
ACCIDENT PREVENTION

FOR

MARINE PERSONNEL



MSTSPAC

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INTRODUCTION

Your safety aboard ship is a vital concern of the Commander MSTSPAC. Injuries to crew members mean lost man power and a job not done. An injury to one man can inconvenience an entire ship.

This book intends to make you SAFETY conscious. It contains some of the basic rules for doing your job in a safe manner. The rules are simple—but you must know and use them.

Records show there are more on-the-job hazards aboard ships than in most shore jobs. This means you must be alert at all times to avoid accidents. Learn the safe way to live on board ship. The safe way is the right way—the ONLY way.

Remember "Accident Prevention is EVERYBODY'S Job."

Reviewed and Approved

18 July 1969
(Date)

[Signature]

COMMANDER

Military Sea Transportation Service, Pacific

ACCIDENTS—CAUSES

An analysis of accidents shows that most accidents which occur aboard ships are caused by unsafe practices or acts. Only a very small percentage are actually caused by mechanical failures.

Specifically, some of the primary causes of accidents aboard ship may be classed as follows:

UNSAFE PRACTICES

PROTECTIVE DEVICES NOT USED

LACK OF JOB VIGILANCE

IMPROPER CLOTHING

IMPROPER PLANNING FOR SAFETY

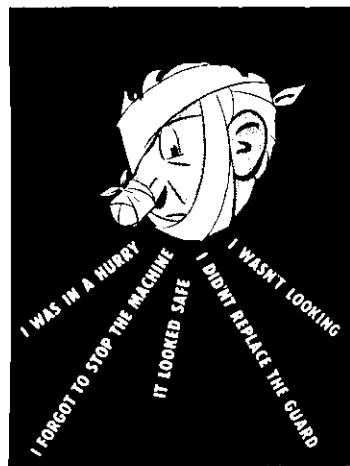
IMPROPER TOOLS

HEEDLESSNESS

POOR JUDGMENT

UNSAFE HABITS

INATTENTION



GENERAL

1. SLIPS, TRIPS, AND FALLS

a. Watch where you're going when moving on board ship or on the docks. Protect yourself from a trip, slip or fall and possible injury. Don't take chances. Take care.

b. Shoes with torn or loose soles can trip you. Choose carefully the type of shoes you wear. Metal heel or toe plates are dangerous because they will not hold on steel decks, ladders or stairs.

c. Loose articles should not be left where anyone can trip over them. Good seamanship requires that everything be properly stowed.

d. Do not walk with your hands in your pockets. If you slip or trip, you might not be able to save yourself from a nasty fall.





2. CLOTHING

a. Wear well-fitted durable work clothes. Avoid loose ends—floppy cuffs or sleeves. Snugly fitted clothes are less liable to be caught in machinery or other objects.

3. PROTECTIVE EQUIPMENT

a. Safety goggles, life preservers, safety belts, and gloves are required gear for certain jobs. Use them for your safety. **Goggles** will protect your eyes when you are chipping or grinding. A **life preserver** must be worn whenever you are working over the side and there is a chance of falling into the water. **Safety belts** shall be worn by all men working aloft, over the side, or in places involving possible falls. **Gloves** will protect your hands while handling line or cable. Do your part to prevent injury to yourself and others.



4. A TRIM SHIP

a. A clean ship is usually found to be a safe ship. A clean ship means good housekeeping and good housekeeping means good accident prevention. Everything kept in its proper place and returned to that place immediately after use eliminates tripping hazards.

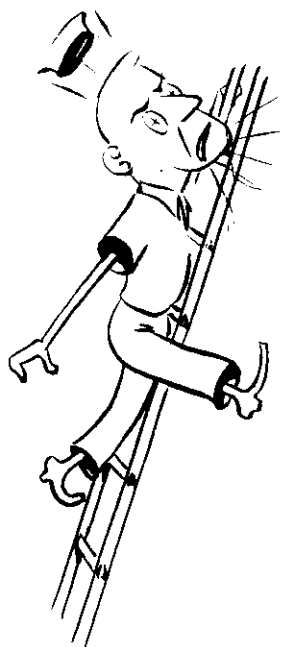
b. Lines kept coiled and properly stowed like-wise prevent accidents and make for good seamanship.

c. Spilled oil or water should be wiped up promptly.

d. Refuse and scrap material should be kept in covered containers and disposed of as quickly as possible.

e. Oil rags or waste permitted to lie around offers a good breeding place for fires. Metal containers are provided for disposal of oily material.





5. GANGWAYS AND LADDERS

a. Keep your eyes open. Watch your step. Hold on tight. Be sure to use both hands. Always be careful. Gangway and ladder accidents can lead to serious and perhaps fatal falls.

