

Pacific Coast Marine Safety Code

STEVEDORING OPERATIONS ON BOARD SHIP

Adopted by the

Pacific Coast Marine Safety Code Committee

Approved by

Pacific American Steamship Association

Shipowners' Association of the Pacific Coast

Waterfront Employers' Associations in the Major Ports



Revised

November 6, 1931

FOREWORD

The following rules for prevention of accidents in STEVEDORING OPERATIONS ON BOARD SHIPS working cargo in any Pacific Coast port, were adopted and ordered published and distributed, at special meetings of the Pacific Coast Marine Safety Code Committee, held in San Francisco, August 2nd, 1929; Portland, Aug. 19, 1930; Los Angeles, Nov. 6, 1931.

The Pacific Coast Code Committee is composed of delegates representing shipowners, waterfront employers, and longshoremen from four districts, comprising all the major ports on the Pacific Coast, together with a general chairman, and a board of technical advisors. The personnel of the Committee is shown on the following page.

The Safety Rules, hereafter termed the "Code," have the approval of the Pacific American Steamship Association, the Shipowners' Association of the Pacific Coast and the Waterfront Employers' Associations at San Francisco, Seattle, Portland, Los Angeles, San Diego and other Pacific Coast ports. Preliminary drafts had been gone over previously by the Safety Committees of the ports and were transmitted for criticism to the operators.

The Coast "Code" now supersedes the "Blue Book," entitled "Safety Rules for Stevedoring Operations Aboard Ship," issued by San Francisco and Los Angeles Harbors on September 5th, 1928, and the "Yellow Book," entitled "Seattle Maritime Safety Rules," issued by the Waterfront Employers and Longshoremen of Seattle on March 28th, 1928.

Every rule in the present "Code" is based on safe practices adopted and used by prominent operators on the Pacific Coast.

Grateful acknowledgment is hereby made to all those who have participated in the drafting of the "Code", and especially to Deputy Commissioners W. H. Pillsbury and Wm. A. Marshall, and Safety Engineer F. C. Gregory, of the U. S. Employees' Compensation Commission.

PACIFIC COAST MARINE SAFETY
CODE COMMITTEE

PACIFIC COAST MARINE SAFETY CODE COMMITTEE

The Pacific Coast Marine Safety Code Committee is a standing Committee of thirteen voting members, and a technical advisory board as follows:

State of Washington Ports: (District No. 1)

Chairman, J. Weber, Waterfront Employers of Seattle;
J. C. Bjorklund, International Longshoremen's Association;
H. M. Delanty, Shipping Federation of the State of Washington.

Columbia River and Oregon Ports: (District No. 2)

Chairman, Capt. J. B. Gilkey, Marine Safety Association of the Columbia River;
Wm. Brady, Waterfront Employers of Portland;
Capt. Paul MacDonald, Waterfront Employers of Portland.

Los Angeles and San Diego Ports: (District No. 3)

Chairman, C. G. Limecooly, Los Angeles Harbor Safety Committee;
G. C. Bankson, Marine Service Bureau, Los Angeles and San Diego;
Capt. R. Hill, Marine Service Bureau, Los Angeles and San Diego.

San Francisco Bay Ports: (District No. 4)

Chairman, Capt. F. M. Edwards, Associations' Safety Committee, San Francisco;
J. B. Bryan, Longshoremen's Association of San Francisco and Bay Districts;
A. E. Stow, Pacific American Steamship Association and Shipowners' Association of the Pacific Coast.

General Chairman, B. O. Pickard, Associations' Accident Prevention Department, San Francisco, Los Angeles, San Diego and Columbia River.

Board of Technical Advisors:

Frank D. Cannon, Associations' Accident Prevention Department, Portland, Oregon.
Stanley C. Davis, Associations' Accident Prevention Department, San Francisco, Calif.
F. P. Folsie, Shipping Federation of the State of Washington.
F. C. Gregory, U. S. Employees' Compensation Commission, Washington, D.C.
C. D. Kennedy, Marine Safety Association of the Columbia River.
Capt. J. G. Ludlow, Waterfront Employers' Union, San Francisco.
Wm. A. Marshall, U. S. Employees' Compensation Commission, Seattle, Wash.
E. A. Mills, Marine Service Bureau, Los Angeles and San Diego.
Wm. Moore, Waterfront Employers, Seattle, Wash.
Capt. W. J. Petersen, Marine Service Bureau, San Francisco.
W. H. Pillsbury, U. S. Employees' Compensation Commission, San Francisco.
Harvey Wells, Waterfront Employers, Tacoma.
A. B. Woodward, Jr., Associations' Accident Prevention Department, San Pedro, Calif.

