PROCEEDINGS OF THE

MERCHANT MARINE COUNCIL

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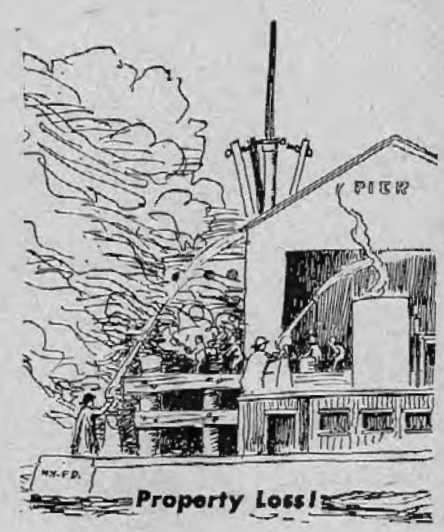
ARE YOU GUILTY ?



BEACHES RUINED — HEALTH ENDANGERED!

MILLIONS LOST IN FISH AND FOULED NETS

WATERFOWL KILLED — A MONEY CROP LOST

DON'T FOUL THE HOMESHORES

Proceedings of the

MERCHANT MARINE COUNCIL

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The Merchant Marine Council of the United States Coast Guard

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DO YOU THINK———

That accidents happen only to the "other fellow"? A lot of fellows thought so until they got hurt. By following safe practices and being alert a man can protect himself but no one is immune to injuries if he takes chances. Be careful—the life you save may be your own.

That when "your number is up" you will get hurt and until it's up you won't get hurt regardless of what you do? If we really believed in fatalism, we would eliminate all safety devices. We would go to sea without life boats, life jackets, firehoses, whistles, running lights, rules of the road, lighthouses, boiler inspections, lookouts, and countless other accident prevention devices, practices and rules. How many men would trust their "number" without these? Is the wearing of a pair of goggles, the proper use of a knife, or the proper lighting off of a boiler any different?

That because of the "law of averages" a certain number of seamen are bound to get hurt despite reasonable precautions? It is true that perhaps one or two percent of all accidents are unpreventable and may be considered matters of chance. It is also true that the seriousness of an injury which may result from any accident is a matter of chance. However, there is no denying the fact that the use of safety belts when working aloft will remove the chance of falling to the deck just as surely as using a two-headed coin will change the odds in matching pennies.

That accidents are the natural price paid for progress? Before there were automatic electric pumps with V-belt drives no one lost fingers in them, but the machine does not go out of its way to hurt us. We fail to put back guards, to shut off the power, or to use only the flat of our hands in turning it over. We can hardly blame the machine for our own failure to observe necessary precautions in using it.

That safety is sissy? That men took great risks in going to sea in the old days, so it is unseamanlike to take sensible precautions now? It is true that men did then and do now have to take necessary risks for the safety of their ship and of their shipmates, but there is a great difference between courage and foolishness.

That accidents are acts of God and therefore unpreventable? While a few natural phenomena such as a bolt of lightning or a tremendous storm are entirely beyond man's control, it is extremely difficult to see how tripping over dunnage scattered on deck, falling from a ladder which is unsecured and slides when the ship rolls, getting a chip of rust in the eye while scaling without goggles, or being hit on the head by a block which falls from an unmoused shackle can be considered either unpreventable or an act of God.

NO, THE GREAT MAJORITY OF ALL ACCIDENTS CAN BE PREVENTED. It takes effort and thought on the part of every man from top to bottom. Let's think of the 98 percent preventable accidents and not too much about those one or two cases in nearly every man's experience when luck, fate, or whatever you want to call it, seemed the only explanation.

THE FARMER'S ROLL

(A List of Prospective New Members)

In a recent issue of the PROCEEDINGS (The Lighter Side, July 1952), the "Farmer Roll" was inaugurated, and the qualifications of a few charter members were mentioned. Using those qualifications as a guide, we have drawn up a list of prospective new members whose membership is conditional upon continued foolish accidents on board ship. It should be readily apparent that, because of any one error, a seaman cannot become a "life member," since dead seamen make poor farmers. So, then, on the basis of becoming temporary Brothers of the Order, we would like the charter members to pass on the qualifications of the following candidates.

First (and always) there are those who claim flying as the field wherein their talents lie—though making clear that it isn't while in flight that they qualify, but in the landing.

An oiler stepped on the bilge pump to reach the starter button, ostensibly to hold the bilge pump down in case it entertained ideas of moving violently about as the electricity reached its windings. When the oiler stepped back, he stepped into an opening and went through, striking his back on the edge of a floor plate.

The sustained flight of a deck engineer was considerably longer. He jumped from the winch platform onto No. 4 hatch, presumably to save himself the time necessary to use the ladder. Only the hatch boards were not in place, and a surprised deck engineer picked himself up from the 'tween deck.

Of course, a successful and graceful falling technique would in most cases bar the contestant for the Farmer Roll from membership. With this in mind, several variations of the fall have been discovered which satisfactorily eliminate this possibility.

The Left-Hand Grab: As the Chief Cook turned to pick up the cutlet pan, which was on the table opposite the range, he slipped on some grease on the deck and lost his balance. Quickly reaching out with his left hand, he latched onto the galley range, thereby saving hilmself from falling. Burned his hand though.

The Left-Foot Squeeze: The Deck Maintenance awoke in his upper bunk and, with a yawn and a stretch, started to descend to the deck. On the way down, his left foot got mixed up between the pipe guard and mattress of the lower bunk; he lost his grip and fell, doing some damage to a couple of toes.

Coaming in the Gloaming: The Messman, concentrating on carrying a garbage can outside to the main deck, tripped over the coaming of the wheather door. A catsup bottle fell from the can, shattering on deck. The falling messman landed on it, sustaining several deep cuts.

Here, it is conceded that, when falling, there is no direction to take but down, whether the way is paved with broken catsup bottles or not. The messman qualified for the Farmer Roll by carrying the garbage can like a babe in arms instead of setting the relatively heavy object over the coaming first, then following with caution.

In a Hurry, Matey: In several lines of endeavor, haste is of the essence. But, take the case of this pump man. On his way to the head the pump man, in attempting to negotiate the intervening ladder with dispatch, slipped, and, in the course of his decent, struck his back a severe blow.

So much for falls. We also have a few reports to present on rather novel methods of self-inflicted bodily harm which will give the farmer-sailor some ideas on how he can compete for a position on our exclusive list.

An electrician we know of remains unchallenged for top honors. The discharging of cargo had been going on for some time when its was noticed that rain was approaching. The hatches were ordered covered to protect the cargo in the holds. A winchman swung one of the pontoons wildly, and it came up against a winch, knocking a hole in the casing, following which the winch developed a clattering noise. The electrician figured that perhaps the gears were fouled in some manner, and, to substantiate his belief, he put his finger through the hole to determine if the gears were clear. The electrician withdrew most of his finger, satisfied with the knowledge that if the gears were clear before his unusual inspection, they certainly were not so now, having been fouled with a piece of finger.

To say the least, parts of index fingers can be found in the darndest places. Note! The second Cook was assisting the Cook in preparing the evening meal. As the Cook was cutting off strips of bacon, the second Cook was chopping the strips into slivers to enhance the flavor of the string beans. So intent was he in his task, in went the tip of his finger before he realized what he was doing.

A deck maintenance used his fingers to line up the shackle on the topping lift block to the eye on the king post. The heavy block slipped and a pair of fingers found their way to the main deck minus the owner.

An O. S., dramatizing the antipathy of mariners toward fingers in general slammed the door of his quarters on one of his fingers, placing that ordinarily useful extremity out of commission.

Naturally, competition for our dubious distinction is not limited to lost digits. There are other means of qualifying.

Culinary Department: A steward was cooking soup in a double boiler when it exploded, showering him with hot soup and water. If you have sometimes wondered what the cook was feeding you; this may at first glance be the answer. But nope, t'weren't dynamite juice! What actually happened was that the top section of the double boiler did not belong with the bottom. A tight seal was made by the unmatched sections which did not allow the steam to escape.

Goodby Cruel World Department. (Or, Sometimes You Just Can't Do Anything Right.) The man made a hangman's noose out of 12-thread Manila rope, then ran the rope through a light fixture overhead in his forecastle and through a towel rack on the bulkhead. He held the rope with both hands and gave it a jerk. Found shortly thereafter, he was suffering from the effects of a fractured skull where his head struck the deck.

So, ends the list of latest candidates for the Farmer Roll.

Actually, the injuries suffered by these careless seafarers constitute no laughing matter. The foolish accidents are presented in this ridiculous manner for the benefit of others in an effort to impress on accident-prone mariners the importance of constant vigilance in insuring their personal safety and well-being.

Remember, foolish accidents are not limited to those resulting in personnel injuries. One example: A tank vessel grounded at night in a channel marked only with unlighted aids to navigation. It appeared that the master, alone on the bridge, was piloting, steering the vessel, manipulating the engine room telegraph, and manning the searchlight simultaneously when the vessel sheered. This caused someone to remark later, "It's a wonder he didn't work out a couple of star sights while he was at it."

GENERAL COMMENTS ON OIL POLLUTION

Oil pollution of coastal areas is a serious problem. Discussions reaching to international levels have been held concerning this subject. Various governments have formulated regulations and placed laws in effect designed to lessen and control the pollution of their coastal areas and harbors, and the subject of pollution of sea water has been brought before a committee of the United Nations for their consideration.

The abatement of pollution, like charity, begins at home. If there does not exist an appreciation of the ill effects of pollution and a spirit of cooperation as to its abatement on the part of vessels and water front industries, then regulation and supervision will not provide the answer for cleaner coasts and waterways. The effects of pollution are serious: industry suffers; water supplies are impaired; wildlife is destroyed; beachfront and recreational areas are jeopardized; and public relations become strained.

It cannot be too strongly stressed that the real approach to actual abatement of pollution attributed to ship operations is the cooperation in preventive measures and the eternal vigilance of those who man and operate the ships.

HEAVING LINES

Have you ever ducked to avoid the monkey fist of a heaving line? Some men have failed to duck and have been seriously injured.

Have you cursed when a well-thrown heaving line hit the side of a warehouse and bounced back into the water just when you wanted to get the lines ashore in a hurry?

Have you watched the tug of war between the man on the heaving line and a vessel drifting away from the dock before mooring lines were free running?

The simple heaving line has been the cause of accidents as a result of two factors: (*a*) a lethal monkey fist, and (*b*) too short a length of line.

A monkey fist is commonly made up around a piece of lead, putty, or heavy metal. A much safer heaving line can be obtained by substituting a small sandbag for the monkey fist. The sandbag should be made of canvas and filled to not over three-fourths of the capacity of the bag with loose sand. Such a monkey fist will carry the line as well as the lead-filled rope covered type, but should it hit a person the damage is, in comparison, negligible. A secondary result of this loosely filled sandbag is that it does not bounce or roll. Thus incidents of monkey fists bouncing off shore obstacles into the water are greatly reduced. Because of the increased friction of the flat bag, the weight of the heaving line between the ship and the dock is less likely to pull the line into the water before a line handler can retrieve it.

The length of a heaving line should be such that a good man cannot throw out the entire length. Ten to twenty feet of line should remain after the best possible heave to allow for the drift of the vessel prior to the time the handlers and shipboard deck crew actually get mooring lines moving toward the dock.

PILOT LADDERS

Taking on or dropping a pilot is often such a routine function that it is susceptible to being done in a perfunctory manner. Yet, whenever anything is done in a perfunctory manner, there is always a strong danger of carelessness. When performing routine chores, the men understandably tend to go about their business mechanically. On the other hand, the officers, perhaps feeling secure in routine, tend to do a minimum of supervision. The combined tendencies consequently and frequently end in some omission which could have prevented a casualty if the chore were not treated as routine.

