PROCEEDINGS OF THE
MERCHANT MARINE COUNCIL
UNITED STATES COAST GUARD

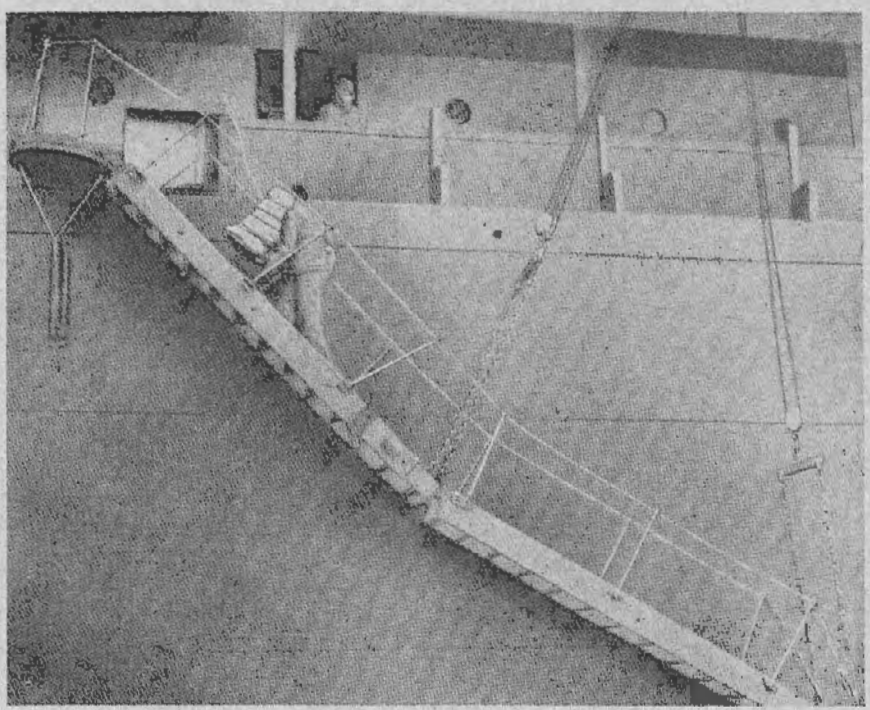
The printing of this publication has been approved by the Director of the Bureau of the Budget, March [illegible] 1952.

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

CG 129

Vol. 10 July 1953 No. 7

DECK TO DOCK OR DOCK TO DECK—MAKE IT SAFE



This is a picture of the way a gangway should not be rigged. It is also a picture of the way not to cross a gangway.
Note the stanchions are loose and not properly secured.
Note the loose one-course hand rope.
Note the lack of sure footing due to the treads being canted from a reasonably horizontal position.
Note the man walking up the ladder is apparently violating two important safety rules. First, he cannot see where he is stepping. Second, both of his hands are engaged with the load he is carrying.

REMEMBER—ONE HAND FOR THE SHIP AND ONE FOR YOURSELF, MAKE IT SAFE

Proceedings of the

MERCHANT MARINE COUNCIL

Published monthly at Coast Guard Headquarters, Washington 25, D. C., under the auspices of the Merchant Marine Council, in the interest of safety at sea. Special permission for republication, either in whole or in part, with the exception of copyrighted articles or pictures, is not required provided credit is given to the Proceedings of the Merchant Marine Council.

The Merchant Marine Council of the United States Coast Guard

CONTENTS

DISTRIBUTION (SDL 54)

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

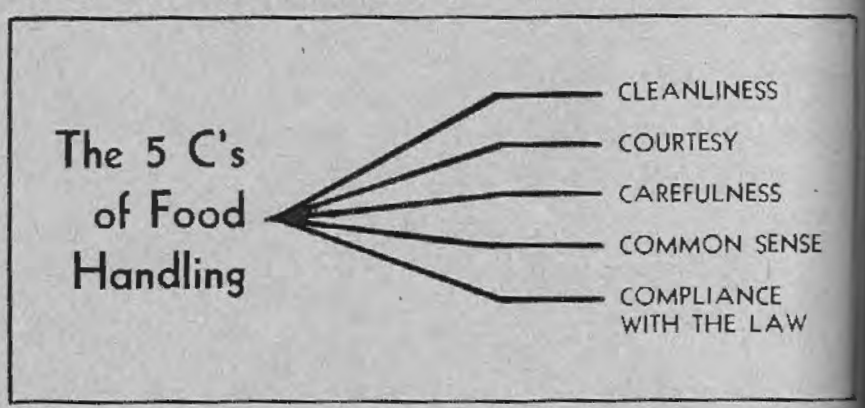
PUBLISHING NOTICE

With this issue, the Proceedings of the Merchant Marine Council resumes its monthly schedule in response to the numerous comments which were received subsequent to the combining of the April–May–June issues. Future issues will not suffer any serious curtailment, although on occasion it will be necessary to condense certain parts of the subject matter in order to stay within space limitations.

FAILURE TO JOIN

The Hearing Examiner in a recent case under the provisions of R. S. 4450, as amended, in which an order was entered suspending the merchant marine document of the seaman concerned, stated his opinion as follows: "In the course of this hearing it developed that this seaman has been following the sea for the past thirty-two years. Apparently his difficulty, on this voyage at any rate, causing him to be neglectful in the performance of his duty and to fail to join his ship, resulted from his excessive use of intoxicating liquors while ashore. The fact that he has been going to sea for this length of time means that he must be held to be aware of the responsibility of seamen to their vessel and to their duties aboard their vessel, particularly in foreign ports. Failure on the part of this seaman, or any seaman, to report to his vessel or to perform his duties on any given day, and particularly his failure to join his vessel at sailing time, jeopardizes not only his ship, but all his shipmates as well. This fact must be forcefully called to the attention of all seamen in the cause of a greater Merchant Service."

In concurring with the Hearing Examiner it is our hope that the individual Masters will, in turn, take steps to direct the attention of their men to this fact.



IGNORANCE, POOR JUDGMENT, DEATH!

Recently, a seaman drowned as a result of a fall while boarding a barge which was not rigged with a gangway. The sequence of events clearly indicate that poor judgment was used in applying artificial respiration. Just as clear is the fact that certain basic principles of manual artificial respiration were completely ignored.

The victim was in the water for only 4 to 8 minutes and his face was submerged for only 1 or 2 minutes.

Approximately four hours before the drowning took place the victim and a shipmate went ashore on personal business. When their personal business had been completed, they entered a local bar from where they could watch the final preparations of their ship for getting under way. When they noticed that final preparations had been just about completed, they commenced to return to their vessel.

Their vessel, a 300-ton uninspected towing vessel, was lying outboard of a 1,000-ton seagoing barge. The nose of the barge was snugged against the pier in such a manner that its stern was approximately 25 feet off from the pier. The deck of the barge was about the level of the pier. In order to board the barge, it was necessary to step from the pier to the barge as there was no gangway.

The two men had been drinking for nearly two hours and were somewhat intoxicated. One of them succeeded in leaping onto the barge, but the other, the principal character in this tragedy, fell into the water. No one saw how this man fell, even though he was accompanied by a shipmate and there were two men working on the barge, securing it for sea. However, a splash and a yell were heard as he fell.