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PACIFIC COAST MARINE SAFETY CODE

SECTION 1. SCOPE, PURPOSE, EXCEPTIONS AND DEFINITIONS

Scope:

Rule 1. This Code, applies to all cargo handling and stevedoring operations aboard ship and covers all operations, persons, employees, employers and vessels included under the Federal Longshoremen's and Harbor Workers' Compensation Act in the States of the Pacific Coast.

Purpose and Exceptions:

Rule 2. The purpose of this Code is to provide reasonable minimum requirements for safety of life, limb, and health. In cases of practical difficulty or unnecessary hardship an employer may make exceptions from the literal requirements of this Code, or permit the use of other devices or methods, but only when it is clearly evident that equivalent protection is provided. Any exceptions for an employer shall be referred first to his District Code Committee; if the proposed exception is approved by his Committee, it shall be forwarded to the General Chairman of the Pacific Coast Safety Code Committee, who shall take a referendum vote by mail of the entire Code Committee. Special Port or District Rules can be adopted by the Code Committee by means of the same procedure provided for employer "exceptions" above.

Where an exception for any company is made to a given rule, according to stipulated conditions it is not necessary that each company petitioning thereafter be given formal consent by vote of the entire Code Com-

Any correspondence with the Code Committee should be addressed to B. O. Pickard, General Chairman, Pacific Coast Marine Safety Code Committee, 256 Mission Street, San Francisco, California.

B. O. Pickard

mittee, but such exception may be granted within any district if it meets the approval of the District Code Committee and the General Chairman.

Mandatory and Advisory Requirements:

Rule 3. The word **Shall** is to be understood as mandatory and the word **Should** as advisory.

Definitions:

(a) General Definitions.

Rule 101. The term Commission means the United States Employees' Compensation Commission.

Rule 102. The term Deputy Commissioner means the Deputy Commissioner of the United States Employees' Compensation Commission having jurisdiction in respect of an injury or death.

Rule 103A. The term Code Committee refers to a standing committee which is hereby created to consist of 13 members as follows: Three each, chosen from both employers and employees as far as possible, from the following districts (1) Washington ports; (2) Oregon, including Columbia River ports; (3) San Francisco Bay, and (4) Los Angeles Harbor District and San Diego, and a General Chairman to be elected by the Committee. The function of this Committee shall include the approval of a final draft of this Code, and the approval of subsequent exceptions or amendments, and of any proposed port rules.

Rule 103B. The term District Code Committee refers to a Committee to be chosen from the Districts prescribed in Rule 103A, consisting of three members to be chosen from employers and employees as far as possible.

Rule 104. The term State includes a Territory.

Rule 105. The term Person means an individual, partnership, corporation, or association.

Rule 106. The term Employer means an employer, any of whose employees are employed in maritime employment, in whole or in part, upon the navigable waters of the United States.

Rule 107. The term Operations and Stevedoring Operations mean the operation of loading, unloading, moving or handling cargo, ship's stores, gear, etc. in, on, or out of any ship and all activities incidental thereto at any port, dock, wharf, pier, jetty, harbor, river, canal or any other place, and included under the jurisdiction of the Federal Longshoremen's and Harbor Worker's Compensation Act.

Rule 108. The term Vessel means any floating structure used in navigation, or for transporting commerce, upon the navigable waters of the United States.

Rule 109. The term Cargo as defined for the purpose of this Code includes all goods or merchandise transported by vessel and also all ship's stores, gear, etc., which may be moved in, on, or out of, any vessel.

Rule 110. The term Contracting Stevedore means the person, firm or corporation contracting with the ship owner or his agents, to carry on stevedoring operations as defined herein; or any person, firm or corporation engaged in stevedoring operations.

Rule 111. The term General Foreman means the person employed to supervise the stevedoring operations.

Rule 112. The term Gang Foreman means the person employed to supervise a gang of longshoremen in the stevedoring operations.

Rule 113. The term Hatch Tender or Gangwayman means the person employed to supervise all the hoisting and lowering operations of handling cargo.

Rule 114. The term Gang means a group of longshoremen working as a unit in the stevedoring operations.

Rule 115. The term Longshoreman means any person who is employed for the purpose of loading or unloading or handling cargo or in other operations as defined herein.

