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

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A: a, b, c, d (2 ea.); remainder (1 ea.);	
B: e (35 ea.); c (14 ea.); g, l (5 ea.); f (4 ea.); h (3 ea.); d (2 ea.); remainder (1 ea.);	
C: All (1 ea.);	
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E: m (1 ea.);	
List 141M.	

MOTORBOATING FOR 1950—HOLIDAY OR HOLOCAUST?

The 1950 Motorboat Season is near at hand. With the coming of the Motorboat Season the "Proceedings" wishes to bring to mind an old adage: "An ounce of prevention is worth a pound of cure."

Motorboats can be a source of great pleasure or they can be a menace to life and property. The primary responsibility for the avoidance of preventable accidents rests with the boatmen themselves. Professional knowledge of the Rules of the Road is, perhaps, too much to expect of operators of small pleasure craft. However, is it too much to expect operators of small pleasure craft to possess and exercise ordinary common sense seamanship?

It is sobering to look back at the numerous accounts of the tragedies that occurred during the 1949 Motorboat Season. These tragedies circumscribed both the careless and negligent navigation of pleasure craft with resultant loss of life, and the careless and negligent manner in which the owners allowed their pleasure craft to become unseaworthy.

For example, the following are a few specific violations of the ordinary practice of seamen rule:

1. Traveling at excessive rates of speed in a congested area;
2. Failure to keep to the right hand side of the channel;
3. Failure to observe obvious restricted areas;
4. Unnecessarily holding the right-of-way in a narrow channel, when safe navigation for small vessels exists outside the dredged channel, thereby creating a dangerous or difficult situation for large, unmaneuverable, seagoing vessels.

The following list depicts a few of the cases wherein lives were lost due to the unseaworthiness of pleasure craft:

1. Faulty ignition resulting in explosion or fire;
2. Lack of proper ventilation resulting in explosion;
3. Lack of general knowledge relative to upkeep of machinery on small craft;
4. Careless handling of fuel;
5. Insufficient life-preserving equipment on board.

Owners of pleasure craft are increasingly creating a situation charged with danger, not only to themselves, but also to the vast shipping industry. In dwelling on those

cases wherein lives have been lost and property damaged, it is interesting to note that fire and explosion rank high among the causes.

In order to have fire three vital elements must be present; namely, fuel, heat (source of ignition), and oxygen. The absence of any one of those three elements eliminates any possibility of fire. It is further interesting to note that a concentration as low as 1½ percent of gasoline vapor in air, by volume, is practically odorless, but is a mixture which may be exploded by a slight spark. An explosive mixture of this nature may travel a considerable distance from the point of leakage before becoming dissipated.

The "Proceedings" has listed below a general formula that each and every owner and operator of pleasure craft should check to fully satisfy himself that his craft is safe. The questions are so worded that a negative answer will indicate an unsatisfactory condition.

HULL

1. Was the hull examined for rot, loose fastenings, split planks and other deterioration or damage? Yes ☐ No ☐

2. Were all seams searched and caulked? Yes ☐ No ☐ (Avoid excess caulking when dried out.)

3. Were all underwater fittings such as sea cocks, scuppers, toilet outlets, stuffing boxes, etc., examined and defective or badly deteriorated parts repaired or removed? Yes ☐ No ☐

4. Are the hull and all underwater fittings now in good condition? Yes ☐ No ☐

5. Is the number awarded displayed on each bow? Yes ☐ No ☐

6. Is the Certificate of Award of Number on board as legally required? Yes ☐ No ☐

7. Are the name and hailing port of your documented yacht displayed conspicuously on the hull and is the official number permanently marked or carved on the main beam? Yes ☐ No ☐

FUEL TANKS, PIPING, ETC.

1. Are fuel tanks in good condition and properly secured to prevent vibration or movement? Yes ☐ No ☐

2. Are filling, sounding pipes, and vents so arranged that vapors, both from filling pipes and from vents, as well as fuel in case of overflow when filling, will not enter the interior of the boat? Yes ☐ No ☐

3. Are such filling and sounding pipes tightly attached to the tank and to a deck fitting? Yes ☐ No ☐

4. Do the filling pipes extend nearly to the bottom of the tank? Yes ☐ No ☐

5. Is the fuel-tank vent pipe solidly attached to the top of the tank? Yes ☐ No ☐

6. Does the fuel-tank vent pipe terminate in the open air, clear of openings in the vessel's hull, cabins, etc.? Yes ☐ No ☐

7. Can the fuel supply be shut off at the tank, the shut off control being outside the compartment in which tank is located? Yes ☐ No ☐

8. Are all drain openings in fuel tanks, fuel piping, etc., fitted with solid plugs? Yes ☐ No ☐

9. Is the entire fuel system, including piping and fittings, tight and in good condition, containing no pet cocks which might accidentally release fuel into the bilges? Yes ☐ No ☐

ENGINE AND ACCESSORIES

1. Are all carburetors fitted with backfire flame arresters? Yes ☐ No ☐

2. Are the carburetors (except downdraft type) fitted with a drip pan underneath to prevent gasoline from dripping into bilges? Yes ☐ No ☐

3. Is the exhaust pipe in good condition and arranged and insulated so as not to scorch or ignite adjacent woodwork? Yes ☐ No ☐

4. Is the muffler, if fitted inboard, absolutely tight, so that no carbon monoxide fumes can leak into the structure of the boat? Yes ☐ No ☐

ELECTRICAL SYSTEM

1. Is the entire electrical system in good condition? Yes ☐ No ☐

2. Are marine-type electrical appliances and fittings installed in spaces likely to contain explosive mixtures, such as gasoline and fuel tank compartments, and near storage batteries which are charged on board? Yes ☐ No ☐

3. Are electric storage batteries located in a well-ventilated space? Yes ☐ No ☐

4. Are such batteries protected to prevent metallic objects being dropped on the batteries, shorting them, and causing sparks? Yes ☐ No ☐

VENTILATION

1. Are all enclosed parts of the vessel provided with means for proper ventilation? Yes ☐ No ☐

2. Is the ventilating system for spaces, such as engine rooms and those containing gasoline machinery, arranged to circulate air in the lower part or bilge? Yes ☐ No ☐

EQUIPMENT

1. Are all life preservers, buoyant cushions, ring buoys, fire-fighting equipment, navigation lights, etc., in good serviceable condition and ready for immediate use? Yes ☐ No ☐

2. Have carbon dioxide extinguishers, which are more than ten percent underweight, been recharged? Yes ☐ No ☐

3. Have all foam type extinguishers been recharged during the past 12 months in accordance with manufacturer's instructions? Yes ☐ No ☐

4. Have carbon tetrachloride extinguishers been tested and are they full? Yes ☐ No ☐

5. Are tags attached to each extinguisher showing the date of last recharge? Yes ☐ No ☐

6. Is the vessel equipped with proper ground tackle? Yes ☐ No ☐

7. Is all ground tackle in good condition? Yes ☐ No ☐

8. Is vessel provided with a hand pump of ample capacity for removing water from bilges? Yes ☐ No ☐

9. Is all equipment located in a permanent place and readily accessible, in case of an emergency? Yes ☐ No ☐

10. Have you checked to see that your fire extinguishers are not too close to the most likely site of a fire, so that in case of fire in such a site, the extinguisher will not then become inaccessible to you? Yes ☐ No ☐