6. DECKS

a. Decks are sometimes unavoidably slippery and full of tripping hazards. Watch your step. Use the handrails. Always be careful. Be alert. Watch out for open hatches. Keep a weather eye out for safety.

7. HANDRAILS AND RAILINGS

a. When going up or down companionways or stairs . . . Use the handrails! Staging, pilot ladders, Jacob's ladders, etc., should not be made fast to handrails. Keep handrails in place. Be sure to rig a temporary rope or chain guard rail when handrails have been removed for any purpose to prevent slipping and falling accidents. Oily, slip-

pery handrails may be hazards. Keep handrails clean.

b. Places where men or materials may fall from one level to another should have protection by railings. Any open or unguarded space may be a hazard to human life. Railings are for safety. Never sit on a railing. You may lose your balance or your life.

8. DOORS

a. Outside door coamings are made to keep water out. Don't let them be a tripping hazard. Step over them!

b. Never put your hands on a door jamb or on the edge of a door when passing through. Movement of the ship might "bang" the door closed and smash your fingers or hand.

c. Use your hands to maintain balance and check overhead for safe clearance.





9. PORT OPENINGS

a. Keep ports closed in heavy weather. When you do open a port, hook the portlight and deadlight up with the safety chain and make sure it is properly hooked. They are heavy and can give your head a hard blow if inadvertently released.

b. Keep head and hands inside when port is open. There is a danger from lines and mooring cables outside the ports. These may move quickly, often without warning, and injure you seriously.

c. Don't throw anything out of ports.

d. Inspect chains, fittings and toggles for holding air ports and deadlights for overhead suspension.

10. STAGINGS—BOATSWAIN'S CHAIRS—PLATFORMS

a. Staging accidents are usually serious because they involve falls from high levels.

b. Proper rigging is very important. Inspect it before using; see that it is strong enough for the purpose intended; and attached to substantial fixtures of a permanent nature.

c. A safety belt with a short life line, secured to the tackle, should be worn when working aloft—even though working in a boatswain's chair.

d. Do not slide down or climb up staging ropes; use the Jacob's ladder.

e. Always use safety belts and life lines when working on a deck outside lifeboats, or where there is no railing for support and in other similar locations.

"WHAT D'YA CALL
THAT—
—AFLYIN' RIG?!"



f. When staging cannot be used, erect a platform to enable you to work safely in elevated and exposed positions. Standing on boxes or makeshift devices is very hazardous.

11. RESPIRATORS—ENCLOSED SPACES

a. When paint-spraying, wear respirators; also wear goggles. When painting in enclosed spaces make certain there is sufficient ventilation.

b. Never enter a tank, double bottom, unventilated hold, or other space containing dead air or gases without receiving the proper instructions from your superior. Make sure the space is properly lighted and has been tested so you know it is free of gases and that it contains sufficient oxygen to support life. **Observe these precautions.** Many men have lost their lives by failure to do so. A fresh air or oxygen breathing apparatus should be worn when entering a tank, compartment or space which may be gassy or lacking in oxygen.

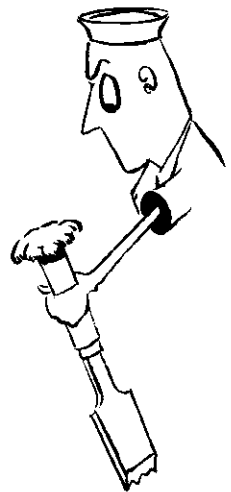
c. See that all breathing apparatus is kept in good condition.

12. TOOLS

a. There are many rules for safe use of tools. Think what you are doing when using them, bearing in mind that as pressure is exerted on a tool a potential hazard exists. A tool that slips, a handle that breaks, or a part that fails . . . all are hazards.

b. On a percentage basis, more accidents result from the use of hand tools than from any other source. Usually these accidents are not too serious.

c. Power tools, on the other hand, are not responsible for as many accidents but accidents from power tools are much more serious in nature. Loss of fingers, hands, legs and other similar types of casualties can occur.



d. When using power machinery always be sure that the guard is in place and the push or feeder tool is free to protect hands.

e. Keep all of your tools ready for safe and efficient use, head tight on the handles, handles free from cracks and splinters; keep chisels, drifts, sets and punches free from mushroom heads and, above all, keep your tools clean.

f. To protect your eyes, do not strike "steel to steel" without the use of safety glasses.

g. Use eyeshield guards on fixed grinders and wire brushes.



13. SMOKING

a. Observe all smoking rules and regulations in port and at sea. You will always have plenty of time to smoke. The rules are for your protection and the safety of the ship.

b. Smoking is not permitted on deck while taking on fuel.

c. Never smoke in your bunk.

d. Use great care as to how and where you dispose of matches and cigarette butts. Be sure they are out before you dispose of them.