(b) Working Places and Gear.

Rule 116. The term Boom Guy means the device, consisting of pennants and tackles, attached to the head of the boom or derrick and used for keeping the boom in position for working cargo.

Rule 117. The term Bridle means a device consisting of a ring or shackle from which are suspended two or more pennants of rope, wire or chain, to the ends of which are attached hooks, shackles or toggles.

Rule 118. The term Bull Line or Bull Rope means an auxiliary rope or fall worked from a winch and roved through lead or snatch blocks or chocks to move cargo or other objects.

Rule 119. The term Deck means the horizontal plating, planking, or floor covering the transverse beams of a vessel.

Rule 120. The term Dunnage means the material used in stowage for protecting cargo.

Rule 121. The term Fall or Cargo Fall means the cable used to hoist cargo.

Rule 122. The term Gangway or Gangplank means the device used for persons passing from the wharf or dock to the ship or vessel and vice versa.

Pacific Coast Marine Safety Code

Supplement No. 2

AMENDMENTS*

Adopted by the

Pacific Coast Marine Safety Code Committee
October 21, 1932



Note: *Supplementary to and a definite part of the Rules revised November 6, 1931, known as the Pacific Coast Marine Safety Code—Stevedoring Operations on Board Ship.

SUPPLEMENT No. 2

Rule 413B (new). Where it becomes necessary to stow deck loads closer than three feet to a hatch coaming, life line shall be rigged for safety of men handling strongbacks and hatch covers.

Rule 514B (amendment). When winch controls are located so as to expose winch driver to bight of the fall, an additional preventer shall be placed on the lead block at the heel of the boom. The preventer shall be not less than $\frac{5}{8}$ -inch wire cable and preferably $\frac{3}{4}$ or larger.

Rule 531B (amendment to Rule 802, and applicable to all ports). Where two gangs are working in the same hatch on different decks, a skid, preferably, or at least a net, should be rigged from lower strongback and securely fastened above over hatch coamings so as to prevent the possibility of men or cargo from falling on men below.

Rule 531C (new). Where cargo is stowed on or in any deck above lower hold, such cargo shall be adequately secured to prevent it from falling on men working below the deck on which such cargo is stowed.

Rule 612 (new). Ship's cargo hoisting falls or whips shall not be used for mooring or shifting ship.

Rule 123. The term Hatch means the opening in a deck through which cargo, fuel, etc., is passed.

Rule 124. The term Hatch Cover or Hatch Plank means the device placed on hatch beams or strongbacks and coamings to cover a hatch.

Rule 125. The term Hatch Way means the square of the hatch from the top deck to the hold.

Rule 126. The terms Hatch beam, Fore and After, and Strongback mean the devices used for supporting the hatch covers to close the hatch.

Rule 127. The term Jacobs Ladder means the device consisting of two parallel pieces of rope or wire joined together at intervals by crosspieces of rope, wire or wood, the whole ladder being flexible.

Rule 128. The term Ladder means an appliance or device consisting of two parallel pieces of wood or metal joined together at intervals by crosspieces called rounds.

Rule 129. The term Lead Block means the device consisting of a grooved sheave encased by a shell used to change the direction of the lead or line.

Rule 130. The term Machinery means the contrivances or machines, such as conveyors, motors, capstans, winches, windlasses, tractors, jitneys, etc., used in the Operations.

Rule 131. The term Passage Way means a path or clear space other than a gang way or ladder through which persons or cargo are to be passed or moved.

Rule 132. The terms Pennant or Pendant mean the piece of wire or rope to which tackles, etc., are attached or suspended to shorten the length of the tackle and to cut down unnecessary amount of rope otherwise used in said tackle.

Rule 133. The term Preventor Guy means the device consisting of a temporary auxiliary rope or wire attached to the head of the boom or derrick to relieve the boom guy of excessive strain in handling heavy drafts of cargo.

Rule 134. The term Shackle means a U shaped device of iron or steel with a pin through the ends used to secure the ends of guys, falls, topping lifts, etc., to ringbolts or cleats.

Rule 135. The term Ship's Gear means the devices used in the Operations, such as booms, derricks, falls, guys, slings, etc., and supplied and carried by the vessel for the purpose of working cargo.

Rule 136. The term Sling means a device made of rope, wire, canvas, chains, boards or other material used to hold cargo for the purpose of hoisting it.

Rule 137. The term Sling Load or Draft means that part of the cargo held by the sling.