He was thrown a line, and he held it securely for about a minute. Then he lost his grip and disappeared below the surface. A seaman, who had come to assist, immediately dove into the water, recovered the drowning man and held his head above the water, until a line was lowered to raise him to the deck of the barge.

Mind you, the man was in the water for only a few minutes.

He was placed aboard the barge moored alongside the pier. Artificial respiration was commenced immediately.

During the time the man was being pulled out of the water the man overboard alarm had been sounded and had resulted in the chief engineer and the master of the towing vessel appearing on the scene as the man was being pulled out of the water.

The master ordered the chief engineer to summon a Doctor as quickly as possible. He then took the seaman's pulse at the wrist. The man was stretched out on the deck of the barge; his heart was still beating; and, he was still alive. Artificial respiration was applied for about 15 minutes (by obsolete methods). But, during the artificial respiration, the man's pulse kept getting weaker. After 15 minutes or so his pulse stopped and then gave a few spasmodic beats. The master then said, "No use, boys. It's all over. He is done." *He did this basing his judgment concerning the man's death on the fact that he could feel no pulse in the wrist and the fact that the seaman's ears, lips, and the back of his neck were turning blue.*

The supposed deceased was then placed in a pickup truck to be taken to a local hospital which was approximately 10 to 15 minutes' drive distant. Efforts at artificial respiration were continued as the truck proceeded to the hospital. Enroute, the Doctor, who had been summoned and was approaching in another vehicle, intercepted the pickup truck. The Doctor immediately entered the pickup; the seaman was rolled over on his back and was examined by the Doctor. Following this examination the Doctor announced, "I think he will be all right. Take me to the hospital."

The truck was about three city blocks away from the City Hospital at the time. As it continued towards its destination, the Doctor applied artificial respiration to the seaman. Immediately upon arrival at the hospital, oxygen was called for, and a pulmotor was used on the seaman as soon as possible. However, all efforts to revive him were unsuccessful. Shortly thereafter, the Doctor informed the crew members of the towing vessel that the seaman was dead.

Ignorance, poor judgment, death! The title is most appropriate. Yes! The above incident clearly indicates certain basic principles of manual artificial respiration were completely ignored. It further indicates a dangerous lack of knowledge of certain basic facts about the human body.

The reader can judge for himself the wisdom and safety of having no gangway in such instances as was described here. The conclusion is fairly obvious.

Whether he could have survived is a matter of conjecture, because the alcohol in his system reduced his recuperative powers. Yet, careful consideration of the incident as it occurred and a full appreciation of the basic principles of artificial respiration must inevitably lead to the conclusion that strict adherence to recommended procedures Could Have Saved The Victim's life.

The first point deserving of comment was the decision that the man was dead and beyond help less than 30 minutes after the accident. The master based his judgment concerning the man's death on the fact that he could feel no pulse at the wrist and the fact that the seaman's ears, lips, and the back of his neck were turning blue. The fact that the pulse at the wrist had become unperceptible is hardly an absolute indication of death. There are cases of normal active people who have no perceptible pulse at all at the wrist. With respect to the supposed drowning victim turning blue, it must be pointed out that authoritative literature concerning artificial respiration will be found to contain a statement such as the following:

> "SYMPTOMS OF ASPHYXIA"
> "The symptoms by which THE NECESSITY for artificial respiration may be recognized are: Cyanosis (blueness of the skin and membrane), suspension of breathing, or shallow breathing in some cases of poisoning."

The second point deserving of comment is the act of moving the seaman from the barge to a truck on the pier, even though medical aid had been summoned and could be presumed to arrive momentarily. Again quoting from authoritative literature concerning artificial respiration:

> (a) "Begin artificial respiration and continue it rhythmically and WITHOUT INTERRUPTION until spontaneous breathing starts or the victim is pronounced dead by a MEDICAL OFFICER."
> (b) "Artificial respiration should be started immediately. Every moment of delay is serious. It should be continued AT LEAST FOUR HOURS WITHOUT INTERRUPTION, until normal breathing is established or until the patient is pronounced dead by a MEDICAL OFFICER."

The person in charge in this case was a man of considerable maritime experience, who, presumably, was not unaware of the basic fundamentals involved in this particular incident. Some of the readers of this article may feel that knowledge gained early in their careers will guide them in future emergencies. In the event this casualty has not pointed out the fal-

lacy of such a supposition, this comment is certainly appropriate:

"Knowledge is just like rowing upstream; when you stop rowing you don't stand still; you go backward."

To illustrate the portent of the saying, it might be well to cite a recent incident where the proper use of modern recommended artificial respiration methods saved a man's life under the most adverse conditions.

While at sea, the U. S. Coast Guard Cutter *Chautauqua* received a request for medical assistance from another vessel. The vessel was boarded, and the *Chautauqua's* Doctor commenced to operate on one of the crew members for appendicitis.

During the operation the patient ceased to breathe, and artificial respiration was applied by the Holger–Nielson Method. Upon resumption of normal respiration by the patient, the operation was completed, but, again, the patient ceased to breathe.

For the second time, the Doctor and members of the boarding party applied the Holger–Nielson Method of artificial respiration. After some four hours of application, the patient suddenly became conscious and responsive and was able to breathe for himself. He then proceeded to recover from the operation without difficulty.

In reporting the incident, the *Chautauqua* expressed a doubt that the patient could have survived if past methods of artificial respiration had been used. It was the ship's opinion this method was far superior to past methods and had saved this man's life.

As many readers probably know, the Holger–Nielson Method of artificial respiration has been adopted and is recommended by several national organizations. Among these, in addition to the U. S. Coast Guard, are the Department of Defense, the U. S. Public Health Service, and the American National Red Cross.

With two such pointed lessons as cited here, there is still more reason to urge one and all to be familiar with this method of artificial respiration.

The Coast Guard has prepared a booklet, CG 139, "Methods of Artificial Respiration," which may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 10 cents. It will help those unfamiliar with artificial respiration methods to become familiar with the proper manner of applying artificial respiration.

Remember "Knowledge is just like rowing upstream; when you stop rowing you don't stand still, you go backward."

(UN) FORTUNATE DISASTER

There is no doubt but that most of us are extremely fortunate at the infrequency of our listing as a casualty statistic. What, at first, is an apparent disaster often resolves itself into a regrettable, but "lucky", incident.

Consider the case of the wayward bowsprit wagged by 40 feet of auxiliary-schooner yacht as it nosed a destructive path through the cabin and cockpit of an approaching 35-foot cruiser.

Damage there was, a-plenty: shattered plate glass, splintered coamings and bulkheads, cracked and split rails and deck—and a broken foremast and tumbled standing rigging on the schooner.

