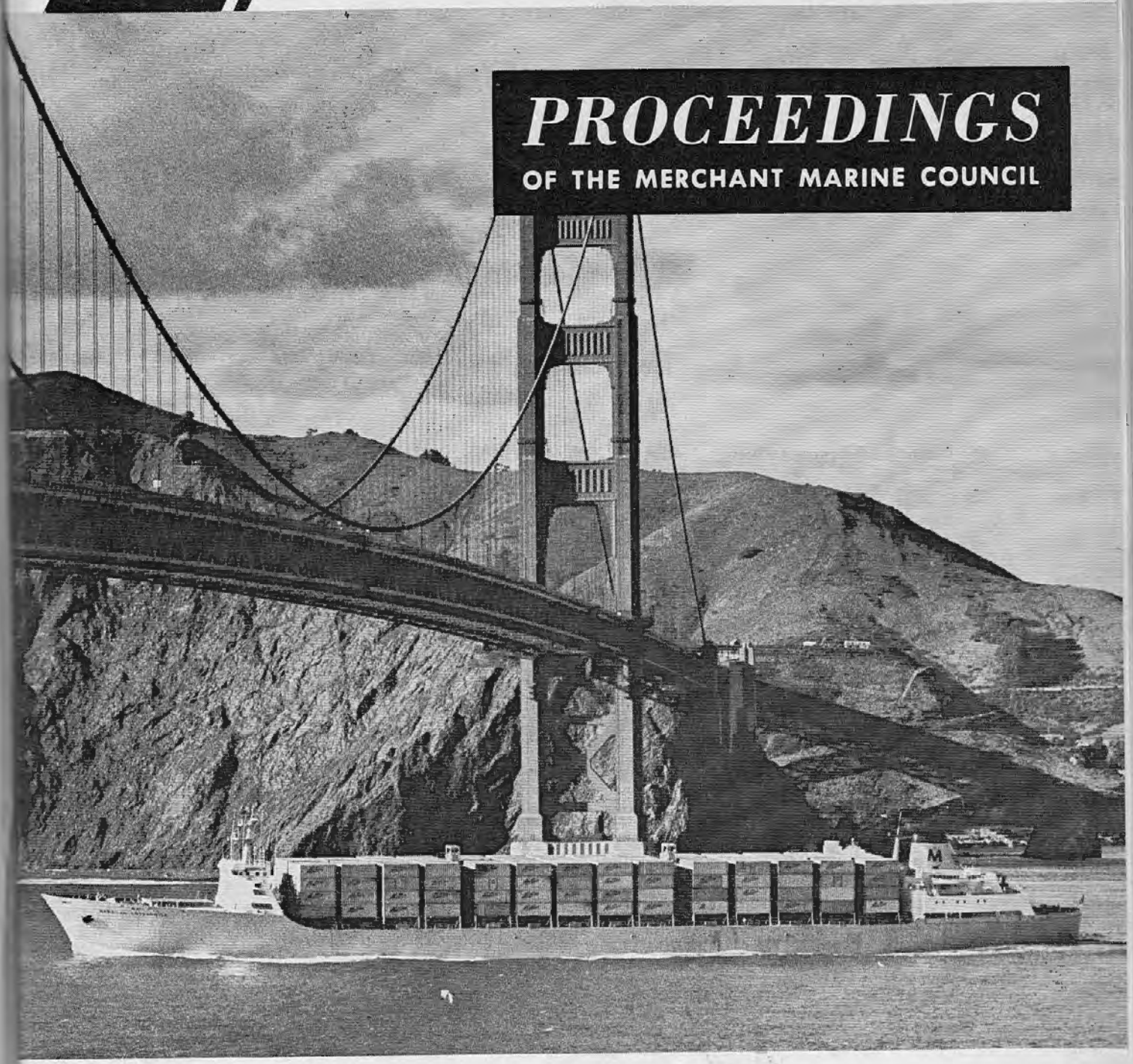
COAST GUARD



PROCEEDINGS

OF THE MERCHANT MARINE COUNCIL

Vol. 27, No. 7 CG-129 July 1970

IN THIS ISSUE . . .

Ground Concepts Related to Electrical Installations . . .

Imco Activities . . .

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

CONTENTS

COVERS

FRONT COVER: New Matson containership SS *Hawaiian Enterprise*, largest and most powerful containership flying U.S. flag, is Hawaii-bound from Port of Oakland and San Francisco Bay with record load of 1,168 freight containers aboard. The 720-foot, 34,700 ton and 23-knot vessel will cut almost 2 days from the usual 5½ day West Coast-Hawaii steaming time. Enterprise was designed by Matson engineers and built by Bethlehem Steel's Sparrows Point, Md., shipyard. Photo by *Edwin Hoffman*.

BACK COVER: "Never tamper with electrical equipment", Courtesy of the *National Safety Council*.

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PROCEEDINGS

OF THE

MERCHANT MARINE COUNCIL

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AT THE CHANGE of command ceremony 1 June, John A. Volpe, Secretary of Transportation, administered the oath of office to Adm. C. R. Bender, the new Commandant of the U.S. Coast Guard. Looking on is Adm. W. J. Smith, retiring Commandant.

NEW COMMANDANT

Admiral Chester R. Bender, a native of Burnsville, W. Va., became the 14th Commandant of the U.S. Coast Guard at ceremonies held on board the Coast Guard Cutter *Gallatin* on June 1 at the Washington Navy Yard.

Admiral Bender relieved Adm. Willard J. Smith, who retired after 37 years of service, the last four as Commandant.

The oath of office was administered by Secretary of Transportation John A. Volpe.

Admiral Bender, though born in West Virginia, grew up in Plant City, Fla. He was graduated from the Coast Guard Academy in 1936. A pilot, he earned his wings in June 1940. He received the Bronze Star Medal during World War II for service in the Philippines as Air Sea Rescue Adviser and Liaison Officer with the Far East Air Forces under the Commander, 7th Fleet.

After the war Admiral Bender commanded air Stations at Traverse City, Mich., and Barbers Point, Hawaii and the cutter *Bering Strait* in the Pacific. He also held several posts at Coast Guard Headquarters in Washington, serving at one time as Aide and Pilot to the Commandant. He was promoted to Rear Admiral in 1964 and served as Commander, 9th Coast Guard District (covering USCG activities on the Great Lakes),

(*Continued on page 132*)

GROUND CONCEPTS RELATED TO MERCHANT

Gordon B. Sims, Jr.

Electrical Engineering Branch, U.S. Coast Guard Headquarters

The following article on ground concepts related to electrical installations on Merchant Vessels is the second of a series of articles concerning the design and use of electrical equipment aboard ship. The purpose of these articles is not to make the reader an instant electrician, and it is emphasized that unqualified personnel should not undertake the repair or adjustment of electrical equipment. Rather, the purpose is to remove some of the mystique and misconceptions concerning shipboard electrical equipment and, in particular, to instill an awareness and understanding by the operating personnel of the existence and purposes of the marine electrical regulations.

In order that these articles can be of maximum use to the industry, questions, comments, or recommendations concerning this or future articles are earnestly solicited. Correspondence should be addressed to Commandant (MMT–1), U.S. Coast Guard, Washington, D.C. 20591.

INTRODUCTION

A term that is commonly used in relation to the electrical system on merchant vessels is "ground" or "grounding." This term is often misunderstood due to its use in several different concepts. As grounding is largely used in connection with personnel and equipment safety, it is important for any one concerned with the electrical installation to have a sound fundamental understanding of the various usages. The purpose of this article is to explain the various meanings of the word "ground" and hopefully provide the reader with a better understanding of the concepts and applications of "grounding."

DEFINITIONS

A recent edition of a widely used dictionary has the following definition: "In electricity, to connect (an electrical conductor) with the ground, which becomes part of the circuit." This definition is really not suitable for our purposes as it implies too many conditions and leaves so much unsaid. In order to properly explain "ground" additional definitions are required. Therefore, the following definitions are offered:

Ground.—(1) The surface of the earth (or a subsitute for the earth such as the metal hull of a ship). (2) An electrical conductive connection between an object and ground. (The object may or may not be electrically energized). (3) To connect an object to the earth. (4) The connection of a current-carrying conductor or winding of an electrical device to the frame or housing of the device. Usually, this is an unintentional connection.

Grounded Potential.—The voltage, or electrical potential of the earth. Ground potential is essentially zero.

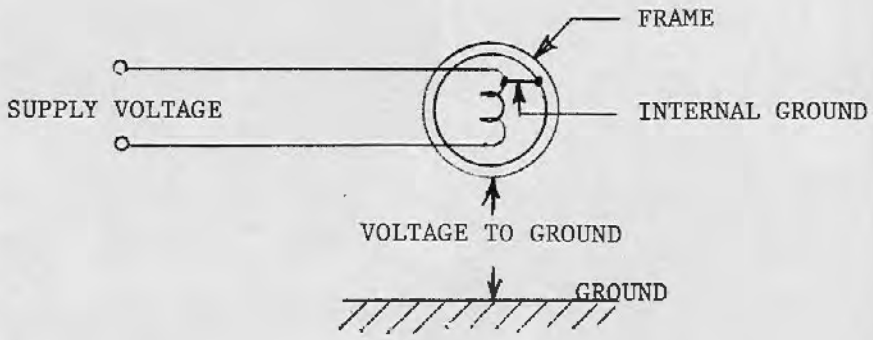


Figure 1.