The following points should always be borne in mind when preparing for the pilot's arrival or departure:

(1) Have a pilot ladder (fitted with spreaders as necessary), a boat rope, and a heaving line ready.

(2) When the ladder is being put over take care to see that some part of it is fast to the ship, for it may dip into the sea and be pulled out of the men's hands. It should not be secured to the rail, as most rails are relatively weak.

(3) The area about the ladder should be free of wet paint, and the lines and equipment should be free of oil and grease.

(4) Locate the ladder low enough to reach a small boat after the bow wave has subsided.

(5) In adverse weather, keep the ladder dry and free of ice to prevent slipperiness.

(6) At night, provide adequate lighting about the ladder.

(7) Either unship the rail at the ladder or provide a short stepladder for the pilot as he comes over the bulwarks.

(8) An officer should greet the pilot as he boards the vessel and show him to the bridge. This officer should carry a flashlight at night to provide adequate lighting en route the bridge. When the pilot is leaving, this procedure should be followed in reverse.

PENNY-WISE—DOLLAR-FOOLISH

We are all familiar with the old story of the railroad employee at a small station who was stationmaster, passenger agent, baggageman, general maintenance man, and also fed the station cat. He had the appropriate caps for each job, and no doubt he was a valuable employee, though his efficiency in all lines might be questionable.

Similarly in the old days of sail, it was customary for the mate on watch, in addition to his duties as watch officer, to sew canvas or otherwise lend a hand in the work on deck. Then, in the change over to vessels propelled by power, with their greater speed and the ever-increasing complexity of navigation and piloting, it became necessary that the mate on watch devote his complete and undivided attention to the navigating and piloting of the vessel.

So, today, it is both surprising and yet apparently the practice on some small vessels for the mate or master to relieve the men from their watch duties so they can work on deck. This practice can lead to a ship going aground or into a collision resulting in the loss of life and damage to the vessel, which in turn may be the basis for charges leading to revocation or suspension of a license.

A recent grounding of a tankship illustrates the folly of working short-handed and trying to do too many things at the same time.

It was a dark night with light rain and fair visibility. The vessel had passed through the breakwater and was proceeding in the channel toward the inner harbor when she grounded about 100 feet outside the channel. This particular channel was marked only by unlighted buoys. The subsequent investigation disclosed that the mate had relieved the helmsman so as to allow him to get the lines ready; and, that the mate, in turn, was relieved by the master, just previous to arrival at the breakwater entrance for the same purpose.

The master in trying to steer the vessel, operate the engine room, telegraphs, and, at the same time, operate the searchlight in an endeavor to pick up the unlighted buoys, neglected his duties as a pilot. The results: Vessel aground; leaking oil creating fire hazard in harbor; a large repair bill; vessel time lost for several weeks while undergoing repairs; master's license jeopardized; and, a record of over 40 years tarnished.

WAS IT WORTH IT?

CARBON MONOXIDE AND CARBON DIOXIDE ASPHYXIATION

The fact that many men do not appreciate the difference between the serious effects of carbon monoxide gas and carbon dioxide gas may properly be made the subject of a note of warning. It should be kept in mind that although both gases are classed as asphyxiants, that is, substances causing a deficiency in the supply of oxygen to the blood through the normal breathing processes, their chemical and physical properties and hence their toxic reactions on the body are quite different. Carbon dioxide is considered a simple asphyxiant causing oxygen deficiency by simply displacing the air, thereby excluding oxygen from the lungs. Carbon monoxide is classed as a chemical asphyxiant, causing oxygen deficiency only when coming in contact with the blood, by chemically combining with the hemoglobin (red blood cells) to decrease its capacity to transport oxygen from the lungs to the body tissues.

Carbon monoxide (CO) is a colorless, tasteless, and practically odorless gas, this latter property making it dangerous as a source of poisoning. It is considered one of the most important poisons associated with human life and industry. In its fatalities, it is outdistanced by only one other poison, grain alcohol. Carbon monoxide is produced whenever incomplete combustion of carbon occurs. It is not likely to occur when carbon is burned with a sufficient supply of oxygen. It burns with a blue flame, combining with oxygen to form carbon dioxide. Carbon monoxide has an explosive range of about 12 percent to 74 percent in air. Its density compared to air is 0.967, being slightly lighter than the atmosphere. Carbon monoxide, when pure, is nearly insoluble in water.

A dangerous source of carbon monoxide gas aboard ship may be found in the exhaust from internal combustion engines. The average carbon monoxide content of such exhaust gases may range as high as seven percent. Considering the fact that an atmosphere containing as little as 0.2 percent carbon monoxide is capable of destroying life, one can appreciate the lethal qualities of exhaust gases from internal combustion engines. It is interesting to note that the exhaust from heavy-oil engines, such as Diesel engines, contains a lower proportion of CO than gasoline-engine exhausts. The safe limit for carbon monoxide in air is usually given as 0.01 percent for continuous exposure. It should be borne in mind that carbon monoxide is practically odorless and highly hazardous concentrations can be inhaled unconsciously, the first symptoms sometimes being dizziness and fainting.

The initial step in the treatment of carbon monoxide poisoning is to remove the person immediately to fresh, but not cold, air. As the action of carbon monoxide is exerted through its combining with the hemoglobin of the blood, the object of treatment is not merely the prevention of immediate death by restoration of breathing, but also the rapid elimination of the carbon monoxide gas. For this purpose, inhalation of a mixture of oxygen and 7 to 10 percent carbon dioxide ("carbogen") has been found very successful, if the affected person is still breathing. If he is not breathing, manual artificial respiration should be started at once, and the inhalation of oxygen plus carbon dioxide administered simultaneously.

It should be remembered that the essential condition in carbon monoxide asphyxia consists, not in the cessation of the movements of breathing, but in the interruption of the supply of oxygen to the tissues of the body, and essentially to the brain, because of the inability of the blood to carry oxygen. In this respect asphyxia by carbon monoxide gas differs from drowning, carbon dioxide poisoning, and electric shock. In the latter conditions, spontaneous respiration is stopped and manual artificial respiration is the prime means of resuscitation.

Carbon monoxide is not considered a cumulative poison. In pure air and with a sufficient volume of breathing, small amounts of the gas are readily ventilated out of the blood.

Carbon dioxide (CO_2) is a nonflammable, colorless, odorless, and tasteless gas. It is about 1.5 times heavier than air. It is found where carbon or carbon monoxide is burned with a sufficient supply of oxygen. On board ship, high concentrations of carbon dioxide may result from the evaporation of dry ice in holds, discharge from fire-extinguishing apparatus, leaks from refrigeration plants, exhaust from internal combustion engines, and flue or stack gases.

The physiological effect of carbon dioxide is caused mainly by oxygen deficiency. Although in such instances the role of carbon dioxide has been primarily that of a simple asphyxiant, it cannot always be classed as physiologically inert. In concentrations of the order of one percent it increases the rate of respiration, this effect reaching the maximum at approximately five percent. Concentrations in excess of about 10 percent become intolerable, and at somewhat higher levels unconsciousness and eventually death result. Apparently carbon dioxide acts primarily as a narcotic in such high concentrations.

Since carbon dioxide is heavier than air, it fills a space from the bottom up, replacing or diluting air, as water would. A man can drown in this gas without warning just as if the space were filled with water—water in which he cannot swim. When concentrations of carbon dioxide in the air decrease the normal 21 percent oxygen content to values between 16 and 12 percent, the first symptoms of asphyxia or suffocation appear. This is somewhat beyond the point at which a candle is extinguished (17 percent). A reduction of the oxygen content to this degree requires a concentration of about 33 percent of carbon monoxide in air. When the gas is present to the extent of 50 percent and the oxygen is reduced by one-half, a man is soon rendered incapable of making a vigorous effort to escape. With about 75 percent carbon dioxide in the air, reducing the oxygen content below six percent, death occurs quickly.

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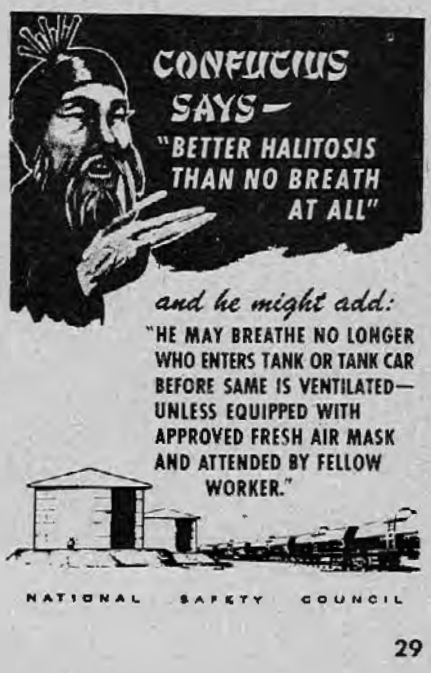

MOPE AND DOPE

"Just give me one argument why you like the tropics so much."

Continued from preceding page.

Should it become necessary to rescue a man who has been overcome from exposure to high concentrations of carbon dioxide, a canister-type gas mask is no help to the rescuer. The canister gas mask can only purify air, it cannot furnish oxygen to an atmosphere or a mixture of gases deficient in oxygen. Only an oxygen breathing apparatus consisting of either a hose mask or self-contained breathing apparatus offers reliable protection. In any case, a lifeline should always be worn by the rescuer and tended from top side. Treatment for oxygen deficiency caused by carbon dioxide is the same treatment as would be furnished in the case of a drowning. Artificial resuscitation should be given as soon as possible.

Gas masks containing absorbents such as charcoal or alkalies are not effective with carbon monoxide, since the gas is not absorbed by these chemicals. However, canister type gas masks containing special catalysts, such as hopcalite, can be used for carbon monoxide, since the catalyst can destroy the carbon monoxide by promoting its oxidation to carbon dioxide.

The use of a pulmotor, or mechanical breathing machine should be discouraged when manual artificial respiration could be applied. The main objection to all apparatus of the pulmotor and resusciator type is that the first essential for resuscitation from gassing or asphyxia is the immediate application of artificial respiration. No apparatus can be applied as quickly as a manual method.

BASKET STRETCHERS

It is extremely important that before an injured man is placed in a basket stretcher a piece of fabric be laid in the bottom and extended over the sides to provide a hand hold by which the patient can later be removed without further injury.

A blanket is ideal for this purpose since it has the additional value of keeping the patient warm. Unfortunately, human nature being what it is, blankets left with the stretchers would probably turn up missing when needed unless the stretchers were in an office or otherwise protected.

It is recommended that each stretcher be equipped with a piece of canvas wide enough to furnish handholds at either side. The canvas can be rolled tightly and tied to the stretcher. It will serve the purpose very well, is inexpensive, and offers a minimum temptation to the pilferer.

YOU MAY NEED A LIFE JACKET ONLY ONCE

The reviewing of accidents is more than what is called "Monday morning quarter-backing." It is a means of hindsight whereupon one might develop and improve foresight. Usually if someone had not made a mistake, then the accident would never have happened! So, knowing the mistake, it can be avoided in similar situations in the future.

This hindsight might well be applied to potential drownings. A person will seldom, if ever, require a life preserver when he remains in a secure and safe place. He normally will need a life jacket only when he has placed himself or been placed in a dangerous position. Then it is too late. Obviously, the only solution is to enforce the wearing of life preservers if there is a likelihood that personnel will require them. Conditions change so rapidly aboard ship and aboard small boats that the probability of a hazardous condition must be carefully considered.

Observations of the Old Mariner

A cook received severe burns when a defective double-boiler allowed steam to build up in the lower compartment sufficiently to blow the top compartment with the boiling contents into the air. He was laid up for six weeks. Nor is he the only man who has been "double-boilered" at the galley range.

