



PROCEEDINGS
OF THE MERCHANT MARINE COUNCIL



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PROCEEDINGS

OF THE MERCHANT MARINE COUNCIL

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SS <i>Gulf Supreme</i> , launched in 1961, a 29,250-ton addition to the Gulf Oil Corp. fleet. She is engaged primarily in coastwise trade. <i>Photo courtesy Bethlehem Steel Company.</i>	
Back Cover	
Safety Reminder by GRANDON SEAL of Pacific Maritime Association.	

THIS COPY FOR NOT LESS THAN 20 READERS—PASS IT ALONG

AMVER

Effective search and rescue involves intricate coordination between civilian and military organizations. The following incident is an example of how such cooperation made possible the saving of a life.

On 2 July 1962 the Norwegian Motor Vessel *Gylfe* was enroute to Botwood, Newfoundland. Through Ocean Station Vessel 4YC, who acted as relay, she requested medical assistance for a 17-year-old crewman who had fallen 25 feet and suffered internal injuries. The patient had been seen by a doctor from the SS *Homeric* a few days earlier but had become worse; skin gray, going into shock, and loss of about two pints of blood.

Commander Eastern Area advised the *Gylfe* that helicopter evacuation was not feasible. In New York the AMVER computer provided a surface picture showing all the vessels carrying doctors, that were within a 200 mile radius. *Gylfe* was unable to arrange rendezvous with any of them, either because of position or unable to establish communications.

Shortly thereafter, Commander Eastern Area was provided with another surface picture which showed a new vessel, SS *Carinthia*, enroute

Greenock, Scotland, in position 50.8N, 441W. Within 5 hours the *Carinthia* reported that she had accomplished a rendezvous with the *Gylfe*, and the patient transferred, but that emergency surgery was necessary to save the patient's life. A list of items for surgery including six units of whole blood and antibiotics were requested. This was complicated by the fact that the blood type, ORH negative, is unusual. The Coast Guard Air Detachment Argentia reported that all medical supplies were available except whole blood of that type.

With no RH negative type O blood available locally, the Red Cross in New York located six units. It was flown to McGuire Air Force Base in New Jersey whereupon MATS flew it to Argentia, Newfoundland. A Coast Guard airplane departed Argentia with all needed supplies on board and, after being successfully vectored to the *Carinthia* by the Weather Station vessel 4YC, air dropped the supplies to the CGC *Casco* who then passed them to the *Carinthia*. A team of doctors then operated, and it was subsequently reported that the patient was making a good recovery in a Liverpool hospital.

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FIRE DOWN BELOW

By Thorolf Wikborg of Oslo, Norway

A SHIP TODAY is a cosy place to live in and the risk is small—if those on board, officers, crew passengers, visitors and repairers, keep in mind the danger of fire.

There is much that is combustible in a ship. Owners and builders have tried increasingly to furnish public rooms with panels, textiles and furniture to make them all look as much as possible like a pleasant home—in the belief and the hope that those on board would behave themselves as though they were at home. But there seem to be considerable shortcomings in the matter of sensible smoking habits. Cigarettes are left on the top of piles of ashes and stumps in ashtrays without the embers being extinguished. They are thrown glowing over the rail or on deck and people go to sleep with them in their hands. There seems to be an innate resistance against extinguishing the embers of cigarettes. At home, in a railway carriage, or in an aeroplane you do not discard a cigarette until it is extinguished. If you are not so careful on board ship it must either be attributed to the fact that you consider that it cannot be so dangerous with so much water about or that you have never learned proper smoking routine. Perhaps it has never been learned ashore and smoking has only begun when one is a first voyage sailor and gets cheap tax-free cigarettes on board.

It is dangerous to smoke carelessly on board a ship. It is, in fact, more dangerous than ashore. Fire is easily fed because of wind currents and artificial ventilation and spreads easily through narrow corridors and staircases. Persons live closer together on board ship and the smoke from a fire can take your breath away before you get a chance to escape and raise the alarm. In harbour it may be some time before the watchman discovers the fire and can help you out for he cannot be in all places at one time, whereas if fire gets the upper hand while you are on the high seas it can mean an unpleasant and dangerous rowing excursion in the life boats.

Here are some examples from recent years.

Fire broke out in the interior of the midshiphouse which was completely destroyed, eleven persons being unable to escape.

Fire broke out in some goods in sacks on deck aft of the midshiphouse, very probably as a result of a cigarette end being thrown from the boatdeck

The following article is not written in technical terms, and the reader may well question some of the statements made, for example, that sparks or open flame are necessary for the ignition of combustible materials. Nevertheless, the article is interesting, easy to read, and the over-all presentation is considered to be worthwhile and of interest to ships' personnel.

Acknowledgment and thanks are given to the following firms who have given us permission to reprint: The British & Foreign Marine Insurance Co., Ltd.; the Thames & Mersey Marine Insurance Co., Ltd.; and the Royal-Globe Insurance Co. ED.

to windward. The flames spread into the midshiphouse and thence to the engine room and cargo holds. The vessel was completely destroyed and four lives were lost.

Fire broke out in the midship saloon at night and the midshiphouse was entirely destroyed. Two passengers were unable to escape and the captain who went in to rescue them also lost his life.

Fire broke out in the electrician's cabin aft of the midshiphouse. Within a quarter of an hour the whole house was in ruins.

The night after arrival in a United States harbour the crew returned on board after shore leave in an unsteady

state. Two of them continued to drink and smoke in one of the cabins and this was seen by the watchman but he did not speak to them. One lay on a sofa, the other in the cabin with a lighted cigarette. The whole of the crew's accommodation was burnt. The one who started the fire managed to save himself but two men were lost and one was maimed through hanging half out of a ventilator while the fire service sprayed water into the cabin through another ventilator.

A boatswain came on board at night after shore leave. An hour later a cry was heard from his cabin; but, before they managed to get him out, he was choked with smoke. The boy who looked after the cabin related afterwards that he had often seen holes burned in the boatswain's pyjamas, blankets, and sheets.

In a South American harbour fire broke out in the crew's quarters and four men lost their lives.

A mess boy was sitting and smoking in his cabin; he threw his cigarette down and went out. There was a regular fire patrol in this ship and the fire was discovered early enough to limit the fire to the cabin by using hand-extinguishing apparatus. The mess boy was heavily fined for having endangered the lives of 50 men and was made responsible for replacing the damage done.

Examples could be multiplied but it is sad reading. Let us turn to a little science.

Cigarette embers maintain 350 to 400° C. If the cigarette paper ignites, the temperature goes up to twice these figures. Wool ignites at 200°, paper at 250°, wood at 300 to 350°, jute, hemp, etc. from 370 to 400°. Cotton waste impregnated with vegetable oil or animal oil (linseed oil, hemp oil, whale oil, codliver oil) will spontaneously heat while the oil dries and can ignite if it lies in such a manner that the heat is not conducted away.

IT IS DANGEROUS

1. To leave a lighted cigarette. Cigarettes do not go out by themselves. Notice the ugly brown marks on tables. Regard a burning cigarette on the top of a heap of stumps and ashes in an ashtray as an abomination instead of an ornamentation as seems to be the "style" on board ship. Why wait for it to be emptied when the mess or saloon boy goes his rounds when you now know that such smouldering cigarette ends have caused



... smoking has only begun ...

severe losses of lives and property due to the embers falling on table or deck and being nursed by draughts when doors are opened or when forced ventilation is switched on?

2. To smoke in the bunk. Remember that you do not know when you are falling asleep. The cigarette or pipe drops on the bedclothes. Flames do not perhaps immediately rise up so that you do not wake with scorching but it smoulders, carbon monoxide develops and you do not wake again.

3. To smoke by open hatches or on deck if there is combustible cargo in the hold or on deck. If the stevedores' people commit such careless acts, it is the duty of one and all to report them. A fire in the hold in port is perhaps not so dangerous to life but think of the destruction of property. And property lost means higher insurance premiums and dearer goods, i.e. a lower standard of living. The commencement of a fire during loading or discharge is often only discovered long after the hatches are closed and the ship miles away.

Cigarettes thrown overboard without being thoroughly stubbed can be blown by the wind round the deck until they find something to ignite or be sucked in by ventilators to the cargo where they can smoulder for a long time before being noticed on deck. This can also happen through sparks from the engine or galley funnel. Be on your guard for these sparks and see that the spark arresters on the air pipes are in place and in order.



... sooner or later every seaman comes in contact with oil ...

4. To strike a match by holding it by the tips and striking it away from you. If it breaks, the flame can easily lodge on something inflammable where it is difficult to reach. A seaman holds the middle finger in the centre of the match and strikes it towards him. Landlubbers and women strike away from themselves.