Grounded Conductor.—A current-carrying conductor that is connected to the ground. This connection can be intentional or accidental.

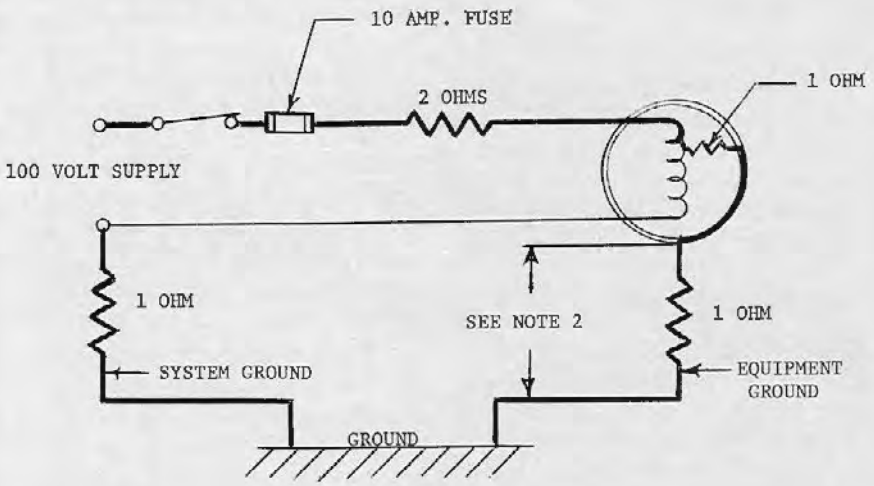
Grounding Conductor.—A current-carrying conductor used intentionally to connect an object to ground.

Bonding.—The connection of several objects to a common, electrically conducting network. This network can be considered to be a substitute for the earth.

GROUND APPLICATIONS

On merchant vessels there are three main applications of the "ground" concept associated with the safety of personnel or protection of electrical equipment. These are: (1) The grounding of metal frames or housings of electrical equipment; (2) the grounding of the neutral current-carrying conductor of an electrical distribution system; and (3) the grounding of an electrical source of

ELECTRICAL INSTALLATIONS ON VESSELS



NOTES

1. Heavy Line indicates path of ground current.
2. Voltage between frame and ground is 1/5 of the 100 volt supply or 20 volts.

Figure 2.

power in such a manner that the earth (or earth substitute) is used as a current-carrying conductor. These applications will be discussed in greater detail.

GROUNDING OF METALLIC FRAMES OR HOUSINGS OF ELECTRICAL EQUIPMENT

This application is one of the most important uses of grounding and is used to afford protection of personnel from electric shock. For portable equipment grounding is usually accomplished by a grounding conductor in the supply cord to connect the frame to the ship's hull. Under normal conditions the frame of electrical equipment is isolated from any source of voltage by insulation or separation through air, whether the frame or housing is grounded or not. The frames have the same voltage as the hull, which is essentially zero. But, if the frame becomes energized due to some insulation breakdown, or accidental contact, and the frame is not grounded to the hull, the voltage of the frame can equal that of the electrical power source. A person touching the frame, standing or otherwise in contact with the hull, will be exposed to this voltage.

Figure 1 illustrates a motor with a grounded winding. The power supply is from an ungrounded source.

The voltage on the frame depends on the point in the winding where the ground occurs, whether or not the power source is grounded, the method of switching the device, and the impedance or resistance of the ground itself. The correct grounding of frames will prevent them from becoming energized. (Refer to *Figure* 2.) It is assumed that the equivalent resistance of the supply cable, internal ground between the winding and the frame, the frame ground, and the supply ground are as indicated in the figure. The circuit through the ground is a simple series circuit. If the supply potential is 100 volts, the voltage drop across the equipment ground will be one-fifth of 100 volts or 20 volts.

The current will be 100 volts divided by 5 ohms or 20 amperes, which would soon blow the 10-ampere fuse, disconnecting the faulted motor from the circuit. In *Figure 2* one side of the supply cable is shown as intentionally grounded to clearly indicate the return path for any ground current. Even without the presence of an intentionally grounded power supply, a complete circuit from a ground on the system to the power supply will generally exist. The circuit can be completed through a low resistance path (or paths) in the cable insulation that has deteriorated or that has been damaged. In ungrounded alternating current systems there is a capacitance between conductors and between each conductor and ground. The reactance associated with the capacitance to ground can effectively complete the circuit from a ground on the system to the power supply. The circuit can also be completed from a ground by means of other unintentional grounds on the system and by ground detection devices.

Figure 2 illustrates an excellent method of grounding the power supply and supplying power to a portable electrical device. Note that the

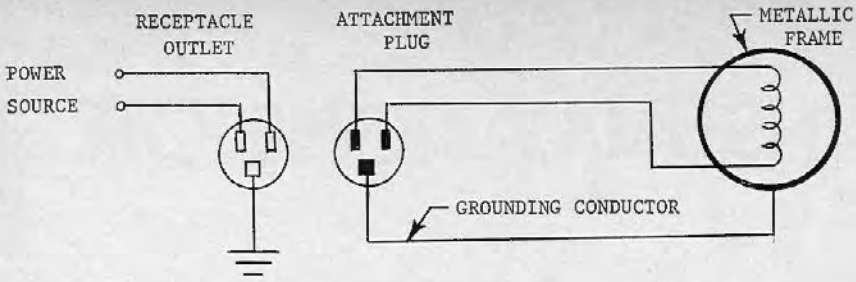


Figure 3.

switch is in the "hot" or ungrounded conductor. When the switch is open, the portable device is disconnected from the source of potential. This would not be the case if the switch was in the grounded conductor. The device would still be energized even if the switch in the grounded conductor was open. A ground in the "hot" side of the supply line will result in the blowing of the fuse if the unit is energized. This will deenergize the unit. If the grounded side of the supply line is grounded to the frame, there will be no potential difference between the frame and ground, thus no shock hazard.

The frames of portable electrical equipment should be grounded to the vessel's hull by means of a grounding conductor in the portable cord and a grounding pole provided in the receptacle outlet and attachment plug. (See *Figure 3.*) The frames of permanently installed (nonportable) electrical equipment are usually grounded by nature of their installation. The frames are in direct contact with the metal hull of the vessel or are grounded by bolts, studs, screws, etc. In such cases no other grounding means is necessary.

GROUNDING OF A CONDUCTOR OF AN ELECTRICAL POWER DISTRIBUTION SYSTEM

Another important application of grounding is the intentional grounding of one pole or terminal of the power supply of an electrical distribution system. On merchant vessels this grounding is usually accomplished by means of a conductor of negligible resistance connecting the pole to ground. This is referred to as "effectively" grounded. Grounding can also be accomplished by means of the resistance or inductance methods of connecting one pole of the system to ground. In these methods a resistor or inductor is provided in the grounding connection to limit the line-to-ground fault current. Examples of "effectively" grounded systems are shown in *Figure 4.*

The primary purpose for "effectively" grounding one of the conductors is to limit the voltage that the system can be subjected to under certain fault conditions. The National Electrical Code, Article 250, states that "Circuits are grounded for the purpose of limiting the voltage upon the circuit which might otherwise occur through exposure to lightning or other voltages higher than that for which the circuit is designed; or to limit the maximum potential to ground due to normal voltages." The first part of the above statement concerns the exposure of a circuit to voltages which are higher than normal. *Figure 5* will be used to explain how grounding limits this voltage.

In *Figure 5,* a fault in the form of an electrical connection between points A and B of the transformer windings is assumed. The electrical

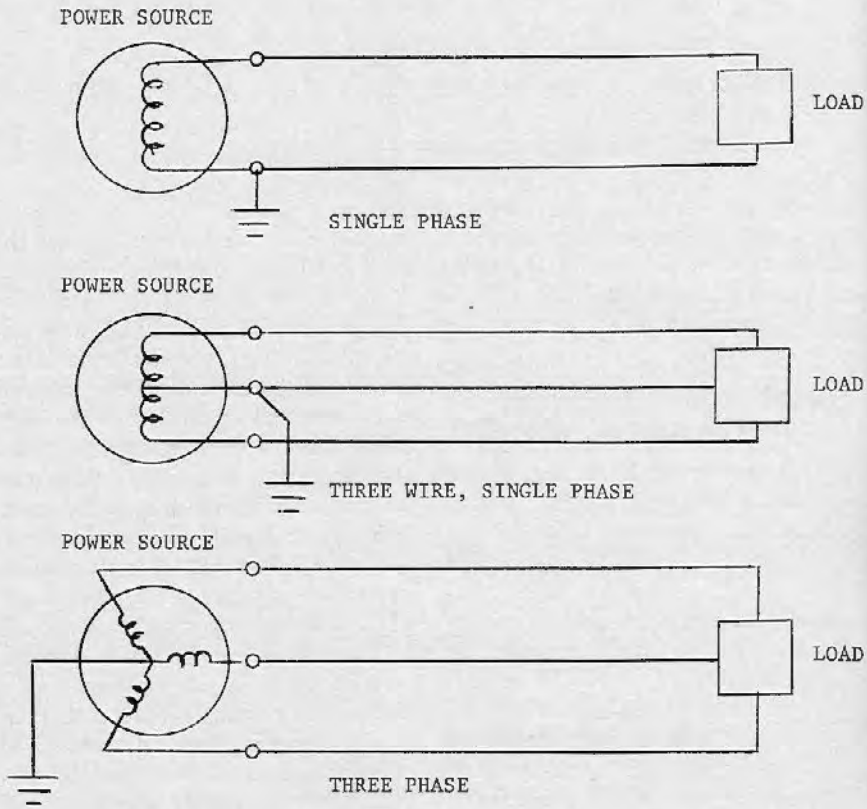


Figure 4.