* * * * *

One individual apparently thought he could save time and effort, but it did not work. While on a ladder, he couldn't quite reach his work, so rather than get down and move the ladder, he placed one foot on an object nearby, leaving the other on the ladder rung. The ladder slipped sideways. A skyhook would have saved the day, though.

* * * * *

Never substitute a pile of bundled rags for a stepladder. Ask the man who tried it, why. He had four days in bed to think it over.

* * * * *

One sure way to cause an accident is to place a coiled line or hose at the very base of a ladder. One seaman was incapacitated * * * for 30 days * * * while the bone mended.

* * * * *

Your Task Forum

Q. How would you locate and set a course by the North Star if at sea in a lifeboat with a damaged compass?

A. The North Star is located on a line extending from the pointer stars of the big dipper, about midway between the big dipper and Cassiopeia. Since the North Star is always within few degrees of true north (the maximum difference is 2.9° in latitude 70° N.), a course can be set by merely heading the boat in such a direction that the relative bearing between the boat and the North Star is the same as the angle between the desired true course and north. To steer east, head the boat so that the North Star bears abeam to port.

Q. What entries would you make in the log after anchoring?

A. The time, depth of water, which anchor is down, how many fathoms of chain are out, and bearings of two or more fixed objects.

Q. What information should you give a pilot when he comes on board?

A. He should be given the draft of the vessel, fore and aft, her speed and backing power, her maneuverability, and the deviation of the compass, as well as any individual features of the ship.

Q. What is meant by "hogging" and "sagging"?

A. When heavy weights are placed at both ends of the vessel, this will cause the bow and stern to be lower than the middle body; the vessel is then said to be *hogging*. When a vessel is heavily loaded in the middle body, this part of the vessel is then lower than both ends; the vessel is then said to be *sagging*.

Q. What is the optical principle of the sextant?

A. When a ray of light is reflected from a plane surface, the angle of incidence is equal to the angle of reflection. When a ray of light undergoes two reflections in the same plane, the angle between its first and its last direction is equal to twice the inclination of the reflecting surfaces.

Q. How is a sea anchor used?

A. A sea anchor is used as a drag to keep the boat's head to the wind and sea and to prevent rapid drifting. When held by the drag line, with trip line slack, it is wide open and drags through the water with considerable resistance. A container of storm oil, having a small opening for the continuous discharge of the oil, may be secured to the sea anchor.

Q. If it were necessary to jump from the ship into burning oil would it be possible to avoid being burned?

A. Yes. The following procedure has been tested and proved successful: jump feet first through the flames; swim as long as you can under the water; then, spring above the flames and breath, using the breast stroke to push the flames away; next, sink and swim under water again. Men have been able to navigate up to 200 yards of burning oil in this manner. To be able to do this, however, you will have to remove your life belt and other cumbersome clothing.

Q. Name three types of shock from physical causes.

A. Any three of the following:

(a) Traumatic.
(b) Electrical.
(c) Chemical.
(d) Shock from starvation or disease.

Q. Define traumatic shock.

A. Shock caused by a severe blow to a vital spot, by cutting or crushing a large nerve trunk, or by other serious injury.

Q. What are the most common symptoms of shock?

A. (a) Pale skin.
(b) Cool, clammy skin.
(c) Feeling of weakness, faintness.

Q. What are the other symptoms?

(a) Perspiration. Can be noted at forehead, about lips, palm of hands.
(b) Weak pulse, sometimes rapid.
(c) Nausea and vomiting.
(d) Patient indifferent to events about him and to questioning.
(e) Unconsciousness may occur.

Q. With what injuries does shock always occur?

A. (a) Serious burns.
(b) Wounds that bleed profusely.
(c) Fractures (broken bones).
(d) Serious wounds affecting any part of the body.

Q. What should you remember about heat in shock treatment?

A. Keep the patient comfortable, *but not hot.*

Q. What kinds of fluids can you give to patients in shock?

A. Warm water, broth, milk, tea, or coffee.

Q. In what position should a patient in shock be placed?

A. Keep the patient lying down flat.

THE DEATH OF A SHIP

On November 7, 1951, the press reported: "A Japanese merchant ship pulled 12 survivors of an ill-fated American freighter from the storm-swept North Pacific early today and moved on to rescue 25 others riding bobbing lifeboats upwind from their burning and sinking ship.

"A fire aboard the freighter late yesterday killed one member of its crew and drove the others to lifeboats to await rescue by commercial and Coast Guard vessels converging on the disaster scene.

"The freighter radioed for aid at 3 o'clock yesterday afternoon, reporting its engine room and crew quarters swept by flames.

"The Japanese freighter, the first to reach the stricken ship, battled rough water and a strong wind through most of the night to rescue 12 seamen in a lifeboat nearest the stricken vessel. All were weakened by cold and exposure."

What follows is the detailed story behind this brief announcement.

THE FIRE

A Liberty-type cargo vessel of 7,176 gross tons, built of steel in 1943, claimed as its home port Savannah, Ga. The crew of the vessel, 37 in number, including the master, signed foreign articles at Portland, Oreg., October 29, 1951. On October 31 the vessel departed from Portland, Oreg., en route Longview, Wash., where a full cargo of grain was to be loaded. Following arrival at Longview, several minor repairs of a routine nature were made in the engine room, and, in addition, a new fuel oil discharge strainer was installed. On November 3, the vessel departed Longview with its grain cargo.

While proceeding down the Columbia River, fog was encountered. Rather than make passage over the Columbia River Bar in poor visibility, the cargo vessel was brought to anchor off Astoria, Oreg. When the fog lifted, the vessel got underway, crossed the bar, and at 1700, November 3, dropped the pilot. She then proceeded seaward en route to a port in India via Yokohama.

At 1200, November 6, 1951, the third day at sea, the second mate relieved the bridge watch. The course was 292° T, speed full ahead, approximately 67 rpm. The wind was from west-southwest, force six to seven, and the sea was very rough with waves of 25 to 30 feet.

In charge of the watch below was the second assistant engineer. Also on watch were an oiler and a fireman.

As was his custom at about the same hour each day, the chief engineer made his rounds and arrived in the engine room just prior to 1500. He saw the second assistant engineer cleaning the fuel oil strainer and went over to observe the operation. This strainer was located on the forward side of the starboard boiler close to the inboard edge of the casing. The second assistant had already cleaned the basket from the after side of the strainer and was about to replace it. At this time the fuel oil was being directed through the forward basket. After installing the after basket, the second assistant engineer then shifted the control lever over so as to burn from the after side. Thereupon, oil sprayed out from the strainer over the second assistant, the chief engineer, and the hot front of the port boiler. This oil ignited within seconds.

The chief attempted to pull the control lever forward but was unable to do so. His clothing afire, he ran between the two boilers and around behind the port boiler, where he tore off the flaming apparel. Leaving this area, the chief found the second assistant engineer, who had come around the starboard boiler, lying on the floor plates, his clothing aflame. Water from a convenient bucket quenched the fire about the second assistant, but there was no response from the man. When the chief engineer tried to lift him, flesh came right off the second's body.

In the meantime the oiler had dispatched the fireman to the bridge with word of the serious fire in the fireroom, while he himself unsuccessfully attempted to contact the bridge by telephone. With no one else below, there being just the lifeless body of the second assistant, the chief engineer headed for the shaft alley in an attempt to escape. Being unable to see through the dense smoke, he finally felt his way to the ice machine room and thence on deck. When the oiler returned to the fireroom from telephoning, he moved the second assistant's body to a safer location near the log deck. As the smoke was intense, he too sought escape through the shaft alley.

The master was notified of the fire at 1450. He went immediately to the bridge, arriving at the same time as the chief mate, who rang the fire alarm. The master ordered the second mate to turn the vessel around so as to put the wind on the stern, but the mate reported that the telemotor was inoperative. Going aft to look for the chief engineer, the master noted that fire hoses had been stretched on deck, but that, since the fire pump had not been lined up there was no pressure on deck. He met the chief engineer on the main deck, who informed him that the fuel oil had been shut off. The third assistant reported that the CO_2 had been released.

Portable CO_2 and foam-type fire extinguishers were used in the fidley and on the starboard side of the house where the wood was burning, but the chief engineer reported to the master that it was hopeless to try to fight the fire in the engine room.

When the bos'n heard the fire alarm, he immediately started forward through the passageway to get his life jacket. In the saloon area he observed the deck maintenance man trying to turn the forward reach rod of the two at that location. The bos'n obtained a 36-inch pipe wrench and together they managed to "free" the reach rod, but it thereafter turned without taking up. They worked this reach rod for about 15 minutes, with no success. Later, it was determined that the reach rods to the valves on the high and low suctions of the settling tanks were not connected.

When the fire alarm sounded, the third mate rushed from his room and noted smoke coming out of the fidley. He stretched hoses out on deck to fight the fire, but since there was no water, he sought the master for instructions. He met the master a few minutes later coming from the bridge. The instructions were brief: "We will have to abandon."

Due to the fuel fed fire in the fireroom and the resulting dense smoke and intense heat, the engine spaces had been abandoned quickly. No attempt had been made to utilize the two 2½-gallon portable foam fire extinguishers, the 40-gallon foam type extinguisher, sand, or the fog nozzles. The engine room had been abandoned with the main engine and associated auxiliaries, including the forced draft blower, in full operation, and the ventilators to the engine spaces were never trimmed.

THE ABANDONMENT

The third mate then ran to the license rack, pried off the case, and removed the licenses. On the boat deck he saw the chief engineer in poor condition from his burns. The mate procured a jar of mentholatum from the hospital, and applied its contents to the chief engineer. The first assistant engineer then gave the chief a life jacket.

At 1530, or approximately 35 minutes after the outbreak of the fire, the master ordered No. 3 lifeboat launched with six men, including the third mate who was in charge of the boat. Orders were given to the third mate to stand by astern on a painter made fast from the vessel to the lifeboat. As the lifeboat drifted astern, the painter was cut, for fear the line and the boat would engage the screw of the vessel, which was still turning.

With lifeboat No. 3 adrift, the master ordered No. 1 lifeboat launched at about 1600. This boat was under the command of the second mate and was launched with four men aboard. The second mate also was ordered to stand by astern on a painter from the ship. Shortly thereafter, this lifeboat was pulled back alongside the ship, and eight more men boarded it before it was cast off and drifted away. At this time it was noted that No. 3 cargo hold was afire. Smoke was coming from the hatch. The boat deck was becoming very hot.

At 1700, No. 4 lifeboat was launched on the windward side of the disabled vessel with 12 men on board under the charge of the chief mate. Among them was the first assistant engineer, a man of 61 years, who fell while climbing down the line into No. 4 lifeboat, sustaining a fractured hip. Also on board was the chief engineer, who was lowered into the boat. Although No. 4 lifeboat was equipped with a motor, the shaft was bent in launching, rendering the motor useless. Being on the weather side, with the lives of the men in the lifeboat jeopardized by pounding against the vessel's hull, the chief mate cast off and rowed away from the vessel's side.

Remaining aboard the stricken vessel at this time were the master, third assistant engineer, and the bos'n. Just prior to 2100, No. 4 cargo hatch was observed to be afire. At 2100 the three remaining men abandoned the vessel in No. 2 lifeboat. Later, this boat took two men from lifeboat No. 1. The two boats then drifted apart.

Although No. 3 lifeboat was the first to be water-borne, it was the last to be picked up. The third mate's account follows: "I was helping to lower No. 3 lifeboat. I had run the painter out when the captain told me to get in the boat. I got in with five others, and they lowered the boat to the water. Someone must have let go of the painter, for we were drifting around to the stern when I noticed that the propeller of the vessel was still turning over. The wind was tending to blow us under the stern, so I used my knife to cut the painter and gave orders to row. We pulled away from the ship, then overhauled it and cut across her bow. We had a hell of a time rowing in that sea. When we saw flames shooting out of the starboard side, we pulled slowly away into the sea, but as it was getting dark I told the fellows it was no use to row all night, that we would put out the sea anchor.