That is all. So you see there are no more safety regulations required at sea than those it is natural to observe at home. Those who cannot or will not behave as reasonable people must be spoken to. It will perhaps be said that this is easier said than done. There is, of course, nothing which offends you so much as when someone is concerned about your behavior. So you do this. You take one of these brochures, underline something you think one of your comrades is apt to overlook and put it in his cabin. Then he can muse over the matter and consider whether it was his guardian angel who thus stole a march on the demon of calamity. And perhaps he will mend his ways.

OIL ON BOARD

Sooner or later every seaman comes in contact with oil, especially those concerned with engines, tanks or galley. Do all know sufficiently about the characteristics of oil? Everyone knows that petrol is highly inflammable. Petrol gives off vapour even at the lowest temperatures and this vapour mixed with air ignites with the smallest spark—you know this from your experience with lighters—the spark arises either through steel objects striking or electrically (contact breakers motor brushes, etc.)

Oil, except crude oil, does not give off vapour at normal temperatures. There are fixed temperature limits for the various types of oil in use. If the temperature is lower, the oil is said not to "flash," i.e. to flare up if a lighted match is held over the surface. The border temperature is known as the flashpoint. Note the following flashpoints:

	° C.	° F.
Petroleum, paraffin, kerosene.....	22	80
Solar oil, light diesel oil	65	150
Ordinary diesel oil.....	80	176
Fuel oil.....	100	212
Lubricating oil.....	180	370

C. means Centigrade (or Celcius) and this thermometer is used in all but English-speaking countries. 0° is the freezing point of water, 100° is the boiling point of water. F. means Fahrenheit, the thermometer which is



... oil is not dangerous so long as it does not get loose ...

used in English-speaking countries but also often found aboard Scandinavian ships. 0° C. corresponds to 32° F., 100° C. corresponds to 212° F. 0° F. corresponds to -17.6° C., i.e. the lowest temperature which could be reached (with ice and salt) when the Fahrenheit thermometer was made a couple of hundred years ago. It is a pity there has been no world agreement on the subject of a standard thermometer. Fateful mistakes are happening and everyone on board who has to measure temperatures must know beforehand what kind of thermometer he has in his hands. And remember always to report C. or F.

A LITTLE SCIENCE AGAIN

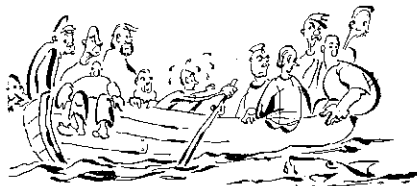
Oil does not burn by itself. It cannot under normal temperatures combine with oxygen in the air. The oil must be heated over the flashpoint when it gives off vapour, which combines with the air, and which is combustible if the proportion of the mixture is more than 1.4% vapour in comparison with the volume of air. If the mixture is stronger than 8%, the gas is not combustible. In a closed room the combustion will take the character of an explosion. Oil floats on water but the oil vapour is heavier than air and will therefore remain in the bottoms of empty tanks, pump-rooms and near the floors in cabins, etc. When a tank is steamed the oil gases will rise in the tank and, as a consequence of heating the increased pressure, float up through the hatches.

ENGINE ROOM PEOPLE SHOULD KNOW:

Oil in use is not dangerous so long as it does not get loose.



... keep the fire pumps going ...



... an unpleasant rowing excursion

BUT:

if it leaks out of a flanged joint; or if there is an overflow in the tanks because someone has forgotten to stop the transfer pump in time; or, if there is back pressure against the pumping from a bottom tank to another tank so that the oil rises in the sounding pipes or air pipes and these are not tight; then there is the danger of a catastrophic fire.

Oil may spout on to hot exhaust valves on the engine top or on to exhaust pipe flanges or on to a boiler or running electric motor or generator where it may be heated over the flash-point and the gas may then be ignited by sparks or by an uninsulated part of the exhaust pipe or by other means.

AN EXAMPLE:

Light diesel oil was being bunkered. A motorman had orders to sound the depth of oil and if it came over a certain level to open a valve to another bottom tank. While he was sounding he fixed open the self-locking valve on the sounding pipe and forgot to close it when he went to open the valve to the other tank. In the meantime, a gush of oil came up through the sounding pipe, came in contact with a running electric motor, the temperature of which was more than the flashpoint of the oil. Gas was therefore formed which was ignited by the commutator sparks and fire burnt freely over bulkheads, paint and spilt oil in the cables and spilt oil under the floor plates.

The heat was strong enough to go through the casings and the whole of the midshiphouse went up in flames. There was later an explosion in the refrigerated stores chamber on account of carbon monoxide from smouldering cork insulation ignited by a smoker's match and fire broke out in one of the deep tanks forward of the engine room bulkhead. The explosion cost the lives of five men.

If the man had closed the valve of the sounding pipe or if he had only, for example, used his hand to lead the oil jet in a direction where it could not be heated, nothing serious could have happened.

It is, of course, wrong to allow sounding pipes on the engine floor to remain open. They should have self-closing cocks kept in good order. When not in use a blind flange should be screwed down over it and when in use you must never think of fixing the valve open. If you cannot take soundings and at the same time hold the valve open yourself, two men should do the job.

Oil bunkering also involves other risks and the correct routine should be to keep the fire pump going with water on the decks and firehoses clear preferably supplied with spray nozzles.

Fires in motor rooms or oil-burning boiler rooms are frequently due to oil having become loose by overpumping daytanks or pipeline leakage, and coming in contact with hot parts, and they may develop to catastrophes if air is allowed into the rooms. The first thing to do is to shut skylight and ventilators and other openings and turn on carbon dioxide (where installed) and try to cool the burning oil with foam or spray.

TANK PERSONNEL MUST KNOW:

Serious accidents have occurred and still occur because tank personnel do not realize that crude oil contains a large proportion of petrol which gives off vapour at any temperature. They believe that "dirty" oil is less dangerous than petrol, and as far as fuel oil is concerned it is true (flashpoints from 65° to 100° C.) but it is a perilous mistake to think that crude oil behaves the same way. Crude oil, as a matter of fact, is much more dangerous than petrol. After a petrol cargo the gas will evaporate readily and the tanks are easily cleaned, but after crude oil cargoes the oil sticks to bulkheads and floors and produces a gas as long as there is only a patch of oil left. Such patches can give off gas even after a tank has been certified gas free. One must always remember that, while the petrol has been refined away from fuel oils, the crude oil contains its original full amount of petrol.

During loading of crude oil or petrol the gas concentration in the tanks will generally be so strong that it will not be inflammable except at the openings where it mixes with air. During discharge, on the contrary, air is drawn into the tank and makes inflammable and explosive gas. When ballasting this gas will be pressed out of the tank openings.

Therefore; during loading and discharging of crude oil or petrol and during ballasting, ventilating and cleaning of tanks after such cargo:

Never use any other lights on deck

than fixed mastlights and approved battery torches.

Never keep doors or portholes in the front of the poop on maindeck open, as gas may pass through them into the accommodation.

Never smoke on board the ship during loading or discharging, and otherwise, when tanks are open, only in such places where the Master has expressly permitted it. Never carry a lighter in the pocket.

Never use lamps connected by cable to the electrical mains near to open hatches or in the tanks, for instance while fixing the Butterworth or cleaning the tanks, unless it has been ascertained by a reliable gas indicator immediately before that the gas concentration is less than one-half percent. Never rely upon your nose as a gas indicator. Even the so-called flameproof lamps (F.L.P.) must not be used. If the cable is damaged and short-circuited or the lamp falls down, the spark thus created will cause an explosion.

EXAMPLES:

During a ballast voyage after carrying crude oil the tanks had been ventilated a considerable time with windsails. When steaming and washing down the tanks an electrical lamp "cluster" was used at the tank hatch to see how the washing down was going on. There was a terrific explosion cutting the ship in two and killing the three who were near the hatch.

During cleaning of tanks after carrying crude oil a tank had been "butterworthed" for 4 hours and ventilated by windsail for 24 hours. A man then went down into the tank in order to fix the Butterworth in a lower position. A F.L.P. lamp was used, and as far as could be ascertained something happened to the lamp or its cable. The man in the tank and two men standing near the hatch were killed by the explosion and the ship was severely damaged.

During spraying of a tank which had carried crude oil, a deckboy bent over the hatch to see how the washing was going on. He lost a lighter, which



... the crew returned ...



If, in spite of all this . . .

he carried unlawfully in the pocket of his boiler suit, and the lighter hit a step of the ladder, opened and caused an explosion severely damaging the ship. The boy had an air trip but landed unconscious on the deck and could later confess what was the cause of this explosion.