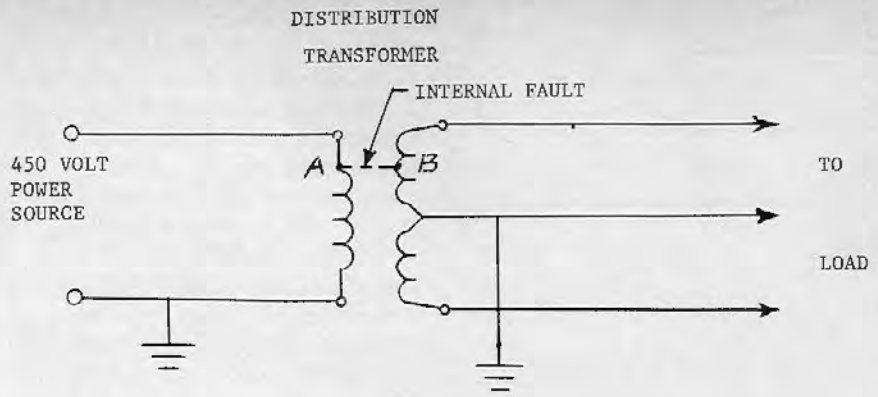


Figure 5.

connection would energize the secondary at the primary potential (450 volts) if the secondary was not grounded. However, as the secondary is grounded, current will flow from the 450 volt power source, from A to B through the fault, through the secondary winding to ground and back to the power source by way of the indicated primary ground connection (completing the circuit). The magnitude of the fault current will depend primarily on the total impedance of the circuit. The total impedance will include the impedance of the power source, cable, transformer windings, grounding connection, and the ground itself. A simplified diagram is shown in *Figure 6.*

All of these impedances in series act to limit the current. Let it be assumed that the fault current is 200 amperes and that the impedance of the ground connection is 0.1 ohm. The voltage drop in the ground connection of the secondary winding would be 20 volts (I x R or 200 x 0.1). Thus the maximum voltage above ground of the secondary would be increased only slightly above its normal rating to a value of 130 volts. Insulation and personnel will not be subjected to excessive voltage. In most cases of an internal fault between the primary and secondary winding of a transformer, where one conductor of the secondary is "effectively" grounded, the voltage impressed on the secondary windings will actually be less than noted values. This is because of the large voltage drop in the source and supply cable impedance which results from the high fault current.

The second part of the National Electrical Code statement concerns limiting the voltage to ground when the system is not subjected to abnormally high voltage. This will be explained by means of *Figure 7.* For the single-phase three-wire system shown in *Figure 4,* the maximum voltage above ground is 110 volts under normal conditions. If the system was not grounded and L1 became grounded, the voltage would shift to the values shown in *Figure 7.* L2 would then be energized at 220 volts above ground.

If the system was grounded as shown in *Figure 4* and L1 became grounded, this ground and the neutral ground would act as a short circuit between L and N. The resulting high current would blow the fuse in line L1 which would remove the faulted circuit from the system. On merchant vessels either the grounded or ungrounded electrical distribution system is permitted by the regulations. This raises the question, "Should a system be grounded or ungrounded?" One of the primary arguments against grounding concerns safety of personnel. It is contended that if the distribution system is ungrounded, a person can touch a "hot" wire or terminal and will not receive an electrical shock since there is no return path to the voltage source which will complete the circuit so current can flow. However, in practical applications this will not be the case. As explained earlier, there will always be a return path to complete the circuit. The only question is how high the impedance of this circuit will be. Therefore, even when the electrical distribution system is ungrounded, it can never be assumed that an energized wire or object can be touched with impunity.

There are electrical installations where ungrounded systems are preferred. The U.S. Navy specifies that ungrounded distribution systems be used on combat vessels. The primary purpose for this is to provide continuity of service of vital electrical equipment. With ungrounded dis-

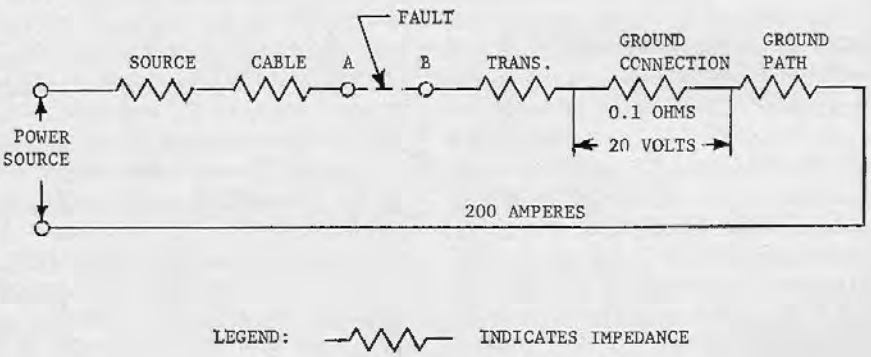


Figure 6.

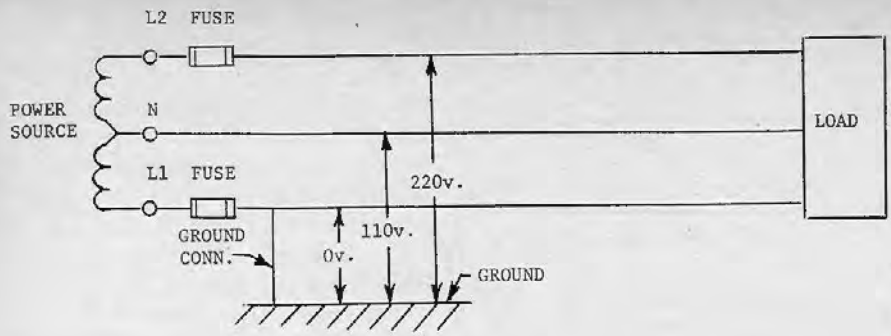


Figure 7.

tribution systems a ground or grounds on one line of the distribution system will not produce large fault currents that would cause overcurrent devices to operate. Thus a single ground would not cause an interruption of the electrical equipment connected to the grounded circuit.

THE USE OF GROUND AS A CURRENT-CARRYING CONDUCTOR

Of lesser importance is the grounding of a power supply and the electrical load in such a manner that the hull (ground) is utilized as a current-carrying conductor. On merchant vessels this practice is referred to as "hull return." It is not generally permitted on merchant vessels except when approved for special purposes. Hull return is not permitted on tank vessels.

An example of a hull-return system that is permitted on merchant vessel is the electrical starting system for a diesel engine. In such a system one side of the starting battery and one side of the engine starter motor is grounded. Power from the battery is supplied to the starter motor by a single conductor. When the motor is energized, the return path for current from the motor to the battery is through the hull of the vessel (ground). One objection to the use of hull return pertains to galvanic corrosion. Where the hull current passes through a welded joint or a joint of dissimilar metals, corrosion at that point is apt to occur.

CONCLUSION

It is hoped that the means and purposes of grounding electrical systems is now understood, and that some of the confusion which may have existed with the terms "ground" and "grounding" is alleviated. More important, there should be a greater appreciation of the importance of ground concepts, especially as related to safety—both fire and personnel. Everybody concerned with electrical systems should be determined to improve the safety of vessels by insuring that all intentional grounds are maintained as intended, and that all faults or unintentional grounds are detected and removed from the system. Special attention must be given to portable tools. It should be obvious that portable tools incorrectly wired, or not properly grounded, can be especially hazardous. For example, the "hot" wire instead of the grounding wire may be connected to the frame. When plugged in, the frame of such a tool will be energized at line voltage even though the tool is otherwise electrically sound. Special attention should be given to portable tools that have been serviced or repaired to insure that the supply cords are wired correctly. Periodically, receptacles should be checked to verify that the grounding pole is continuous with the hull of the ship, and that the path to ground is of low resistance. Tools should also be inspected to verify that a conductor separate from the current-carrying conductors is provided for grounding the frames. The grounded conductor of the power supply shall never be used as the means for grounding frames. This is because of the voltage drop that is present in any conductor which is carrying current. This voltage drop may be especially high when the portable device is shorted or grounded, which could result in the frame being energized at a dangerously high voltage. By using a separate grounding conductor the chance of a dangerously high voltage appearing on the frame of a faulty device is reduced. This is because of the greater conductor capacity available to carry the large current which assures a lower resistance in the path between the frame and ground. Additionally, as indicated above, there is no assurance that the intended grounded conductor will, in fact, not be "hot."