"We had to have some kind of shelter, so we put the sail and a tarp over us, and we lay there all night. At one time we saw a big ship come up—what we thought was a Japanese ship. That night we could see the burning vessel. It looked like the whole ship was aflame. We could make out the complete silhouette of the ship; it was a red glow with flames shooting up from amidships.

"We lay to during the next day. The wind was blowing about 35 to 40 knots, and the swells were pretty big. Every time we came up on a swell, we could see the Japanese ship and wondered why they couldn't see us. Anyway they missed us and we drifted on. We were riding it out pretty well.

"About 0300 the next morning we shipped a sea, and when we raised the tarp to bail out the lifeboat, we saw a line of lights. I said, 'Give an S O S.' We held the lantern up, and they must have seen it, for they came round and put a searchlight on us. I knew then it was a cutter. We were in the water 35 hours before being picked up by a Coast Guard cutter."

THE RESCUE

The Japanese-flag vessel, in answering the S O S from the burning American freighter, was the first to arrive in the vicinity, and at about 2330 on the day of the fire came alongside No. 1 lifeboat. Seven of the eleven men in the boat immediately scrambled on board the Japanese vessel. The remaining four unexplainably made no attempt to get aboard. Further attempts to get alongside to pick up these four men were unsuccessful.

At 0200 the next morning, the rescuing vessel picked up the survivors in No. 2 lifeboat.

After daylight, another attempt was made to pick up the remaining four crew members in No. 1 lifeboat. As the Japanese vessel approached alongside, the lifeboat collided with it in such a manner as to overturn, throwing the occupants in the water. Lines and buoys were thrown from the steamer, and, in addition, a Coast Guard plane dropped four rubber liferafts, but the men in the water seemed to make no attempt to grasp the lines or rafts and disappeared beneath the surface as they drifted aft.

No. 4 lifeboat remained adrift all night. The occupants could see the burning vessel and, in addition, saw a plane overhead. Flashlights, flashed in the direction of the plane, were acknowledged. The next morning a Greek ship came alongside No. 4 lifeboat with three jacobs ladders placed over the side. When alongside the Greek vessel, and in reaching distance of the ladders, an oiler made a lunge for one of the ladders. He climbed about three rungs when the lifeboat went down in a trough. As it came up on the crest of a wave it hit the ladder. The oiler's feet appeared to have been knocked off the ladder, but he held on with his hands and climbed about two more rungs before he fell in the water between the ship and the lifeboat. Attempts to grab him were unsuccessful. A line was thrown out, and the oiler grabbed it, but he was unable to hold on and disappeared before further assistance could be rendered. The remaining nine men aboard No. 4 lifeboat made it aboard the vessel with no serious difficulty.

The rescue vessels all arrived in Port Angeles, Wash., the evening of November 13, where the crew members of the ill-fated vessel were put ashore.

THE DEATH

Following receipt of the S O S on November 6, 1951, a Coast Guard cutter was dispatched to the scene. The cutter sighted the stricken vessel on November 10, but heavy weather prevented boarding until the early morning of November 13. Upon boarding it was noted that No. 3 and 4 hatches were still smoldering. The hatch boards and covers had been burned off. The deck was corrugated about the midship section, but no cracks were observed on the deck or sides. The house was gutted and the ports were gone. Also, the vessel was listing about 20 degrees to port on an even fore and aft trim.

At about 1050 the cutter commenced towing the unmanned derelict at a speed of approximately 5 knots. A commercial tug arrived shortly after the vessels were under way, but the towline was declined on account of oncoming darkness.

About 0900 the next morning, November 14, a boarding party from the commercial tug went aboard the stricken vessel and made their towline fast. After the towline was rigged, the two vessels got under way.

The weather was adverse, but on the 15th of November, it moderated somewhat. On November 16, the wind became stronger and the seas higher. This condition prevailed until the 18th of November, when it was noted that the vessel was taking considerable water on deck.

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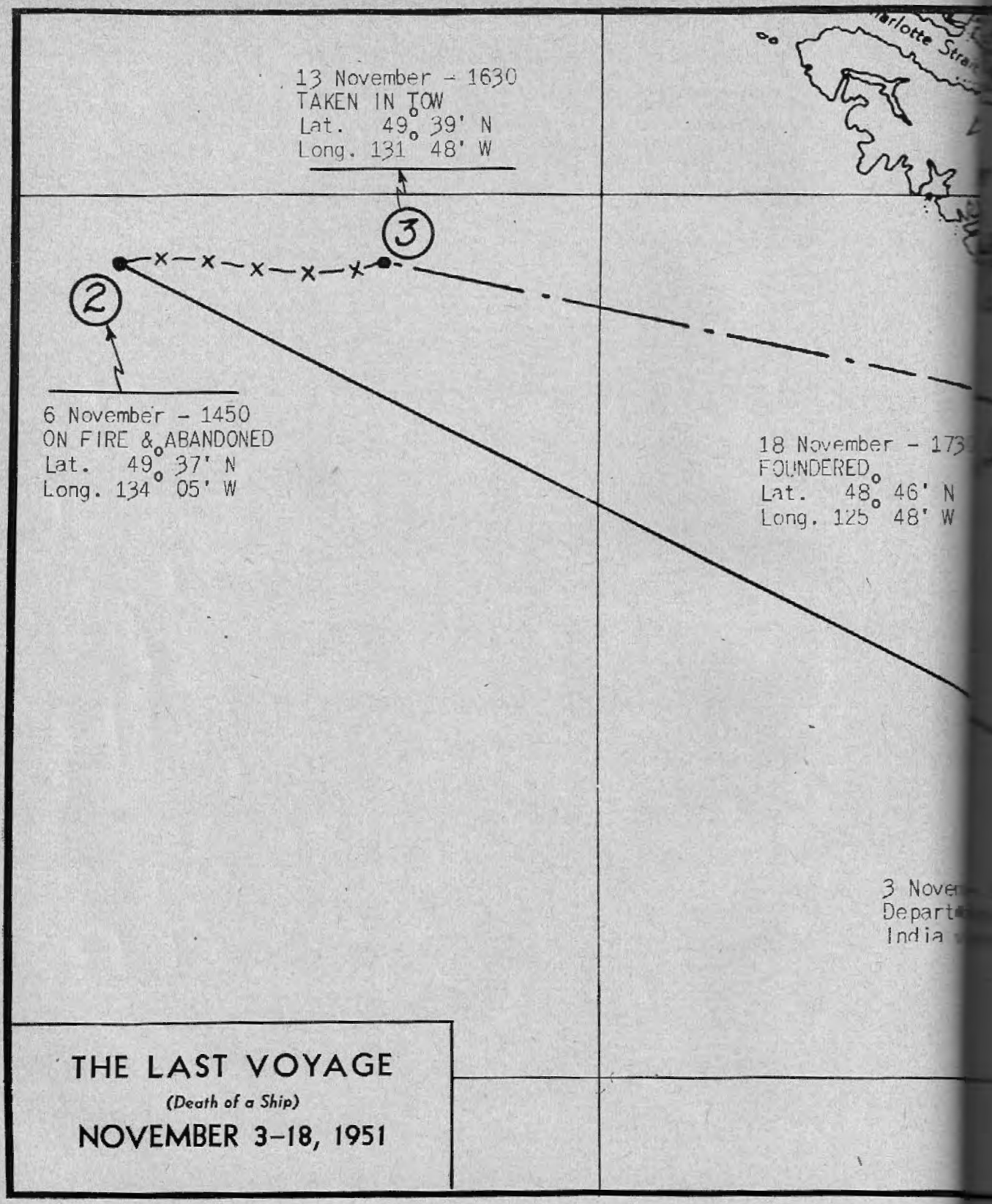
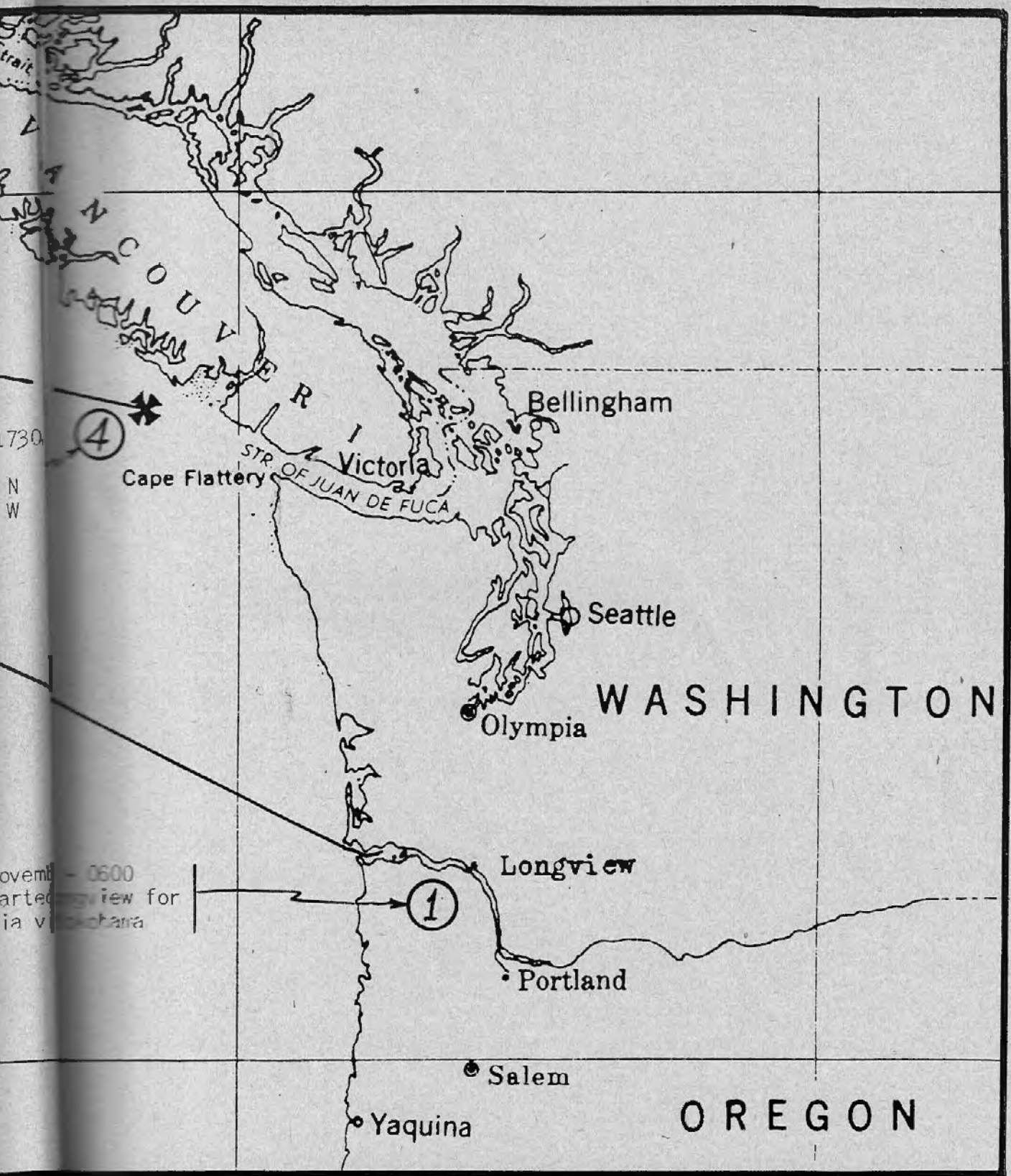

13 November - 1630
TAKEN IN TOW
Lat. 49° 39' N
Long. 131° 48' W
3
2
6 November - 1450
ON FIRE & ABANDONED
Lat. 49° 37' N
Long. 134° 05' W
18 November - 173
FOUNDERED
Lat. 48° 46' N
Long. 125° 48' W
3 Nover
Depart
India
THE LAST VOYAGE
(Death of a Ship)
NOVEMBER 3–18, 1951


VANCOUVER I.
Bellingham
Victoria
STR. OF JUAN DE FUCA
Cape Flattery
4
Seattle
WASHINGTON
Olympia
Longview
1
Portland
Salem
OREGON
Yaquina

Steam had been seen rising from No. 4 hatch. Though no marked increase in the list of the vessel was noticed, it became apparent that the vessel rolled heavily and recovered more slowly. Later, on the 18th of November, the vessel appeared to be going down a little by the stern, and her port list had likewise increased.