There is little doubt that most explosions on tankers are due to lack of knowledge or caution when dealing with gas-containing compartments.

When you have learned what is said above, and act accordingly together with your colleagues, your life on board a tanker will be as safe as anywhere else.

SHIPYARD PEOPLE SHOULD KNOW:

All that is written in this brochure. And that sparks from burning and welding apparatus ignite oil vapor and that insulation is a very inflammable material. The welding of the outside of a plate with interior insulation has in too many cases led to catastrophic fires. Fire can smoulder for a long time in the insulation before it breaks out, perhaps long after working hours.

AN EXAMPLE:

A change was to be made in the oil pipe in the engines. It was not the intention to use a cutting apparatus but two men found it was easier to use one. Loose oil took fire and the two workers lost their lives while the repairs cost \$300,000.

CARBON MONOXIDE:

Carbon monoxide forms by fire smouldering (burning without sufficient ingress of air) in wood, coal, cork, etc. The gas is odourless but very poisonous. Carbon monoxide alone cannot ignite but mixed with air it is very susceptible to ignition, fire and explosion. No matches or sparks must be near when a space is being opened where there may be carbon monoxide. It is somewhat lighter than air and comparatively easy to eliminate.

IF, IN SPITE OF ALL THIS, THERE SHOULD BE A FIRE ALARM:

If the advice which is given in this brochure is followed, the danger of fire on board will be considerably reduced. Fires due to technical faults are rare. In cargoes, fire can arise through spontaneous combustion but these fires can be held in check comparatively easily by shutting out air and by injecting carbon dioxide or steam until the ship arrives in harbour. Most fires are caused by ignorance or carelessness.

Ships can hardly be built completely fireproof and foolproof. Ships are, therefore, equipped to avoid outbreaks of fire. There are fire pumps in the engineroom and on large ships also outside the engineroom. There are hose pipe connections in the engineroom and on deck. There are carbon dioxide or steam pipe conduits to the holds and there are hand fire extinguishing apparatus everywhere. Most outbreaks of fire can easily be put out in their early stages. But they must be dealt with quickly. Every man should know the ship's fire rou-



The one nearest the seat of the fire . . .

tine by heart and take part in fire extinguishing practice. Every man should know the right thing to do in any given case without the need for orders. The one nearest the seat of the fire must do what he can to put it out at the same time as he gives the alarm.

It should be known that there is no fire without air (excepting in the case of certain chemical cargoes). The first thing you do is to get hold of the nearest hand-fire extinguishing apparatus but it is equally important to stop the ingress of air. If this can be done, the fire will soon die. In the case of fires in accommodation rooms, ventilators and doors must be shut immediately and the artificial ventilation must be stopped. The watch in the engineroom should start the fire pumps and the watch on deck attend

to the water service pipe lines, valves and hoses. In the case of fire in the holds, hatches and ventilators must be made airtight as quickly as possible. If carbon dioxide or steam is used as an extinguisher a small opening must be maintained under strict control in order that displaced air can escape satisfactorily. If a fire occurs in the engine room, the skylight and doors must be shut immediately, the ventilating fans must be stopped and the ventilators plugged or dampers shut.

All hose nozzles on board a ship should be supplied with gear enabling them to be used either for straight stream or for spray. Spray extinguishing is much more effective than straight stream. It cools better and protects the operator better and all the water attacks the fire, while in the case of ordinary extinguishment with straight jets only a small portion of the water works on the fire and the rest destroys anything susceptible to water damage and gives the ship a list if it accumulates in large quantities on board. In the engineroom spray extinguishment will also be suitable but foam or CO₂ extinguishment probably better. If there is nothing more combustible in an engineroom than a little spilled oil under the floor plates, the prevention of an ingress of air will unquestionably be the best method of procedure while efforts are made, if feasible, to direct a fire hose towards the pipe lines which lead to and from the day tanks.

If you are unfortunate enough to be involved in a fire, you must remember:

To bend down or crawl in a smoke filled corridor. Carbon monoxide (CO) concentrates higher up. In the event of carbon dioxide (CO₂) having been used for fire extinguishment, however, you must walk upright. Carbon dioxide is mostly concentrated near the floor.

If your clothes are alight, you must not run further than is necessary but roll on the deck or plating.



. . . head down or crawl . . .

SAFETY CHISELERS

By Robert H. Smith and Arthur E. Willis

United States P&I Agency



"Stand by to repel boarders"! At that stirring command, every stout hand grabbed his cutlass and ran to the rail. Soon would come the savage charge of lusty cutthroats, flying through the air, pistols in belts, knives in teeth, rapiers flashing, to plunder another of the King of Spain's treasure ships. Yes, those were the "good old days", long gone now, existing only in the imaginations of Hollywood scenario writers. Or are they?

We rode a loaded tanker from quarantine to the pier not long ago. As the tugs breasted her gradually to the pier, the usual assortment of people was waiting on the dock, each with pressing business aboard. And, as usually is the case with a loaded tanker, the main deck was about even with the dock.

Slowly, the space between the ship and dock narrowed, now 15 feet—10 feet—5 feet. Suddenly, one of the waiting men jumped the gap with great agility, sample rack in one hand and tape in the other, clipboard tucked in his belt. He bounced over the rail and landed on deck with a flourish. Promptly, the rest of the boarders followed suit although not all of them displayed the verve and derring-do of the leader. Immediately, they scattered fore and aft about their business and another successful invasion was underway.

Within a few minutes after the ship was secured fore and aft, the gangway was swung out, man ropes rigged, and a safety net stretched beneath. The Third Mate walked down the gangway and read the draft. The deck gang turned to, hooking up hoses, and port routine took over.

Did anyone gain anything by not waiting for the gangway? Was any task so urgent or any boarder's time so precious that he could not wait to board the vessel safely? Never yet

have we found a "yes" answer to those questions. Usually we get just a sheepish grin and perhaps the comment, "Well, everybody does it—it's not really dangerous". Argue the point and some ships' officers are apt to reply, "What can I do? I am busy tying up. Besides, that first man aboard is one of my bosses and if you think I'm going to chew him out, you can guess again".

Of course, it is not a matter of chewing out anybody. What is needed is to enforce good seamanship and respect for safety regulations, quietly but firmly. It can be done by competent officers who are never too busy to prevent accidents. The boss will respect the man who does it.

Never forget that if an accident does occur, the Coast Guard is apt to take a dim view of any alibi that prevention of such accidents is not the responsibility of the ship or that the ship's officers are unable to prevent such accidents. If it results in litigation, the Court's views of the ab-

sence of ship's liability might be quite different and an officer might have a rough time on the witness stand.

Records indicate that this bad habit can be plenty dangerous. Boarding ships by means other than by gangway inevitably leads to disaster sooner or later. A slight slip on a wet spot, a turned ankle because of a worn shoe, misjudgment of distance of a moving platform—and what chance has a man in the water between a 20,000 ton tanker and a solid-faced dock?

True, the unlucky ones don't always get killed. Sometimes they just get hurt. On one tanker, a man in a hurry to get ashore did not wait for the ship to tie up but jumped for the lock wall. He made it all right—on some loose gravel so that he slipped and fractured a bone in his heel. Often it takes a long time to recover from such an injury. SEE YOU NEXT TRIP—COMING UP THE GANGWAY.

PROCLAMATION 3483

FIRE PREVENTION WEEK, 1962

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA
A PROCLAMATION

WHEREAS experience has revealed the great value of effective community fire prevention programs in conserving our national treasures of life and property; and

WHEREAS increased fire losses during the past year demand an immediate awareness on the part of the public of the need for, and value of, exercising greater care and responsibility in avoiding destructive fires and for participating in community fire prevention programs and related activities:

NOW, THEREFORE, I, JOHN F. KENNEDY, President of the United States of America, do hereby designate the week beginning October 7, 1962, as Fire Prevention Week.

I bid all citizens to join in actively promoting the fire prevention and control efforts of their respective community fire departments and I especially invoke the wholehearted support of State and local governments, the Chamber of Commerce of the United States, the American National Red Cross, and other labor, business, farm, and professional organizations, as well as schools, civic groups, and public information agencies, in observing Fire Prevention Week and in enlisting the public as active participants in fire prevention efforts. I also direct the appropriate Federal agencies to assist in this effort to reduce the shameful waste caused by preventable fires.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States of America to be affixed.

DONE at the City of Washington this eighteenth day of July in the year of our Lord nineteen hundred and sixty-two, and of the Independence of the United States of America the one hundred and eighty-seventh.