As stated before, Coast Guard regulations require that all metallic frames of portable tools be grounded. The National Electrical Code also permits the use of "double insulated" portable tools in which case the grounding of frames is not required. "Double insulation" is used in connection with devices that are constructed or insulated so as to make the grounding of energized parts to frames highly unlikely. If there is any question as to whether a tool is double-insulated or not, and it is not provided with the grounding conductor, the tool should not be used.

It is reiterated that the grounding of one conductor of an electrical distribution system has two principal purposes. They are: (1) to anchor the voltage to limit it to a certain value; and, (2) to prevent the high voltage from the primary power source from being imposed on the low voltage distribution system.

A future article will discuss ground detection systems and their use aboard ship. ⚓

PUBLIC HEARING

The Merchant Marine Council on March 30, 1970, held a public hearing concerning proposed regulations and amendments to existing regulations authorized by the navigation and vessel inspection laws. The first 12 items which were proposed were designated items PH 1–70 to PH 12–70, and were set forth in one volume of the Merchant Marine Council Public Hearing Agenda, CG–249. A summary of these proposals was also published in the Federal Register of February 28, 1970 (35 F.R. 3916) and described in the February issue of the "Proceedings."

The proposed regulations concerned the following: Item PH 1a–70 proposed to amend Subchapter H (Passenger Vessels) of Title 46, CFR, to insure that a number of the additional life preservers required by § 75.40–10(b) are readily accessible to personnel on watch in the engineroom and pilothouse; PH 1b–70 proposed, in accordance with ANNEX V of the amendment to SOLAS 60, to improve arrangements for lifesaving appliances on all vessels 492 feet or more in length with no amidships superstructures, by requiring a liferaft forward on such vessels and to eliminate the references to "widely separated working spaces" in Subparts 33.05, 94.10 and 192.10 of Title 46, CFR.

Item PH 2–70 proposed to revise Subchapter T (Small Passenger Vessels (under 100 Gross Tons)) of Title 46, CFR, to establish specific guidelines concerning the use on Subchapter T vessels of nonmetallic materials in piping systems by the addition of a new Subpart 182.40 to Part 182.

Item PH 3–70 proposed an amendment to 46 CFR 10.02–9(e) requiring that the applicant for renewal of a deck license which is endorsed "radar observer" be required to demonstrate his continued knowledge of radar plotting and/or interpretation or give evidence of successful completion of a radar simulator course. It was also proposed to make the "radar observer" requirement specifically applicable to pilots by an amendment to Subpart 157.20 of Title 46, CFR.

Item PH 4–70 dealing with electric navigation lights, was withdrawn prior to the Public Hearing.

Item PH 5–70 proposed various amendments to Subchapter D (Tank Vessels), of Title 46, CFR regarding (PH 5a–70) the display of warning signs on moored or anchored tank vessels; (PH 5b–70) the indication in Section 34.05–10(a) and Table 34.50–10(a) to indicate that portable fire extinguishers are required on unmanned tank barges only during cargo transfer operations and/or when operating the cargo pump or auxiliary boiler; (PH 5c–70) the adequacy of pumproom ventilation by positive means; and (PH 5d–70) minimum emergency lighting requirements for U.S. vessels.

Item PH 6–70 proposed amendments to Subchapter F (Marine Engineering) of Title 46, CFR as follows: (PH 6a–70) proposed addition to Subpart 55.15 as a modification of Section III of the ASME Code with regard to nuclear reaction containment and a change to Suhpart 54.01 to provide an adequate design for pressure vessels subject to exposure to small external pressures; (PH 6b–70) exemption of all Class II pressure vessels having an internal volume of less than 5 cubic feet from Coast Guard shop inspection and plan approval provided they are ASME stamped "U" or "UM"; and (PH 6c–70) regulations for control systems of large automatic auxiliary heating equipment are brought into compliance with various societies standards.

Item PH 7–70 proposed changes to Subchapter Q (Specifications) of Title 46, CFR as follows: (PH 7a–70) a reference specification is provided by Subpart 164.016 for "Microcellular Nylon, Sheet and Molded Shape"; (PH 7b–70) improvement of approval procedure for interior finishes by providing marking for field identification and publication of an approval listing; (PH 7c–70) amendments to Part 160 providing that certain lifesaving devices will be accepted as approved for use on vessels if they are listed and labeled by an approved laboratory in accordance with Coast Guard specifications; (PH 7d–70) clarification of the specification for floating orange smoke distress signal; (PH 7e–70) amendment of the incombustibility test of § 164.009–3 to require that a specimen retain at least 50 percent of its original weight; (PH 7f–70) requiring all new passenger ships to have not less than

(*Continued on page 132*)

Standard Engineroom Console Guide

The development of a standardized engineroom control console by the Maritime Administration, was announced recently by Maritime Administrator A. E. Gibson.

The plans and description of the console are contained in a publication entitled "Guide for a Standardized Engine Room Propulsion Control Console."

"Use of a standardized engineroom control console will have several important effects," Mr. Gibson said. "First, it will permit economies in production and installation of the console; and second, it will simplify the training required of ships' engine personnel."

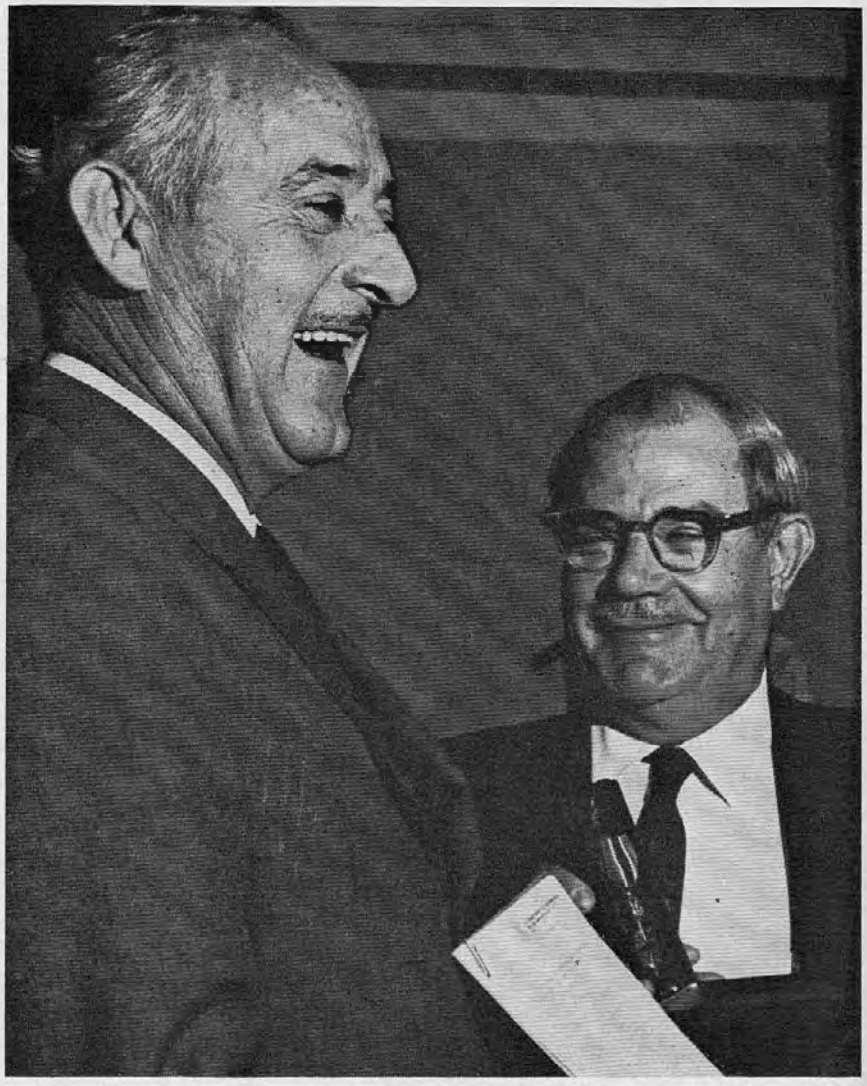
He added that while there seems to be a great deal of uniformity in the machinery and equipment for automated ship engine control systems, there has been a lack of such standardization in the control panels themselves.

"This publication is intended to fill this gap," he declared.

The MarAd guide, he pointed out, represents a consensus based on discussions with a cross-section of equipment manufacturers, shipowners, and marine engineering organizations.