11. Are all of the requirements for approved equipment, safety devices, and installations, as provided by the Motorboat Act and required by the Coast Guard's rules and regulations for motorboats and certain motor vessels complied with? Yes ☐ No ☐

Inspect your boat and its equipment and remedy all unsafe conditions without delay. Avoid needless accidents; an unsound motorboat and one that is improperly equipped may become a death trap. *The life you save may be your own!*

In addition, strict observance of the following instructions will help eliminate the common hazards attendant to motorboat operation:

GENERAL SAFETY PRECAUTIONS

1. When getting the vessel ready for a trip, be sure that all compartments are properly aired out and, until this is accomplished, do not permit the engine to be started or allow smoking, the use of matches, cigarette lighters, or other actions which may constitute a source of vapor ignition. While the vessel is being aired out check all equipment and see that it is in good condition and that all such equipment which is required by law to be on board is in compliance with the applicable rules issued by the Coast Guard.

2. Only safety matches should be used on board.

3. A good seaman is cautious. Be alert to sudden changes in weather.

4. A black squall (thunder shower) always can be dangerous. Be prepared for the worst. If caught in

exposed waters take every possible precaution in advance.

5. Advise your guests where the life preservers or buoyant cushions are to be found.

6. Restrict smoking to certain parts of the vessel.

SAFETY PRECAUTIONS DURING FUELING OPERATIONS

1. Before taking on fuel, see that the vessel is properly moored and that all ports and doors adjacent to the fuel-tank vent and fill pipes are closed. This is necessary because gasoline vapors are heavier than air and will seek the lowest part of the cabin, engine room, etc., and present a serious hazard. Coal fires should be banked, other fires should be extinguished, and galley should be closed.

2. While refueling, prohibit smoking; the use of matches or cigarette lighters; operation of stoves, refrigerators, or machinery; the pulling of switches; or any such act likely to cause the ignition of petroleum vapors.

3. To guard against static spark, place nozzle of filling hose, or can, in metallic contact with fill pipe before starting to fill and maintain continuous contact until finished. *This is important!*

4. After fueling operations are completed, close filling pipe and wipe up any gasoline which may have spilled. Open up all ports and doors which may have been closed and air out properly before striking matches, starting machinery, etc.

5. Refueling of the vessel should be accomplished in daylight hours.

A Prudent Operator Will Observe the Following Prohibitions

1. Do not overload the boat.
2. Do not take chances with fire and explosion.
3. Do not tolerate an installation which lacks modern safeguards.
4. Do not allow gas or oil in the bilge.
5. Do not operate near swimmers in the water.
6. Do not allow rubbish to accumulate.
7. Do not make temporary repairs except in emergencies.
8. Do not use gasoline stoves.
9. Do not use kapok-filled life preservers to sit upon as such action compresses the filler and destroys its efficiency.
10. Do not fail to provide life belts for children.
11. Do not be afraid of a boat—respect it.
12. Do not forget your wake can damage others.
13. Do not fail to reduce speed through mooring fields.

14. Do not fail to take precautions against fouling other boats when anchoring.

15. Do not lie at anchor with short cable; allow sufficient scope.

16. Do not fail to exercise sober judgment at all times.

Valuable additional information covering the various phases of safety in operation and maintenance may be obtained by contacting the Commander of your nearest flotilla of the Coast Guard Auxiliary. Complete information concerning all laws relative to motorboats may be obtained at your nearest Coast Guard District Office, Coast Guard Marine Inspection Office, or Coast Guard station or unit.

Let's make the 1950 Motorboat Season a safe one, so that pleasure boating can continue to be a safe relaxation from work.

COURT AFFIRMS COMMANDANT'S DECISION BARRING COMMUNISTS AS LICENSED RADIO TELEGRAPH OFFICERS

The District Court of the United States for the District of Columbia on February 7, 1950, upheld the right of the United States to deny licenses as radio telegraph officers to persons affiliated with or sympathetic to the Communist Party.

The case came before Judge Burnita Matthews as the result of a motion for a preliminary injunction against the Commandant of the Coast Guard by three radio operators who had been denied licenses, pursuant to section 3 of the act of May 12, 1948 (46 U. S. C. 229) (c) on the ground that they were not, in the opinion of the Commandant, "suitable and safe" persons to be entrusted with the powers and duties as a licensed radio telegraph officer.

At the same time that the motion for a preliminary injunction was filed, counsel for the three unsuccessful applicants also filed a motion for the appointment of a three-judge court, pursuant to the provisions of 28 U. S. C. 2284. Argument on this motion was also heard by Judge Matthews about 3 weeks prior to the hearing on the preliminary injunction and when it was ascertained that the plaintiffs were not directing their attacks at the constitutionality of the act of May 12, 1948, but rather to the constitutionality of the acts of the Commandant under the statute, Judge Matthews dismissed this latter motion.

In dismissing the motion for a preliminary injunction Judge Matthews stated that the statute in dispute vested broad discretionary judgment in the Commandant of the Coast Guard and that, in the absence of any evidence of misuse or distortion of

the discretionary power vested in the Commandant, the Court would not interpose its discretion or judgment in the matter.

NOTICES

DEPARTMENT OF DEFENSE

Department of the Navy

[No. 10]

NET LAYING SHIPS

RANGE LIGHTS

Whereas, section 306, Title 33, United States Code, provides that any requirement as to the number, position, range of visibility or arc of visibility of navigation lights, required to be displayed by naval vessels under acts of Congress, as enumerated in said section 306, Title 33, United States Code, shall not apply to any vessel of the Navy where the Secretary of the Navy shall find or certify that, by reason of special construction, it is not possible with respect to such vessel or class of vessels to comply with statutory requirements as to the number, position, range of visibility or arc of visibility of navigation lights; and

Whereas, a study of the arrangement and position of the navigation lights of that type of naval vessels known as Net Laying Ships, AN-78 Class, has been made in the Navy Department and, as a result of such study, it has been determined that because of their special construction it is not possible for Net Laying Ships, AN-78 Class, to comply with the requirements of the statutes enumerated in said section 306, Title 33, United States Code.

Now, therefore, I, Francis P. Matthews, Secretary of the Navy, as a result of the aforesaid study do hereby find and certify that the type of naval vessels known as Net Laying Ships, AN-78 Class, are naval vessels of special construction and that on such vessels, with respect to the position of the additional white light (commonly termed the range light), it is not possible to comply with the requirements of the statutes enumerated in Section 306, Title 33, United States Code. Further, I do find and certify that it is feasible to locate the said additional white light (commonly termed the range light), if such light is installed, forward of the masthead light in such position that the said additional white light and the masthead light shall be in line with the keel and the after light shall be at least fifteen feet higher than the forward light and the vertical distance between the two lights shall be less than the horizontal distance. I further direct that the aforesaid additional white light, if such light is installed, shall be located in the man-

ner above described and I further certify that such location constitutes compliance as closely with the applicable statutes as I hereby find to be feasible.