JOHN F. KENNEDY

By the President:

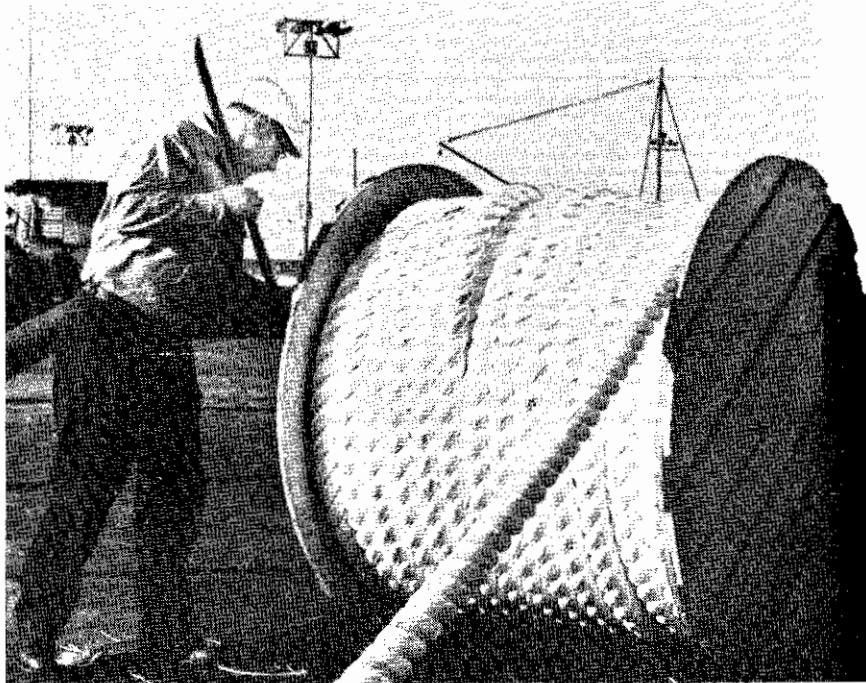
DEAN RUSK,
Secretary of State.

NYLON LINES—CASUALTY REPORT

EARLIER THIS YEAR a merchant seaman, performing his duty at his mooring station, was permanently crippled when struck by a synthetic fiber mooring line that had parted under heavy stress.

The seaman, experienced in his profession, was handling the port off-shore bow mooring line. This 6-inch line, manufactured of synthetic fibers, led from a bollard on the dock through the port rolling chock to the forward bitts, aft to a fairlead abaft the windlass and thence to the gypsy head of the windlass. The seaman standing forward of the gypsy head and facing aft had placed four round turns on the gypsy head and was tending the line. The starboard bowline was being tended in a similar manner. A heavy strain developed on each of these lines as both were being used to heave the vessel ahead to the next berth. However, the starboard bowline was momentarily surged when its turns became fouled on the gypsy head and thus caused a critical load to be put on the port bowline. Although these lines are capable of being stretched far beyond the limits of hemp fibers, the elastic limit in this instance was exceeded and the line parted between the gypsy head and the fairlead. Unlike hemp fibers, no inherent audible warning is given as the line approaches its breaking point, and once the line parts or the tension is released, the tendency of its fibers to return to their original shape creates a terrific backlash. This occurred as the port line parted. The length of the line attached to the bollard whipped violently out of the fairlead and although unobserved by the others on the bow, it apparently struck the seaman before disappearing overboard thru the rolling chock. When discovered the lower extremities of both legs had been so severely mangled as to necessitate amputation.

Although synthetic fiber lines have many characteristics that make them superior to hemp fibers, there are certain precautions that must be exercised in their safe handling. Supervising personnel should carefully consider the lead of the line to be employed so as to reduce or eliminate, if possible, the positioning of any personnel in the potential "line of fire" from a parting line. This consideration should be given even though use of such a lead may not be the most satisfactory or convenient with respect to rigging stoppers, securing the line, etc.



Courtesy California Shipping Co.

In the December 1959 issue of this publication maintenance and safe handling tips compiled by the U.S. Navy Bureau of Ships were printed. To once again emphasize the importance of a thorough understanding and knowledge of the characteristics required in the use and handling of these lines, these guide posts are reprinted below. All mariners are urged again to review them with the idea that similar future accidents may be avoided. In the future examinations for all licensed and unlicensed ratings in the deck department will contain question material on the handling, use and maintenance of synthetic fiber lines.

MAINTENANCE

1. Nylon rope will hold a load even though a considerable number of the yarns are abraded. Ordinarily, when abrasion is localized, the rope may be made satisfactory for reuse by cutting away the chafed section and splicing the ends. Chafing and stretching do not necessarily indicate the load-carrying ability of nylon rope.

2. Splice nylon rope as you would manila rope except that tape instead of seizing stuff should be used for whipping the strands and rope. Also, nylon rope, because of its smoothness and elasticity, requires at least one extra tuck over that for manila rope. For heavy load applications, such as

towing take an additional backtuck with each strand.

3. Should nylon rope become iced over, thaw it carefully at moderate temperature and drain before stowing.

4. Should nylon rope become slippery because of the accumulations of oil or grease, scrub it down. Isolated spots may be removed by the use of light burning oils.

GENERAL USE

5. Do not uncoil new nylon rope by pulling the end up through the eye of the coil. Unreel it as you would wire rope.

6. New cable-laid nylon hawsers tend to be stiff and difficult to handle. To alleviate this condition, tension the cables for 20 minutes at 30 per cent extension (100 feet when tensioned would measure 130 feet).

7. When the stretch of nylon becomes excessive, double up the lines by passing the bight, thereby halving the elongation under load. This reduces the hazard of snapback, since the rope will usually part near the eye. For drydocking and other close control work, stretch can be reduced to one-half by doubling the lines.

8. When new cable-laid nylon hawsers are strained, sharp cracking noises will be heard. The noises are associated with readjustment of the rope strands in the stretched cable. Under normal safe-working loads, the

rope will stretch one-third of its length.

9. Wet nylon hawsers under strain emit steam-like water vapor. This phenomenon is normal under safe-working loads.

10. Nylon rope can withstand repeated stretching with no serious effect. When under load it thins out; but when free of tension it returns to its normal size. The critical point of loading is 40 per cent extension; that is, a 10-foot length would stretch to 14 feet when under load. Should the stretch exceed 40 per cent, the rope is in danger of parting.

11. When sets of ropes are to be used in parallel, as are boatfalls, do not pair nylon rope with low elongation rope such as wire or manila.

12. Use nylon rope stopper for holding nylon hawsers under load. Do not use manila or chain.

13. When handling nylon rope without a powered reel, avoid coiling it in the same direction all the time since this will tend to unbalance the lay.

14. Bitts, chocks, and other holding devices used with nylon rope should have smooth surfaces to reduce abrasion and minimize surging of nylon ropes under working conditions. Use chafing gear where there are sharp metal edges. During reeling or heaving-in operations, take care that thimbles and connecting links do not chafe or cut the nylon hawsers.

15. Since, normally, plain-laid nylon rope is right-laid, coil it on bitts, capstans, or reels in a clockwise direction.

16. Do not use wire or spring lay rope on the same chock or bitt with nylon rope.

17. Plain-laid nylon hawsers tend to elongate around bitts when loaded. To minimize excessive lengthening, take a turn under the horn and cross the line on itself before taking more turns.

18. When nylon hawsers are used on capstans for heavy towing or impact loading, take six turns on the capstan and two turns overlaying the last four turns. This procedure reduces the hazard of sudden surges on rendering out.

19. For mooring purposes with low

freeboard vessels where the tide differentials are average, make up at half tide. No further handling should be required.

20. Nylon rope under heavy strain may develop glazed areas where it has worked against bitt and chock surfaces. This condition may be caused by the removal of paint from metal surfaces or the fusing of nylon fibers. In either case, the effect on the rope strength is negligible.

ALONGSIDE TOWING

21. Make up forward and backing tow lines as close as possible without regard to sharp bends.

22. Take up slack in relaxed line while the other line is under heavy load.

23. When easing pull, the tug may have to reverse engines slightly to counteract the elastic property of nylon and thus avoid "snapback" action.

PRECAUTIONS

24. Nylon rope on parting is stretched 50 per cent. The stretch is recovered instantaneously with resulting snapback. In view of this, it is imperative that no one stand in direct line of pull when heavy loads are applied.

25. Do not use a single part of plain-laid rope for hauling or hoisting any load that is free to rotate. If one part of rope is essential, use cable-laid nylon hawsers.

26. Do not stow nylon rope in strong sunlight for long periods. Cover it with tarpaulins. During stowage, keep it away from heat and strong chemicals.

27. Be extremely careful when easing out nylon rope around bitts and cleats under heavy load. Because its coefficient of friction is lower than that of manila, the nylon rope may slip when eased out and cause injury to personnel unfamiliar with its oddities.