Rule 138. The term Stevedoring Gear means the devices used and furnished by the stevedoring contractor.

Rule 139. The term Stowage means the proper placing of cargo on or in vessels.

Rule 140. The term Topping Lift means the wire or rope attached to the boom head and mast or Samson post or other fixed object by means of which the boom or derrick is raised, lowered or suspended.

Rule 141. The term Tween Deck or Tween Decks means an intermediate deck situated between the main deck and the hold.

Rule 142. The term Set-up means the manner in which the entire standing and running gear is rigged for one gang to work cargo.

SECTION 2. RESPONSIBILITIES AND DUTIES UNDER THE CODE

Rule 201. The vessel, its owner, master, and officer in charge shall be severally and jointly responsible for the safe condition of the ship's gear and equipment, and for the competency of any ship's officer or member of the crew who may engage in Operations covered by this Code. They shall provide, so far as the same shall be under their control, a safe working place upon the vessel for all Operations carried on upon it.

Rule 202. The contracting stevedore is responsible for the proper and safe condition of all stevedoring gear supplied by it, and for the competency of foremen and other persons supplied by it in charge of Operations.

Rule 203. The duties of the General Foreman are: To see that all gear is in apparent good safe working condition during the stevedoring Operations. He is in charge of all stowage and handling of cargo. He should see that stevedoring Operations are carried on in a safe manner. Where conditions warrant, and he is not in immediate touch with his superior officers, he should stop work if necessary to avoid accidents.

Rule 204. The Duties of the Gang Foreman are: To be in direct charge of his gang, to supervise all the stevedoring Operations in connection therewith and see that all work is done in a safe manner. He shall report promptly to the General Foreman any defect in the gear or any unsafe working condition. In the event that the gang foreman or hatchtender, upon discovery

of defective gear, should find it impossible to get in touch immediately with the General Foreman, he shall himself stop work, if necessary, until the General Foreman shall have had opportunity to pass upon the situation.

Rule 205. The duties of the Hatch Tender or Gangwayman are: He should be familiar with the deck stevedoring Operations and be capable of rigging booms, derricks, and other deck gear for the proper hoisting or moving of cargo.

Before commencing to hoist cargo, he should, in conjunction with the gang foreman, see that the boom topping lifts and boom guys are properly secured and the saveall made fast; that pins in shackles on all cargo gear are properly fastened; that the space from the hatch coamings to the ship's side is clear for working cargo and the hatch beams, strongbacks, fore and afters and hatch covers which are removed, stowed on deck in a safe, orderly manner; and inspect generally, as far as possible, all running gear for any defect or unsafe working condition.

He shall see that the cargo is properly slung before being hoisted, and shall control the movements of slingloads or drafts by positive signals to the winch driver. He should keep the slingload or draft in sight when being moved, and warn all persons in danger of being injured by the movement of cargo. Whenever Operations are suspended or terminated, he shall see that the hatch covers are on, or safety lines are stretched around hatch coamings, and rope stretched across side rail opening or side rails properly shipped, if the appliances are supplied by the vessel, or unless the duty has been assumed by the vessel. He shall be held

responsible, together with the gang foreman, for the safety of the men during the Operations.

Rule 206. The duties of the Winchdriver are: To see before starting hoisting operations, that the winch is free from water, that the cargo fall is in good order and properly secured to the winch drum, and that the winch is in good order, reporting any defects to the gang foreman. He shall take signals only from the hatch tender, if a hatch tender is used, for the operation of the winch, and shall at all times operate the winch or winches in a safe manner. If the winches are not properly oiled, he shall report same to his foreman. When leaving winch unattended, he shall see that the power is turned off.

Rule 207. The duties of the Longshoremen, in addition to those presented elsewhere in this Code, shall be to use the safety devices provided, to practice the safety methods prescribed, and to cooperate in all that makes for safety.

SECTION 3. GENERAL SAFETY RULES

Rule 301. All gears and friction drives, wherever located, should be completely encased. Where, in the case of gears, this is impracticable, a band guard should be provided with side flanges extending inward beyond the root of the teeth.

Rule 302. Where there is a spoke hazard, the spokes should always be covered on exposed side.

Rule 303. All sprocket wheels, wherever located, should be completely encased.

Rule 304. All projecting set screws on moving parts should be removed, or countersunk or headless set screw should be used. No part of the set screw should project above the surface.

Rule 305. Shaft keys, unless enclosed by the housing of the machine, should be flush or protected with cylindrical safety sleeves, or completely enclosed.