Dated at Washington, D. C., this 23d day of January A. D. 1950.

FRANCIS P. MATTHEWS,
Secretary of the Navy.

[F. R. Doc. 50-782; Filed, Jan. 27, 1950;
8:45 a. m.]

[No. 4 (g)]

LANDING SHIP, UTILITY (LSU)

NAVIGATION LIGHTS

Whereas, the act of December 3, 1945 (Public Law 239, 79th Cong., as amended by Public Law 433, 80th Cong.) provides that any requirement as to the number, position, range of visibility or arc of visibility of navigation lights, required to be displayed by naval vessels under acts of Congress, as enumerated in said act of December 3, 1945, as amended, shall not apply to any vessel of the Navy where the Secretary of the Navy shall find or certify that, by reason of special construction, it is not possible with respect to such vessel or class of vessels to comply with statutory requirements as to the number, position, range of visibility or arc of visibility of navigation lights; and

Whereas, a study of the arrangement and position of the navigation lights of that type of naval vessels known as Landing Ship, Utility (LSU), has been made in the Navy Department and, as a result of such study, it has been determined that because of their special construction it is not possible for Landing Ships, Utility (LSU) to comply with the requirements of the statutes enumerated in said act of December 3, 1945, as amended;

Now, therefore, I, Francis P. Matthews, Secretary of the Navy, as a result of the aforesaid study do hereby find and certify that the type of naval vessels known as Landing Ships, Utility (LSU), are naval vessels of special construction, and that on such vessels, with respect to the position of the masthead light and the additional white light (commonly termed the range light), it is not possible to comply with the requirements of the statutes enumerated in the act of December 3, 1945, as amended. Further, I do find and certify as follows:

(a) That it is feasible to locate the aforesaid masthead light in the after part of said vessels approximately one hundred five feet abaft the stem.

(b) That it is feasible to locate the additional white light (commonly termed the range light), if such light

is installed, in the forward part of the vessel and in front of the light referred to in the preceding paragraph at such a height that the after light shall be at least fifteen feet higher than the forward light and that the vertical distance between the two

lights shall be less than the horizontal distance.

(c) That it is feasible to locate the masthead light and the additional white light (commonly termed the range light), if such light is installed, in a vertical plane parallel to the

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 31 December 1949. 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..... 15,501 (1) Portland, Maine..... 10,908 (2) St. Albans..... 2,827 (5) Providence..... 4,245	33,571
2 (St. Louis)	(45) St. Louis..... 17,316 (12) Pittsburgh..... 2,652 (34) Pembina..... 80 (25) Minneapolis..... 6,716 (40) Indianapolis..... 4,275 (42) Louisville..... 4,005 (43) Memphis (part)..... 8,103 (44) Vancant (Des Moines)..... 76 (46) Omaha (part)..... 400	43,713
3 (New York)	(10) New York..... 47,751 (6) Bridgeport..... 8,722 (11) Philadelphia..... 21,097	77,570
5 (Norfolk)	(14) Norfolk..... 15,867 (13) Baltimore..... 22,454 (15) Wilmington, N. C..... 8,398	46,719
7 (Miami)	(18) Tampa (part)..... 22,358 (16) Charleston..... 1,878 (17) Savannah..... 3,364 (49) San Juan..... 414 (51) St. Thomas..... 75	28,089
8 (New Orleans)	(20) New Orleans..... 19,623 (18) Tampa (part)..... 815 (19) Mobile..... 8,022 (21) Port Arthur..... 3,953 (22) Galveston..... 10,416 (23) Laredo..... 1,586 (24) El Paso..... 6 (43) Memphis (part)..... 76	44,897
9 (Cleveland)	(41) Cleveland..... 14,085 (7) Ogdensburg..... 6,594 (8) Rochester..... 8,669 (9) Buffalo..... 8,192 (36) Duluth..... 4,152 (37) Milwaukee..... 12,459 (38) Detroit..... 28,769 (39) Chicago..... 8,203	91,123
11 (Long Beach)	(27) Los Angeles..... 8,557 (25) San Diego..... 1,735 (26) Nogales..... 94	10,386
12 (San Francisco)	(28) San Francisco..... 20,253 (47) Denver.....	20,253
13 (Seattle)	(30) Seattle..... 2,411 (29) Portland, Oreg..... 9,773 (33) Great Falls..... 1,028 (46) Omaha (part).....	43,212
14 (Honolulu)	(32) Honolulu..... 3,312	3,312
17 (Juneau)	(31) Juneau..... 6,578	6,578
Grand total		449,423

keel approximately twelve feet to starboard of the fore and aft centerline of said vessel.

I direct that the aforesaid lights, that is, the masthead light and the additional white light (commonly termed the range light), if such light

is installed, shall be located in this type of vessels in the manner above described. I further certify that such location constitutes compliance as closely with the applicable statutes as I hereby find to be feasible.

Dated at Washington, D. C., this 12th day of December A. D. 1949.

FRANCIS P. MATTHEWS,
Secretary of the Navy.

[F. R. Doc. 49-10056; Filed, Dec. 15, 1949;
8:49 a. m.]

LESSONS FROM CASUALTIES

EXPLOSION AND FIRE ON GASOLINE PROPELLED FISHING BOAT

A six-ton, wooden, fishing vessel was recently destroyed by an explosion and fire off the coast of Lower California. The vessel was gasoline propelled and the course of the casualty presents no particularly outstanding features. The gasoline had evidently made its way into the interior of the boat and when the operator pressed the starter button the engine room immediately burst into flames. The vessel burned to the water's edge and sank.

The case, however, presented one outstanding feature which has characterized several other recent fires on small boats. As stated above, the engine room burst into flames practically instantaneously. In spite of being uninjured by the blaze, the operator was unable to fight the fire because all the fire fighting equipment was located within the engine room compartment. It seems incredible that a boat operator would leave all his fire fighting equipment in the very

place where a fire would be most likely to occur and where such equipment would be unavailable in case the need for its use arose. However, experience has shown that many boat owners do just that.

On inspected motorboats the Coast Guard would not permit such an arrangement, but on uninspected vessels no control over the placing of fire fighting equipment is possible other than by advice and moral suasion. The usual reason for placing equipment of this nature in the engine compartment is that on many small motorboats this is the only part of the vessel which can be locked up and thus prevent theft of the fire extinguishers when the vessel is unattended.

In these cases the operator should remove a part of his fire fighting equipment from the engine room prior to starting the engine. These extinguishers should then be mounted in locations where they would be accessible to him even though a fire started in the engine compartment.

DELETE ONE MOTORBOAT

A motorboat owner recently paid with the total loss of his cabin cruiser for his failure to understand and properly maintain his fire-extinguishing equipment.