28. For control in easing out, take two or three round turns on the bitt before figure-eighting the line. Use of the round turns provides a means for closer control in easing out or surging. Always stand well clear of the bitts during these operations.

The chemicals listed here have a permanent effect on nylon yarn. Action takes place at various temperatures and concentrations according to the chemical involved.

Concentrated formic acid.

Benzyl alcohol (at a boil).

Phenol.

Cresols.

Xylenols.

Chlorinated phenols.

Concentrated nitric acid.

Concentrated sulfuric acid.

Calcium chloride (in methanol).

Calcium chloride (in glacial acetic acid; ethylene chlorohydrin; ethylene glycol).

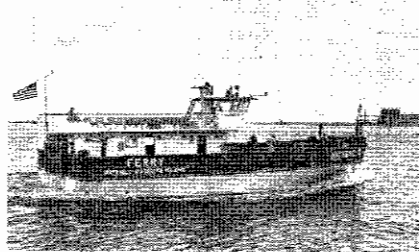
Zinc chloride in methanol.

Concentrated hydrochloric acid.

LIFE EXPECTANCY

Nylon rope properly handled and maintained should remain serviceable more than five times longer than manila rope subjected to the same use. Adherence to the foregoing instructions combined with the usual safe practices followed for manila rope will give all the advantages of nylon rope plus savings in cordage allowances.

M/V NICHEVO II



A new combination passenger and automobile ferry, the Motor Vessel *Nichevo II*, was completed recently at Fraser-Nelson Shipbuilding & Dry Dock Co., Inc., Superior, Wis., for Nichevo Ferry Line, of LaPointe (Madeline Island), Wisconsin.

Built to the special design of the owners, the *Nichevo II* will operate in the passenger and automobile ferrying service between Bayfield, Wisconsin, and Madeline Island in the Apostle Island Group of Lake Superior.

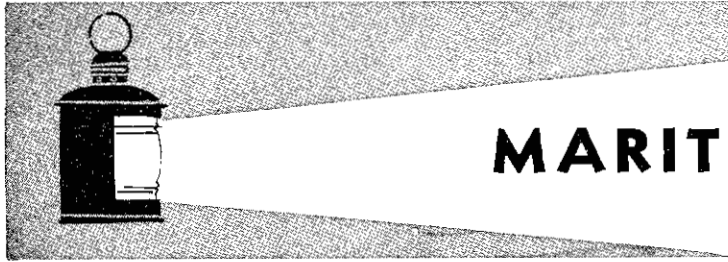
The ship has a large open deck area with cabin and pilot house structures grouped on the port side. Loading ramps, electrically operated, are located at both bow and stern and these raise up flush with the ship's bulwarks when the vessel is underway. Automobile loading will be over the stern at one end of the trip with unloading over the bow at the other, thus eliminating the need for backing on or off of vehicles.

Plans were prepared by the naval architect firm of Walter W. Haertel, of Sturgeon Bay, Wisconsin.

Overall length of the new ferry is 65 feet with an extreme beam of 32 feet, and a loaded draft of seven feet. With 3,000 square feet of deck space, the *Nichevo II* can carry nine automobiles, or two full-sized highway buses. Designed passenger carrying capacity is 150 persons, and full load tonnage is 40 tons.

The hull is reinforced at bow and stern to withstand operation in ice and to allow for numerous dockings in regular service.

Power for the ship is supplied by a 250 h.p. Murphy Diesel engine driving a four-bladed propeller through three-to-one reduction gearing. Designed speed of the ship is 12.5 m.p.h.



MARITIME SIDELIGHTS

The American Merchant Marine Institute reports that on 1 July the United States privately owned merchant fleet, of 1,000 gross tons or over, totaled 986 vessels with a deadweight of 14,405,000 tons. This was composed of 34 passenger combination vessels of 303,000 deadweight tons (481,000 gross), 626 dry cargo vessels of 7,099,000 and 326 tankers of 7,003,000 deadweight tons. This represented an increase of one ship and 22,000 deadweight tons over 1 June and was the seventh consecutive month that the fleet has increased since the low of 973 in December 1961. In the above totals were 98 inactive vessels, 24 of which were laid-up and 74 temporarily idle; including 14 under repair, two converting and one jumboizing.

‡ ‡ ‡

Foreign trade cargo handled in the port of New York in 1961 showed a decline. According to the Port of New York Authority's Annual Report, New York Harbor handled 12,994,112 long tons of foreign trade general cargo in 1961. This was 5.4 percent below the 13,736,545 tons handled in 1960, and 0.7 percent below the 13,091,702 tons handled in 1959. Comparable volumes for total U.S. oceanborne export-import general cargo showed an increase of 2.7 percent to 60,793,809 tons in 1961 from 59,170,441 tons in 1960. New York's share of the national volume of general cargo trade, therefore, declined 1.8 percent.

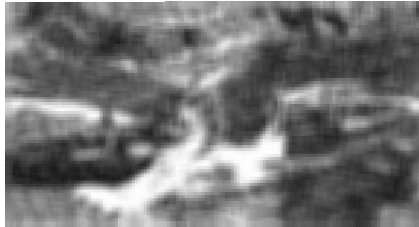
‡ ‡ ‡

An experimental process which utilizes electricity and plastic membranes to convert sea water into fresh water is being installed at the Coast Guard's Ocracoke Lifeboat Station on the Outer Banks of North Carolina.

The system, which will go into operation the latter part of August, will be the world's first known continuous sea water conversion process by this method.

In this process an electric field causes the ions of mineral impurities to pass through plastic membranes, thus producing purified water. The system will produce 2,000 gallons a day.

CARGO SALVAGED



The sea-going tug *Salvage Chief* owned by Fred Devine of Portland, Oregon and under the command of Captain Reino Mattila, recently completed successful salvage of cargo from the stranded SS *Chichasaw*.

The freighter, aground off Santa Rosa Island, 98 miles west of Los Angeles, was difficult to reach by land because of no roads and rugged shoreline. In removing the cargo, the *Salvage Chief's* crew employed a "bi-line" transfer system and transferred the cargo from the vessel to barges on the seaward side.

The salvage operation was completed in a little over a minute's time, with all the cargo salvaged, 14 barge-loads, except for a small water damaged portion.

The *Salvage Chief*, in operation since 1949, with Mattila as captain for the last ten years, has a string of brilliant salvage operations to her credit, including the successful recovery of the Cape Douglas, a 114 ton fishing vessel, from 640 feet of water in Puget Sound.

‡ ‡ ‡

A 479,000-pound generator stator was recently loaded aboard the S/S *Mormacglen* in New York. The stator, destined for service in Buenos Aires, is reportedly the heaviest single unit ever shipped to South America.

‡ ‡ ‡

During the 1962 fiscal year, 11,150 vessels transited the Panama Canal. This figure, unprecedented in the history of the Canal, represents approximately 67,595,000 long tons of cargo. This marks the 10th year that the Canal has set a record for handling oceangoing vessels.

A 420-foot oceangoing barge, believed to be the largest of its type in the world, was recently launched at the New Orleans yard of Avondale Shipyards. The *Angela*, of self-unloader design, will be used by Moran Towing Corp. to move cement between Ravena, N.Y., and Atlantic coast ports.

‡ ‡ ‡

The Maritime Administration has invited bids for the construction of two 220-foot, 1,615-ton vessels for the Coast and Geodetic Survey. The vessels are intended for use in hydrographic surveying and oceanographic studies in coastal and offshore waters, principally in southeast Alaska.

‡ ‡ ‡

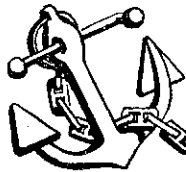
The third of six vessels being constructed for Farrell Lines was recently launched at Ingalls Shipbuilding Corp. The 522-foot *Mercury* is capable of carrying 10,700 tons of cargo, and is designed for operation between the United States and East Africa.

‡ ‡ ‡

A 7-year low in the number of waterfront accidents in the port of New York was set during 1961, according to the New York Shipping Association Safety Bureau's annual report. The accident frequency last year, representing the number of accidents per million manhours worked, declined to 69.8 percent. The number of accidents totaled 3,035 and compared with a high of 4,136 accidents set in 1957. The basic accident causes, according to the report, show equipment used on the piers and ships account for only 3.4 percent of all accidents reported, whereas operating methods and conditions were responsible for 57.8 percent of all accidents and individual actions accounted for 28.4 percent of the accidents.

‡ ‡ ‡

A speed of 50 knots was achieved during the recent initial "flight" of the hydrofoil vessel *Denison*. The 104-foot, 90-ton vessel is designed for a maximum speed of 60 knots.