Rule 306. Shields or screens should be provided which will prevent contact with crank, connecting rod, valve rod, steam jam cylinder or other moving parts.

Rule 307. Removal of existing protective appliances during stevedoring Operations is strictly prohibited.

Rule 308. If tools, materials, appliances, or any gear are at any time found to be out of repair, defective, or in any way unsafe, employees shall report the same immediately to the person in charge of the work.

Rule 309. Where an edge of cargo or of a landing platform is exposed and there is danger of falls of persons, the edge should be guarded by a life line.

Rule 310. Winches, conveyors, belts, and all driving gear may be lubricated while in motion only when this can be done by means of suitable contrivances, without danger.

Rule 311. Lubricating and oiling while a machine is in motion may be done only by persons authorized to do so.

Rule 312. Cleaning of machine parts may be done only while the machine is not in motion.

Rule 313. Transferred to and made a part of Rule 525.

Rule 314. Employees shall do everything possible to prevent fires. Smoking is prohibited.

Rule 315. Entering dark holds, decks, or compartments without a light is prohibited. (See Rules 410 and 411.)

Rule 316. Naked lights are prohibited in stevedoring Operations aboard ship. (See Rules 410 and 411.)

Rule 317. No one shall be allowed to turn to or remain on the job if under the influence of intoxicating liquors.

SECTION 4. GENERAL WORKING CONDITIONS

Reporting of Injuries:

Rule 401. An injury of any kind, irrespective of its severity, shall be reported immediately to the foreman, or man in charge, by the injured person if he is physically able (if the injured person is physically unable to report the injury, then it shall be reported by any person in possession of the facts). The foreman, or man in charge, shall see that the injured party is given immediate first aid treatment and that the injury is reported promptly to the employer.

First Aid:

Rule 402. An approved first-aid kit shall always be immediately available when and where Operations are being carried on. The first-aid kit shall be in charge of, and maintained fully stocked by, a designated attendant who shall be trained to render first aid to the injured. The first aid attendant should always be available to give immediate assistance. One or more stretchers shall be available at places where Operations are being carried on, to be furnished by the vessel or by the dock operators.

Rule 403. At each major port there shall be provided by some appropriate port organization, facilities for the formation of a first aid corps, and for the training of persons employed who wish to qualify to render first aid.

Rule 404. Notices shall be exhibited in prominent positions at every dock, or wharf, stating:

(a) The position of the first aid kit, and the name of the person in charge thereof.

(b) The telephone number of Emergency Hospital or Ambulance Service.

(c) Name, address and telephone number of Company's physician and hospital.

Rule 405. One or more life buoys for the rescue of drowning persons shall be maintained at each dock.

Clean Drinking Water:

Rule 406. At all places where Operations are being carried on, good drinking water in covered clean utensils or devices shall be conveniently available.

Toilets:

Rule 407. At least one conveniently accessible toilet, either on board the vessel or on the wharf or other place where the vessel is moored, shall be available at all times for the use of every person engaged in the Operations. Such toilets shall be kept clean and in good order.

Decks, Floors and Passage Ways:

Rule 408. All decks, floors and other places, where persons are engaged in the Operations, shall, as far as possible, be kept clean and free from dust, litter and slipperiness. Grease, oils, etc., spilled where stevedoring Operations are being carried on shall be immediately covered by sand or other suitable material.

Rule 409. Transferred to and made a part of Rule 408.

Rule 410. General Foremen shall not permit Operations on or in ship's decks, holds, or other places, un-

less adequately lighted. (See Rules 315, 316, 906, and 1009.)

Rule 411. One or more lights shall be kept burning on the dock near the gangplank or other entrance to the ship after dark while ship is tied up to dock. (See Rules 315 and 316.)

Rule 412. Passageways on dock shall be kept clear from tackle end of ship's gear to shed, to give ample room for hooking or landing loads or drafts, except when working cars direct to or from ship.

Rule 413. Where men are to be required to work in a space below a deck where cargo is stowed, the said cargo in said deck shall be so stowed as to have clear space of three feet around hatch coaming of said deck for handling hatch covers.

Access to Vessels:

Rule 414. When a ship is lying at a dock, there shall be provided at all times a safe means of going to and from the ship consisting of a gangplank or other equally adequate method. All persons going to and from the ship must use this equipment. "Shortcuts" over side via cargo slings, save-alls, moving conveyors, etc., are prohibited.