14. FIRE PREVENTION

a. The prevention of fire is one of the primary objectives of each officer and man aboard ship. Observe all fire prevention rules. Practice good housekeeping and many fire hazards will be eliminated. Do your part to keep a clean, trim ship.

b. Know where fire extinguishers are located and know how to use them.

c. Do not use flammable liquids for cleaning cloths or tools. The practice is too risky for you and your ship.

d. A quick response to a fire alarm, coupled with correct action, may save the ship and the lives of those aboard.

15. HANDLING MATERIAL

a. Some of your work will involve lifting and carrying articles. Lift no more than you can handle—get your shipmate to help you if the load is too heavy for you. Let your leg muscles do most of the lifting. Keep the load close to you.

b. Keep hands and fingers in the clear and out from under when shifting boxes. A few precautions may prevent painful injury.

16. FIRST AID

a. There is FIRST AID equipment aboard. Report and get first aid for any injury, no matter how slight. If someone else is hurt seriously, send for help from the sick bay.

b. Report all accidents and injuries at once to your supervisor and to the Medical Officer.

DECK EQUIPMENT

17. LINES AND CABLES

a. Keep your feet out of the bight of any line.

b. Keep well clear of any mooring line under tension.

c. All lines should be kept coiled and stowed when not in use. In handling them, coil them as you heave them in and stow them out of the way.

d. All mooring lines should have a becket installed at the eye as a hand grip for use while placing lines over bitts, etc., in order to prevent finger and hand injuries.

Stand clear and be alert when heaving lines are being thrown.



18. HATCHES

- a. Keep clear of open hatches.
- b. Protect and guard all open spaces when practicable so that they may not become death traps.
- c. If necessary to enter the hold by the fixed ladder, hold on to the rungs with both hands.
- d. Correct unsafe practices or conditions before an accident occurs.

19. BLOCK AND TACKLE

- a. Inspect blocks and tackle before using.
- b. Use block and tackle to lift heavy gear. This safe practice will prevent hernias, crushed arms, hands, etc.

20. CARGO GEAR

- a. A thorough inspection should be made of all ship's cargo handling gear and equipment prior to the beginning of each loading or discharging operation.
- b. Runners (cargo falls) should be properly secured to winch drums before working cargo.

c. Runners should always be led from the top of the winch drum to the heel block in order to prevent fouling.

d. Never walk under heel blocks of winches.

e. Strongbacks should be stowed as near the bulwark as possible, and on their sides.

f. Never attempt to oil a cargo winch while it is in operation.

g. When oiling or carrying on other work on any power-driven equipment, make sure controls are locked or tagged in "off" position so that they cannot be started up without your knowing. If you remove safety guards make sure they are replaced when you have completed the job.

ENGINEERING EQUIPMENT

21. DECKS, FLOOR PLATES AND GRATINGS

a. In oiling machinery, do not apply so much oil that it overflows on to the deck. If it overflows, wipe it up at once.



b. Floor plates, landings, and ladders should be kept free of grease and oil in order to prevent slipping and falling accidents.

c. All floor plate openings should be kept well lighted and guarded to prevent falling accidents.

d. Handrails must be kept clean. Leather-soled footwear should be worn.

22. BOILERS

a. Never work on boilers unless you have been thoroughly instructed on proper procedures.

b. Boilers must be opened only under the direct supervision of an engineer officer, and with all safeguards observed.

c. Before lighting off a boiler, the furnaces should be thoroughly blown out by means of the forced blower and the burner should always be ignited with a torch. Stand clear and to one side of the opening to avoid burns in case of a flareback.

d. Every precaution should be taken to guard against oil dripping from burner tips on floor plates or

fuel oil lines. This is a fire hazard. Be sure burners are properly adjusted.

e. Safety goggles must be worn when working on gauge glasses as a glass may break without warning. Keep gauge glass guards in place at all other times.

23. CHAIN BLOCKS, TACKLE, LINES

a. All hoisting gear should be carefully inspected for possible defects before being placed in service.

b. Never stand under a load being lifted or lowered.

c. Hoists should never be secured to pipes or gratings, but only to solid steel structural parts.

d. Chain blocks, when not in use, should be kept well secured to prevent possible injury to men from swinging blocks or chains.

24. ELECTRICAL AND POWER-DRIVEN EQUIPMENT

a. Do not make any repairs to or do any work on any electrical equipment or fixtures unless you are qualified and authorized to do so. Temporary makeshift installa-

tions are hazardous from both the safety and fire prevention standpoints.

b. The principal causes of personal injuries from electrical hazards are:

- (1) Touching live parts
- (2) Short circuit
- (3) Accidental ground
- (4) Overload
- (5) Breaking connections

Electrical hazards are often created by "amateur electricians" who like to rig up all sorts of gadgets. Such practices should be discontinued.

c. Use all protective equipment and guards required to do a job safely, particularly at the switchboard.

d. Do not guess about whether a circuit is alive or not. Consider it alive. Use a voltage tester for testing.

e. If you work on any power-driven or controlled machines or equipment, be sure circuits are de-energized, valves are closed to the "off" position, and the controlling switch or valve is locked or tagged.

f. Use safety equipment such as rubber gloves, rubber mats, insulated tools, etc., when necessary.