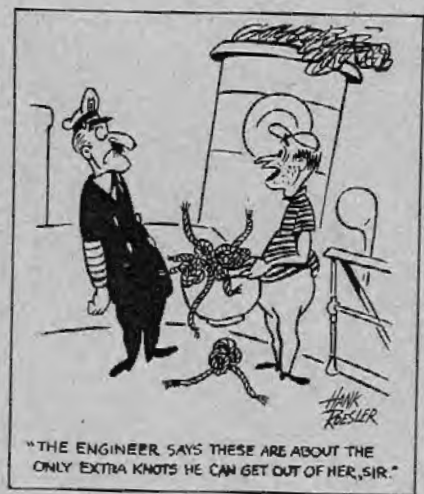
Disastrous! Well, yes—financially, at least; about $3,700.00 combined.

Fortunate?

The unbroken bones and the untorn flesh of the seventeen persons involved attest so—as does the possibility of utilizing the lessons learned from the unsafe practices leading to this collision in the prevention of future accidents.

The term "unsafe practices" is used because investigation into the facts and circumstances surrounding this accident failed to reveal any violation of existing statutory responsibilities on the part of either craft. The collision occurred at the 60-foot wide entrance to a yacht club at a Great Lakes port at about 11:00 p. m. of a clear, calm, quarter-moon night. Both vessels were operated by experienced yachtsmen familiar with the locality, each in compliance with the laws as to equipment and installations, and neither was operated in a wilfully reckless or negligent manner. How, then, a collision?

Visualize the cruiser on an in-bound approach to the harbor entrance,



Courtesy Maritime Reporter.

using local knowledge and the privately operated fixed breakwater lights on either side of the entrance to steer by. When within usable distance, two spotlights were turned on, and kept on, to delineate the shoreside (in-bound starboard) rock seawall. The pilot manipulated the lights from his steering position inside the streamlined cabin. The other six adult members of the party were not concerned actively in the navigation of the vessel.

Coincident with the approach maneuvering of the cruiser, the auxiliary schooner departed her mooring in the harbor and proceeded outbound under power, steering a track parallel to and close aboard the seaward breakwall, while making preparations for hoisting sail as soon as clear of the entrance.

When within 75–100 feet of the entrance, the lights of the incoming cruiser loomed up on the seaward side of the off-shore breakwall, approaching on an apparently converging course. The 65 horsepower engine of the schooner was backed, the electric horn sounded, and at least one of the two men on the bow readying the sail shouted to attract the attention of the cruiser—all to no avail. The collision occurred in a matter of seconds. Later there was no evidence or admission that the proximity of the schooner was apparent to anyone on the cruiser prior to the collision.

What caused the accident? Basically, poor seamanship:

1. Failure to check the course with a compass. In this instance the cruiser, even though steering on the starboard entrance light, was actually cutting across the channel and creating a dangerous crossing situation in restricted waters.

2. Immoderate use of spotlights in areas of merging traffic. This reduced effectiveness of the running lights, as well as the ability of the personnel on board to see objects outside the illuminated sector.

3. No lookout. Both these vessels had on board passengers of maturity and experience that could have been stationed as lookout with no other function to distract attention. Certainly the temporary relinquishing of pleasure in the interests of safety would have paid off.

Multitudinous laws seeking to cover every seagoing probability would not only be objectionable by their very weight, but would also *not prevent* accidents. They would merely provide a penalty to add to the burden. Science asserts that man is the only reasoning animal—that is, having the ability to decide on a course of action based on knowledge, foresight, and consideration. Let's use it!

ACCIDENT CAUSES

FAULTY ENVIRONMENT:

1. HAZARDOUS ARRANGEMENT
   - (a) Unsafe piling and storage.
   - (b) Congested working space.
   - (c) Inadequate aisles, exits.
   - (d) Unsafe processes.
   - (e) Overloading.
   - (f) No safe access to remote or high places.
2. UNSAFE MATERIAL AND EQUIPMENT
   - (a) Rough and sharp-edged materials.
   - (b) Inherently slippery surfaces.
   - (c) Poorly designed and constructed equipment.
   - (d) Low material strength (floors, hoisting equipment, etc.).
   - (e) Weakening of parts by rust, corrosion, and decay.
3. ILLUMINATION
   - (a) Insufficient light.
   - (b) Glare.
   - (c) Unsuitable location of light sources.
4. VENTILATION
   - (a) Insufficient air change.
   - (b) Impure air source.
   - (c) Contamination by processes.
   - (d) Excessive heat.
5. MOVING MACHINERY
   - (a) Unguarded.
   - (b) Inadequately guarded.

THE HUMAN ELEMENT:

1. PHYSICAL AND MENTAL CHARACTERISTICS
   - (a) Poor eyesight.
   - (b) Defective hearing.
   - (c) Muscular weakness.
   - (d) Slow mental reaction.
   - (e) Lack of coordination.
   - (f) Heart, circulatory or other organic weakness.
   - (g) Lack of nervous and emotional stability.
2. KNOWLEDGE AND SKILL
   - (a) Ignorance of correct methods.
   - (b) Faulty work habits.
   - (c) Insufficient experience.
3. ATTITUDES
   - (a) Indifference.
   - (b) Inattention.
   - (c) Indolence.
   - (d) Arrogance.
   - (e) Recklessness.
   - (f) Hostility.

ACCIDENT CAUSES ARE FOUND BY:

1. Investigation of accidents.
2. Study of accident experience.
3. Studying accident experience of others.
4. Inspections.
5. Suggestion systems.
6. Job analysis.

Your Fact Forum

Q. What should be known about water lights?

A. The self-igniting water lights attached to ring buoys, life rafts, and buoyant apparatus may be of either the old calcium carbide or electric type, except that tankers are required to be provided with the electric water light because of the fire hazard involved in using the calcium carbide type.

The calcium carbide water light consists of a copper cylinder, weighted in the bottom to maintain an upright position in the water and provided with a plug or cap which, when removed, admits sufficient water to ignite the light when it strikes the water. This type of water light is attached to the ring buoy and so arranged that the plug or cap device will be removed by the weight of the buoy when thrown overboard. The cylinder contains calcium carbide and calcium phosphide sufficient to create a brilliant flame for at least 45 minutes. Such water lights for life rafts may have the plug or cap removed by manual action.

The electric water light consists of a tube containing dry cell batteries. It is mounted in an inverted position, so that when it is thrown overboard along with a ring buoy, it will be automatically righted on contact with the water by a weight in the bottom. A mercury or gravity switch closes the circuit and turns the lamp on. The batteries supply a continuous source of light for a period of not less than 22 hours.

Q. What is the danger of a kink in a wire rope?

A. A kink distorts the strands and the wires in the strands at the kink. This causes unequal tension in the rope which will lead to early failure of the rope. It may also lead to an accident.

Q. What should be done before painting canvas?

A. You should wet canvas before painting with soapy water or plain fresh water. This keeps the canvas fairly pliable and reduces the amount of paint required in painting the canvas.

Q. What care should you give spare tarpaulins, boat covers, etc.?

A. Spare tarpaulins, lifeboat covers, etc., or awnings, that have not been in use for some time, should be taken on deck, aired, and dried occasionally. Canvas will sweat, and, if not dried out from time to time, will rot.

Q. What care should be given blocks?

A. They should be inspected frequently and kept oiled and greased. Once a year the pins should be scraped and examined; strops should be scraped and red-leaded; and, bushings examined, oiled, or renewed if necessary. The shells should be painted or varnished.