At 1730, this same date, men aboard the tug stated they could not steer the tug. They believed they had fouled their towline on the bottom. The ill-fated ship could not be seen astern on the radar and darkness and squally weather prevented visual sighting. In communicating with the Coast Guard cutter it was ascertained that they had lost a target on their radar. Receiving this information the tug picked up her gear and retraced her course. Not being able to locate the vessel it was then evident that she had foundered in the approximate position of 48°46'6'' N., 125°48' W., in some 36 fathoms of water.

THE POST MORTEM

The foundered vessel met its death as the result of an uncontrollable fire in its fireroom. A fire becomes uncontrollable through the inability of the fire fighters to remove or isolate from the fire the inflammable substance, or because of the inability to smother the fire by removing, in one way or another, oxygen necessary for combustion. In the case of this vessel it was not satisfactorily shown that the fuel oil service pump was successfully shut down or that the valves to the settling tanks were closed. Thus, the fire was fed by the steady pumping of oil from settling tanks containing a few hundred barrels of the inflammable substance. The smothering of such a fire at this stage is out of the question.

It is not possible to say that the fire could have been prevented, since it is not known exactly how the fuel oil sprayed out of the system. We do know that the newly installed fuel oil discharge strainer played an important part, because it was during its manipulation that oil escaped either from under one of the caps fitted over the strainers or from the flange on the discharge side of the strainer assembly. We do know that the location of the strainer was such that the stream of oil impinged on the hot burner front of the port boiler, igniting the oil. Toward the elimination of future, identical accidents, instructions have been issued calling for relocation of the strainers and installation of a metal spray shield around the strainers.

What should be of utmost importance to every seafaring man is the location, availability, and condition of the remote controls to the fuel oil service pumps and fuel oil settling tank. In the event of a serious fire in the engine spaces, it may well be that the only way to stop the flow of oil is by the remote controls. And, if the source of fuel is thus removed, positive steps may be taken to smother, localize, and otherwise control the fire.

In this case the engine spaces immediately became so full of choking smoke that there was no opportunity to line up the fire pump. For the same reason, the 40-gallon foam fire extinguisher was not put to use in the initial attempt to put out the fire. On deck there were only the portables with which to fight the fire. If in some way water could have been fed to the hoses that were stretched out, a delaying action could have been waged with the possibility of success. The property of water in the form of a fine low-velocity spray or fog in extinguishing oil fires is well-known. In addition, the cooling of adjacent compartments could have been undertaken.

Valuable lessons are learned from the unfortunate experiences of others. We have discussed one lesson from this casualty, that it is imperative to know the location and operation of remote controls. There are several others.

(1) In the hasty abandonment of the engine space, the machinery was left in full operation. As a result, the screw kept turning over for better than an hour. This, of course, made it difficult for the lifeboats to stay in the vessel's proximity, and at one time endangered a lifeboat which drifted aft in way of the screw.

(2) It was found that the CO_2 bank had not been released. This was not due to negligence, but to unfamiliarity. It is doubted that release of the CO_2 would have extinguished the fire, since, as required, this was a bilge system as opposed to a "total flooding" system. But, again, as with the shutting off of the fuel oil pump, the CO_2 may have had the effect of temporarily reducing the intensity of the fire so that positive measures could be taken.

(3) Responsible persons on the rescuing vessels and planes were in agreement that radar was ineffective in the rescue operation, since none of the lifeboats were picked up by means of radar. The lifeboats were relatively insignificant targets in the high seas that then prevailed, and the sea return completed their obscurity. Because larger objects can be picked up on the radar scope more readily than small ones, all persons who find themselves in a similar predicament as the fatal vessel's crew members would do well to remain within the area of the abandoned vessel or, if it were to founder, within the area of the last radioed position.

(4) An unusual phenomenon was described in connection with the rescue that is very often repeated in other casualties where men are found in the water. Although certain individuals may appear to be in good physical condition—and they may appear to be excellent swimmers—they very often fail to take advantage of the efforts of others to rescue them. Lines, ring buoys, or rafts may be within their reach, or they may even have hold of one of these devices, but strength seems to be lacking, and they drown at a time when their rescue is most imminent. More positive efforts must be made in many instances to help these people to help themselves.

One final thought in closing—

The cause of the fire on the sunken ship has been determined, and similar casualties from the same cause have been eliminated through the simple expedient of relocating the offending piece of equipment. However, fires on vessels have many possible sources. The hazard of fire requires constant vigilance, the utmost degree of care in its prevention and extinguishment, and close attention to the performance of personnel and fire-fighting equipment during drills or under emergency conditions.

To Detect Flaws in Chain Links, Hooks, Castings, Etc.

SATURATE them thoroughly with some light oil long enough to permit the oil to soak into any cracks or pinholes, then wipe off all traces of the oil on the surface. After this has been done, coat the entire surface with whiting. After the whiting has dried the oil will begin to appear thru it wherever there are deep-seated flaws having surface openings. A blow with a hammer will help bring the oil to the surface.

OPEN FLOOR PLATES

Open floor plates in the engine room often catch the unwary. We even have had reports in which the man who lifted the plate later walked into the hole. True, an open floor plate is clearly visible, but only if a man looks for it. Since the floor plates of the engine room usually provide an unobstructed walkway, few men look at the deck as they walk. Hence an open floor plate may not be noticed in time.

Roping off such openings would provide excellent protection but would often be impracticable. Since the chief need is for something that will attract an approacher's attention to the opening, an appropriately colored sign could serve the purpose. If placed beside the opening in the line of passage it would attract the attention of anyone approaching. When not needed it could be stowed against a bulkhead or the ship's side.

Never store blasting caps (fuse type or electric blasting caps) in the same magazine with other explosives.

SHIPBOARD ACCIDENTS

The Accident Prevention Bureau, Pacific Maritime Association, has made a study of 1400 shipboard injuries to seamen. This list, shown in tabular form, indicates both the accident location and one of the contributing causes for each of these accidents. It is considered to be indicative of classes of shipboard accidents, generally applicable to all vessels in view of the wide exposure from which the statistics were developed.

The Bureau included slipping, tripping, falling in one category, which is labeled "missteps." Such items as being thrown off balance by the roll of the vessel were included in this class. The group comprised 35.4 percent of the total.

Hand handling of objects and materials was involved in 27.6 percent of all the cases analyzed. It includes the dropping of boxes on the feet and strain while lifting. This group is called "handling accidents."

The moving objects classification was considered to include hose sweeping across the deck, struck by sliding doors, struck by parted line, struck by slingload, and similar accidents incurred from moving objects.

Under the heading of flying objects are listed accidents resulting from the projection of chips, dust, splashed chemicals, steam, or hot water.

The Bureau also investigated the parts of the body involved in all the accidents reported. The following table shows the parts of the body which are most likely to be injured:

Body Part	*Percentage*
Fingers	12.8
Back	10.2
Leg	6.9
Multiple Injuries of Arm	6.8
Ankle	6.1
Hand (above fingers)	5.3
Foot	4.8
Eye	4.5
Forearm	4.4
Skull	4.1
Knee	4.1
Abdomen	4.1
Elbow	3.3
Face	3.2
Toes	3.1
Shoulder	1.9
Side	1.6
Hip	1.6
Ears, Nose, Mouth, and Throat	1.0

It may be noted that finger, hand, and wrist injuries, on the average, account for 20.8 percent of all injuries. The part of the body next likely to be injured is the foot and the ankle, which accounts for 14 percent of the total.

The chart of accident classification and locations may be used to determine where accidents are most likely to occur, particularly aboard a large vessel, and what consists of the greatest hazard in each location.

The table of body parts injured furnishes an excellent guide for every supervisor. He can develop precautions for his men which will reduce the leading accidents. A sample of the instructions which he might give is as follows:

1. Keep your hands out of harm's way. Wear gloves when you are handling sharp objects. Use wrenches properly so that they will not slip.

2. Watch your step, particularly when handling materials or when decks are slippery. Keep your feet out from under loads. Most missteps occur on a wet deck, in the engine room, on an interior ladder, on the gangway, or in the quarters.

3. Learn how to lift properly. You do it this way (demonstrating how to lift). Do not lift anything heavy unless you are in a good position, hold it securely, and use your legs. Do not lift while reaching out or while twisted or leaning across something. Lifting accidents are most likely on a wet deck, in the engine room, or in the galley.

Other points for instruction may be easily developed by applying the information contained in the two tables to your unit.

* Study of 1,400 Seamen's Occupational Accidents for 1951

Type of accident	Location of accident																												
	Aloft	Bridge deck	Boat deck	Deckhead	Weather deck	Tween decks	Ice boxes	Storerooms	Shops	Tanks	Lower hold	Gangplank	Pilot ladder	Hold ladder	Exterior ladder	Interior ladder	Passageway	Engine room	Shaft alley	Galley	Laundry	Messrooms	Public rooms	Ship's quarters	Lavatory	Lifeboat afloat	Miscellaneous small craft	Dock or drydock	Not clearly stated	Not otherwise classified	Total
Slips	6	13	12	30	139	8	15	9	2	2	11	27	5	6	15	55	17	55	2	19	1	7	1	16	6	5	2	8	6	6	506
Slipping	2	3	7	12	59	2	11	5	1	1	4	14	0	4	9	36	10	36	1	10	1	1	1	4	3	1	1	1	2	0	242
Tripping	0	3	4	16	58	3	1	3	1	0	2	3	1	0	0	14	5	4	0	1	0	4	0	2	2	0	1	6	1	2	137
Falling	4	7	1	2	22	3	3	1	0	1	5	10	4	2	6	5	2	15	1	8	0	2	0	10	1	4	0	1	3	4	127
Hand handling	5	1	1	2	124	8	17	15	12	3	12	2	1	1	1	6	4	80	2	46	2	3	3	7	1	1	1	2	19	4	386
Handling objects	1	1	1	3	51	9	12	4	2	0	2	0	0	1	0	0	5	7	0	5	1	1	1	8	1	0	1	3	2	0	122
Flying objects	1	2	1	0	15	0	0	2	4	0	1	0	0	0	0	0	1	41	0	15	1	1	0	0	1	0	0	0	8	0	94
Stepping	1	3	3	3	18	3	1	1	0	0	2	0	0	2	2	4	5	21	1	3	2	2	2	6	0	0	0	0	3	3	91
Falling objects	0	0	0	0	20	9	2	1	5	0	2	0	0	0	0	0	0	3	0	3	0	4	0	1	0	0	0	1	1	1	53
Moving machinery	0	1	8	0	8	0	0	0	7	0	0	0	0	0	0	0	0	17	0	2	0	0	1	0	0	0	0	0	0	0	44
Other	1	1	0	0	9	1	0	0	0	1	0	2	0	1	0	6	4	4	0	8	1	11	0	17	1	0	3	1	29	3	104
Total	15	22	26	38	384	38	47	32	32	6	30	31	6	11	18	71	36	228	5	101	8	29	8	55	10	6	7	15	68	17	1,400

IT WILL WORK

Representatives of the Accident Prevention Bureau daily visit many vessels on the Pacific coast. From time to time they are especially pleased to find a vessel doing an exceptionally good job in its accident-prevention program.