The boat was being operated by the owner, alone, and was headed for berthing and winter lay-up. Before starting the trip the owner had caused the gasoline engine to be tuned up, the battery to be checked, and the fuel tank to be filled. Soon after commencing the trip, the owner heard a "whoof" explosion in the engine compartment and smoke began seeping through the joints of the main cabin hatch where he was operating the boat. He put the wheel hard over and grounded the bow in a nearby mud bank. Upon pulling the manually operated remote control for the engine compartment fixed CO₂ system, he heard the gas discharge for a few seconds only, with no appreciable effect on the fire. Seizing the portable CO₂ extinguisher, he opened the en-

gine hatch and quickly exhausted the contents.

By this time the flames and heat forced him to abandon ship via the bow to shore. Nearby fire departments arrived shortly afterward and fought the fire for almost 2 hours. However, the boat was completely gutted and became a total loss. The cause of ignition of the fire could not be determined.

The owner later stated that he had been in the practice of testing his CO₂ extinguishers by "cracking" the valves for an instant. He had not been aware of the method of testing CO₂ extinguishers for charge by weighing.

From these facts, the obvious conclusion is that all of his CO₂ extinguishers were practically empty at the time of greatest need.

All motorboat owners should be reminded that once the seal inside the valve control on a CO₂ fixed system or portable extinguisher has been punctured by opening the valve, this extinguisher should never again be depended upon to be charged, until it has been recharged and resealed. In other words, never open the valves on a CO₂ extinguisher until you want to use it to extinguish a fire. The correct method of testing a CO₂ extinguisher for the amount of charge is by weighing at regular intervals. The weight of the carbon dioxide gas in the extinguisher when fully charged (obtained by subtracting the weight of the container and fittings, as marked on the container, from the total weight of the charged extinguisher) should be compared at regular intervals (recommended—monthly) with the weight of the gas in the extinguisher at those times. A reduction of 10 percent in the weight of the gas-charge calls for recharging of the extinguisher.

A reflection of this casualty is brought out on the back cover of this issue.



he may be
down—but
NOT out

NATIONAL SAFETY COUNCIL

Know
Practice
Teach

SAFETY

An uninspected, wooden, cabin motorboat, 22 feet in length, recently suffered a gasoline vapor explosion resulting in a fire which subsequently burned the vessel to the waterline. Explosions and fires on uninspected gasoline propelled motorboats are old stories and are practically always due to accumulations of gasoline vapor in the vessel. The vapor usually arises from raw gasoline which has for one reason or another been spilled into the interior of the vessel.

In the present case a petcock had been fitted below the carburetor. Shortly previous to the accident the vessel touched bottom and had bent the propeller. This caused considerable vibration in the operation of the vessel, and the vibration shook the petcock open. Gasoline, of course, ran out in the vicinity of the engine, and the vapors were finally ignited by some means not definitely ascertained.

The Coast Guard's rules governing the installation of gasoline engines on inspected motorboats prohibit the use of any outlet or drain in the gasoline lines or in the bottom of the fuel tanks. While these valves or cocks are handy for draining out sediment or water they are highly dangerous as shown by the instant case and many others in the Coast Guard's files. The fool killer never sleeps, and any motorboat owner may be certain that if he indulges in such practices as the fitting of gasoline petcocks in his installation he is taking a very long chance indeed.

In the case discussed the motorboat burned to the water's edge and sank in shallow water. Subsequent to the fire the engine was raised and it was at this time that it was discovered that the petcock had become loosened and backed out of the carburetor.

INFLATED

A man tried to secure the air hose to the line without closing the valve. Particles of dirt were blown into his wrist.

Compressed air in thin streams can itself puncture the skin. When this happens and any amount of air gets under the skin, the results are reported to be extremely painful. It might also be recalled that at present there is pending the trial of a doctor for the mercy killing of a cancer sufferer. What did he use? A shot of air from a hypodermic needle in the vein.

So keep in mind that compressed air can do more than pepper your hide with dirt particles. Be sure the pressure is off the line or hose while you make or break connections.

Courtesy, SHIPBOARD SAFETY.

Very recently an uninspected fishing vessel loaded with loose uniced fish went down by the stern and sank, resulting in a total loss of vessel and cargo. This fishing vessel was of wooden construction and similar to many now in use in American fishing fleets.

It appears that, upon completion of the fishing operations and after the vessel had been pumped out, the mate observed the craft settling at the stern. An investigation by the master revealed about 30 inches of water in the engine room. The pumps were started at once, but were not able to overcome the intake of water.

In this instance, although assistance was rendered by another vessel which attempted to tow the sinking vessel to shallow water, the effort had to be abandoned when it was realized that the situation was rapidly increasing in imminence.

The crew was transferred to the assisting vessel by use of lifeline. The doomed craft sank shortly after, in approximately 6 fathoms of water.

It was the opinion of the master that water gained entrance through stern and fish hold hatch. However, it appears that the vessel went down because of overloading which caused the seams to open.

The owner of this fishing vessel, it seems, might well have been spared his loss had the fishing vessel been properly inspected.

Owners of fishing vessels are urged to inspect their vessels annually to make certain that planking, at least up to the deep load line, is in good condition and seams properly caulked.

WATCH THAT BOTTLE!

The dangers which may be encountered from tipping a bottle at the wrong time were recently vividly illustrated aboard a cargo vessel bound from Europe to the U. S. A. About 2 days out three members of the crew found a bottle containing, to all outward appearances, French Cognac, and each had a "nip." Unfortunately, the contents proved to be carbon tetrachloride, which had probably been neatly stowed away in this manner by some thoughtless seafarer for cleaning, or other purposes. Two of the tipplers immediately ejected the liquid from their mouths, but the boatswain, a hardier soul, swallowed his "neat." Within a day or two he was a very sick man, having developed lower nephron nephrosis, a poisoning and inflammation of the kidney. About 5 days after the swallow, he died, in spite of all efforts to save his life, with radioed medical advice. Carbon tetrachloride is highly toxic in vapor

Time saved
at the price
of an
Accident is

NO BARGAIN

form, but in concentrated liquid form, it is too much for any human kidney to stand. Drinking carbon tetrachloride is even more dangerous than drinking wood alcohol strained through bread, which an old seaman's fallacy claims removes the poisonous qualities. MORAL—Don't drink from a bottle unless you are sure of the contents!

SNATCH BLOCK FAILURE

"At or about 0905, * * * while on board the S. S. * * *, an ordinary seaman sustained death as a result of injuries incurred thereon" was reported by the Coast Guard investigator. The coroner's verdict was accidental death by reason of fractured skull. The answer to "How did injury occur?" was the terse statement, "Struck by winch cable." Take either report and you come to the same conclusion—he is dead! There is nothing we can do for this 20-year-old seaman who has become another figure in the death statistics of the Coast Guard. But this can be done—prevent another fatal accident of this kind by guarding against the use of known defective equipment.

This seaman was killed as a result of being struck on the head by a 7/8-inch wire cable after the 12-inch snatch block on deck, through which the cable was reeved, gave way. In order to better understand how this accident occurred and the lessons that may be gained therefrom, a summary of the conditions preceding the accident are necessary.