Q. How should fire hose be carried?

A. Fire hose should be carried with nozzles attached and should be connected to fire plugs. Fire hose may be temporarily removed from a hydrant when it interferes with cargo handling, but should be reconnected immediately after cargo handling is completed. The length of the hose should be sufficient to reach the various parts of the deck. Suitable spanners should be secured to each hydrant or nearby.

Q. Is the density of sea water the same at all depths?

A. No. It increases with depth.

Q. What special precautions should be taken with coal cargo?

A. The coal should be well trimmed into the bins to prevent shifting, and no naked lights should be allowed in the holds. The holds should be ventilated whenever possible to discharge any accumulated gas. Weather permitting, hatches should be uncovered to hasten and facilitate the removal of gas.

Q. What is important to bear in mind in the use of "dry ice" for refrigerating perishable cargoes?

A. A substantial volume of carbon dioxide is liberated as dry ice evaporates. Therefore, a compartment containing dry ice should be well ventilated.

Q. Why is it important to keep a record of the weather?

A. Primarily because it facilitates forecasting weather to be expected during certain seasons along different trade routes.

Q. What entries should be made in the logbook regarding fire and boat drills?

A. The day, the month, the time the alarm was sounded, the number of lengths of hose used, the number of the boats swung out, the condition of all fire and lifesaving equipment, the duration of the drill, whether the passengers and the crew were instructed in the adjustment of life preservers and gas masks, and the condition of watertight door mechanism, valves, etc.

HE WENT THATAWAY

A happy throng of adults and children had boarded the excursion vessel, their thoughts absorbed with the possibility of having a good time soaking in the warm sun and cool breezes that the big city couldn't offer. When the "All Aboard" was given, there were over 300 excited passengers on deck, mostly school children with a few parents and teachers.

The excited passengers tensed to the thrill of their moving from the slip.

In the pilothouse, the captain methodically prepared to unmoor his vessel, which was moored starboard side to directly behind two other vessels.

All the lines were cast off. The master rang two-thirds astern on the starboard engine and put his rudder 15 degrees left. But alas! The vessel must have been tired—it didn't want to go out in the stream; in fact it was so strong in its desire to stay ashore that when the captain signalled for two-thirds astern, the vessel forged ahead!

The mate was able to get his starboard forward spring line back on the dock in an attempt to check the forward motion of the vessel. The astonished master immediately rang full astern on both engines, but the vessel was adamant in remaining in port by continuing its forward motion and snapping the spring line.

The excursion vessel managed to clear the stern of the vessel moored dead ahead only because there was a 15 degree left rudder.

In the meantime another passenger laden excursion vessel which had been moored further ahead had started to back out of the same slip. The master of the tired vessel ran his engine room telegraph up to stop, then full astern. But, there was still fight left in the tired vessel. She responded immediately with added power ahead. The astonished but harassed master ordered a 15 degree right rudder to avoid hitting the other backing excursion vessel.

After scraping along the pier, the tired vessel added impetus to its refusal to back by crashing into the bulkhead.

Perhaps some of the passengers were aware of the peculiar behavior of the errant vessel and braced themselves for the ensuing collision, but for the most part, those passengers standing were bowled over like tenpins and those sitting in chairs were overturned. A multitude were injured. The vessel itself was holed above the waterline and required drydocking.

Investigation of this casualty revealed that a man who held a Chief Engineer's license, although articled to the job of oiler on this vessel, had been inattentive to his duties. Not once, not twice, but three times he failed to follow the orders given by the master on the engine room telegraph. The first signal received in the engine room following the standby order was for two-thirds astern on the starboard engine. The Chief Engineer of the excursion vessel was standing by for orders for the port engine and did not concern himself with orders for the starboard engine. It was the oiler, standing by the starboard engine, who answered the bridge by the telegraph with two-thirds astern and promptly turned up the equivalent speed ahead. The next order, for full astern on both engines, was answered properly by the Chief Engineer, but the oiler increased the ahead motion to the screw for which he was responsible. The next two orders came in quick succession: both engines stop, then both engines full astern, with the same results as before.

As the boat struck the bulkhead, the shore superintendent hopped aboard and made for the engine room. There he found the Chief Engineer at the port engine controls with the port engine going full speed astern. The oiler was at the starboard engine controls and the starboard engine was going full speed ahead.

Since the oiler had answered the bridge correctly on the telegraph, his failure to direct his engine accordingly can be attributed only to inattention to duty. Why he was inattentive, 'tis hard to say. We can only guess.

Inattention to duty is a serious matter. Inattention to duty on the part of an officer in charge of a watch can result in a large ship piling up on the beach. Inattention to duty on the part of a watertender can result in major damage to boilers. One result of inattention to duty you already know. There can be no daydreaming or feeling of smug self-satisfaction in performing a job, when one little mistake or a few seconds' delay in the performance of this job spells misfortune. The fellows who dig up tricky slogans say, "Eternal Vigilance is the Price of Safety." They seem to be right.

People ought to say their prayers before they go down slippery stairs

Long chances—shorten lives

Observations of the Old Mariner

A seaman fractured his ankle when he jumped from the ship to the dock to assist with mooring lines. The sea ladder was rigged, but * * *

* * * * *

An explosion occurred in a boiler when a member of the engine room failed to ventilate thoroughly after the lighting-off device failed on the first attempt.

* * * * *

A steward received severe burns when a pot of hot coffee placed on a drain board by a good shipmate tipped over as the vessel rolled.

* * * * *

An awkard location of a bank of batteries aboard a vessel was a contributing factor in a hydrogen gas explosion. In order to make a routine check of the batteries for testing and watering, it was necessary to lay a plank across the top of the cells to gain access. The planks slipped, puncturing the top of the cells and causing the plates to contact, thus making a short circuit. Since there was no method of exhausting the compartment * * * Whoom!

* * * * *

A seaman lost the tip of his finger when he attempted to hook the whip of the boom to a ballast ball. Apparently he did not have enough hands left to give a signal, and the boom operator took the slack out of the line before he could stand clear.

* * * * *

A supervisor checking a sanding and cleaning operation failed to wear goggles and got his eye full of fine particles. The supervisor, that is.

* * * * *

A chief engineer was struck on the face with a shower of shavings while turning out a brass flange on a lathe. This was close. A shaving cut his lip and cheek, missing those precious eyes by a near inch.

* * * * *

A fireman was nipped when he attempted to pass a piece of wood over the cutting head of a joiner without the use of a pusher stick. The wood slipped out of his hand at the danger point.

* * * * *

Two loaded box pallets covered with a tarpaulin caught fire for some unknown reason. This was an ideal situation for a carelessly thrown cigarette butt.

A TOTAL LOSS

A 40-foot pleasure yacht caught fire and burned to the water line and was declared a total loss.

On the day of the fire the owner decided to take the yacht on a pleasure cruise. Prior to starting the engines he examined the engine compartment bilges for gas leakage. There was no leakage. Next, he vented the engine compartment and opened the fuel line shut off valves at the tank. Thereupon, he proceeded to a nearby fuel dock to take on fuel.

The time used to fuel the vessel was approximately 15 minutes, and the amount of fuel taken on board was approximately 33 gallons. The engine hatches and ventilators were closed during fueling. But, the fuel line shut off valves were left open.