Rule 415. Where a gangplank is reasonably practicable, a gangplank not less than 22 inches wide shall be provided and properly secured to the ship. Such gangplank shall be provided with a two-rail railing on each side; such railing shall be not less than three and one-half ($3\frac{1}{2}$) feet high; the upper and lower rails to consist of wood, taut ropes or chains or other equally safe devices.

Rule 416. In other cases a ladder shall be provided which shall be of sound material, of adequate length, and properly secured to prevent slipping.

Rule 417. If a ship, boat, or other vessel is alongside any other ship, boat, or other vessel, and persons employed are required to pass from one to the other, a safe means of access shall be provided by the ship, boat or other vessel which has the higher freeboard.

Rule 418. When working barge, scow, raft, or log boom alongside ship, a Jacobs ladder, or its equivalent, properly secured, shall be provided and used for each separate unit of Operation.

Hold Ladders:

Rule 419. Ladders shall be provided in all holds where employees are engaged in stevedoring Operations. Where it is impracticable to use a ladder, an equivalent safe means of escape shall be provided.

Rule 420. Ship's ladders providing entrance to and exit from holds shall be kept in repair and in safe condition.

Rule 421. Hold ladders shall be kept clear, and no cargo stowed within six inches from inside rungs of ladders. If cargo is so stowed that it is not possible to use permanent hold ladders, portable ladders shall be provided and properly secured.

Winch Operations:

Rule 422. A place provided for winch drivers to stand or sit shall be kept in good order and all means taken to prevent slipping and falling of seat of driver.

Rule 423. The ship's gear should be so rigged as to protect the winch driver against swinging loads.

Rule 424. All winches operating with a single lever shall be counterbalanced by a weight properly secured.

Rule 425. Extensions on operating levers of winches, of substantial material, where necessary, shall be furnished by the ship, and securely attached to the regular lever.

Noxious Cargo:

Rule 426. Longshoremen shall wear (a) approved goggles when handling cargo liable to injure or irritate the eyes; (b) respirators of an approved type when handling cargo liable to injure or irritate the respiratory passages and lungs.

Rule 427. When such goggles and respirators are required, same shall be provided by employer.

Rule 428. Strict care should be exercised when entering holds that have been recently fumigated.

SECTION 5. SAFE PRACTICES

(A) PREPARATION OF HATCH AND DECKS
FOR CARGO HANDLING OPERATIONS

Rule 501. No cargo shall be worked through a section of a hatch unless the strongback of section adjacent to uncovered portion of hatch is bolted to hatch coamings, or otherwise secured or removed.

Rule 502. No cargo shall be hoisted from hatch until hatch covers and strongbacks are off and stowed clear of working gear, except such cargo as must be removed to clear beams.

Rule 503. Strongbacks and hatch covers shall be so stowed as not to interfere with a safe walkway for hatch tenders from rail to hatch coaming, and so that drafts or gear cannot tip same into hatches or over ship's side.

Rule 504. Foremen or hatch tenders shall personally supervise the taking off or placing of hatch covers, strongbacks and beams. Booms shall not be raised or lowered except under the immediate supervision of the man in charge of gang.

Rule 505. When employees are below, they shall stand in the clear while strongbacks, hatch beams and hatch covers are being taken out or put in place.

Rule 506. Sling loads or drafts of dunnage shall not be handled over the heads of longshoremen. Where practicable double slings should be used.

Rule 507. Where temporary deck stage is used for

the purpose of loading or unloading ships, such stage shall be strongly built and securely fastened.

Rule 508. When it is necessary to work cargo on a skeleton deck, safe decking shall be provided unless the workmen can work safely from the cargo stowed below such skeleton deck.

Rule 509. Employees shall never ride strongbacks or beams; nor shall they unnecessarily walk or climb upon them while in place.

*Rule 510. When working cargo over a **deck load** a safe walkway shall be provided for the hatch tender from rail to coaming. When this is impracticable two hatch tenders shall be used.

*Rule 511. Deck loads shall be so stowed as not to interfere with safe operation of winches or to permit loose material falling into hatches or overside.

(B) RIGGING OF SHIP'S GEAR FOR CARGO HANDLING OPERATIONS

Rule 512. Longshoremen should not be hoisted aloft except by hand power; booms should be lowered to deck for changing gear, or making necessary repairs.

Rule 513. The winch fall should be so wound that the lever shall have the same direction of operation as the load being handled. Winches hereafter constructed shall be made so that they can be operated as above recommended.