Designers of new ships will be able to use the guide in preparing layouts of the propulsion control console as part of their machinery guidance plans, thereby assisting in development of uniform patterns and basic arrangements for merchant ships of the future. Copies of the guide are being sent to interested persons by the Maritime Administration. ⚓

HEROIC MASTER HONORED



Captain Johnny L. Jensen (left), former Master of the SS U.S. Conqueror, *receives the Distinguished Service Medal from Peter Munty, Maritime Administration's area representative for Southern California.*

A surprised Master Mariner received the Nation's highest merchant marine award in December, 1969, when he was presented the Distinguished Service Medal. Captain Johnny L. Jensen of Long Beach, Calif., thought the Coast Guard and Maritime Administration were looking for him for another reason. At the presentation of the award, he remarked: "I thought you were trying to track me down all these months because I had violated some regulation!"

Actually, Captain Jensen is a hero, and the details of his valor while serving as a Master of a U.S. merchant ship engaged in the sealift to Vietnam are set forth in the following Citation:

> On March 16, 1967, while transiting the Long Tau River about 14 miles below Saigon, Vietnam, the U.S. Flag U.S. *Conqueror* was attacked with 75mm recoilless rifle and 50-caliber machine gun fire. The vessel sustained 13 direct hits of which four struck the bridge area causing holes as large as four feet in diameter and extensive fire damage. During the attack which lasted about ten minutes the helmsman was forced to leave the wheel. Captain Johnny L. Jensen, Master of the vessel, with complete disregard of his own safety while fire erupted in the radio shack and other areas of the bridge, went to the wheel and with the Vietnamese Pilot alongside navigated the vessel until the attack ceased and the vessel was clear of the danger area. The crew thereafter extinguished the fire and upon effecting helicopter evacuation of two wounded personnel the vessel berthed at Saigon. In maintaining firm and effective control of his vessel and crew while under enemy attack, Captain Jensen displayed outstanding courage, devotion to duty and complete disregard for his own safety, which are in keeping with the highest traditions of the United States Merchant Marine.

A copy of this commendation for DISTINGUISHED SERVICE has been made a part of Captain Johnny L. Jensen's official record.

Chemical Data Guide for Bulk Shipment by Water

A new edition of the pamphlet entitled "Chemical Data Guide for Bulk Shipment by Water" CG–388 dated August 27, 1969, has been published by the U.S. Coast Guard.

This guide has been prepared for the guidance of Rescue Coordination Center watch officers, Port Safety personnel, Merchant Marine Safety personnel, and other individuals whose duties may require decisions in situations involving bulk chemical shipments.

Copies of this pamphlet may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, price: $2.00. ⚓

Hazardous Industrial Chemicals

The National Academy of Sciences has just published, under Coast Guard contract, a revised edition of the publication, "Evaluation of the Hazard of Bulk Water Transportation of Industrial Chemicals"—"A Tentative Guide." This booklet rates 209 industrial chemicals for fire hazards, health hazards, water pollution, and reactivity.

Copies of this publication are available from the Committee on Hazardous Materials, National Academy of Sciences, 2101 Constitution Avenue N.W., Washington, D.C. 20418. ⚓

AIR PRESSURE EXPLODES BARRELS

The Chief was spinning the yarn. "I was stationed at Bahrain. A ship came in and I was asked to go aboard her, as a boy had been killed a day out of port. It was clearly a case of 'murder.' He was a young engine-room cadet, who was either permitted or told to displace the contents of a lube barrel into a ship's tank, using compressed air. The top of the barrel blew off and killed the boy. Use of air for this purpose is dangerous."

Past experience has shown that barrels, when subject to excessive internal pressures, generally fail at the ends.

Barrels vary somewhat in size, but we can assume the radius of this barrel might have been about 11.25 inches. The area of the head would then equal πr^2 or $A=3.1416\times 126.6=397.7$, or 400 square inches.

If 100 pounds of air were used, this would then have put a load on the barrelhead of 40,000 pounds, or 20 short tons.

Displacing products from barrels with air is risky business and can only be done with safety when precautions are taken to insure that excessive air pressure is not used. It is estimated that air at 7 pounds per square inch is the maximum pressure that can be used. In view of these facts, we do not permit the use of air to displace the contents of barrels of petroleum products on company vessels. The proper way to do this job is to use a pump. ⚓

—Safety Bulletin
Chevron Shipping Co.

PUBLIC HEARING

(*Continued from page 129*)

two sources of power supply for the fire alarm and fire detection system, each supply being provided by separate feeders; and (PH 7g–70) alteration of the specification for electric hand flashlights so it applies only to watertight flashlights, thereby eliminating the examination of explosion-proof flashlights by the Coast Guard.

Item PH8–70 proposed various amendments to Subchapter J (Electrical Engineering) of Title 46, CFR, generally concerning (PH 8a–70) a requirement that a dual battery system have battery capacities sufficient to maintain the normal loads for 1 week for general and other alarm systems; (PH 8b–70) clarification of existing regulations by minor changes to Parts 111, 112, and 113; (PH 8c–70) omission of cable entrance plates for motor controller enclosures; (PH 8d–70) relaxation of the requirements of Table 111.50–20(a) to agree with various Societies recommended practices; (PH 8e–70) the updating of the definition of drip-proof machine; and (PH 8f–70) the revision and rearrangement of Part 111 by system rather than by components.

Item PH 9–70 proposed regulation changes to Part 69 to define the extent to which floor, double bottoms, and bottom frames will be considered to represent the "floor timber" for admeasurement purposes.

Item PH 10a–70 proposed various amendments to the Dangerous Cargo Regulations which would delete the transportation requirements for wet iron mass, wet iron sponge and wet iron oxide since the material no longer has a self-heating property, a proposal to make the requirements for the transportation of baled cotton the same as for vegetable fibers, and proposed editorial changes for military explosive regulations (Subpart 146.29 of Title 46, CFR); PH 10b–70 proposed periodic tests or renewal of the flexible connection lines of the CO2 fire extinguishing system.

Item PH 11a–70 proposed to amend the fee schedule for the numbering of undocumented vessels or renewals thereof; (PH 11b–70) proposed the use of a sticker to evidence the currency of the certificate of number of undocumented vessels.

Item PH 12–70 proposed to amend 33 CFR 126 (Subchapter L, Security of Waterfront Facilities) to provide continuous control of the shoreside transfer operation involving bulk liquid and liquefied gas dangerous cargo by requiring supervision of the transfer by trained, competent persons, the posting of warning signs, maintenance of the transfer system and safety procedures.

ACTION TAKEN

The Merchant Marine Council in Executive Session considered all written comments received, as well as the oral comments delivered at the Public Hearing on March 30. The Council has recommended to the Commandant the approval without change of items 5, 6, 7e, 7f, 7g, and 11 and the approval with modification of items 2, 3, 7a, 7b, 7d, 8, 10a, 10b, and 12. These items will be published in the Federal Register as soon as possible. Final action on items 1, and 7c, and 9 is being withheld pending further study. Item 4 has been withdrawn and the time to submit comments on Item 9 has been extended to September 1, 1970. ⚓

NEW COMMANDANT

(*Continued from page 123*)

and Superintendent of the Coast Guard Academy.

Most recently, Admiral Bender served in San Francisco as Commander, 12th Coast Guard District and as Commander, Western Area. In the latter capacity, he exercised certain operational controls over all Coast Guard commands in the Pacific.

He was nominated to be Commandant of the Coast Guard with the rank of Admiral, on April 16, 1970 for a 4-year term beginning June 1.

Admiral Bender is married to the former Annamarie R. Ryan of Sault Ste. Marie, Mich. They have one son, Mark Allan.

Admiral Smith, a native of Suttons Bay, Mich., was graduated from the Coast Guard Academy in 1933. Also a pilot, he earned his wings in 1940.

During his long career, Admiral Smith commanded the Coast Guard Air Station at Traverse City, Mich., and later became Commander, Western Pacific Section with headquarters in Guam. He was appointed a Rear Admiral in 1962 and served as Superintendent of the Coast Guard Academy and later as Commander, 9th Coast Guard District. He became Commandant on May 31, 1966.

During Admiral Smith's tenure in office, the Coast Guard was transferred from the Treasury Department to the new Department of Transportation on April 1, 1967. He was decorated with the Distinguished Service Medal for his assistance in setting up the new Cabinet department.

Under Admiral Smith's direction, Coast Guard forces in Vietnam were greatly expanded. Those forces are now being cut back under the President's Vietnamization program.

His 4 years as Commandant were marked by a modernization program of the Service's ships and aircraft. Coast Guard duties were also expanded in such fields as oil pollution detection and enforcement, polar icebreaking and recreational boating safety.

Admiral Smith is married to the former Harriet A. Lary of Los Angeles, Calif. They have one daughter Lary and a son Jeffrey. ⚓

IMCO ACTIVITIES

THE PURPOSE OF the Intergovernmental Maritime Consultative Organization (IMCO), a specialized agency of the United Nations, is to achieve the highest standards of maritime safety and efficient navigation by facilitating cooperation among governments in technical matters of all kinds affecting shipping. As such it is responsible for updating and revising various international agreements including the 1960 SOLAS Convention. Its work is not, however, limited to this. IMCO is a dynamic organization holding approximately 24 meetings each calendar year.