On the voyage to a southern port the attention of the chief officer was directed to the snatch block which failed. The snatch block was out of working order inasmuch as its cheeks had been sprung and the sheave pin was considerably bent. He directed the cheeks of the block to be bent into alignment by the boatswain and that the sheave pin be turned over to the

chief engineer for straightening. The boatswain never knew nor seriously gave thought as to whether the snatch block was complete according to the manufacturer's design. However, when the ship arrived at its destination the snatch block had been repaired, although neither the officers nor the boatswain knew how much its strength had been impaired nor what its safe working load would be.

Imagine this Liberty cargo ship going through the hustle and bustle preparatory to shoving off for a coastwise voyage. The wind is southeast, force 1-2, the weather is cloudy and rainy, and good visibility. Topping off a bulk cargo of sulfur at the sulfur dock has just been completed. Orders are to lower and secure all hatch covers. It was during the execution of these orders that the fateful accident occurred.

The boatswain was in charge of activities securing all hatch covers. The hatch covers on this Liberty ship are divided at the center, each being hinged at the fore and aft end of the hatch and closed toward the center. Each hatch cover was lowered separately. The power for raising and lowering the hatch cover was obtained from the two winches located port and starboard under the forward portion of the shelter deck.

Due to the location of these winches in relation to the hatch covers, it was necessary to rig a snatch block to provide a fairlead or near fairlead for the winch cable to be connected to the hatch cover falls. This was accomplished by hooking a 12-inch snatch block to a padeye located on deck approximately midway between the trunk and bulwarks in line with the base of the kingpost. The winch cable was then run through the snatch block on deck to the cable block at the base of the kingpost, thence to and through the blocks on top of the kingpost and hatch covers. This arrangement applied to both starboard and port sides.

The snatch blocks that were used on deck were moved from hatch to hatch as the work progressed. The lowering operations were begun aft where operations were halted on the No. 4 hatch due to the winch runner riding up out of the sheave to a position on top of the cheek of the block, falling down into a crevice therein lying against the iron strap which passes through a slot in the cheek to the outside thereof near the outer perimeter at the top of the block. This resulted in jamming the runner. The officer in charge was notified and he examined the condition and ordered the boatswain to continue operations, but to have the winches handled more carefully to avoid bouncing the snatch block on the deck. The operations were then continued and after completing No. 4 hatch the gear was moved to the No. 2 hatch and lowering operations were begun.

It appears that the young seaman who was killed was standing near the shelter deck door inside the bight of the winch runner and was probably watching the operation with interest. His presence was not noticed by the boatswain in charge, who was standing near the snatch block on the starboard side of the vessel, nor the other crewman stationed on the port side to receive signals from the boatswain and relay them to the port winch operator. When the hatch cover was lowered approximately three-fourths of the distance, the snatch block on the port side gave way as the cheek facing upward was broken near the bottom of the block allowing the bight of the cable to whip across inboard as the hatch cover fell. The seaman was seen knocked to the deck near the shelter deck door, port side at this time.

The snatch block was of the conventional type steel block, 12-inch sheave, grooved to carry $\frac{7}{8}$ -inch cable. An examination of the block after the accident revealed that near the top thereof on one of the cheeks,

where the slot in the cheek allows the strap to pass through it, extending upward on the outside of its outer perimeter, the section of the slot on the outer perimeter of the cheek inside the strap was missing. In order to ascertain that part of the block was missing, grease and dirt were cleaned away from both ends where the section should have been and there was revealed the jagged edges of broken metal. This break was not recent because the only metal marks appearing were those made from the cable as it rode on the cheek of the block in the slot around the strap, which marks were clearly visible. The latch pin of the block, which has a toggle device on one end, was also examined and it was found slightly bent. A test of the holding properties of the pin's toggle was made by placing it in an "on or safe" position, and after the pin had been put in place, by jiggling and bouncing the block on deck while holding normal stress on it. The toggle in the pin came up from its "on or safe" position to a straight or nearly so position, thus allowing the latch pin to come out of the arms which hold the block together at the top. This action would probably tend to place the entire load on the upper cheek of the block.

Lessons to be learned from this casualty are:

1. Before handling heavy weights the officers or seamen involved should inspect the equipment to be used very carefully and replace any equipment found to be unsatisfactory or defective.

2. Seamen not directly connected with the operations should stay entirely clear of the equipment and running gear. They should NEVER stand in the bight of a line or cable.

3. Officers in charge should take necessary precautions to see that seamen do not become exposed to dangers which are not normally present.

4. Constant vigilance is the price of safety.

APPENDIX

Equipment Approved by the Commandant

[CGFR 50-4]

APPROVAL OF EQUIPMENT

By virtue of the authority vested in me as Commandant, United States Coast Guard, by R. S. 4405 and 4491,

as amended, 46 U. S. C. 375, 489, and section 101 of Reorganization Plan No. 3 of 1946 (11 F. R. 7875, 60 Stat. 1097, 46 U. S. C. 1), as well as the additional authorities cited with specific items below, the following approvals of equipment are prescribed and shall be effective for a period of five years from date of publication in the Federal Register unless sooner canceled or suspended by proper authority:

BUOYANT CUSHIONS, KAPOK, STANDARD

NOTE: Cushions are for use on motorboats of classes A, 1, or 2 not carrying passengers for hire.

Approval No. 160,007/91/0, Standard kapok buoyant cushion, U. S. C. G. Specification 160,007, manufactured by Burlington Mills, Inc., Burlington, Wis., for Gamble-Skogmo, Inc., 15 North Eighth Street, Minneapolis 3, Minn.

Approval No. 160.007/92/0, Standard kapok buoyant cushion, U. S. C. G. Specification 160.007, manufactured by California Cushion Co., 1728 Industrial Way, Los Angeles 23, Calif.

(54 Stat. 164, 166; 46 U. S. C. 526e, 526p; 46 CFR 25.4-1, 160.007)

BUOYANT CUSHIONS, NON-STANDARD

NOTE: Cushions are for use on motorboats of classes A, 1, or 2 not carrying passengers for hire.

Approval No. 160.008/424/0, 13" x 19" x 2" rectangular buoyant cushion, 22 oz kapok, Burlington Mills, Inc., Dwg. No. 25, dated July 27, 1946, manufactured by Burlington Mills, Inc., Burlington, Wis., for Gamble-Skogmo, Inc., 15 North Eighth Street, Minneapolis 3, Minn.

Approval No. 160.008/425/0, 16" x 20" x 2" rectangular buoyant cushion, 28½ oz kapok, Dwg. Nos. A-184, dated December 14, 1949, and C-56, dated December 14, 1949, revised January 12, 1950, manufactured by The American Pad & Textile Co., Greenfield, Ohio.

Approval No. 160.008/426/0, 18" x 21" x 2" rectangular buoyant cushion, 33¾ oz kapok, Dwg. Nos. A-185, dated December 14, 1949, and C-57, dated December 14, 1949, revised January 12, 1950, manufactured by The American Pad & Textile Co., Greenfield, Ohio.