The fuel system was a "gravity fed system" with the fuel tanks in the forward part of the vessel at a height higher than the height of the engines' carburetors. The owner had had previous experience with regard to the carburetors flooding and overflowing when the shut off valves were left open for long periods of engine shut down. During short periods of engine shut down, no previous leakage had been noted. Hence the reason for leaving the fuel shut off valves open during fueling.

After fueling the owner started the port engine and found it to function satisfactorily. The starboard engine did not start. Rather, it backfired several times.

The owner continued efforts to start the starboard engine. While he was doing so, he heard a dull thump and opened the engine room hatch to find out what had happened. On opening the hatch, he found that the engine compartment was afire.

The fire spread so rapidly from the engine compartment to the wheelhouse that the owner was obliged to leave the cabin and was unable to fight the fire with fire extinguishers. The vessel burned completely to the water line and was declared a total loss. Fortunately, no one was injured as a result of the fire.

Obviously, the carburetor floats on this vessel could not hold back the pressure of the full tank of fuel. The carburetors flooded, allowing gasoline to go into the engine compartment. Then the backfiring of the starboard engine ignited the gasoline around the carburetor, from where the fire spread to other fuel leakage.

Once again there was a case of fire attendant with total loss of the vessel, because the owner-operator did not take the vital precautions to ventilate and examine his engine compartment bilges after fueling and prior to starting his engines.

NUMBERED AND UNDOCUMENTED VESSELS

The table below gives the cumulative total of undocumented vessels numbered under the provisions of the Act of June 7, 1918, as amended (46 U. S. C. 288), in each Coast Guard district by Customs ports for the quarter ending March 31, 1953. Generally speaking, undocumented vessels are those machinery-propelled vessels of less than 5 net tons engaged in trade which by reason of tonnage are exempt from documentation. They are also those motorboats and motor vessels of 5 net tons and over used exclusively for pleasure purposes which are not documented as yachts or those of less than 5 net tons which by reason of tonnage, are not entitled to be so documented.

Coast Guard District	Customs Port	Total
1 (Boston)	(4) Boston	17,637
	(1) Portland, Maine	11,959
	(2) St. Albans	2,960
	(5) Providence	5,081
	Total	37,637
2 (St. Louis)	(45) St. Louis	9,578
	(12) Pittsburgh	1,922
	(34) Pembina	68
	(35) Minneapolis	2,098
	(40) Indianapolis	3,285
	(42) Louisville	2,612
	(43) Memphis (part)	4,996
	(46) Omaha (part)	270
	(47) Denver	13
	Total	24,842
3 (New York)	(10) New York	42,145
	(6) Bridgeport	8,338
	(11) Philadelphia	17,858
	Total	68,341
5 (Norfolk)	(14) Norfolk	17,113
	(13) Baltimore	24,705
	(15) Wilmington, N. C	9,139
	Total	50,957
7 (Miami)	(18) Tampa (part)	24,012
	(16) Charleston	2,037
	(17) Savannah	3,435
	(49) San Juan	398
	(51) St. Thomas	107
	Total	29,989
8 (New Orleans)	(20) New Orleans	20,993
	(18) Tampa (part)	764
	(19) Mobile	8,629
	(21) Port Arthur	4,106
	(22) Galveston	11,315
	(23) Laredo	2,235
	(24) El Paso	6
	(43) Memphis (part)	76
	Total	48,124
9 (Cleveland)	(41) Cleveland	6,790
	(7) Ogdensburg	2,569
	(8) Rochester	4,838
	(9) Buffalo	4,237
	(36) Duluth	2,574
	(37) Milwaukee	3,587
	(38) Detroit	17,001
	(39) Chicago	5,632
	Total	47,228
11 (Long Beach)	(27) Los Angeles	9,651
	(25) San Diego	1,856
	(26) Nogales	118
	Total	11,625
12 (San Francisco)	(28) San Francisco	21,262
	Total	21,262
13 (Seattle)	(30) Seattle	16,841
	(29) Portland, Oregon	8,585
	(33) Great Falls	432
	Total	25,858
14 (Honolulu)	(32) Honolulu	4,296
	Total	4,296
17 (Juneau)	(31) Juneau	7,112
	Total	7,112
Grand Total		377,271

3 FERRY FATALITIES

The passenger-ladened new automobile approached a ferry barge. The barge was tied to the river bank. In the automobile were Mr. and Mrs. B, and their three children. The children were ages 9, 10, and 14, respectively.

The vehicle was one equipped with an automatic transmission and had been driven only some 400 miles. Theirs was the first vehicle aboard the ferry. Mr. B was driving, and he drove it to within 2 or 3 feet of the guard chain, stopping near the starboard railing of the ferry.

The car stood motionless at this location for approximately three minutes, during which time a second automobile boarded the ferry barge and stopped behind and to the left of Mr. B's car. As the third automobile was boarding the ferry barge, Mr. B's car started moving forward and went through the guard chain, off the ferry, and into the water.

One of the ferry operators attempted to loop the end of the guard chain around the rear bumper of the car, but it sank too quickly. Life preservers and life rings were immediately thrown to the spot where the car had gone down. But, these efforts were to no avail.

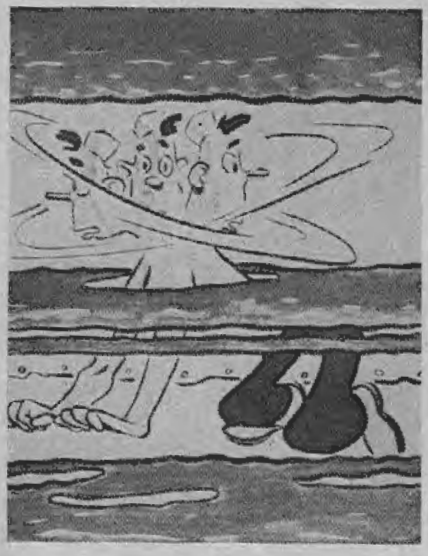
Mr. B and his 14 year old son were the only two survivors. The bodies of Mrs. B and the other two children were found within the automobile when it was raised approximately an hour after the accident.

The investigation of this casualty indicated that the accident was caused by the fact Mr. B apparently became rattled and excited when the car behind him accidently bumped his rear bumper slightly. It appeared that Mr. B stepped on the accelerator accidently, and since the car was equipped with automatic transmission, it surged forward through the guard chain and overboard.

Mr. B, when questioned later, stated that he thought he had stopped the engine of his car, placed his emergency brake on, and had taken his car out of gear. However, he was not positive that he did any or all of these things. In the event that he did do these things, it would have taken a terrific impact on the part of the automobile behind him to knock his car overboard with the brakes set, breaking the guard chain, and knocking the railing down in the process. The testimony of the other witnesses did not reveal that they either saw or heard any such impact.

It was also brought out that the ferry operator had taken normal precautions against any type of accident, with the exception of placing wheel chocks in front of the wheels of this particular vehicle. Nor, was there any apparent material defect to the ferry prior to the accident. When the accident did occur, the ferry operators made every reasonable effort to rescue the victims.