These meetings range from the subcommittee level in which purely technical considerations are appropriate to those of the Assembly which as the governing body of IMCO, votes on proposals from the lower bodies after all phases of the proposals have been considered.

The finished product of IMCO is the IMCO resolution. It has been examined carefully from all angles and been approved by vote of the Assembly on which all member nations have equal representation. At this point it is essential to appreciate the effect of an IMCO decision upon the U.S. industry and the public in general.

To begin with, it should be clearly understood that IMCO decisions are NOT automatically binding upon the various governments. IMCO "recommends" the decision to the governments for adoption. It is then up to the individual governments to decide if they want to adopt IMCO's recommended action. In this country, if the IMCO recommendation relates to an International Convention or an amendment to an International Convention, it would not be binding upon industry or the public until:

(*a*) Ratified by the United States,

(*b*) Implementing legislation is passed (if needed); and

(*c*) Regulations (if needed) are promulgated in the normal manner (in the case of Coast Guard Regulations, this includes a public hearing).

If the IMCO recommendations did not relate to an International Convention it would not be binding upon industry or the public until:

(1) The Department of State refers the matter to the appropriate agency (in the case of a technical maritime safety matter this would probably be the Coast Guard);

(2) Implementing legislation is passed (if needed); and

(3) Regulations (if needed) are promulgated in the normal manner (in the case of Coast Guard Regulations, this includes holding a public hearing).

As industry has an opportunity to express itself before any of these steps are taken, it is obvious that it has voice in the procedures whereby IMCO recommendations are accepted or rejected.

In an effort to publicize the work of IMCO the "Proceedings" will contain timely articles describing the latest work accomplished by IMCO. The Resolutions of the Sixth Session of the Assembly of IMCO follow. Future editions will describe the work of the various bodies of IMCO as it progresses.

SIXTH SESSION OF THE INTERGOVERNMENTAL MARITIME CONSULTATIVE ORGANIZATION (IMCO) ASSEMBLY RESOLUTIONS

RESOLUTION 174

Amendments were made to the following sections of SOLAS 1960:

- Parts VI and VIII of Passenger Ship Safety Certificate
- Part V of Cargo Ship Safety Equipment Certificate
- Part I of Cargo Ship Safety Radiotelegraphy Certificate
- Parts VII and IX of Nuclear Passenger Ship Safety Certificate

Chapter I:

- Reg. 7 on survey of ships' structures
- Reg. 8 on surveys of life-saving appliances and other equipment of cargo ships
- Reg. 9 on surveys of radio and radar installations of cargo ships

Chapter II, Reg. 65 on fireman's outfits and personal equipment

Chapter III:

- Reg. 21 on specifications on lights for lifebuoys
- Reg. 22 on specifications on lifejackets

Chapter IV:

- Reg. 2 on definition of "Radio Officer"
- Reg. 9 on transmitters and receivers

Reg. 11 on radiotelephone distress frequency RDF
Reg. 13 on transmitters and receivers
Reg. 15 on radiotelephone installation
Chapter V:
Reg. 12 on radio requirements of ships 1,600 tons gross tonnage and up
Reg. 21 on International Code of Signals

RESOLUTION 175

Amendments to the International Convention for the Prevention of Pollution of the Sea by Oil, 1954. Defines terms of reference. Regulates discharge of oil or oily mixtures by vessels. Outlines requirements for oil record book and its maintenance.

RESOLUTION 176

Encourages Maritime Safety Committee to implement effective measures for marine pollution prevention and control as soon as possible. Arranges for an international conference on Marine Pollution to prepare a suitable international agreement for placing restraints on the contamination of the sea, land and air by ships, vessels and other equipment in the marine environment. Encourages Member States to recognize urgency for effective control measures and to submit relevant information.

RESOLUTION 177

Recommends performance standards for navigational lights to insure early identification among vessels of their respective attitudes and conditions of operation.

RESOLUTION 178

Recommends adoption of rules for positioning of navigation lights to fill the need for increased accuracy in estimating the aspect of observed ships.

RESOLUTION 179

Recommends the establishment of fairways or shipping routes through off-shore exploration areas to ensure that exploitation of sea-bed resources does not seriously obstruct shipping routes.

RESOLUTION 180

Recommends location of off-shore platforms be disseminated by Notices to Mariners and/or radio warnings. Suggests Administrations set standards for platform manning.

RESOLUTION 181

Recommends that Administrations insure that liferaft instructions include immediate action to be taken and more detail on how to survive in the raft. These should be written in one of the official languages of IMCO and the official language of the subject country.

RESOLUTION 182

Recommends that off-shore platforms and associated ships, aircraft and land stations be fitted with maritime mobile safety radiocommunications equipment. Recommends that underway platforms be fitted with maritime radiotelephones to comply with Regulations 14 and 15 of Chapter IV of SOLAS 60, as far as practicable.

RESOLUTION 183

Recommends fire safety measures for hydrofoil boats to provide them a level of safety equivalent to structural fire protection and extinction requirements contained in SOLAS 60.

RESOLUTION 184

Recommends that member governments adopt Grain Regulations as an equivalent to Chapter VI of SOLAS 60. Recommends that governments exchange data compiled as a result of using these Regulations.

RESOLUTION 185

Recommends that Grain Regulations set out in Resolution 184 apply to cargo ships of less than 500 tons gross tonnage as far as is reasonable and practicable.

RESOLUTION 186

Adopts schemes in the approaches to New York Harbor and Delaware Bay as described in Annex III to Resolution 161 (ES IV). Traffic separation schemes and areas to be avoided by ships of certain classes are given for various geographical locations.

RESOLUTION 187

Adopts procedure for amending and updating the International Code of Signals. Governments should encourage use of the Code and users should supply comments for evaluation.

RESOLUTION 188

Adopts and recommends implementation of "Document for Guidance—1968" on training of masters, officers and crew. This document supercedes the one approved by Resolution 89 (IV). The IMCO Maritime Safety Committee is authorized to amend and make necessary additions to the document.

RESOLUTION 189

Voluntary reports on spillage of oil. Asks Maritime Safety Committee to review existing arrangements and make recommendations so that governments should be informed of such incidents and so that the Organization should be able to compile a record of them. Invites governments to inform the Secretary-General of all reports received in accordance with Resolution 147 (ES IV).

RESOLUTION 190

Approves the reports of the IMCO Maritime Safety Committee and expresses the Assembly's appreciation of the work of the MSC.

RESOLUTION 191

Approves the International Convention on Tonnage Measurement of Ships, 1969, its Annexes and Recommendations and accepts the duties of depository. Invites member states to accept or accede to the Convention as soon as possible.

RESOLUTION 192

The IMCO Maritime Safety Committee will study and do preparatory work for a conference for the revision of the Regulations for Preventing Collisions at Sea, 1960, to be held in 1972. The Secretary-General will make in due course, appropriate administrative and financial proposals for such a conference.

RESOLUTION 193

Authorizes the Secretary-General to work with the United Nations towards convening a conference on container traffic in 1971.

RESOLUTION 194

Recommends that governments accept and/or implement the standardization of shipping documents and standards and Recommended Practices set out in the Convention on Facilitation of International Maritime Traffic, 1965. Inform Secretary-General of steps taken to implement and difficulties experienced with the Model Forms and Recommended Practices.

RESOLUTION 195

Review of the Organization's methods of work and the total financial burden falling upon member states. Directs IMCO Council to prepare a longer term work program for the Organization and to keep its objectives and methods under review.

RESOLUTION 196

Establishes Working Capital Fund of $150,000 for 1970–71. Discusses contribution payments and financing procedures for 1970–71.

RESOLUTION 197

Approves the final accounts and audit report for the financial period ending 31 December 1967.

RESOLUTION 198

Establishes the work program and budget for 1970–71.

RESOLUTION 199

Endorses the following organizations as having consultative status:

International Radio-Maritime Committee
International Association of Lighthouse Authorities
International Chamber of Commerce
International Confederation of Free Trade Unions
International Chamber of Shipping
International Electrotechnical Commission
International Shipping Federation Limited
International Organization for Standardization
International Union of Marine Insurance
International Union of Official Travel Organizations
International Commission of Illumination
International Federation of Christian Trade Unions
Permanent International Association of Navigation Congresses
International Maritime Committee
European Nitrogen Producers' Association
International Superphosphate Manufacturers' Association Limited
Internal Association of Ports and Harbors
Baltic and International Maritime Conference
International Association of Classification Societies
International Law Association
International Cargo Handling Co-ordination Association

RESOLUTION 200

Authorizes Secretary-General to pay the costs of editing publications and their sales from the Printing Fund. He will also charge the Printing Fund an appropriate proportion of the capital cost of new equipment for production of saleable items.