(54 Stat. 164, 166; 46 U. S. C. 526e, 526p; 46 CFR 25.4-1, 160.008)

SIGNALS, DISTRESS, FLARE, RED, HAND

Approval No. 160.021/5/0, Hand red flare distress signal, 500 candlepower, 2-minute burning time, identified by The Kilgore Manufacturing Company's General Arrangement Dwg. No. CX-115, dated April 18, 1949, and Detail Dwg. No. CX-116, dated April 18, 1949, submitted by Coston Supply Co., Inc., 31 Water Street, New York, N. Y.

(R. S. 4417a, 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 481, 1333, 50 U. S. C. 1275; 46 CFR 160.021)

TELEPHONE SYSTEMS, SOUND POWERED

Approval No. 161.005/11/1, Sound powered telephone station, selective ringing, common talking, 11 stations maximum, bulkhead mounting, waterproof, with separately mounted 6" or 8" hand generator bell, Dwg. No. 11, Alt. 3, dated Nov. 1949, Type A, Model WT-1, manufactured by Hose-McCann Telephone Co., Inc., Twenty-fifth Street and Third Avenue, Brooklyn 32, N. Y. (Supersedes Approval No. 161.005/11/0, published in Federal Register July 31, 1947.)

(R. S. 4417a, 4418, 4426, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 392, 404, 1333, 50 U. S. C. 1275; 46 CFR 32.9-4, 63.11, 79.12, 97.14, 116.10)

FIRE EXTINGUISHERS, PORTABLE, HAND, CARBON-DIOXIDE TYPE

Approval No. 162.005/20/0, Model 15 AK Lever Type CD General Quick Aid Sno Fog Fire Guard, 15-lb. carbon-dioxide type hand portable fire extinguisher, Parts List Dwg. No. AC-215, dated July 22, 1947, Assembly Dwg. No. EC-215-X, dated August 4, 1944, Revision No. 3, dated May 1, 1946, and name plate Dwg. No. CC-215-1, dated February 14, 1947, revised June 27, 1947, manufactured by The General Detroit Corp., P. O. Box 263, Detroit 32, Mich.

(R. S. 4417a, 4426, 4479, 4492, 49 Stat. 1544, 54 Stat. 165, 166, 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 463a, 472, 490, 526g, 526p, 1333, 50 U. S. C. 1275; 46 CFR 25.5-1, 26.3-1, 27.3-1, 34.5-1, 61.13, 77.13, 95.13, 114.15)

FIRE EXTINGUISHERS, PORTABLE, HAND, SODA-ACID TYPE

Approval No. 162.007/27/0, General Quick Aid Fire Guard Model SA-303 Soda Acid, 2½-gallon hand portable fire extinguisher, Parts List Dwg. No. AS-303, dated June 30, 1947, Assembly Dwg. No. BS-303-X, dated July 2, 1947, and name plate Dwg. No. PS-303-14Q, dated May 7, 1947, revision B, dated September 18, 1947, manufactured by The General Pacific Corp., 1501 East Washington Boulevard, Los Angeles 21, Calif.

Approval No. 162.007/29/1, Kidde (Symbol AM), 2½-gallon soda-acid type hand portable fire extinguisher, Assembly Dwg. No. 2X-1131, dated March 22, 1948, name plate Dwg. No. 2X-370, Alt. G, dated January 26, 1948, manufactured for Walter Kidde & Co., Inc., 675 Main Street, Belleville 9, N. J., by American-LaFrance-Foamite Corp., Elmira, N. Y. (Supersedes Approval No. 162.007/29/0 published in the Federal Register Apr. 1, 1948.)

Approval No. 162.007/30/0, Alfco Model 3S1, 2½-gallon soda-acid type hand portable fire extinguisher, Assembly Dwg. No. 2X-1111, Alteration C, dated March 23, 1948, name plate Dwg. No. 2X-346, Alteration R, dated Feb. 5, 1948, manufactured by American-LaFrance-Foamite Corp., Elmira, N. Y.

(R. S. 4417a, 4426, 4479, 4492, 49 Stat. 1544, 54 Stat. 165, 166, 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 463a, 472, 490, 526g, 526p, 1333, 50 U. S. C. 1275; 46 CFR 25.5-1, 26.3-1, 27.3-1, 34.5-1, 61.13, 77.13, 95.13, 114.15)

FLAME ARRESTERS, BACKFIRE (FOR CARBURETORS)

Approval No. 162.015/8/2, Model No. C175-11, backfire flame arrester for carburetors, identified by Assembly Dwg. No. C175-11, dated April 13,

1946, and revised November 4, 1949, manufactured by Zenith Carburetor Division, Bendix Aviation Corp., 696 Hart Avenue, Detroit, Mich. (Supersedes Approval No. 162.015/8/1 published in Federal Register Feb. 19, 1949.)

Approval No. 162.015/9/2, Model No. C175-11A, backfire flame arrester for carburetors, identified by Assembly Dwg. No. C175-11A, dated May 9, 1946, and revised November 4, 1949, manufactured by Zenith Carburetor Division, Bendix Aviation Corp., 696 Hart Avenue, Detroit, Mich. (Supersedes Approval No. 162.015/9/1 published in Federal Register February 19, 1949.)

Approval No. 162.015/11/1, Model No. B175-18, backfire flame arrester for carburetors, identified by Assembly Dwg. No. B175-18, dated July 24, 1946, and revised July 25, 1946, manufactured by Zenith Carburetor Division, Bendix Aviation Corp., 696 Hart Avenue, Detroit, Mich. (Supersedes Approval No. 162.015/11/0 published in Federal Register July 31, 1947.)

Approval No. 162.015/25/0, Model No. B175-20, backfire flame arrester for carburetors, identified by Assembly Dwg. No. B175-20, dated May 9, 1946, manufactured by Zenith Carburetor Division, Bendix Aviation Corp., 696 Hart Avenue, Detroit, Mich.

Approval No. 162.015/26/0, Model No. B175-21, backfire flame arrester for carburetors, identified by Assembly Dwg. No. B175-21 dated May 9, 1946, manufactured by Zenith Carburetor Division, Bendix Aviation Corp., 696 Hart Avenue, Detroit, Mich.

Approval No. 162.015/27/0, Model No. B175-19, backfire flame arrester for carburetors, identified by Assembly Dwg. No. B175-19, dated July 24, 1946, and revised July 25, 1946, manufactured by Zenith Carburetor Division, Bendix Aviation Corp., 696 Hart Avenue, Detroit, Mich.

(54 Stat. 165, 166, as amended; 46 U. S. C. 526i, 526p; 46 CFR 25.6-1, 26.4-1, 27.4-1)

INCOMBUSTIBLE MATERIALS

Approval No. 164.009/23/0, "No. 75 Ultralite MC Insulation," glass wool insulation type incombustible material identical to that described in National Bureau of Standards Test Report No. TG 10210-1656: TP 2855 (Test No. 122822) dated Dec. 13, 1949, approved in a density of 0.75 pound per cubic foot, manufactured by Gustin-Bacon Manufacturing Co., 1412 West Twelfth Street, Kansas City 7, Mo.

Approval No. 164.009/24/0, "No. 150 Ultralite MC Insulation," glass wool insulation type incombustible material identical to that described in

National Bureau of Standards Test Report No. TG 10210-1656: FP 2855 (Test No. 122822) dated December 13, 1949, approved in a density of 1.48 pounds per cubic foot, manufactured by Gustin-Bacon Manufacturing Co., 1412 West Twelfth Street, Kansas City 7, Mo.