One of the most recently visited vessels of this type is the *William Luckenbach*, at present operated by the Pacific Far East Lines. The general well-kept appearance of the vessel is apparent to anyone approaching it.

As one steps upon the expanded gangplank he finds he is using a gangplank that completely meets the specifications of a good gangplank, as set forth in MARINE SAFE PRACTICE PAMPHLET NO. 11. This plank has two chain handlines secured at the top and bottom of the plank and independent of the ship. This allows the handline to be tight at all times. Extending from the turntable are two-pipe, self-adjusting, handrails protecting the area between the stanchion on the plank, and handlines around the turntable itself.

Along the lower handline on the inshore side an extension cord has been securely fastened, bearing five lights encased in wire cages to prevent breakage. This gives complete light the length of the gangplank at knee height, insuring a well-lighted means of access at all times.

With the exception of a topping lift stopper clamp and sheave arrangements at No. 5 aft, this C3 has no gear or equipment different than any other C3. The maintenance and ingenuity in use of the gear provided is the noteworthy thing aboard this vessel. This vessel does not have topping lift winches, consequently there is a housekeeping problem with the excess topping lift when stevedoring operations are being carried on.

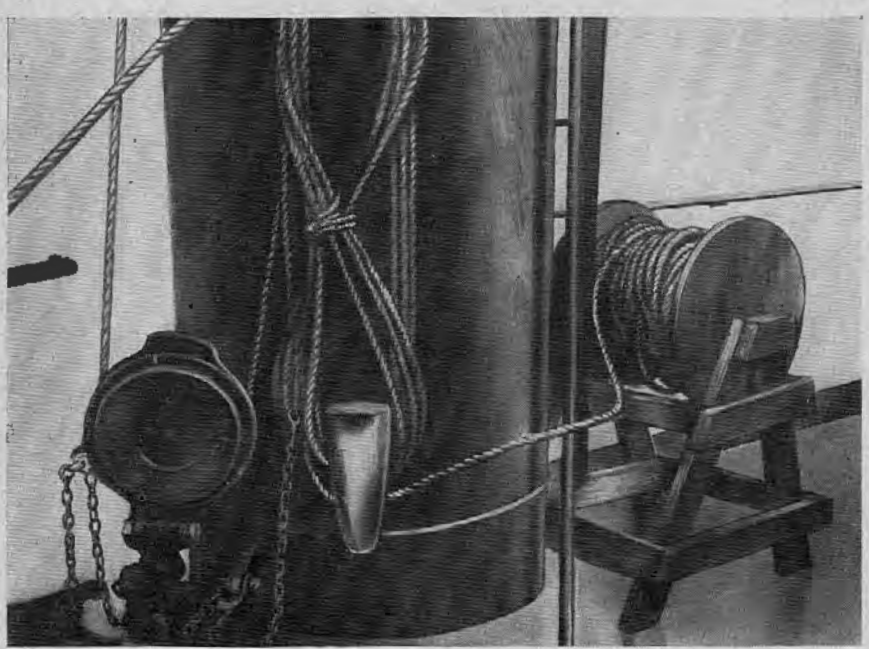
Mr. Donald O'Brien, chief officer, and a primary factor behind this ship's excellent approach to safety, together with his bos'n, has come up with a solution to the question, "What to do with the excess lift?" The ship's carpenter obtained an empty wire reel approximately 1½ feet wide and 2 feet in diameter, and mounted it with an axle on a small stand constructed of 2" x 4" stock. This is located near the cleat where the topping lift is secured. After the gear has been rigged for stevedoring operations, and the lift has been secured in the cleat, the excess lift is then coiled upon this empty reel.

In this manner the lift is protected from any cutting action which can be received when the lift is strewn about the deck, and when objects such as strongbacks, pontoons, or other loads are set upon it.

Second, and equally important, it eliminates the nuisance of scattered coils on deck, which offer such a wonderful tripping hazard to seamen and stevedores alike.

When questioned as to whether or not longshoremen used it, Mr. O'Brien replied, "When the longshoremen came aboard they looked the arrangement over, unreeled the lift, rearranged the gear to fit the conditions at hand, secured the lift, and rewound the excess back upon the reel. This was done without instruction from either the ship or stevedore supervision."

Perhaps you have attempted to install a new wrinkle in your operation and have been discouraged by the acts of an individual longshore gang in refusing to accept your improvements. It is respectfully suggested that if this has happened, try again and perhaps you will receive the cooperation that Mr. O'Brien has received.—*Courtesy of Seamen's Safety Guide, November 1952.*



WOULD YOU—

Have your safety goggles in your pocket when doing work hazardous to your eyes if you knew you were to lose your sight by neglecting to use them?

Remove the safety guard if you knew that as a result either you or your shipmate might lose a hand or arm?

Neglect reporting a slight injury for proper treatment if you knew that blood poisoning or infection would ensue?

Permit material to remain out of place on deck if you felt certain that either you or your shipmate would trip over it and sustain a broken leg?

Indulge in horseplay if you knew that it might result in the death or crippling af a shipmate?

Permit your mind to wander from what you are doing if you knew you would lose a finger or hand by doing so?

Use a mushroomed or burred-head tool if you knew that flying particles from the tool would strike another in the eye and blind him?

Use a broken ladder if you were certain that it would give way, causing you to fall and fracture a limb?

Wear shoes with thin or wornout soles if you knew that a rusty nail or other sharp object on the deck would pierce your shoe, penetrate your foot and cause blood poisoning?

Ignore safety rules and instructions if your indifference would result disastrously to yourself and to your shipmates?

Though the answer to all of the foregoing questions is a decided "NO", many deaths and accidents continue to occur from such causes. They can be prevented, however, if forethought is exercised. *Forethought, not afterthought, is the keynote to safety.*

His narrow new home was built of pine, because he ignored a "NO SMOKING" sign.

Amendments to Regulations

Title 46—Shipping

Subchapter B—Merchant Marine Officers and Seamen

[CGFR 52-58]

PART 12—CERTIFICATION OF SEAMEN

ENDORSEMENTS PLACED ON SEAMEN'S DOCUMENTS UNDER WARTIME REGULATIONS

The President by Proclamation 2974, dated April 28, 1952, and published in the FEDERAL REGISTER April 30, 1952, declared that the existence of an Unlimited National Emergency proclaimed May 27, 1941, by Proclamation 2487 was terminated since the declaration by Congress of the existence of a state of war between the United States of America and Japan, which was the last of the states of war declared by Congress between the United States of America and Japan, Germany, Italy, Hungary, Rumania, and Bulgaria, was terminated by the coming into force on April 28, 1952, of the Treaty of Peace with Japan signed at San Francisco September 8, 1951. During World War II certain certificates or documents issued to seamen as "Able Seaman" or "Qualified Member of the Engine Department" were endorsed "Unless sooner invalidated this certificate shall expire six months after the termination of the war." In order to obtain a certificate with this restrictive endorsement, it was necessary for the applicant to meet all the present requirements for the rating of "Able Seaman" or "Qualified Member of the Engine Department" with exception of sea service, which had been reduced. In most instances these seamen now have the required service to obtain a document without this restrictive endorsement. It is urged that seamen holding documents bearing this restrictive endorsement apply for documents without this restrictive endorsement as soon as possible.

In order that the operation of vessels engaged in activities essential to our national defense will not be delayed, as well as to afford an opportunity for seamen presently holding certificates or documents bearing this restrictive endorsement to exchange them for documents without such restrictive endorsement, amendments to 46 CFR 12.05-13 and 12.15-13 extend the period of validity of such documents or certificates until July 1, 1953. The purpose for the amendments to 46 CFR 12.05-13 and 12.15-13 is to provide qualified seamen for the manning of merchant vessels which are necessary in our national defense. It is hereby found that compliance with a notice of proposed rule making, 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. 120, dated July 31, 1950 (15 F. R. 6521), and an Order of the Acting Secretary of the Treasury dated January 23, 1951, identified as CGFR 52-1 (16 F. R. 731), to promulgate regulations in accordance with the statutes cited with the regulations below, the following amendments to the regulations are prescribed and shall be effective from October 28, 1952:

SUBPART 12.05—ABLE SEAMAN

Section 12.05-13 is amended to read as follows:

§ 12.05-13 *Certification of able seamen under wartime regulations.* (a) Any person who has been certified as able seaman under wartime regulations and whose certificate or document is endorsed "Unless sooner invalidated this certificate shall expire six months after the termination of the war" shall be permitted to be employed in the capacities indicated on his certificate or document until such certificate or document is revoked or suspended or until July 1, 1953. A seaman who can produce documentary evidence of sufficient service to comply with the peacetime sea service requirements may be issued a merchant mariner's document on which the restrictive endorsement is omitted: *Provided,* That he surrenders for cancellation the original certificate or merchant mariner's document bearing the restrictive endorsement and that he is qualified in all other respects.

(b) Any able seaman holding a certificate or document endorsed "Unless sooner invalidated this certificate shall expire six months after the termination of the war" may not be engaged in the capacities indicated on his certificate or document on or after July 1, 1953, except that he may be continued in employment necessary for completion of the voyage which commenced prior to that date.

SUBPART 12.15—QUALIFIED MEMBER OF THE ENGINE DEPARTMENT

Section 12.15-13 is amended to read as follows:

§ 12.15-13 *Certification of qualified members of the engine department under wartime regulations.* (a) Any person who has been certified as a qualified member of the engine department under wartime regulations and whose certificate or document is endorsed "Unless sooner invalidated this certificate shall expire six months after the termination of the war" shall be permitted to be employed in the capacities indicated on his certificate or document until such certificate or document is revoked or suspended or until July 1, 1953. A seaman who can produce documentary evidence of sufficient sea service to comply with the peacetime sea service requirements may be issued a merchant mariner's document on which the restrictive endorsement is omitted: *Provided,* That he surrenders for cancellation the original certificate or merchant mariner's document bearing the restrictive endorsement and that he is qualified in all other respects.

(b) Any qualified member of the engine department holding a certificate or document endorsed "Unless sooner invalidated this certificate shall expire six months after the termination of the war" may not be engaged in the capacities indicated on his certificate or document on or after July 1, 1953, except that he may be continued in employment necessary for completion of the voyage which commenced prior to that date.

(Sec. 13, 38 Stat. 1169, as amended, sec. 7, 49 Stat. 1936, as amended; 46 U. S. C. 672, 689. Interpret or apply secs. 1, 2, 64 Stat. 1120; 46 U. S. C., note preceding sec. 1)

Dated: December 23, 1952.

[SEAL] MERLIN O'NEILL,
Vice Admiral, U. S. Coast Guard,
Commandant.

[F. R. Doc. 52-13735; Filed, Dec. 30, 1952; 8:56 a. m., 17 F. R. 11882—12/31/52.]

DANGER

NO JOB IS SO IMPORTANT
NO WORK IS SO URGENT
THAT WE CAN NOT TAKE TIME
TO PERFORM OUR WORK SAFELY

Equipment Approved by the Commandant

DEPARTMENT OF THE TREASURY

United States Coast Guard

[CGFR 52—45]

(R. S. 4405, 4491, 54 Stat. 164, 166, as amended; 46 U. S. C. 375, 489, 526e, 526p; 46 CFR 25.4–1, 160.008)

GAS MASKS, SELF-CONTAINED BREATHING APPARATUS, AND SUPPLIED-AIR RESPIRATORS

Approval No. 160.011/22/1, Type WUG–N1 Universal Gas Mask, Bureau of Mines Approval No. 1443, Willson Catalog No. 49, P. 50 manufactured by Willson Products, Inc., Reading, Pa. (Supersedes Approval No. 160.011/22/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.011/23/1, Type WUG–N2 Universal Gas Mask, Bureau of Mines Approval No. 1445, Willson Catalog No. 49, P. 50, manufactured by Willson Products, Inc., Reading, Pa. (Supersedes Approval No. 160.011/23/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.011/24/1, Type WIG–G4 Ammonia Gas Mask, Bureau of Mines Approval No. BM–1425, Willson Catalog No. 49, P. 54, manufactured by Willson Products, Inc., Reading, Pa. (Supersedes Approval No. 160.011/24/0 published in the Federal Register dated July 31, 1947.)