RESOLUTION 201

Instructs the Secretary-General to convey to the Director-General of the International Labor Organization (ILO) IMCO's congratulations on the ILO's 50th Anniversary. ⚓

Approved Equipment

Commandant Issues Equipment Approvals; Terminates Others

U.S. Coast Guard approval was granted to certain items of lifesaving, and other miscellaneous equipment and materials. At the same time the Coast Guard terminated certain items of lifesaving, and other miscellaneous equipment and materials.

Those interested in these approvals should consult the Federal Registers of March 11, 14, 25, April 14, May 7, and May 27, 1970, for detailed itemization and identification.

Circular NVIC 0–70

The annual listing of navigation and vessel inspection circulars in force, and cancellation of others has been made in Navigation and Vessel Inspection Circular 0–70.

Copies of this circular may he obtained at the local marine inspection office or by writing Commandant (CAS–2) U.S. Coast Guard, Washington, D.C. 20591.

AMENDMENTS TO REGULATIONS

Title 46 Changes

Chapter I—Coast Guard Department of Transportation

SUBCHAPTER I—CARGO AND MISCELLANEOUS VESSELS

PART 98—SPECIAL CONSTRUCTION, ARRANGEMENT, AND PROVISIONS FOR CERTAIN DANGEROUS CARGOES IN BULK

SUBCHAPTER O—CERTAIN BULK DANGEROUS CARGOES

PART 151—UNMANNED BARGES

Certain Bulk Dangerous Cargoes on Unmanned Tank Barges; Correction

In F.R. Doc. 70–1991, appearing at page 3706 in the issue of Wednesday, February 25, 1970, the following corrections should be made:

1. In § 98.10–15 paragraph (c) is corrected to read as follows:

§ 98.10–15 Pressure-vessel type cargo tanks.

* * * * *

(c) Tanks designed, inspected, and tested as required by Department of Transportation Specification 103A, 103A–W, 103B, or 103B–W will be accepted as pressure-vessel type cargo tanks, provided the maximum pressure to which the tanks may be subjected does not exceed 30 pounds per square inch. Prior to installing such tanks on a self propelled cargo vessel, the owner shall furnish the Commandant with a copy of the inspection report certifying that the tanks and appurtenances comply with Department of Transportation specifications.

* * * * *

§ 98.25–70 [Amended]

2. In Table 98.25–70(b), appearing on page 3712, the heading is corrected by changing the word "Holders" to "Headers".

§ 151.01–10 [Amended]

3. In Table 151.01–10(b) of § 151.01–10, appearing on page 3715, the 46th item is corrected by changing "Ethyleneimide" to "Ethylenemine".

4. In Table 151.01–10(d), appearing on page 3716, the second item under the heading "Miscellaneous oils, including:" is corrected by changing the words "Coat tar" to "Coal tar".

5. In § 151.05–1, appearing on page 3720, paragraphs (n) and (o) following paragraph (e) are corrected to read as follows:

§ 151.05–1 Explanation of column headings in Table 151.05.

* * * * *

(f) *Cargo segregation/piping and venting.* This column indicates the required separation of piping and venting used for the cargo from piping and venting used for other cargo. Terms are explained in § 151.13–10 and in the footnotes of Table 151.05.

* * * * *

§ 151.45–4 [Amended]

6. In § 151.45–4, appearing on page 3731, paragraph (a)(1) is corrected by changing in the first sentence the words "in this part" to "in this chapter".

Dated: April 15, 1970.

W. J. SMITH,
Admiral, U.S. Coast Guard,
Commandant.

[F.R. Doc. 70–4899; Filed, Apr. 21, 1970; 8:48 a.m.]

(Federal Register of April 22, 1970.)

Chapter I—Coast Guard, Department of Transportation

MISCELLANEOUS AMENDMENTS TO CHAPTER

The purpose of this document is to effect miscellaneous amendments to Subchapters B—Merchant Marine Officers and Seamen, H—Passenger Vessels, I—Cargo and Miscellaneous Vessels, J—Electrical Engineering, K—Marine Investigations and Suspension and Revocation Proceedings, P—Manning of Vessels, R—Nautical Schools, T—Small Passenger Vessels, and U—Oceanographic Vessels. All of the amendments made by this document are interpretative rules, general statements of policy or rules of Coast Guard organization, procedure, or practice. Therefore, it is unnecessary to comply with the Administrative Procedure Act concerning public notice of rule making and public procedures thereon.

The minor changes effected by this document are self-explanatory. There are a few others, however, which warrant some comment.

In order to establish eligibility for a license as a merchant marine officer, an applicant must present satisfactory evidence that he is a citizen of the United States. Acceptable evidence of citizenship is described in 46 CFR 10.02–5(c). This document amends the foregoing section by providing an additional means of proving citizenship, namely the presentation of a validated merchant mariner's document indicating that the holder is a citizen of the United States.

Sections 11.10–1 and 11.10–50 are amended to specify the time period within which an applicant for a license as temporary third mate or temporary third assistant engineer must have completed his required experience. In effect, this amendment constitutes a relaxation in the recency of service requirement because of the current shortage of officers in the merchant marine.

Section 12.02–4 is amended to reflect the discretion given the Commandant of the Coast Guard by the Act of July 15, 1954 (Sec. 1 and 2, 68 Stat. 484; 46 U.S.C. 239a and

239b), with respect to issuance of merchant mariner's documents to a person convicted of a violation of a narcotic drug law.

Section 157.20–30 presently states that a licensed master is required for a sailing vessel of over 700 gross tons. The provisions of R.S. 4438, as amended (46 U.S.C. 224), however, have been interpreted as requiring a master only if the sailing vessel of over 700 gross tons is carrying passengers for hire. Section 157.20–30, therefore, is accordingly amended.

The regulations contained in Subpart 175.01 of Subchapter T indicate that "L" vessels are not inspected under the authority of the Act of May 10, 1956 (70 Stat. 151–154; 46 U.S.C. 390–390g). Since sailing vessels and barges of less than 100 gross tons and over 65 feet in length are considered "L" vessels and are inspected under that authority when carrying more than 6 passengers, Subpart 175.01 is amended to remedy this inaccuracy. Also, Subpart 175.05 is amended to state clearly that Subchapter T applies to all vessels of less than 100 gross tons, to include a provision applicable to foreign "L" vessels, and to clarify the definition of "S" and "L" vessels.

(Federal Register of April 30, 1970.)

SUBCHAPTER C—UNINSPECTED VESSELS

PART 25—REQUIREMENTS

SUBCHAPTER T—SMALL PASSENGER VESSELS (UNDER 100 GROSS TONS)

PART 184—VESSEL CONTROL AND MISCELLANEOUS SYSTEMS AND EQUIPMENT

Navigation Lights; Light Intensity Standards; Extension of Date for Compliance

1. Sections 25.05–15(d) and 184.15–5(d) require compliance with certain intensity standards for navigation lights on and after January 1, 1971. This date for compliance was predicated on the development and the issuance prior to that date of approval specifications for navigation lights. It now appears that these approval specifications cannot be developed and issued prior to the present effective date. The amendments in this document extend the effective date for compliance with these light intensity standards from January 1, 1971, to January 1, 1973, in order to provide additional time for the development and issuance of these approval specifications.

2. Since the sole effect of these amendments is to extend the date of compliance by the boating public with the light intensity standards, notice and public procedure thereon are not required and these amendments can be made effective in less than 30 days.

3. Accordingly, § 25.05–15(d) is revised to read as follows:

§ 25.05–15 Light intensity standards.

* * * * *

(d) The light intensity standards of this section shall apply to new navigation lights installed and replacements of existing lights made on or after January 1, 1973. Such lights shall be of an approved type.

4. Section 184.15–5(d) is revised to read as follows:

§ 184.15–5 Light intensity standards.

* * * * *

(d) The light intensity standards of this section shall apply to new navigation lights installed and replacements of existing lights made on or after January 1, 1973. Such lights shall be of an approved type.

(Sec. 17, 54 Stat. 166, sec. 3, 70 Stat. 152, sec. 6(b)(1), 80 Stat. 937; 46 U.S.C. 526p, 390b, 49 U.S.C. 1655(b)(1); 49 CFR 1.46(b))

Effective date. These revisions shall become effective on the date of publication in the FEDERAL REGISTER.

Dated: April 23, 1970.

W. J. SMITH,
Admiral, U.S. Coast Guard,
Commandant.

[F.R. Doc. 70–5296; Filed, Apr. 29, 1970; 8:50 a.m.]

(Federal Register of April 30, 1970.)

Title 33 Changes

Department of Transportation

Chapter I—Coast Guard

SUBCHAPTER A—GENERAL

PART 19—WAIVERS OF NAVIGATION AND VESSELS INSPECTION LAWS AND REGULATIONS

Extension of Time of Waiver Order

Part 19 is concerned with the waiver of compliance with Coast Guard administered navigation and vessel inspection laws in the interest of national defense. Part 19 is also codified in 46 CFR Part 6.

In the Federal Register of December 2, 1969 (34 F.R. 19076), Part 6 was redesignated from 46 CFR Part 154. In addition to the redesignation, this document also made a change in the citation of authority, and amended § 6.20(g) by extending the waiver of the provisions of 46 U.S.C. 672 from December 31, 1969 to December 31, 1971.