Approval No. 164.009/26/0, "J-M Marine Silento Asbestos Felt," asbestos paper type incombustible material identical to that described in National Bureau of Standards Test Report No. TG 10210-1660: FP 2861, dated Dec. 21, 1949, approved in a weight of 32 pounds per one hundred square feet, manufactured by Johns-Manville Sales Corp., 22 East Fortieth Street, New York 16, N. Y.

(R. S. 4417a, 4426, 49 Stat. 1384, 1544, 54 Stat. 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 369, 391a, 404, 463a, 50 U. S. C. 1275; 46 CFR Part 144)

Dated: February 1, 1950.

[SEAL] MERLIN O'NEILL,
Vice Admiral,

U. S. Coast Guard, Commandant.

[F. R. Doc. 50-1082; Filed, Feb. 7, 1950;
8:47 a. m.; 15 F. R. 693-2/8/50]

TERMINATION OF APPROVAL OF EQUIPMENT

By virtue of the authority vested in me as Commandant, United States Coast Guard, by R. S. 4405 and 4491, as amended, 46 U. S. C. 375, 489, and section 101 of Reorganization Plan No. 3 of 1946, 11 F. R. 7875, 60 Stat. 1097, 46 U. S. C. 1, as well as the additional authorities cited with the specific item below, the following approval of equipment is terminated because the item of equipment covered is no longer being manufactured:

FIRE EXTINGUISHERS, PORTABLE, HAND, SODA-ACID TYPE

Termination of Approval No. 162-007/3/0, Empire 2½-gallon soda-acid hand portable fire extinguisher, Assembly Dwg. No. 2X-1082, Alteration F, dated February 26, 1946, Name

plate Dwg. No. 2X-215, Alteration D, dated July 11, 1946, manufactured by American-LaFrance-Foamite Corp., Elmira, N. Y.

(R. S. 4417a, 4426, 4479, 4492, 49 Stat. 1544, 54 Stat. 165, 166, 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 463a, 472, 490, 526g, 526p, 1333, 50 U. S. C. 1275; 46 CFR 25.5-1, 26.3-1, 27.3-1, 34.5-1, 61.13, 77.13, 95.13, 114.15)

CONDITIONS OF TERMINATION OF APPROVAL

The termination of approval of equipment made by this document shall be made effective upon the thirty-first day after the date of publication of this document in the Federal Register. Notwithstanding this termination of approval on any item of equipment, such equipment manufactured before the effective date of termination of approval may be used on merchant vessels so long as it is in good and serviceable condition.

Dated: February 1, 1950.

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

[F. R. Doc. 50-1083; Filed, Feb. 7, 1950;
8:47 a. m.; 15 F. R. 694-2/8/50]

Affidavits

The following affidavits were accepted from January 15 to February 15, 1950:

Atlas Bronze Corp., 2409-17 Cedar Street, Philadelphia 25, Pa. Castings.
Belfield Valve Division, Minneapolis-Honeywell Regulator Co., 435 North Broad Street, Philadelphia 23, Pa. Valves and Fittings.

Racine Tool & Machine Co., Racine, Wis. Valves.

Welding Electrodes

The following type of electrode has been tested in accordance with the requirements of ASTM designation A233-48T for mild steel arc-welding electrodes in the presence of an American Bureau of Shipping Surveyor and

the test report indicates that the requirements were met.

Air Reduction Sales Co., 42d Street, opposite Grand Central, New York 17, N. Y. Arcrods Corp. (Manufacturer), Airco No. 387, Type E6012.

General Electric Co., Schenectady, N. Y. Arcrods Corp. (Manufacturer), W-28, Type E6012.

Wilson Welder & Metals Co., Lincoln Building, 42d Street and Grand Central, New York 17, N. Y. Arcrods Corp. (Manufacturer), 109, Type E6012.

Operating Positions and Electrode Sizes

The ⅜", ⅝", ¾", ⅞", 1", 1½", and 2" diameter electrodes will be allowed for all position welding. The ⅜" and ⅝" diameter electrodes will be allowed for horizontal fillet and flat position welding. The ⅞" diameter electrode will be allowed for flat position welding.

The electrode listed as Airco No. 383, GE, W-58, and Wilson 583, designated as an E7011 electrode sold by Air Reduction Sales Co., General Electric Co., and Wilson Welder & Metals Co., respectively, has been removed from the acceptable list of arc welding electrodes.

Investigating Units

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 526 cases during the month of January 1950. From this number, hearings resulted involving 14 officers and 55 unlicensed men. In the case of officers, 2 licenses were revoked, 1 was suspended, 5 were suspended with probation granted, 1 was voluntarily surrendered, 3 cases were dismissed after hearing and 7 hearings were closed with an admonition. Of the unlicensed personnel, 12 certificates were revoked, 43 were suspended, 18 were suspended with probation granted, 14 were voluntarily surrendered, 3 were closed with an admonition, and 6 were dismissed after hearing.

Merchant Marine Personnel Statistics

WAIVERS OF MANNING REQUIREMENTS FROM JANUARY 1 TO JANUARY 31, 1950

Region	Number of vessels	Deck officers substituted for higher ratings	Engineer officers substituted for higher ratings	Able seamen substituted for deck officers	Ordinary seamen substituted for able seamen	Qualified members of engine department substituted for engineer officers	Wipers or coal passers substituted for qualified members of engine department	Wipers, coal passers or cadets substituted for engineer officers	Ordinary seamen or cadets substituted for deck officers	Total
Atlantic coast	1						1			1
Gulf coast										
Pacific coast										
Great Lakes										
Total	1						1			1

NOTE.—In addition, individual waivers were not granted to permit the employment of able seamen holding certificates for "any water—12 months" in excess of the 50 percent authorized by general waiver.

MERCHANT MARINE LICENSES ISSUED DURING JANUARY 1950

DECK OFFICERS

		Region								Total	
		Atlantic coast		Gulf Coast		Great Lakes and rivers		Pacific coast			
		O	R	O	R	O	R	O	R	O	R
Master	Ocean	16	76	7	17	0	1	4	33	27	127
	Coastwise	1	8	3	2	0	2	0	0	4	12
	Great Lakes	0	2	0	0	6	40	0	0	6	42
	B. S. & L.	2	36	0	3	0	1	1	6	3	46
	Rivers	0	12	0	3	4	14	0	0	4	29
Chief mate	Ocean	12	31	4	6	0	1	6	9	22	47
	Coastwise	0	0	1	1	1	0	0	0	1	1
Second mate	Ocean	4	39	6	8	1	3	4	13	15	63
	Coastwise	0	0	0	0	0	0	0	0	0	0
Third mate	Ocean	8	25	1	9	0	5	1	14	10	63
	Coastwise	0	0	0	0	0	0	0	0	0	0
Mate	Great Lakes	0	0	0	0	0	0	0	0	0	0
	B. S. & L.	0	2	0	0	0	0	1	2	1	4
	Rivers	0	1	0	2	4	3	1	0	5	6
Pilots	B. S. L. & R.	62	100	15	19	43	77	13	29	133	225
Master	Uninspected vessels	1	0	0	0	0	0	2	4	3	4
Mate	Uninspected vessels	0	0	0	0	0	0	1	0	1	0
Total		106	342	37	70	58	147	34	110	235	669
Grand total		448		107		205		144		904	