This case dramatically focuses attention on the continuous necessity of extreme care during ferry operations. The responsibility for safe passage rests both upon the vehicle operator and the ferry operator. Those driving onto a ferry should take every care to follow the instructions given by the ferry operator. When at their location they must guard against leaving cars in gear, leaving engine going and having the emergency brake off. On the other hand, the ferry operators must, in addition to maintaining a safe ferry, make every effort to maintain adequate guards and take the added precaution of placing chocks under the wheels of cars in line with the discharging ramp.



"LOIN OR BOIN!"

The term "Control Valves" has a vague meaning to Scuttlebum. He should know where they are for the various fire-fighting systems aboard his ship. Some day it may be his responsibility to operate them in emergency, *but fast!*

BOILER NEGLIGENCE

An 8,000-ton, C–3 type, cargo vessel suffered casualties to both boilers which required her to return to port for extensive repairs. Examination disclosed damage to the boiler casings, insulation, and economizer assemblies on both boilers. Cost of repairs was $30,000, and the vessel was delayed in port eight days.

This vessel departed New York on an east bound round the world voyage. The chief engineer was satisfied with the condition of the plant upon departure and no unusual difficulty was experienced until the vessel was one day out of Honolulu two months later, when a hot spot approximately two feet in diameter was discovered on the bottom of the starboard boiler furnace.

Speed was reduced immediately, and the vessel returned to Honolulu for repairs. Repairs consisted of: complete removal of the economizer banks of the port and starboard boilers; complete renewal of all brickwork; renewal of port boiler, sidewalls, flooring, and partial backwall; renewal of the starboard boiler slope brickpan; and renewal of the front casing of the port boiler in and around the superheater door.

Investigation disclosed that the plant had been operated during the voyage on 21 nozzles, except for the time the vessel was maneuvering, and that number 43 burner tips were used to maintain the steam pressure for operating main and auxiliary machinery.

The engineroom log book disclosed that the tubes were blown daily on the morning 4 to 8 watch and the evening 8 to 12 watch. However, both economizer banks were plugged solid with soot.

It was established that during the course of the voyage neither the chief engineer nor the second assistant engineer had entered the fire sides of either boiler to determine the condition of the brickwork and tubes. During the course of the voyage the vessel had made stops at 11 ports. The average length of stay in these ports was three days, during which cargo was worked and only one boiler operated.

The obvious lack of inspection and proper maintenance of the boilers by the responsible engineering personnel appeared to be the major factor in this casualty. The chief engineer and the second assistant engineer who were charged with responsibility of maintenance, should have made periodic inspections of the boilers. If they had, preventive measures could have been taken earlier to cope with the extensive deterioration discovered on inspection of the boilers.

APPENDIX

Amendments to Regulations

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

[CGFR 53-7]

PART 92—ANCHORAGE AND NAVIGATION REGULATIONS; ST. MARYS RIVER, MICHIGAN

MISCELLANEOUS AMENDMENTS

These miscellaneous changes modernize the requirements and establish special limits for certain portions of the St. Marys River.

[EDITOR'S NOTE: A copy of the changes may be obtained upon request from the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C.]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

Subchapter B—Merchant Marine Officers and Seamen

[CGFR 53-13]

PART 10—LICENSING OF OFFICERS AND MOTORBOAT OPERATORS AND REGISTRATION OF STAFF OFFICERS

PART 12—CERTIFICATION OF SEAMEN

OATHS OR AFFIRMATIONS BY APPLICANTS FOR LICENSES OR CERTIFICATES

These amendments to 46 CFR Parts 10 and 12 clarify the requirements regarding the making of oaths or affirmations by applicants for licenses as masters, mates, engineers, and pilots; certificates of registry as staff officers; licenses as motorboat operators; licenses as radio officers; certificates of service; and duplicate seaman's documents.

Subchapter E—Load Lines

[CGFR 53-16]

PART 45—MERCHANT VESSELS WHEN ENGAGED IN A VOYAGE ON THE GREAT LAKES

LOAD LINES FOR GREAT LAKES VESSELS

These miscellaneous amendments in 46 CFR Part 45 modify the period of the intermediate and summer seasons for all merchant vessels engaged on voyages on the Great Lakes; establish a new load line mark ("MS") which will be applicable to tank vessels and cargo vessels; and provide a new season to be known as "midsummer" for such vessels allowed to carry the new load line mark "MS."

Subchapter J—Electrical Engineering

[CGFR 53-3]

PART 111—ELECTRICAL SYSTEM; GENERAL REQUIREMENTS

MISCELLANEOUS CHANGES TO AGREE WITH AMERICAN BUREAU OF SHIPPING RULES

These changes provide agreement between the Coast Guard regulations and the American Bureau of Shipping rules.

[EDITOR'S NOTE: Copies of the above regulations may be obtained upon request from the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C.]

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 1-53

Subj: Rules and Regulations for Passenger, Cargo and Miscellaneous Vessels; 46 CFR Subchapters H and I, index for.

This interim index was prepared to cover the Rules and Regulations for Passenger, Cargo and Miscellaneous Vessels, 46 CFR, Subchapters H and I. The pamphlets containing the Rules and Regulations for Passenger, Cargo and Miscellaneous Vessels are now available.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 2-53

Subj: Miscellaneous electrical equipment satisfactory for use on merchant vessels; revised requirements for.

This circular describes the revised requirements for miscellaneous electrical equipment satisfactory for use on merchant vessels.

[EDITOR'S NOTE: Copies of Navigation and Vessel Inspection Circulars 1-53 and 2-53 may be obtained upon request from the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C.]

Equipment Approved by the Commandant

DEPARTMENT OF THE TREASURY

United States Coast Guard

APPROVAL OF EQUIPMENT; TERMINATION OF APPROVAL OF EQUIPMENT; CHANGE IN NAME AND ADDRESS OF MANUFACTURER; AND CORRECTION OF A PRIOR DOCUMENT.

[EDITOR'S NOTE: Due to space limitations, it is not possible to publish the documents regarding approvals of equipment published in Federal Registers dated February 18 and March 18, 1953 (CGFR 53-4, 53-5, 53-9, 53-10). Copies may be obtained upon request from the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C.]

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated, recertificated and canceled from January 27, 1953, to April 20, 1953, 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

Turco Products, Inc., Terminal Annex 2649, Los Angeles 54, Calif. Certificate No. 364, dated January 30, 1953. "Turco-Klene." Certificate No. 365, dated January 30, 1953. "Turco-Solv."

Timmons and Charles, 110 Academy Street, Jersey City 2, N. J. Certificate No. 366, dated February 9, 1953. "Timmons & Charles Electric Motor Cleaner."

The Penetone Co., Tenafly, N. J. Certificate No. 367, dated February 12, 1953. "Buxite."

Dakoline Chemical Co., 357 Atlantic Avenue, Brooklyn 2, N. Y. Certificate No. 368, dated February 17, 1953. "Electro Degreasing Solvent and Cleaner."

Valjer Corp., 264 Eastland Avenue, Pelham 65, N. Y. Certificate No. 369, dated March 4, 1953, "Sludge Solvent #60 With Cat-Ion."