(R. S. 4405, 4417a, 4426, 4491, 49 Stat. 1544, 54 Stat. 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 463a, 489, 50 U. S. C. 1275; 46 CFR 61.16, 77.18, 95.17, 114.18, 160.011)

WINCHES, LIFEBOAT

Approval No. 160.015/62/0, Type B–135M lifeboat winch, approved for a maximum working load of 13,500 pounds pull at the drums (6,750 pounds per fall), identified by general arrangement dwg. No. 2105–8 dated January 28, 1952, manufactured by Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J.

(R. S. 4405, 4417a, 4426, 4488, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, 245, as amended; 46 U. S. C. 367, 375, 391a, 404, 481, 489, 1333, 50 U. S. C. App. 1275; 46 CFR 33.10–5, 59.3a, 60.21, 76.15a, 94.14a, 160.015)

SEA ANCHORS, LIFEBOAT

Approval No. 160.019/11/0, Type JF lifeboat sea anchor, U. S. C. G. dwg. No. MMI–562 and specification dated November 1, 1943, revised August 24, 1944, manufactured by Samuel Fassman Co., 164 Liberty Avenue, Brooklyn 12, N. Y.

(R. S. 4405, 4417a, 4426, 4488, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 481, 489, 1333, 50 U. S. C. App. 1275; 46 CFR 33.15–1, 33.15–5, 59.11, 76.14, 160.019)

LIFE FLOATS

Approval No. 160.027/10/1, 7.0′ x 3.5′ (10″ x 10″ body section), elliptical, solid balsa wood life float, 10-person capacity, dwg. No. G–331, dated December 13, 1943, revised June 5, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.027/10/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.027/11/1, 8.5′ x 4.0′ (11″ x 11″ body section), elliptical, solid balsa wood life float, 15-person capacity, dwg. No. G–331, dated December 13, 1943, revised June 5, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.027/11/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.027/12/1, 9.0′ x 5.5′ (12″ x 12″ body section), elliptical, solid balsa wood life float, 20-person capacity, dwg. No. G–331, dated December 13, 1943, revised June 5, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.027/12/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.027/13/1, 10.0′ x 5.5′ (12″ x 12″ body section), elliptical, solid balsa wood life float, 25-person capacity, dwg. No. G–331, dated December 13, 1943, revised June 5, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.027/13/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.027/14/1, 11.5′ x 7.0′ (14″ x 14″ body section), elliptical, solid balsa wood life float, 40-person capacity, dwg. No. G–331, dated December 13, 1943, revised June 5, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.027/14/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.027/15/1, 13.0′ x 8.5′ (16″ x 16″ body section), elliptical, solid balsa wood life float, 60-person capacity, dwg. No. G–331, dated December 13, 1943, revised June 5, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.027/15/0 published in the Federal Register dated July 31, 1947.)

(R. S. 4405, 4417a, 4426, 4481, 4488, 4491, sec. 11, 35 Stat. 428, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 474, 475, 481, 489, 1333, 50 U. S. C. App. 1275; 46 CFR 160.027)

DAVITS, LIFEBOATS

Approval No. 160.032/109/1, telescopic gravity davit, type TG–9.5, approved for maximum working load of 1,900 pounds per set (950 pounds per arm), using one part falls, identified by arrangement dwg. No. 3237 dated May 26, 1950, and revised April 11, 1952, manufactured by Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Ambay, N. J. (Supersedes Approval No. 160.032/109/0 published in the Federal Register dated March 21, 1951.)

(R. S. 4405, 4417a, 4426, 4481, 4488, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 474, 481, 489, 1333, 50 U. S. C. 1275; 46 CFR 160.032)

MECHANICAL DISENGAGING APPARATUS, LIFEBOAT

Approval No. 160.033/4/1, Rottmer type size C releasing gear, approved for maximum working load of 18,300 pounds per set (9,150 pounds per hook), identified by general arrangement dwg. No. 1498–5 dated January 8, 1951, and revised June 9, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.003/4/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.033/26/1, Rottmer type size 297 releasing gear, approved for maximum working load of 39,800 pounds per set (19,900 pounds per hook), identified by assembly dwg. No. 1895–10 dated November 22, 1948, manufactured by Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J. (Supersedes Approval No. 160.033/26/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.033/27/1, Rottmer type size 298 releasing gear, approved for maximum working load of 27,700 pounds per set (13,850 pounds per hook), identified by arrangement dwg. Nos. 3367–3 dated November 13, 1951,

and 3372–4 dated November 1, 1951, manufactured by Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J. (Supersedes Approval No. 160.033/27/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.033/28/1, Rottmer type size 299 releasing gear, approved for maximum working load of 15,720 pounds per set (7,860 pounds per hook), identified by arrangement dwg. No. 3372–6 dated December 11, 1951, manufactured by Welin Davit & Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J. (Supersedes Approval No. 160.033/28/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.033/39/1, Rottmer type S–1 releasing gear, approved for maximum working load of 21,300 pounds per set (10,650 pounds per hook), identified by hoist gear assembly dwg. No. M–115–1 dated October 25, 1949, and revised June 6, 1952, manufactured by Marine Safety Equipment Corp., Point Pleasant, N. J. (Supersedes Approval No. 160.-033/39/0 published in the Federal Register dated May 10, 1950.)

Approval No. 160.033/44/0, type T–9.5 releasing gear, approved for maximum working load of 1,900 pounds per set (950 pounds per hook), identified by hoist and release gear dwg. No. 3237–2 dated June 8, 1950, and revised July 14, 1950, for use on all vessels other than ocean and coastwise, manufactured by Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J.

(R. S. 4405, 4417a, 4426, 4488, 4491, 49 Stat.1544, 54 Stat. 346, and sec. 5 (c), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 481, 489, 1333, 50 U. S. C. App. 1275; 46 CFR 33.10–15, 33.10–20, 59.68, 76.62, 94.59, 160.033)

LIFEBOATS

Approval No. 160.035/26/1, 26.0′ x 8.75′ x 3.75′ steel oar-propelled lifeboat, 50-person capacity, identified by general arrangement dwg. No. G–2650 dated April 2, 1952, and revised June 13, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.035/26/0 published in the Federal Register dated July 31, 1947.)

Approval No. 160.035/194/2, 35.0′ x 12.33′ x 5.25′ steel hand-propelled lifeboat, 135-person capacity, identified by construction and arrangement dwg. No. 1871 dated April 9, 1952, manufactured by Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J. (Supersedes Approval No. 160.-035/194/1 published in the Federal Register dated October 29, 1948.)

Approval No. 160.035/213/1, 12.0′ x 4.4′ x 1.9′ steel oar-propelled lifeboat, 6-person capacity, identified by general arrangement dwg. No. G–1206–S dated April 25, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y. (Supersedes Approval No. 160.035/213/0 published in the Federal Register dated April 1, 1948.)

Approval No. 160.035/236/0, 16.0′ x 5.8′ x 2.42′ steel oar-propelled lifeboat, 13-person capacity, identified by general arrangement dwg. No. G–1613 dated April 28, 1952, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York 7, N. Y.

Approval No. 160.035/285/0, 18.0′ x 5.75′ x 2.42′ aluminum oar-propelled lifeboat, 16-person capacity, identified by construction and arrangement dwg. No. 18–4 dated October 24, 1951, and revised June 6, 1952, manufactured by Marine Safety Equipment Corp., Point Pleasant, N. J.

Approval No. 160.035/288/0, 26.0′ x 9.0′ x 3.83′ steel, oar-propelled lifeboat, 53-person capacity, identified by general arrangement and construction dwg. No. 49R–2658 dated January 15, 1952, and revised July 14, 1952, manufactured by Lane Lifeboat & Davitt Corp., 8920 Twenty-sixth Avenue, Brooklyn 14, N. Y.

(R. S. 4405, 4417a, 4426, 4481, 4488, 4491, 4492, 35 Stat. 428, 49 Stat. 1544, 54 Stat. 346, and sec 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 396, 404, 474, 481, 489, 490, 1333, 50 U. S. C. App. 1275; 46 CFR 33.01–5, 59.13, 76.16, 94.15, 113.10, 160.035)

KITS, FIRST-AID

Approval No. 160.041/4/0, First-aid Kit, Model No. H–24, dwg. No. H–24–K revised July 11, 1952, submitted by A. E. Halperin Co., Inc., 75–87 Northhampton Street, Boston 18, Mass.

(R. S. 4405, 4417a, 4488, 4491, 49 Stat. 1544, 54 Stat. 346, 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 481, 489, 1333, 50 U. S. C. App. 1275; 46 CFR 160.041)

VALVES, SAFETY

Approval No. 162.001/5/1, Style HRC–MS–1 carbon steel body pop safety valve, 350 p. s. i. maximum pressure, 450° F. maximum temperature, dwg. No. B–33675 dated Aug. 22, 1941, and G–33675 dated July 16, 1952, approved for sizes 2″, 2½″, 3″ 3½″ and 4″, manufactured by the Crosby Steam Gage & Valve Co., 43 Kendrick Street, Wrentham, Mass. (Supersedes Approval No. 162.001/5/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.001/6/1, Style HRD–MS–2 carbon steel body pop safety valve, 450 p. s. i. maximum pressure, 650° F. maximum temperature, dwg. No. B–33676 dated July 18, 1952, and G–33676 dated July 18, 1952, approved for sizes 1½″, 2″, 2½″, 3″, 3½″ and 4″, manufactured by the Crosby Steam Gage & Valve Co., 43 Kendrick Street, Wrentham, Mass. (Supersedes Approval No. 162.001/6/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.001/7/1, Style HRD–MS–3 carbon steel body pop safety valve, 500 p. s. i. maximum pressure, 650° F. maximum temperature, dwg. No. B–33677 dated July 18, 1952, and G–33677 dated July 18, 1952, approved for sizes 1½″, and 2″, manufactured by the Crosby Steam

Gage & Valve Co., 43 Kendrick Street, Wrentham, Mass. (Supersedes Approval No. 162.001/7/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.001/8/1, Style HRSA–MS–3 carbon steel body pop safety valve, 500 p. s. i. maximum pressure, 750° F. maximum temperature, dwg. No. D–33678, dated July 16, 1952, and G–33678 dated July 16, 1952, approved for sizes 1½" and 2", manufactured by the Crosby Steam Gage & Valve Co., 43 Kendrick Street, Wrentham, Mass. (Supersedes Approval No. 162.001/8/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.001/53/1, Type 38SV alloy steel pop safety valve, 1,500 p. s. i. maximum pressure, 1050° F. maximum temperature, dwg. Nos. B31432–2, Alt. 2 dated May 9, 1952, and C32258–1 undated, approved for sizes 1½", 2", 2½", 3" and 4", manufactured by Foster Engineering Co., 835 Lehigh Avenue, Union, New Jersey. (Supersedes Approval No. 162.001/53/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.001/56/1, Type 1451 Consolidated bronze body pop safety valve, 300 p. s. i. maximum pressure, 450° F. maximum temperature, dwg. No. 3VL953 dated July 28, 1952, approved for 2½" size, manufactured by Manning, Maxwell & Moore, Inc., Stratford, Conn. (Supersedes Approval No. 162.001/56/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.001/60/1, Type 1426 Consolidated duplex carbon steel body pop safety valve, 300 p. s. i. maximum pressure for sizes 3" and 4", and 600 p. s. i. maximum pressure for sizes 2" and 2½", 650° F. maximum temperature. dwg. No. 3VK953 dated June 13, 1952, approved for sizes 2", 2½", 3" and 4", manufactured by Manning, Maxwell & Moore, Inc., Stratford, Conn. (Supersedes Approval No. 162.001/60/0 published in the Federal Register dated July 31, 1947.)