Rule 514A. The boom guys and preventers should be kept as far away from the heel of the boom as possible, but not past the line of the fall. They shall be made fast so as to divide the strain on both. Preventers should be made fast around the head of the boom independent of all other fastenings. Booms shall always be so topped as to avoid undue strain on both boom and topping lift. (Special caution where samson or derrick post is low.) In all "set-ups" the dragging of one fall against the other without plenty of sag is positively dangerous and should be avoided.

Rule 514B. When winch controls are located so as to expose winch driver to bight of the fall an additional preventer shall be placed on the lead block at the heel of the boom.

Rule 515. Measures shall be taken to prevent steam from, or to, any crane, winch or other appliance obscuring any part of the decks, gangways, stages, wharf, or other place, or otherwise hindering or injuring any person employed in the Operations.

*Interpretations Rules 510 and 511. "Special attention of all responsible for stowage of deck loads of lumber and logs is hereby called to the serious hazards which some of the present practices have created."

(C) HANDLING OF CARGO AND PRACTICES INCIDENT THERETO

Rule 516. Riding cargo hook is prohibited; however in emergencies, and under safe working conditions, specially prepared slings may be ridden in and out of the holds, under the order and direct supervision of the foreman.

Rule 517A. Sling loads shall not be held suspended over men's heads, either on dock or ship; standing or working under hanging loads is prohibited.

Rule 517B. Sling loads that are improperly slung shall not be hoisted.

Rule 518. No cargo shall be loaded or unloaded by a fall or sling at any intermediate deck unless either the hatch at that deck is safely covered, or a secure landing platform of a width not less than that of one section of hatch coverings, has been placed across the hatch.

Rule 519. Blocks, crow bars, chain slings, and other heavy equipment shall not be thrown from deck to ship's hold or from deck to dock.

Rule 520. While working cargo which may shift or roll on workman, the cargo shall be secured or blocked.

Rule 521. All cargo raised by hoisting gear shall always be carefully secured against falling or spreading. Where practicable double slings should be used on small lumber.

Rule 522. In hoisting lump coal or similar bulk car-

go in baskets, tubs, etc., containers should not be filled above the rim.

Rule 523. When assisting to steady or land a load, longshoremen should not stand between the load and any fixed object, and shall **always face the load**. Loads shall not be lifted from cars or docks when men are standing between load and ship.

Rule 524. When using a bull line to move cargo, the longshoremen should stand out of the bight, and clear of the throw of the lead and hook.

Rule 525. A sling load or draft shall not be lifted with a chain having a kink in it. A chain shall not be shortened by wiring or tying. Chains shall not be repaired, even temporarily, by bolting two links together or by the use of wire.

Rule 526. Each employer shall employ for every hatch or set of winches being operated a signal man, gangwayman, or hatch tender. (See also hatch tenders' duties—Rule 205.)

Rule 527. The riding of moving conveyors, other than of mechanical stevedores, escalators, or other devices especially designed for transportation of men, is strictly prohibited. Such special devices as are permissible for transporting men in and out of vessels, may be ridden only when the driver is at the controls and can stop the device.

Rule 528. Two men shall be required on a log boom for each unit of Operation. Life lines shall be furnished hanging overside to water's edge.

Rule 529. Men trimming bulk cargo are to be checked in and out of the hold.

Rule 530. Electric trimmers used for bulk cargo containing explosive dust shall be disconnected from conductors before being lowered into hold of ship; the electric current shall be kept shut off while conductors are being secured to or disconnected from the trimmers.

Rule 531. When men are working in the square of the hatch, bales of cotton, wool, cork, gunny bags, or other similar articles shall not be hoisted by hooks attached to the bands or fastenings of such bales.

(D) PREPARATION OF HATCH AND DECK AT SUSPENSION OF CARGO HANDLING

Rule 532. When work in a hatch is finished for the day, upper deck hatch covers, or approved night hatches, shall be on, or safety lines stretched around the hatch coamings. (See Rule 205.) Manholes and other deck openings should be protected in a safe manner.

SECTION 6. SHIP'S GEAR

Rule 601. All bridles for removing strongbacks or beams from hatch coamings shall be of sufficient length so that strongbacks can be hooked on without necessitating climbing out on them to do so; shackles or toggles are recommended in place of hooks for handling strongbacks. Hand lines shall be attached of adequate length for use in preventing swinging of hatch beams and strong backs.

Rule 602. All boom guys and gin blocks shall be secured by shackles.