The Curran Corp., South Canal Street, Lawrence, Mass. Certificate No. 370, dated March 4, 1953, "Gunk I-S (Industrial Shampoo)."

The Brilco Laboratories, 1553 63d Street, Brooklyn 19, N. Y. Certificate No. 371, dated March 4, 1953, "Brilco Electrical Parts Cleaner."

Virginia Smelting Co., West Norfolk, Va. Certificate No. 103, dated April 20, 1953, "Lethalaire Formula 22."

RECERTIFIED

Burton Marine Corp., 50 Church Street, New York 7, N. Y. Certificate No. 310, dated February 9, 1953. "Lektro Cleaner."

Xzit Chemical Co., 158 14th Street, Hoboken, N. J. Certificate No. 233, dated February 12, 1953. "Xzit Degreasing Solvent."

E. F. Drew and Co., Inc., 15 East 26th Street, New York 10, N. Y. Certificate No. 256, dated March 26, 1953, "Drew Fot—W."

CANCELED BY REQUEST OF MANUFACTURER

Pennsylvania Salt Mfg., Co., Tacoma, Wash. Certificate No. 249, dated February 14, 1953. "PENCO Desooter."

Safe-Way Exterminating Co., Detroit, Mich. Certificate No. 119, dated February 16, 1953. "Red Devil Bed Bug Liquid."

Standard Oil Co. (Ind.), Chicago 80, Ill. Certificate No. 120, dated February 19, 1953. "Superia Insect Spray."

Shell Oil Co., Inc., Washington 5, D. C. Certificate No. 188, dated February 20, 1953. "Shell DDT Ship Spray #2."

CANCELED IN ACCORDANCE WITH 46 CFR 147.03–7 (RECERTIFIED WITH ORIGINAL NUMBERS)

Gendron Chemical Co., Hoboken, N. J. Certificate No. 264, dated February 3, 1953. "Water Soluble Degreaser—101."

Xzit Sales Co., Hoboken, N. J. Certificate No. 233, dated February 12, 1953. "XZIT Bilge Cleaner."

CANCELED IN ACCORDANCE WITH 46 CFR 147.03–9—FAILED TO RENEW

Agnite Corp., Charlotte, N. C. Certificate No. 103, dated February 26, 1953, "Agnite."

The Collinite Chemical Co., Utica, N. Y. Certificate No. 104, dated February 26, 1953, "Collinite Color–Up."

Fergusson Laboratories, Philadelphia, Pa. Certificate No. 108, dated February 26, 1953, "Alexyl 32."

Hotcan Corp., Los Angeles, Calif. Certificate No. 111, dated February 26, 1953, "Hotcan."

Goulard and Olena, Inc., New York, N. Y. Certificate No. 112, dated February 26, 1953, " G & O Special Liquid Insecticide."

Lukon, Inc., Leominster, Mass. Certificate No. 114, dated February 26, 1953, "Lukon No–Rubbing Wax."

M. U. B. M. Producing Co., New York, N. Y. Certificate No. 116, dated February 26, 1953, "Vapocide."

Star Band Co., Inc., New York, N. Y. Certificate No. 121, dated February 26, 1953, "Twill Rust Remover Preventor." Certificate No. 122, dated February 26, 1953, "Rid-Rust Metal Polish."

Tersch Patents and Chemicals, Inc., New York, N. Y. Certificate No. 127, dated February 26, 1953, "Quick–Cide."

Viking Chemical Corp., New York, N. Y. Certificate No. 128, dated February 26, 1953, "P–10 Shampoo."

Sillcrest Chemical Co., Houston, Tex. Certificate No. 129, dated February 26, 1953, "Sillcrest Metal Polish."

American K. A. T. Corp., New York, N. Y. Certificate No. 131, dated February 26, 1953, "K. A. T. All Colloidal Water Treatment."

The Atlantic Refining Co., Philadelphia, Pa. Certificate No. 143, dated February 26, 1953, "Atlantic Safety—Kleen."

The Odosin Corp., New York, N. Y. Certificate No. 149, dated February 26, 1953, "Odosin." Certificate No. 150, dated February 26, 1953, "Odolure."

Northwest Exterminating Co., Inc., New York, N. Y. Certificate No. 151, dated February 26, 1953, "Northwest Odorless Disinfectant."

Imperial Laboratories, Elmwood Park, Ill. Certificate No. 155, dated February 26, 1953, "Jay–Kay Metal Polish."

Refiners Lubricating Co., New York, N. Y. Certificate No. 156, dated February 26, 1953, "Speedi–Dri."

Wonder Chemical Co., Brooklyn, N. Y. Certificate No. 161, dated February 26, 1953, "Wundo."

Jaygol Products Corp., Brooklyn, N. Y. Certificate No. 162, dated February 26, 1953, "Jaygol Pest Eliminator."

The Tanglefoot Co., Grand Rapids, Mich. Certificate No. 163, dated February 26, 1953, "Difuso."

United Gilsonite Laboratories, Scranton, Pa. Certificate No. 170, dated February 26, 1953, "E–Ject–O Drain Opener."

A. P. Schrock Chemical Co., Seattle 3, Wash. Certificate No. 190, dated February 26, 1953, "Letholol."

Ellis Solvents Co., Inc., Walpole, Mass. Certificate No. 193, dated February 26, 1953, "Chemical Solvent."

Mill Creek Products, Kansas City 2, Mo. Certificate No. 194, dated February 26, 1953, "MCP Insecticide A."

E-Z-Est Products Co., San Francisco 3, Calif. Certificate No. 196, dated February 26, 1953, "E-Z Est Metal Polish."

Industrial Management Corp., Valparaiso, Ind. Certificate No. 198, dated February 26, 1953, "Insect–O–Blitz."

Bridgeport Brass Co., Bridgeport 2, Conn. Certificate No. 199, dated February 26, 1953, "Bridgeport Brass Aer–A–Sol Insecticide Bomb."

National Products Co., Memphis, Tenn. Certificate No. 200, dated February 26, 1953, "Paint Cleaner." Certificate No. 201, dated February 26, 1953, "Vapor–Kill." Certificate No. 202, dated February 26, 1953, "Liquid Dishwashing Compound." Certificate No. 203, dated February 26, 1953, "Phenocide." Certificate No. 204, dated February 26, 1953, "Metal Polish."

Lure Products, Miami 36, Fla. Certificate No. 216, dated February 26, 1953, "Shynol."

Edgar A. Murray Co., Detroit 7, Mich. Certificate No. 219, dated February 26, 1953, "Marine Spray Doom."

McDowall Chemical Co., Seattle 1, Wash. Certificate No. 222, dated February 26, 1953, "McDowall's Peerless."

The Langree Co., Inc., Long Island City 1, N. Y. Certificate No. 224, dated February 26, 1953, "Rapid Action."

Mr. A. H. Houston, New York 7, N. Y. Certificate No. 225, dated February 26, 1953, "Odorless Cleaner." Certificate No. 226, dated February 26, 1953, "Non-Slip Floor Polisher."