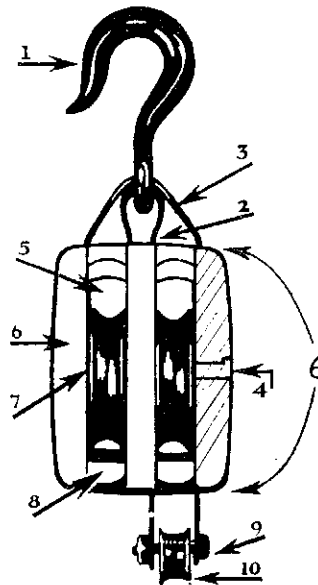
nautical queries

DECK

ENGINE

BLOCKS AND TACKLES

Q. Name seven of the ten parts of a block indicated on the diagram below:



- A. (1) Hook
 (2) Inner strap or thimble
 (3) Outer strap
 (4) Pin
 (5) Swallows
 (6) Cheeks or shell
 (7) Sheaves
 (8) Breech
 (9) Becket
 (10) Thimble

Q. Describe the hazards and precautions necessary when carrying nitrates.

A. Nitrates, when involved in a fire will greatly intensify the burning of all combustible material.

Nitrates should be stowed separate from all combustible material, explosives, or acids (white label).

—Nitrates, N.O.S. *Explosives or Other Dangerous Articles on board Vessels*

Nitrates are oxidizing products. When in a fire they increase its spreading intensity. They should be separated from inflammable goods, and, especially, products apt to ignite spontaneously. Avoid mixing with sulfur, charcoal, etc., and prevent contact with acids. Soluble in water. Stow away from combustibles, waste, sweepings, etc. Require thorough cleaning of compartment before loading.

—*Dictionary of Commodities Carried by Ship*

Q. What is the block coefficient of a vessel?

A. The block coefficient of a vessel is the ratio of her volume of displacement at load draft to the volume of a rectangular parallelepiped or block whose length is the same as the length between perpendiculars, whose breadth is the same as the molded beam, and whose height is the same as the molded draft. This may be expressed:

$$\text{Block Coefficient} = \frac{\text{Volume of Displacement}}{L \times B \times D}$$

Q. When compression members of a ship's structure such as longitudinal girders or frames have been badly buckled by collision or other cause, why is cropping out and renewal preferable to fairing in place?

A. When compression members of a ship's structure such as longitudinal girders or frames have been badly buckled by collision or other cause, cropping and renewal is usually necessary as a faired compression member will usually retain only a small part of its original strength and stiffness.

Q. A vessel is preparing to lift with her jumbo boom a weight of 75

tons, with the boom head 50 feet from the ship's centerline. Determine the list that will be given the vessel when the weight is suspended if the displacement is 6000 tons and the GM 6 feet with the weight in the suspended condition.

$$\begin{aligned} \text{A. } GM &= \frac{w \times d}{W} \cot \phi \\ 6 &= \frac{75 \times 50}{6000} \cot \phi \\ \cot \phi &= 9.6 \\ \phi &= 5.95^\circ \\ \text{List anticipated} &= 6^\circ \end{aligned}$$

Q. (a) What are the advantages of the centrifugal pump in comparison with the vertical reciprocating pump?

(b) Would any damage be likely to occur if the discharge valve was closed just before securing the power to the centrifugal condensate pump?

A. (a) The centrifugal pump delivers an even pressure, is easily adaptable for turbine or motor drive, requires less headroom, and has fewer moving parts.

(b) The centrifugal pump is not a positive displacement pump and hence there will not be a dangerous rise in pressure and no damage should occur.

Q. What is the purpose of the wearing rings of a centrifugal pump?

A. The wearing rings, by their close clearances, restrict flow from the high pressure side to the low pressure side. These rings suffer erosion, due to water leakage, but are easily and economically replaced in comparison with the costly renewal of an eroded casing or impeller.

Q. Describe the mechanical arrangement by which the stroke is varied on the triplex-crankshaft type of variable stroke feed pump.

A. The lower end of each crankshaft connecting rod is pin-connected to a link, the upper end of which is connected to the plunger or crosshead. The lower end of each of these links carries a curved pivoting guide shoe which slides in the curved track of the "stroke transformer." Control of the pump stroke is obtained by varying the angular position of the stroke transformer guide by means of the hydraulic servo piston which tilts this guide about its trunnion supports.

Q. What may be the causes of a direct-acting steam feed pump making short jumps of the plunger at the beginning of the stroke?

A. This jumping indicates that the liquid cylinder is not completely filled with liquid at the beginning of the discharge stroke. This may be a result of running the pump too fast; a restricted suction line; an air leak in the suction line; or the pumping of excessively heated liquids which vaporize under the lower pressures encountered during the suction stroke.

TREASURY DEPARTMENT
UNITED STATES COAST GUARD

ADDRESS REPLY TO:
COMMANDANT
U.S. COAST GUARD
HEADQUARTERS
WASHINGTON 25, D.C.



MVI
1 May 1962

Commandant's Action

on

Marine Board of Investigation; capsizing of the motor vessel *Borie*, four miles west of entrance to Southwest Pass, 14 August 1960 with loss of life.

The record of the Marine Board of Investigation convened to investigate subject casualty together with its Findings of Fact, Conclusions and Recommendations has been reviewed.

At about 0430 CST on 14 August 1960 the MV *Borie*, an offshore oil platform supply vessel, capsized in the Gulf of Mexico approximately 4 miles west of Southwest Pass, Mississippi River. As a result of the casualty, the master lost his life. The 3 other crew members aboard at the time were recovered safely. The vessel was righted and towed to port for repairs and refitting.

The *Borie* is an uninspected, twin screw, diesel propelled vessel of 199 gross tons, 135 feet in length. She is designed with the deckhouse forward and a clear deck space aft for the carriage of cargo. No cargo is carried below deck. Aside from the machinery and steering areas this space is devoted to tankage for fuel and ballast.

The *Borie* was enroute from Harvey, Louisiana, to the drilling rigs in the Bay Marchand area with a deck load of drill pipe casing, drill tubing and chain. The trip down the Mississippi proceeded without incident. Upon passing the jetty at the entrance to Southwest Pass at daybreak on 14 August 1960 a course of approximately 345° on the magnetic steering compass was set to clear the drilling rigs in that area. The weather was clear, wind light and seas estimated to be from the south, 3 to 4 feet. The vessel's speed was not determined. After proceeding about a mile above the West Jetty, course was altered to 295° per steering compass. While in the turn the vessel began developing a port list which reached approximately 4 or 5° when the mate on watch disengaged the engines and went below to the engineer's room. Upon finding the engineer sitting on his bunk the mate requested him to remove the list, then returned to the bridge and re-engaged the engines. The list continued to increase, however, and within a minute or two had reached a dangerous degree. The mate realizing the vessel was capsizing, secured the engines, climbed to the starboard side and jumped into the water as the vessel rolled over.

The engineer had just reached the manifold valve in the engine room when he too realized the vessel was capsizing. He immediately attempted to return along the passageway but was halted by the onrush of water as the vessel rolled over.

The deckhand had been awakened by the master running toward the bridge shouting "shut them off" apparently referring to the engines. When he arose, the deckhand noticed an excessive port list and proceeded immediately out the starboard door. As he did so he

heard the deck cargo shift, whereupon the vessel capsized, throwing him into the water.

The mate and deckhand managed to climb up on the overturned hull and after a few minutes heard the engineer hammering on the hull from within. A short time later the master's body was sighted floating near the bow of the vessel and was hauled aboard. Both the mate and the deckhand attempted to resuscitate him without success. Approximately 3 and ½ hours later at about 0800 the MV *Halliburton* 212 arrived on the scene and recovering the two men on the overturned hull, advised the California Company of the engineer trapped within the vessel. A diver was dispatched by helicopter and with the aid of self-contained breathing apparatus the engineer was rescued.

From a stability study of the MV *Tioga*, a sister ship to the MV *Borie*, the Board determined that the *Borie*, in her most probable condition of operation and loading at the time of the casualty, had a G. M. of 2.48 feet and a maximum righting arm at 10 degrees heel of 0.49 feet in still water. Although the record appears to indicate otherwise, it should be noted that if the cross connections between the forward fuel oil tanks and between 1 and 2 ballast tanks had been open the G.M. may have been as low as 1 foot and the maximum still water righting arm equal to 0.25 feet at 10° at the time of the casualty.

REMARKS

Concurring with the Board, it is considered that the principal cause of this casualty was the inadequate operational stability of the vessel in the loaded condition.