25. MACHINERY

a. Lathes, drill presses or power grinders and others are to be operated only by authorized persons. Follow all safety rules. Adjustments and repairs shall be made only with power off and controls locked out.

b. Wear safety goggles while operating these machines.

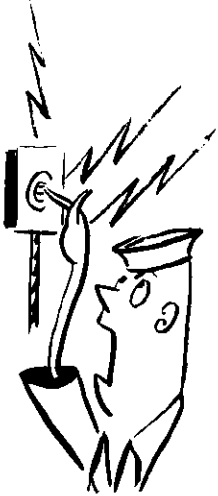
c. See that all guards are in place.

d. Do not wear ties, loose or ragged clothing; these may catch in the moving machinery.

26. ELEVATORS AND DUMBWAITERS

a. Inspect and check operating mechanism of elevators and dumbwaiters periodically.

b. Instruct each man using the dumbwaiter **not** to put his head inside the shaft. The reason is obvious.



c. Read and follow instructions on all equipment.

d. Do not overload.

STEWARD'S EQUIPMENT

27. GALLEY RANGES

a. Make sure guard rails are in place when the ship starts to roll.

b. When opening a hot range oven keep your head and face level with the top of the range to avoid getting a hot blast in the face or in the body.

c. Use care in placing or removing pans or pots of hot liquids or foods on the range.

d. Attempt no repairs on equipment. Notify your superiors.

e. Always use pads in opening oven doors.

28. REEFER BOXES

a. Be careful in handling the doors to the reefer boxes. Do not try to hold the door open with your foot.

b. Watch your step to avoid slipping and falling.

c. Learn how the refrigerator alarm works and how to use the safety release.

d. Supplies should be stowed and secured properly to prevent shifting in heavy seas.

e. Exercise safety at all times.

29. COFFEE URNS

a. Do not attempt to operate the steam valves unless you know how.

b. Avoid spilling hot water on arms or other parts of the body.

c. Never leave an urn with the steam on.

d. Standing on boxes or make-shift platforms is hazardous.

30. KNIVES

a. When using a knife, always cut away from your hand and body.

b. Keep knives racked in drawers with the handles all one way.



c. Hold the knife by the handle at all times, with the cutting edge away from your body.

d. Dull knives may slip and be more dangerous than sharp ones.

e. In case of cuts, report to the sick bay for treatment. Report all accidents.

31. POWER-OPERATED EQUIPMENT

a. Power-operated equipment installed in the galleys, pantries, sculleries, bake shops, butcher shops and laundries shall be operated only by authorized personnel.

b. Operating instructions and safety precautions are posted adjacent to each piece of equipment. Read and follow these instructions.

c. Shut off main power source plus operating switch when equipment is not in use.

d. If equipment is not functioning properly, report it to your supervisor.

e. Keep hands away from blades while machine is in operation.

f. Be sure safety guard is secured in position before operating the machine.

g. Do not try to clean any machine while it is in operation.

h. Do not overload.

i. Make sure that water does not come in contact with electric motors.

32. CAUSTICS

a. Never handle caustics with bare hands. Wear rubber gloves for hand protection.

b. Safety goggles should also be used for eye protection.

c. An eye can only be replaced with a glass eye. Play it safe.

33. ELECTRIC FANS

a. Keep guards on room fans in place at all times, otherwise tips of fingers may be removed by the blades.

34. CLEANLINESS

a. Good housekeeping means good **accident prevention**.

b. Wipe up spilled grease or water immediately to avoid slipping hazards.

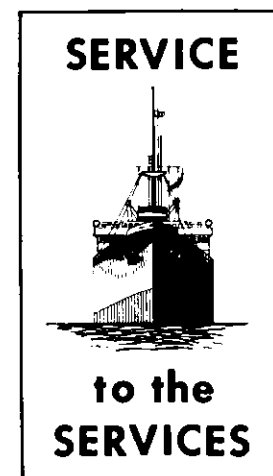
c. Keep your quarters, the space where you work, and your person shining clean for the sake of your own health and that of your shipmates.

ALL HANDS

The suggestions given in this booklet do not list all the safety rules, but should serve to make every seafaring man think in terms of safety. Remember, there is no substitute for safety! "SAFETY" has a very special meaning for the seafaring man because he faces more hazards than the average man. Practice safety. The conservation of human life by preventing personal injuries should be man's greatest effort and objective.



MEMO



**COMMON
SENSE**
Prevents
ACCIDENTS