Since Part 19 duplicates Part 6, it should also reflect the above changes. This document revises the citation of authority in Part 19 and extends the time of the waiver order in § 19.20 (g), to bring this Part into conformance with 46 CFR Part 6.

Accordingly, it hereby found that compliance with the provisions of the Administrative Procedure Act relating to notice of proposed rule making, public procedures thereon and effective date requirement is unnecessary.

1. The authority note for Part 19 is revised to read as follows:

AUTHORITY: The provisions of this Part 19 issued under Sec. 1, 64 Stat. 1120, Sec. 6(b)(1), 80 Stat. 937; 46 U.S.C. Note prec. 1, 49 U.S.C. 1655(b)(1); 49 CFR 1.4(a)(2).

2. Section 19.20(g) is revised to read as follows:

§ 19.20 Service requirements for certification as able seamen or qualified member of the engine department.

* * * * *

(g) This waiver order shall remain in effect until December 31, 1971, unless sooner terminated by notice of

cancellation published in the Federal Register.

(R.S. 4405, as amended, 4462, as amended, sec. 1, 64 Stat. 1120, sec. 6(b)(1), 80 Stat. 937; 46 U.S.C. 375, 416, 46 U.S.C. Note prec. 1, 49 U.S.C. 1655(b)(1); 49 CFR 1.4(a)(2))

Effective date. These amendments shall become effective on the date of their publication in the Federal Register.

Date: April 9, 1970.

P. E. TRIMBLE,
Vice Admiral, U.S. Coast Guard,
Acting Commandant.

[F.R. Doc. 70-4602; Filed, Apr. 14, 1970; 8:50 a.m.]

(Federal Register of April 15, 1970.)

Chapter I—Coast Guard, Department of Transportation

SUBCHAPTER L—SECURITY OF WATERFRONT FACILITIES

PART 126—HANDLING OF EXPLOSIVES OR OTHER DANGEROUS CARGOES WITHIN OR CONTIGUOUS TO WATERFRONT FACILITIES

Handling Dangerous Articles or Substances in Bulk at Designated Waterfront Facilities

Item PH 5-69 of the Merchant Marine Council Public Hearing Agenda dated March 24, 1969 (CG-249) included a proposal to amend 33 CFR 126.27 to clearly indicate its application to dangerous articles shipped in bulk or portable tanks, in addition to shipments in containers or packagings. Notice of the contents of this Agenda was published in the FEDERAL REGISTER of February 7, 1969 (34 F.R. 1831). No comments were received on this proposal and the amendment to § 126.27 was published in the FEDERAL REGISTER of October 29, 1969 (34 F.R. 17478). It is now noted that this recent amendment limits the section to dangerous articles in bulk or portable tanks. This document corrects this error by amending § 126.27 so that it expressly states that it applies to all shipments of dangerous cargoes whether in containers, packagings, bulk, or portable tanks.

Since this is an editorial correction, notice and public procedure are not required and the amendment can be made effective in less than 30 days.

1. Section 126.27 is amended by deleting in the heading the words "in bulk or portable tanks" and by changing in the introductory text the words "or portable tanks" to "portable tanks, containers or packagings". As amended, the heading and introductory text of § 126.27 reads as follows:

§ 126.27 General permit for handling dangerous articles or substances.

A general permit is hereby issued for the handling, storing, stowing, loading, discharging or transporting of dangerous articles or substances (other than designated dangerous cargo) in bulk, portable tanks, containers, or packagings, at designated waterfront facilities, conditioned upon the observance and fulfillment of the following :

* * * * *

(Sec. 1, 40 Stat. 220, as amended, sec. 6(b)(1), 80 Stat. 937; 50 U.S.C. 191, 49 U.S.C. 1655(b)(1); E.O. 10173, 15 F.R. 7005, 3 CFR, 1950 Supp., as amended; 49 CFR 1.46(b))

Effective date. This amendment shall become effective on the date of publication in the FEDERAL REGISTER.

Dated: May 8, 1970.

P. E. TRIMBLE,
Vice Admiral, U.S. Coast
Guard, Acting Commandant.

[F.R. Doc. 70-5963; Filed, May 14, 1970; 8:48 a.m.]

(Federal Register of May 15, 1970.)

STORES AND SUPPLIES

Articles of ships' stores and supplies of a dangerous nature certificated and cancelled from March 1, 1970 to April 30, 1970, inclusive, for use on board vessels in accordance with the provisions of Part 147 "Regulations Governing Use of Dangerous Articles as Ships' Stores and Supplies on Board Vessels" are as follows:

CERTIFIED

Economics Laboratories, Osborn Building, St. Paul, Minn. 55102. Certificate No. 879, dated April 2, 1970, MAGNORUST.

Tam Chem, Inc., P.O. Box 2875, Tampa, Fla. 33601:

Certificate 874, dated March 2, 1970, METAL-X, INDUSTRIAL DEGREASER.

Certificate 875, dated March 2, 1970, CARBON-X.

Certificate 876, dated March 3, 1970, TANK-X, COLD WASH DEGREASER.

Besco Corp., 200 North Myrtle St., Metaire, La. 70004:

Certificate 877, dated March 3, 1970, BESCO DEGREASER NO 1.

White Manufacturing Co., P.O. Box 15216, Houston, Tex. 77020:

Certificate 878, dated March 25, 1970, ELECTRO-CLEAN PC-14.

CANCELED

Uncle Sam Chemical Co. Inc., 573-577 West 131st St., Philadelphia, Pa. 19133:

Certificate 286, dated June 23, 1949, GERMALL DISINFECTANT.

Magnus Chemical Co., Inc., 400 South Ave., Garwood, N.J. 07027:

Certificate 315, dated July 18, 1950, MAGNUS-TRICON PROCOMET.

Montgomery Chemical Co., P.O. Box 187, Jenkintown, Pa. 19046:

Certificate 562, dated April 1, 1963, MONCO AEROSOL RUG CLEANER.

Radiator Specialty Co., P.O. Box 10628, Charlotte, N.C. 28201:

Certificate No. 587, dated December 13, 1963, SOLDER SEAL RUST-RAIDER.

Chartres Co., Inc., P.O. Box 52305, New Orleans, La. 70150:

Certificate 192, dated January 25, 1963, NO. 33 COLD WASH SOLVENT.

Certificate 404, dated September 10, 1959, MIRA-KIL.

Certificate 431, Dated May 17, 1960, NO. 66 SEA WASH.

MERCHANT MARINE SAFETY PUBLICATIONS

The following publications of marine safety rules and regulations may be obtained from the nearest marine inspection office of the U.S. Coast Guard. Because changes to the rules and regulations are made from time to time, these publications, between revisions, must be kept current by the individual consulting the latest applicable Federal Register. (Official changes to all Federal rules and regulations are published in the Federal Register, printed daily except Sunday, Monday, and days following holidays.) The date of each Coast Guard publication in the table below is indicated in parentheses following its title. The dates of the Federal Registers affecting each publication are noted after the date of each edition.

The Federal Register will be furnished by mail to subscribers, free of postage, for $2.50 per month or $25 per year, payable in advance. The charge for individual copies is 20 cents for each issue, or 20 cents for each group of pages as actually bound. Remit check or money order, made payable to the Superintendent of Documents, U.S. Government Printing Office. Washington, D.C. 20402. Regulations for Dangerous Cargoes, 46 CFR 146 and 147 (Subchapter N), dated January 1, 1970 are now available from the Superintendent of Documents price: $3.75.

CG No.	TITLE OF PUBLICATION
101	Specimen Examination for Merchant Marine Deck Officers (7–1–63).
108	Rules and Regulations for Military Explosives and Hazardous Munitions (5–1–68).
115	Marine Engineering Regulations and Material Specifications (3–1–66). F.R. 12–18–68.
123	Rules and Regulations for Tank Vessels (5–1–69). F.R. 10–29–69, 2–25–70.
129	Proceedings of the Merchant Marine Council (Monthly).
169	Rules of the Road—International—Inland (9–1–65). F.R. 12–8–65, 12–22–65, 2–5–66, 3–15–66, 7–30–66, 8–2–66, 9–7–66, 10–22–66, 12–23–67, 6–4–68, 10–29–69, 11–29–69.
172	Rules of the Road—Great Lakes (9–1–66). F.R. 7–4–69.
174	A Manual for the Safe Handling of Inflammable and Combustible Liquids (3–2–64).
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323	Rules and Regulations for Small Passenger Vessels (Under 100 Gross Tons) (7–1–69). F.R. 10–29–69, 2–25–70, 4–30–70.
329	Fire Fighting Manual for Tank Vessels (7–1–68).

CHANGES PUBLISHED DURING MAY 1970

The following have been modified by Federal Registers:

CG–190, Federal Register, May 7, and May 27, 1970.

CG–239, Federal Register, May 15, 1970.

U.S. GOVERNMENT PRINTING OFFICE: 1970

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