With respect to the Board's recommendations, stability studies have been made on this type of hull and as a result all vessels of this type which are certificated by the Coast Guard will henceforth be issued a stability letter in accordance with the provisions of 46 CFR Part 93, specifying the hardware required to control hull integrity, measures to insure proper distribution and security of cargo, measures to control free surface and measures for water clearance on deck.

Since the MV *Borie* was not subject to inspection by the Coast Guard, no further action is indicated.

Subject to the foregoing remarks the record of the Marine Board of Investigation is approved.

E. J. ROLAND,
Vice Admiral, U.S. Coast Guard,
Acting Comandant.

AMENDMENTS TO REGULATIONS

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

SUBCHAPTER K—SECURITY OF VESSELS [CGFR 62-24]

PART 124—CONTROL OVER MOVEMENT OF VESSELS

Advance Notice of Time of Arrival of Vessels

By Executive Order 10173 the President found that the security of the United States is endangered by reason of subversive activities and prescribed certain regulations relating to the safeguarding against destruction, loss, or injury from sabotage or other subversive acts, accidents, or other causes of similar nature to vessels, ports, and waterfront facilities in the United States and all territory and waters, continental or insular, subject to the jurisdiction of the United States exclusive of the Canal Zone.

Pursuant to the authority of 33 CFR 6.04-8 in Executive Order 10173 (15 F.R. 7007; 3 CFR, 1950 Supp.) the Captain of the Port may supervise and control the movement of any vessel and shall take full or partial possession or control of any vessel or any part thereof when within the territorial waters of the United States under his jurisdiction whenever it appears to him that such action is necessary in order to secure such vessel from damage or injury or to prevent damage or injury to any waterfront facility or waters of the United States or to secure the observance of rights and obligations of the United States.

The provisions of 33 CFR 124.10 set forth the requirements regarding the advance notice of vessel's estimated time of arrival to be furnished to the Captain of the Port. The purpose for amending this section is to clarify requirements concerning which vessels are required to submit an advance notice of arrival report, especially at ports on the Great Lakes.

Because of the national emergency declared by the President, it is found that compliance with the Administrative Procedure Act (requesting notice of proposed rule making, public rule-making procedures thereon, and effective date requirements thereof) is impracticable and contrary to the public interest.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Executive Order

10173 as amended by Executive Orders 10277 and 10352, I hereby prescribe the following amendments to § 124.10 revising paragraphs (a) (8) and (b) (2) and adding paragraphs (b) (5) and (6), which shall become effective upon the date of publication of this document in the Federal Register:

§ 124.10 Advance Notice of Vessels' Time of Arrival to Captain of the Port.

(a) * * *

(8) A westbound vessel which is to proceed to or through United States waters of the St. Lawrence River and/or the Great Lakes shall be subject to compliance with paragraph (b) of this section.

(b) * * *

(2) In addition, prior to or immediately on entering Lake Ontario inbound, advise the Commander, Ninth Coast Guard District, Cleveland, Ohio, of the vessel's first intended United States port of call, if any, and estimated time of arrival at that port.

* * * * *

(5) A master or agent of a vessel who files a copy of the scheduled route with the Commander, Ninth Coast Guard District, Cleveland, Ohio, at least 24 hours prior to arrival at Snell Lock, and who includes in the schedule the estimated time of arrival at the Snell Lock, Massena, N.Y., shall be considered to be in constructive compliance with requirements of subparagraph (1) of this paragraph and no additional advance notice of the vessel's arrival at the Snell Lock is required. Likewise, a master or agent of such vessel who indicates in this schedule the name of the first in-

tended United States port of call and estimated time of arrival at that port shall be considered in constructive compliance with subparagraph (2) of this paragraph and no additional advance notice of arrival is required.

(6) When the arrival is a direct result of the operation of "force majeure," and it is not possible to give at least 24 hours advance notice of time of arrival, then advance notice as early as practicable shall be furnished.

(Sec. 1, 40 Stat. 220, as amended; 50 U.S.C. 191; E.O. 10173, 15 F.R. 7005, 3 CFR, 1950 Supp., E.O. 10277, 16 F.R. 7537, 3 CFR, 1951 Supp., E.O. 10352, 17 F.R. 4607, 3 CFR, 1952 Supp.)

Dated: August 3, 1962.

E. J. ROLAND,
Admiral, U.S. Coast Guard,
Commandant.

[F.R. Doc. 62-7903; Filed, Aug. 7, 1962; 8:52 a.m.]

TITLE 46—SHIPPING

Chapter 1—Coast Guard, Department of the Treasury

SUBCHAPTER O—REGULATIONS APPLICABLE TO CERTAIN VESSELS DURING EMERGENCY [CGFR 62-23]

PART 154—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS¹

Vessels Operated by Pacific Micronesia Lines, Inc.

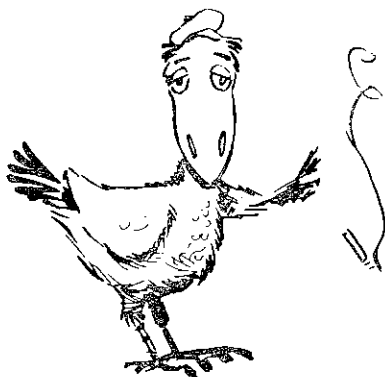
The Assistant Secretary of Defense, Installations and Logistics, in a letter to the Secretary of the Treasury dated July 3, 1962, requested a general waiver of navigation and vessel inspection laws of the United States as follows:

Each year since 1951, the Department of Defense has recommended waiver of the vessel inspection laws of the United States for certain vessels operating in the Trust Territory pursuant to a contract with the Government of the Trust Territory. This is to recommend a limited waiver similar to that applicable through June 30, 1962.

In the interest of national defense and pursuant to the provisions of Public Law 891, 81st Congress, it is requested that there be waived the requirements of the navigation inspection laws relating to licensed and unlicensed personnel, passenger quarters, crew quarters, the number of passengers allowed to be carried on freight vessels, the technical requirements for stowage of certain dangerous cargo, the requirements for U.S. Coast Guard type approval of lifeboats and their stores, and the making of repairs, alterations or replacement ordinarily requiring Coast Guard approval in foreign countries.

¹ This is also codified as 33 CFR Part 19.

DEEP SEA SNIPE FLICKER



ONE OF THE most easily identified of our feathered friends. Ranges from truck to keelson, stem to stern. He deposits his snipe by a flicking motion, to drop on tarpaulins, lifeboat covers, and in wastebaskets.

G. Seal

This waiver is requested until June 30, 1963.

Section 1 of the act of December 27, 1950 (64 Stat. 1120, 46 U.S.C., note preceding 1), states in part as follows:

That the head of each department or agency responsible for the administration of the navigation and vessel-inspection laws is directed to waive compliance with such laws upon the request of the Secretary of Defense to the extent deemed necessary in the interest of national defense by the Secretary of Defense. * * *

By Department of Defense Directive 5100.21, dated April 9, 1959 (24 F.R. 2912), as amended by Department of Defense Directive 5126.22 (26 F.R. 1922-1924), the Secretary of Defense delegated to the Assistant Secretary of Defense, Installations and Logistics, full power and authority to act for and in the name of the Secretary of Defense, and to exercise the powers of the Secretary of Defense upon any and all matters concerning which the Secretary of Defense is authorized to act pursuant to Public Law 891, 81st Congress, 2d Session (64 Stat. 1120; 46 U.S.C. note preceding 1) except as delegated to the Secretary of the Army insofar as such act is related to the St. Lawrence Seaway Power Project, the St. Lawrence Seaway Navigation Project, and the Great Lakes Connecting Channels Project.

As the previous waiver in 46 CFR 154.35, as well as 33 CFR 19.35, had expired by virtue of its own terms on June 30, 1962, the Commandant on July 13, 1962, instructed the Officer in Charge, Marine Inspection, United States Coast Guard, Guam; that a waiver was granted as requested.

The purpose of the following waiver designated § 154.35, as well as 33 CFR 19.35, is to waive the navigation and vessel inspection laws and regulations

issued pursuant thereto which are administered by the United States Coast Guard as requested by the Assistant Secretary of Defense, Installations and Logistics; to confirm the waiver on this subject sent to the Officer in Charge, Marine Inspection, United States Coast Guard, Guam; and to publish this waiver in the Federal Register. It is hereby found that compliance with the Administrative Procedure Act (respecting notice of proposed rule making, public rule making procedures thereon and effective date requirements thereof) is impracticable and contrary to the public interest.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by an order of the Acting Secretary of the Treasury dated January 23, 1951, identified as CGFR 51-1, and published in the Federal Register dated January 26, 1951 (16 F.R. 731), the following waiver is promulgated and shall be in effect to and including June 30, 1963, unless sooner terminated by proper authority, and § 154.35 is revised as follows:

§ 154.35 Department of the Interior vessels operated by Pacific Micronesian Lines, Inc.