ENGINEER OFFICERS

Steam	Chief engineer:	8	85	2	38	5	18	2	34	17	175
	Unlimited	4	39	0	0	3	53	0	8	7	106
	Limited	6	38	5	13	5	9	3	19	19	79
	First assistant engineer:	1	3	0	1	4	19	0	1	5	24
	Unlimited	12	65	6	15	5	9	9	18	32	107
	Limited	0	1	0	0	2	14	0	0	2	15
	Second assistant engineer:	4	82	7	12	4	28	2	20	17	142
	Unlimited	0	2	0	0	1	0	0	0	1	2
	Limited	2	17	1	9	1	1	2	18	6	45
	First assistant engineer:	8	26	2	5	5	9	2	9	17	49
Motor	Unlimited	3	2	0	0	0	1	1	1	4	4
	Limited	1	1	0	2	6	2	1	0	8	5
	Second assistant engineer:	1	2	0	1	0	0	0	0	1	3
	Unlimited	0	0	0	0	1	0	0	0	1	0
	Limited	1	100	0	16	0	25	0	36	17	172
	Third assistant engineer:	0	0	0	0	0	0	0	0	0	0
	Unlimited	2	1	0	0	0	0	6	0	8	1
	Limited	0	0	0	0	0	0	11	0	11	0
	Chief engineer	53	464	23	118	42	188	39	164	157	934
	Assistant engineer	517		141		230		203		1,091	
Total		53		23		42		39		157	
Grand total		517		141		230		203		1,091	

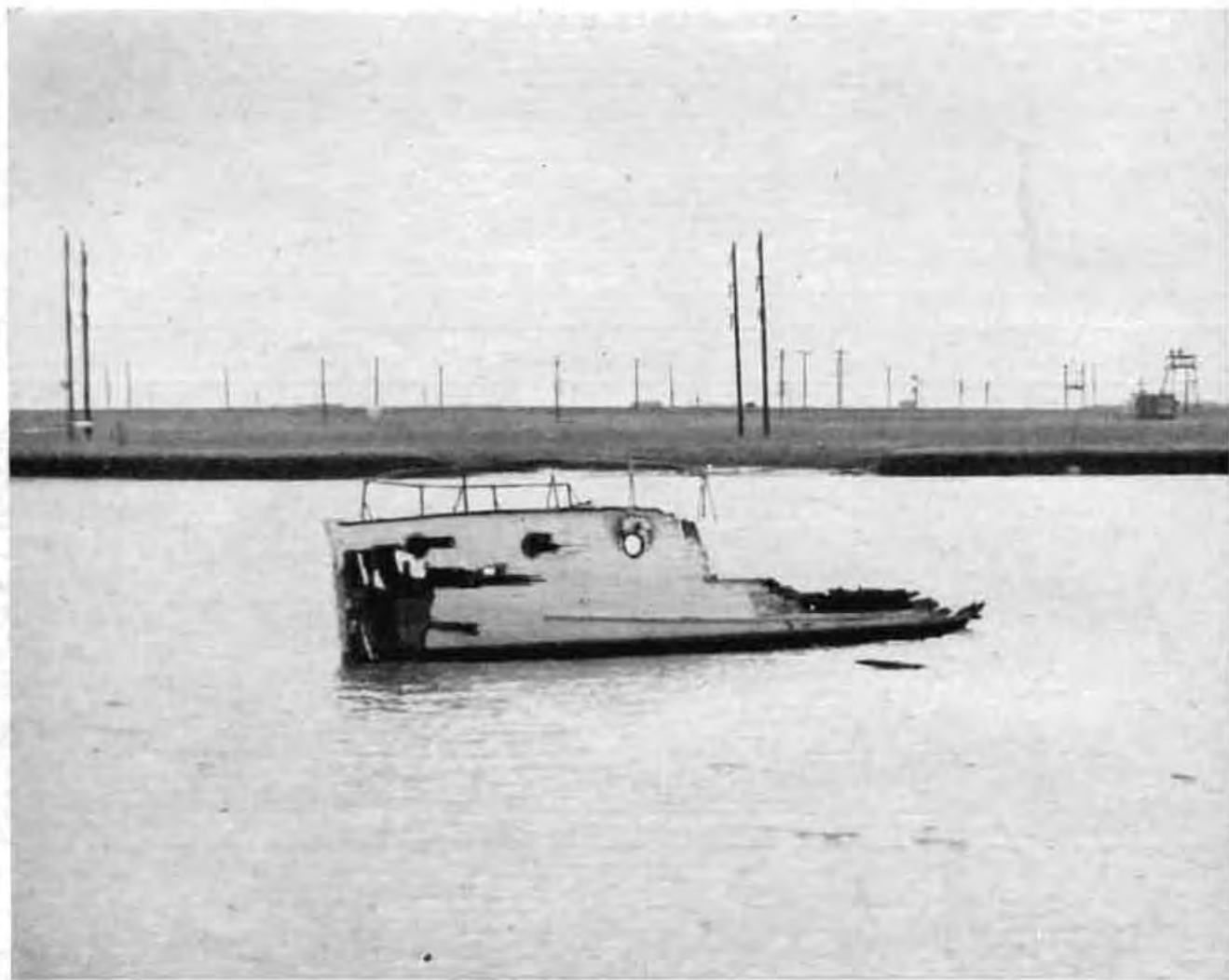
ORIGINAL SEAMEN'S DOCUMENTS ISSUED MONTH OF JANUARY 1950

Region	(1) Staff officer	(2) Contin- uous dis- charge book	(3) U. S. mer- chant mar- iner's docu- ments	(4) AB any waters un- limited	(5) AB any waters 12 months	(6) AB Great Lakes 18 months	(7) AB tugs and tow- boats any waters	(8) AB bays and sounds ¹	(9) AB sea- going barges	(10) Lifeboat- man	(11) Q. M. E. D.	(12) Radio opera- tors	(13) Certifi- cate of service	(14) Tanker- man
Atlantic coast	30	1	463	132	41					138	100	2	374	9
Gulf coast	2	2	84	40	14	2				25	12	1	86	10
Pacific coast	14		169	52	8	1				76	48	3	123	6
Great Lakes and rivers	2	3	168	5	20	13				21	40		147	14
Total	48	6	884	229	83	16	0	0	0	260	200	6	730	39

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

NOTE.—Columns 4 through 14 indicate endorsements made on United States merchant mariner's documents.

**IT DOESN'T PAY TO GAMBLE WHEN YOU HAVE
NOTHING TO GAIN—AND MUCH TO LOSE**



**THE BUSINESS END OF A LITTLE MATCH MAY BE THE
END OF A BIG BUSINESS**

Remember—Accidents Are Expensive