(R. S. 4405, 4417a, 4418, 4426, 4433, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, 245, as amended; 46 U. S. C. 367, 375, 391a, 392, 404, 411, 489, 1333, 50 U. S. C. App. 1275; 46 CFR 52.65)

BOILERS, HEATING

Approval No. 162.003/21/1, Model MSCH, Size 28–260, waste heat boiler, heat recovery silencer type, fitted with spark arrester, steel construction, dwg. Nos. B–476A revised July 24, 1952, and B–743 revised July 24, 1952, maximum design pressure 30 p. s. i., approval limited to bare boiler, manufactured by the Maxim Silencer Co., Hartford, Conn. (Supersedes Approval No. 162.003/21/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.003/26/1, Model 400 hot water heating boiler, forced circulation coil type, dwg. No. L–33, dated July 17, 1952, maximum design pressure 30 p. s. i., approval limited to bare boiler, manufactured by Preferred Utilities Mfg. Corp., 1860 Broadway, New York 23, N. Y. (Supersedes Approval No. 162.003/26/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.003/27/1, Model 800T hot water heating boiler, forced circulation coil type, dwg. No. L–33, dated July 17, 1952, maximum design pressure 30 p. s. i., approval limited to bare boiler, manufactured by Preferred Utilities Mfg. Corp., 1860 Broadway, New York 23, N. Y. (Supersedes Approval No. 162.003/27/0 published in the Federal Register dated July 31, 1947.

(R. S. 4405, 4417a, 4418, 4426, 4433, 4434, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, 245, as amended; 46 U. S. C. 367, 375, 391a, 392, 404, 411, 412, 489, 1333, 50 U. S. C. App. 1275; 46 CFR Part 52)

FIRE EXTINGUISHERS, PORTABLE, HAND, CARBON-TETRACHLORIDE TYPE

Approval No. 162.004/21/1, General Quick Aid Fire Guard Model 85 HD, 1-quart carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. BT–185–XJ, Rev. B dated January 21, 1952, name plate dwg. No. AT–185–1D dated March 3, 1952, no revision, manufactured by the General Detroit Corp., 2272 East Jefferson Avenue, Detroit 7, Mich. (Supersedes Approval No. 162.004/21/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.004/22/1, General Quick Aid Fire Guard Model 95 HD, 1½-quart carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. BT–195–XJ, dated March 28, 1952, no revision, name plate dwg. No. AT–195–1D, dated March 3, 1952, no revision, manufactured by the General Detroit Corp., 2272 East Jefferson Avenue, Detroit 7, Mich. (Supersedes Approval No. 162.-004/22/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.004/23/2, General Quick Aid Fire Guard Model 85 HD, 1-quart carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. BT–185–XJ, Rev. B dated January 21, 1952, name plate dwg. No. AT–185–1D, dated March 3, 1952, no revision, manufactured by the General Pacific Corp., 1501 East Washington Boulevard, Los Angeles 21, Calif. (Supersedes Approval No. 162.004/23/1 published in the Federal Register dated October 2, 1948.)

Approval No. 162.004/54/0, General Quick Aid Fire Guard Model 95 HD, 1½-quart carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. BT–195–XJ, dated March 28, 1952, no revision, name plate dwg. No. AT–195–ID, dated March 3, 1952, no revision, manufactured by the General Pacific Corp., 1501 East Washington Boulevard, Los Angeles 21, Calif.

Approval No. 162.004/65/0 Badger's CTC (Symbol PY), 1-quart carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. B–15791 dated June 17, 1949, no revision, name plate dwg. No. A–16174, Rev. 4 dated January 8, 1952, manufactured for Badger Fire Extinguisher Co., 626 Somerville Avenue, Somerville 43, Mass., by the Pyrene Manufacturing Co., 560 Belmont Avenue, Newark 8, N. J.

Approval No. 162.004/66/0, Badger's CTC (Symbol PY), 1½-qt. carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. B–16164 dated November 22, 1950, no revision, name plate dwg. No. A–16237, Rev. 4 dated January 8, 1952, manufactured for Badger Fire Extinguisher Co., 626 Somerville Avenue, Somerville 43, Mass., by the Pyrene Manufacturing Co., 560 Belmont Avenue, Newark 8, N. J.

Approval No. 162.004/67/0, Gorham (Symbol PY) 1-qt. carbon-tetrachoride type hand portable fire extinguisher, assembly dwg. No. B–15791 dated June 17, 1949, no revision, name plate dwg. No. A–15759, Rev. No. 6 dated January 5, 1952, manufactured for Gorham Fire Equipment Co., 30 India Wharf, Boston, Mass., by the Pyrene Manufacturing Co., 560 Belmont Avenue, Newark 8, N. J.

Approval No. 162.004/68/0, Gorham (Symbol PY), 1½-quart carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. B–16164 dated November 22, 1950, no revision, name plate dwg. No. A–15760, Rev. No. 6 dated January 5, 1952, manufactured for Gorham Fire Equipment Co., 30 India Wharf, Boston, Mass., by the Pyrene Manufacturing Co., 560 Belmont Avenue, Newark 8, N. J.

Approval No. 162.004/69/0, Kidde VL No. 6 (Symbol PY), 1-qt. carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. B–15791 dated June 17, 1949, no revision, name plate dwg. No. A–16158, Rev. No. 3 dated July 17, 1951, manufactured for Walter Kidde & Co., Inc., Belleville 9, N. J., by the Pyrene Manufacturing Co., 560 Belmont Avenue, Newark 8, N. J.

Approval No. 162.004/70/0, Kidde VL No. 5 (Symbol PY), 1½-quart carbon-tetrachloride type hand portable fire extinguisher, assembly dwg. No. B–16164 dated November 22, 1950, no revision, name plate dwg. No. A–16159,

Rev. No. 3 dated July 16, 1951, manufactured for Walter Kidde & Co., Inc., Belleville 9, N. J., by the Pyrene Manufacturing Co., 560 Belmont Avenue, Newark 8, N. J.

(R. S. 4405, 4417a, 4426, 4479, 4491, 4492, 49 Stat. 1544, 54 Stat. 165, 166, 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 463a, 472, 489, 490, 526g, 526p, 1333, 50 U. S. C. 1275; 46 CFR 25.5–1, 26.3–1, 27.3–1, 34.25–1, 61.13, 77.13, 95.13, 114.15)

Dated: October 2, 1952.

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

[F. R. Doc. 52–11030; Filed, Oct. 10, 1952; 8:52 a. m., 17 F. R. 9080—10/11/52.]

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 November 15 to December 15, 1952, is as follows:

The Lunkenheimer Co., P. O. Box 360, Annex Station, Cincinnati 14, Ohio. Heat Nos. 442 and 443.

M. Greenberg's Sons, 765 Folsom St., San Francisco 7, Calif. Heat No. 169.

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated and recertificated from November 26 to December 29, 1952, 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

Metropolitan Refining Co., Inc., 50–23 Twenty Third St., Long Island City 1, N. Y. Certificate No. 362, dated December 2, 1952. "LIQUID SLUDGE-OUT."

National Aluminate Corp., 6216 West 66th Place, Chicago 38, Ill. Certificate No. 363, dated December 19, 1952, "NALCO SR–155."

RECERTIFIED WITH ORIGINAL NUMBERS IN ACCORDANCE WITH SECTION 147.03–7

Elraco Engineering Co., 14th and Garden Streets, Hoboken, N. J. Certificate No. 264, dated December 3, 1952. "ELRACO DEGREASER."

Merchant Marine Personnel Statistics

MERCHANT MARINE OFFICER LICENSES ISSUED

DECK

October 1952

Grade	Original	Renewal
Master:		
Ocean	30	181
Coastwise	4	14
Great Lakes	3	5
B. S. & L.	5	64
Rivers	6	16
Radio officer licenses issued	43	
Chief mate:		
Ocean	46	29
Coastwise		1
Mate:		
Great Lakes		
B. S. & L.	2	7
Rivers	3	13
Second mate:		
Ocean	61	42
Coastwise		1
Third mate:		
Ocean	34	22
Coastwise		
Pilots:		
Great Lakes		7
B. S. & L.	75	161
Rivers	50	49
Master: Uninspected vessels		5
Mate: Uninspected vessels	2	1
Total	364	618
Grand total	982	

ENGINEER

Grade	Original	Renewal
STEAM		
Chief engineer:		
Unlimited	38	160
Limited	8	76
First assistant engineer:		
Unlimited	26	41
Limited	2	6
Second assistant engineer:		
Unlimited	39	59
Limited		1
Third assistant engineer:		
Unlimited	39	55
Limited		
MOTOR		
Chief engineer:		
Unlimited	3	44
Limited	21	49
First assistant engineer:		
Unlimited		4
Limited	1	1
Second assistant engineer:		
Unlimited	3	9
Limited	1	3
Third assistant engineer:		
Unlimited	6	57
Limited	2	
Chief engineer: Uninspected vessels	5	1
Assistant engineer: Uninspected vessels	7	
Total	201	566
Grand total	767	

INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 892 cases during the month of October 1952. From this number, hearings before Examiners resulted involving 18 officers and 88 unlicensed men. In the case of officers, no license was revoked, three were suspended without probation, four were suspended with probation granted, two licenses were voluntarily surrendered, seven cases were dismissed after hearing, and no hearings were closed with an admonition. Of the unlicensed personnel, 16 certificates were revoked, 25 were suspended without probation, 36 were suspended with probation granted, 14 certificates were voluntarily surrendered, three hearings were closed with admonitions, and four cases were dismissed after hearing.

ORIGINAL SEAMEN'S DOCUMENTS ISSUE

October 1952

Type of document	Atlantic coast	Gulf coast	Pacific coast	Great Lakes and rivers	Total
Staff officer	35	2	29	1	67
Continuous discharge book	----	9	----	----	9
Merchant mariner's documents	895	226	592	714	2,427
AB any waters unlimited	81	24	53	9	167
AB any waters, 12 months	82	18	40	46	186
AB Great Lakes, 18 months	2	----	----	13	15
AB tugs and towboats, any waters	----	----	----	----	0
AB bays and sounds [1]	1	----	----	----	1
AB seagoing barges	----	----	----	----	0
Lifeboatman	217	31	153	56	457
Q. M. E. D.	145	39	83	89	356
Certificate of service	865	221	581	674	2,341
Tankerman	10	15	5	29	59

[1] 12 months, vessels 500 gross tons or under, not carrying passengers.

NOTE.—The last 11 categories indicate number of endorsements made on United States merchant mariner's documents.

WAIVER OF MANNING REQUIREMENTS

Waivers	Atlantic coast	Gulf coast	Pacific coast	Great Lakes	Total
Deck officers substituted for higher ratings	3	----	1	1	5
Engineer officers substituted for higher ratings	1	----	3	2	6
O. S. for A. B.	4	1	6	12	23
Wiper or coalpassers for Q. M. E. D.	2	1	7	13	23
Total waivers	10	2	17	28	57
Number of vessels	8	2	14	16	40

NOTE.—In addition, individual waivers were granted to permit the employment of 30 able seamen holding certificates for "any waters—12 months" in excess of the 25 percent authorized by statute.

STOP OIL POLLUTION

DISCHARGE OF OIL IN COASTAL WATERS IS ILLEGAL AND PUNISHABLE

(TITLE 33 U. S. C. SEC. 432—437)

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