Pursuant to the request of the Assistant Secretary of Defense, Installations and Logistics, in a letter dated July 3, 1962, made under the provisions of section 1 of the act of December 27, 1950 (64 Stat. 1120; 46 U.S.C., note preceding 1), and this waiver having been deemed necessary in the interest of national defense, I hereby waive compliance with the provisions of the navigation and vessel inspection laws relating to licensed and unlicensed personnel, passenger quarters, crew quarters, the number of passengers allowed to be carried on freight vessels, technical requirements for stowage for certain dangerous cargoes, and, in addition for vessels of United States registry, the requirements for U.S. Coast Guard type approval of lifeboats and their stores, and the making of repairs, alterations, or replacements (ordinarily requiring U.S. Coast Guard approval) in foreign countries, administered by the United States Coast Guard, as well as the regulations issued thereunder and published in 33 CFR Chapter I or in this chapter, to the extent necessary to permit the operation of vessels of the Department of the Interior and now operated by Pacific Micronesian Lines, Inc., or other vessels which may be used as substitutes for such vessels, in the Trust Territory of the Pacific Islands, as well as between the Trust Territory of the Pacific Islands, and all the ports of the United States, including its territories and posses-

sions, and foreign ports. In the case of United States registered vessels, the making of repairs, alterations or replacements in foreign countries applies only to structural features and not to portable equipment requiring U.S. Coast Guard type approval. This waiver shall be in effect from July 13, 1962, to and including June 30, 1963. (Sec. 1, 64 Stat. 1120; 46 U.S.C., note prec. 1)

Dated: July 30, 1962.

[SEAL] E. J. ROLAND,
Admiral, U.S. Coast Guard
Commandant.

[F.R. Doc. 62-7648; Filed, Aug. 1, 1962; 8:59 a.m.]

EQUIPMENT APPROVED BY THE COMMANDANT

[EDITOR'S NOTE.—Due to space limitations, it is not possible to publish the documents regarding approvals and terminations of approvals of equipment published in the Federal Register dated August 4, 1962 (CGFR 62-19), and Federal Register dated August 11, 1962 (CGFR 62-21). Copies of these documents may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.]

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated from 1 August to 31 August 1962, 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

Orb Industries, Inc., P.O. Box 589, Media, Pa., Certificate No. 533, dated 1 August 1962, TEECO MALATHION RESIDUAL INSECTICIDE or ORB MALATHION RESIDUAL INSECTICIDE.

Jaxon Engineering Specialties, 185 Steuart St., San Francisco 5, Calif., Certificate No. 534, dated 20 August 1962, UNITED ELECTRIC SOLVENT #1.

Jaxon Engineering Specialties, 185 Steuart St., San Francisco 5, Calif., Certificate No. 535, dated 20 August 1962, UNITED ELECTRIC SOLVENT #2.

AFFIDAVIT

The following affidavit was accepted during the period from 15 July 1962 to 15 August 1962:

Charles Petty, Jr., & Associates, 3707 University Way N.E., Seattle 5, Wash., VALVES & FITTINGS.

SOOTY-COLORED LITTERBIRD



BIRDWATCHERS agree that this is the most common shipboard pest. They leave tools scattered on deck—drop mops and hoses in their track, which trap the unwary walker. Known to dump trash to windward.

G. Seal

MERCHANT MARINE SAFETY PUBLICATIONS

The following publications that are directly applicable to the Merchant Marine are available and may be obtained upon request from the nearest Marine Inspection Office of the United States Coast Guard. The date of each publication is indicated in parentheses following its title. The dates of the Federal Registers affecting each publication are noted after the date of each edition.

CG No.	TITLE OF PUBLICATION
101	Specimen Examination for Merchant Marine Deck Officers (7-1-58).
108	Rules and Regulations for Military Explosives and Hazardous Munitions (8-1-58).
115	Marine Engineering Regulations and Material Specifications (2-1-61). F.R. 9-30-61.
123	Rules and Regulations for Tank Vessels (1-2-62). F.R. 5-2-62.
129	Proceedings of the Merchant Marine Council (Monthly).
169	Rules of the Road—International—Inland (5-1-59). F.R. 5-21-59, 6-6-59, 5-20-60, 9-21-60, 4-14-61, 4-25-61.
172	Rules of the Road—Great Lakes (6-1-62). F.R. 8-31-62.
174	A Manual for the Safe Handling of Inflammable and Combustible Liquids (7-2-51).
175	Manual for Lifeboatman, Able Seamen, and Qualified Members of Engine Department (9-1-60).
176	Load Line Regulation (9-1-61). F.R. 7-27-62.
182	Specimen Examinations for Merchant Marine Engineer Licenses (12-1-59).
184	Rules of the Road—Western Rivers (6-1-62).
190	Equipment Lists (4-1-60). F.R. 6-21-60, 8-16-60, 8-25-60, 8-31-60, 9-21-60, 9-28-60, 10-25-60, 11-17-60, 12-23-60, 12-24-60, 5-2-61, 6-2-61, 6-8-61, 7-21-61, 7-27-61, 8-16-61, 8-29-61, 8-31-61, 9-8-61, 9-9-61, 10-18-61, 11-3-61, 11-18-61, 12-12-61, 2-9-62, 2-17-62, 3-15-62, 4-17-62, 4-25-62, 5-17-62, 5-25-62, 7-24-62, 8-4-62, 8-11-62.
191	Rules and Regulations for Licensing and Certificating of Merchant Marine Personnel (6-1-62).
200	Marine Investigation Regulations and Suspension and Revocation Proceedings (7-1-58). F.R. 3-30-60, 5-6-60, 12-8-60, 7-4-61, 5-2-62.
220	Specimen Examination Questions for Licenses as Master, Mate, and Pilot of Central Western Rivers Vessels (4-1-57).
227	Laws Governing Marine Inspection (7-3-50).
239	Security of Vessels and Waterfront Facilities (8-1-61). F.R. 12-12-61, 8-8-62, F.R. 8-31-62.
249	Merchant Marine Council Public Hearing Agenda (Annually).
256	Rules and Regulations for Passenger Vessels (1-2-62). F.R. 5-2-62.
257	Rules and Regulations for Cargo and Miscellaneous Vessels (3-2-59). F.R. 4-25-59, 6-18-59, 6-20-59, 7-9-59, 7-21-59, 9-5-59, 5-6-60, 5-12-60, 10-25-60, 11-5-60, 11-17-60, 12-8-60, 12-24-60, 7-4-61, 9-30-61, 10-25-61, 12-13-61, 5-2-62.
259	Electrical Engineering Regulations (12-1-60). F.R. 9-30-61, 9-23-61, 5-2-62.
266	Rules and Regulations for Bulk Grain Cargoes (5-1-62).
268	Rules and Regulations for Manning of Vessels (9-1-60). F.R. 5-5-61, 6-28-61, 12-16-61.
269	Rules and Regulations for Nautical Schools (3-1-60). F.R. 3-30-60, 8-18-60, 11-5-60, 7-4-61, 9-30-61, 12-13-61, 5-2-62.
270	Rules and Regulations for Marine Engineering Installations Contracted for Prior to July 1, 1935 (11-19-52). F.R. 12-5-53, 12-28-55, 6-20-59, 3-17-60.
293	Miscellaneous Electrical Equipment List (6-1-62).
320	Rules and Regulations for Artificial Islands and Fixed Structures on the Outer Continental Shelf (10-1-59). F.R. 10-25-60, 11-3-61, 4-10-62, FR 8-31-62.
323	Rules and Regulations for Small Passenger Vessels (Not More Than 65 Feet in Length) (6-1-61).
329	Fire Fighting Manual for Tank Vessels (4-1-58).

Official changes in rules and regulations are published in the Federal Register, which is printed daily except Sunday, Monday, and days following holidays. The Federal Register is a sales publication and may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. It is furnished by mail to subscribers for \$1.50 per month or \$15 per year, payable in advance. Individual copies desired may be purchased as long as they are available. The charge for individual copies of the Federal Register varies in proportion to the size of the issue and will be 15 cents unless otherwise noted in the table of changes below.

CHANGES PUBLISHED DURING AUGUST 1962

The following have been modified by Federal Registers:
CG-190, Federal Registers, August 4 and August 11, 1962.
CG-239, Federal Register, August 8, 1962.
CG-172, 239 and 320 Federal Register, August 31, 1962.

EVERY WEEK
SHOULD
BE



FIRE PREVENTION WEEK—
AT HOME OR ON THE FRONT.