Rule 603. When deck loads of lumber extend above the bulwarks, there should be a pennant of sufficient length to preclude sending a workman down ship's side to secure or release the boom guy from the deck ring bolt.

Rule 604. The ship shall furnish a sufficient number of approved topping lift stoppers where necessary for safely shifting derrick topping lifts.

Rule 605. Cargo booms should be tested and have approved capacity plainly marked in a conspicuous manner and place, preferably at the heel of the boom.

Rule 606. Cargo falls or ship's hoisting gear shall not be used to move railroad cars on docks.

Rule 607. Hatch rollers shall be so constructed that they can be firmly attached or secured to hatch coamings.

Rule 608. Broken, split, or ill fitting hatch covers shall at once be discarded or repaired. All hatch covers,

and fore-and-aft and thwart-ship beams shall, insofar as they are not interchangeable, be kept plainly marked to indicate the deck and hatch to which they belong and their position therein, and a licensed ship's officer should be present and responsible for the proper covering and uncovering of all hatches. Sufficient hatch covers of proper dimensions to insure a tight cover for each deck shall be supplied at all times during Operations.

Rule 609. Adequate hand grips shall be provided on all hatch covers, having regard to their size and weight. Hand grips shall not be secured by means of wood or lag screws; where bolts are used ends of same shall be riveted.

Rule 610. Deflectors shall be used on openings from ships emitting waste water or matter interfering with the Operations, or affecting the health of longshoremen.

Rule 611. Inspection of ship's cargo gear should be made by the ship's crew before gear is used for stevedoring Operations. The crew should give all assistance possible to maintain properly ship's cargo gear while in use.

SECTION 7. STEVEDORING GEAR

Rule 701. Wire bridles shall have a covering of marline, rubber hose or other suitable protection for men's hands over hook-splice.

Rule 702. Savealls shall be stretched, hung and safely secured to vessel and dock, in line with each hatch when general cargo is being worked.

Rule 703. If tools, materials, appliances, or any gear are at any time found to be out of repair, defective, or in any way unsafe, men shall report the same immediately to the person in charge of the work.

Rule 704. Stevedoring gear shall be carefully inspected by a designated and competent employee before being issued for use in stevedoring any ship. Any unsafe or doubtful gear shall be discarded, marked, and so placed that it cannot be used by longshoremen.

SECTION 8. SPECIAL PORT AND DISTRICT RULES (SEE Rule 2)

LOS ANGELES HARBOR:

Rule 801. While a ship is lying at a dock where fender logs are used, a saveall should be stretched under the accommodation ladder, or other means of access, in such a manner as to prevent a person from falling between the ship and dock.

Rule 802. (An addition to Gray Book Rule 413.) Where two gears are working in the same hatch, and one gang is on a deck below the other gang, a life net or its equivalent should be used across the edge of the upper deck in such a manner as to prevent men or cargo from falling to the lower deck.

SPECIAL PORT AND DISTRICT RULES (Continued)

SECTION 9. MINIMUM STANDARDS FOR GEAR, ETC.

Suggested Minimum Safety Standards for Gear and Equipment used in Cargo Handling Operations Aboard Ship, have been prepared, adopted and approved and are published in a separate pamphlet, which is available upon request.

These standards cover:

- Rule 901. Ladders; both portable and fixed types.
- Rule 902. Booms.
- Rule 903. Goggles.
- Rule 904. Equipment for protection of respiratory organs.
- Rule 905. First-aid kits.
- Rule 906. Lighting.
- Rule 907. Wire rope.
- Rule 908. Chains.
- Rule 909. Manila rope.

SECTION 10. MINIMUM STANDARDS REQUIRED IN NEW SHIPS

Suggested Minimum Safety Standards for Cargo Handling Spaces, Gear and Equipment in New Ship Construction, have been prepared, adopted and approved and are published in a separate pamphlet, which is available upon request.

These standards cover:

- Rule 1001. Hatch coverings.
- Rule 1002. Hatch beams and strongbacks.
- Rule 1003. Hatch coamings.
- Rule 1004. Guarding 'Tween Deck Hatches.
- Rule 1005. Cleats and Ring Bolts.
- Rule 1006. Cargo Booms.
- Rule 1007. Winches.
- Rule 1008. Access to Holds.
- Rule 1009. Illumination of Decks, Holds, and Cargo Handling Spaces.
- Rule 1010. Wiring, Outlets, Electrical Fittings, etc., for Cargo.
- Rule 1011. Greasing System.
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