Westinghouse Electric Corp., Springfield 2, Mass. Certificate No. 231, dated February 26, 1953, "Bug Bomb." Certificate No. 232, dated February 26, 1953, "Bug Bomb Formula S–36."

The Johnson–March Corp., New York 17, N. Y. Certificate No. 238, dated February 26, 1953, "Seabrite."

E. F. Drew and Co., Inc., New York 10, N. Y. Certificate No. 256, dated February 26, 1953, "Ameroid Fuel Oil Treatment and Sludge Remover 'Special'."

Tuttle Burton Chemical Corp., New York 4, N. Y. Certificate No. 257, dated February 26, 1953, "Burco #40." Certificate No. 258, dated February 26, 1953, "Burcolene." Certificate No. 259, dated February 26, 1953, "Burconite."

Motor Chemical Corp., Chicago 11, Ill. Certificate No. 260, dated February 26, 1953, "PD–F."

Underwood Chemical Corp., New York 4, N. Y. Certificate No. 263, dated February 26, 1953, "Chex–Flame."

Innis, Speiden and Co., New York 6, N. Y. Certificate No. 267, dated February 26, 1953, "Iscomist Aero Deodorant Bomb." Certificate No. 268, dated February 26, 1953, "Iscomist Aero Bomb Formula No. 316." Certificate No. 269, dated February 26, 1953, "Iscomist Aero Bomb Formula No. 300."

Sentinel Chemical Co., Oakland 7, Calif. Certificate No. 273, dated February 26, 1953, "Sentinel All Purpose Metal Polish."

Innis, Speiden and Co., New York 6, N. Y. Certificate No. 283, dated February 26, 1953, "Isco Spray."

James Varley and Sons, Inc., St. Louis 15, Mo. Certificate No. 289, dated February 26, 1953, "Concentrated Vaporizing Insecticide."

Mill Creek Products Co., Inc., New York 19, N. Y. Certificate No. 299, dated February 26, 1953, "Insecticide 'B'."

Mill Creek Products Co., Inc., New York 19, N. Y. Certificate No. 300, dated February 26, 1953, "Water Base Residual Spray."

Klix Chemical Co., 2460 Third Street, San Francisco 7, Calif. Certificate No. 324, dated February 26, 1953, "Klix Marine Insect Spray."

AFFIDAVITS

The following affidavits were accepted during the period from January 15 to April 15, 1953:

The Capitol Mfg. and Supply Co., 153 West Fulton Street, Columbus 16, Ohio. Pipe fittings.

Seattle Screw Products Co., Inc., 84 University Street, Seattle 1, Wash. Bolting.

Hammond Brass Works, Summer Blvd., Hammond, Ind. Valves.

American Motors Co., 21 Nevin Ave., Richmond 5, Calif. Valves.

Republic Mfg. Co., 1930 West 77th St., Cleveland 2, Ohio. Valves.

Treadwell Engineering Co., Easton, Pa. Castings.

Superior Valve and Fittings Co., 1509 West Liberty Avenue, Pittsburgh 26, Pa. Valves and Fittings.

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 January 15 to March 15, 1953, is as follows:

H. B. Sherman Mfg. Co., Battle Creek, Mich. Heat Nos. 774 through 778.

The Lunkenheimer Co., Cincinnati 14, Ohio. Heat Nos. 444 through 446.

H. B. Sherman Mfg. Co., Battle Creek, Mich. Heat Nos. 779 through 781.

The Lunkenheimer Co., Cincinnati 14, Ohio. Heat Nos. 447 through 449.

Merchant Marine Personnel Statistics

MERCHANT MARINE OFFICER LICENSES ISSUED

Quarter Ending 31 Mar. 1953

DECK

Grade	Original	Renewal
Master:		
Ocean	92	563
Coastwise	14	49
Great Lakes	55	209
B. S. & L.	22	176
Rivers	9	86
Radio officer licenses issued	57	
Chief Mate:		
Ocean	76	109
Coastwise	1	20
Mate:		
Great Lakes		1
B. S. & L.	2	9
Rivers	15	41
Second Mate:		
Ocean	105	126
Coastwise		1
Third Mate:		
Ocean	119	108
Coastwise	1	1
Pilots:		
Great Lakes	170	329
B. S. & L.	247	531
Rivers	90	109
Master:		
Uninspected vessels	19	12
Mate:		
Uninspected vessels	6	6
Total	2,000	2,486
Grand total	4,486	

ENGINEER

Grade	Original	Renewal
STEAM		
Chief Engineer:		
Unlimited	100	520
Limited	30	405
First Assistant Engineer:		
Unlimited	139	193
Limited	31	53
Second Assistant Engineer:		
Unlimited	215	225
Limited	25	79
Third Assistant Engineer:		
Unlimited	327	178
Limited	10	10
MOTOR		
Chief Engineer:		
Unlimited	8	125
Limited	55	185
First Assistant Engineer:		
Unlimited	11	40
Limited	34	72
Second Assistant Engineer:		
Unlimited	23	44
Limited	6	9
Third Assistant Engineer:		
Unlimited	191	199
Limited	7	3
Chief Engineer:		
Uninspected Vessels	10	6
Assistant Engineer:		
Uninspected Vessels	9	1
Total	1,231	2,356
Grand total	3,587	

INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 2,663 cases during the first quarter of 1953. From this number, hearings before Examiners resulted involving 50 officers and 207 unlicensed men. In the case of officers, no license was revoked, 13 were suspended without probation, 8 were suspended with probation granted, 2 licenses were voluntarily surrendered, 13 cases were dismissed after hearing and 5 hearings were closed with admonitions. Of the unlicensed personnel, 30 certificates were revoked, 55 were suspended without probation, 78 were suspended with probation granted, 31 certificates were voluntarily surrendered, 11 hearings were closed with admonitions, and 22 cases were dismissed after hearing.

ORIGINAL SEAMEN'S DOCUMENTS ISSUED

Quarter Ending 31 Mar. 1953

Type of document	Atlantic coast	Gulf coast	Pacific coast	Great Lakes and rivers	Canal Zone	Total
Staff officer	79	15	47	3		144
Continuous discharge book	4	17	2			23
Merchant mariner's documents	2,037	547	1,463	1,363	4	5,414
AB any waters, unlimited	200	80	117	36	1	434
AB any waters, 12 months	124	32	89	87		332
AB Great Lakes, 18 months	3		16	24		43
AB tugs and towboats, any waters						
AB bays and sounds[1]						
AB seagoing barges						
Lifeboatman	234	12	268	17	1	532
Q. M. E. D.	324	126	224	188	2	864
Certificate of service	1,987	573	1,435	1,285		5,280
Tankerman	25	27	9	51		112

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

NOTE.—The last 10 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	2		4		6
Engineer officers substituted for higher ratings		1	5	2	8
O. S. for A. B.	7	3	4	1	15
Wipers or coalpassers for Q. M. E. D.	4	1	9		4
Total waivers	13	5	22	3	
Number of vessels	12	5	16	2	

NOTE.—In addition, individual waivers were granted to permit the employment of 97 able seamen holding certificates for "any waters—12 months" in excess of the 25 percent authorized by statute.

U. S. GOVERNMENT PRINTING OFFICE: 1953

National Safety Council