

THE SAN FRANCISCO WATERFRONT

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The Linguistic Bond of the Dockers *circa* the Mid-Sixties:  
Their Language of Sea and Ship

by

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Well, life got better in every respect with our years of struggle  
-- so I remember lots of guys and even still hear their voices.  
San Francisco docker - deceased

And we even voiced our union debt in just the way we talked.  
San Francisco docker - deceased

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## A Brief Introduction

### The Docker Language of Sea and Ship: An Inherited Product of Labor \*

As detailed in earlier papers, the nature of their work and their contract right to equally share in that work by a rotational job dispatch conducted by elected union members essentially fashioned the personhood and character and, hence, the social morality, too, of virtually every West Coast docker from their "big strike" of 1934 to the early sixties, \*\* And there also was thereby fashioned the social and moral foundations of their ever-evolving union and the great many actions which to that time they thereby had undertaken, both on the job and in the community. Those papers also suggest the richly complex and vibrant social setting of the work performed by the San Francisco dockers to the early sixties. But with the focus here, it must now be noted that because of their ongoing social contact the vocational language of all of the many waterfront callings came to be used to some extent by those of all others. And, hence, too, this also must be noted now: since they worked "along the shore" \*\*\* and with many of them having also been to sea, ^ the San Francisco dockers had long since used a language of sea and ship when speaking with one another, with family and neighbors and all of their friends, and everyone they also met in all of their social settings. ^^

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\* Having begun to longshore on the San Francisco waterfront in 1963, the author soon was keeping notes on the language of sea and ship which he thus often heard -- especially from the "old-timers", i.e., those who had been in the "big strike" of 1934. But with that language, for reasons here to be set out, rapidly being less used as of the early sixties, it was rarely voiced on-the-job by c. 1980. It was also by 1980 that author had drafted "The San Francisco Waterfront: Work, Language, Culture and Community." Having been repeatedly set aside, that was as it now appears by 2006.

\*\* Since West Coast dockers of every port also thus shared their work by being so dispatched in various job categories, each of which was seniority-based, virtually all of those docker came to frequently say: "The union *is* the hiring hall," And with the employers seeing that, too, their halls were only kept by long and ever more bitter strikes in 1946 and 1948.

\*\*\* With news of gold in 1848, the San Francisco waterfront was jammed with ships in less than a year. And many of those were also abandoned by their crew in favor of the gold rush, And as the city's labor supply was thereby sharply reduced, work "on the front" began to be advertised by employer-hired criers with this: "Men along the shore." And, thus, too, the word "longshoremen" had also evolved by c. 1880.

^ One such person was Harry Bridges who had plied the South Pacific on a canvas rigged ship after World War I. Bridges served as the chairman of the joint Maritime Strike Committee in 1934 and in 1937 he was elected to serve as the president of the newly established International Longshoremen and Warehousemen Union (ILWU). As had been so since the "The Big Strike of '34, he thereafter played an exceptionally important role and hence at times a very controversial role in American labor history. He retired in 1977 and died on March 30, 1990.

^^ As might be supposed and as will soon be observed and later much illustrated, such use of this language was possible, if not, indeed, inevitable, since much of it could readily be employed and quite forcibly, too, in a metaphoric manner.

The linguistic heritage from which those dockers thus drew was a very ancient product of the work performed by an untold number of long forgotten seamen and dockers and those of many shore-based professions and callings and trades, many of whom are still remembered and very much honored throughout the world. Thus, for example, any number of entries in The Oxford Companion to Ships and the Sea,\* refer to the work of such figures as Homer and Aristotle, Pythagoras, Pytheas and Aratus, and Ptolemy and Marius of Tyre. And thus it should also be noted that the antiquity of this heritage and the very wide breadth of its great many sources were occasioned by the benefits of the sea and its always present and ever-evolving dangers. And since vessels are routed from port to port, that heritage also includes a language of passage *par excellence*. And thus, too, it also includes a highly economic and very precise syntax of command intended to insure, as far as may thus be done, the performance of the work required to meet the sea, i.e., for a passage both safe and efficient. And, indeed, it may thus be said that this language of sea and ship uniquely exemplifies the sort of ever-evolving linguistic product which work and its performance can produce and hazardous work must and will most surely produce.\*\* And as will soon be evident, these parts of their speech also greatly helped the San Francisco dockers to express, not only their personhood and character, but their jointly created and mutually shared social morality, culture, and community. Thus, for example, they were commonly used to present and discuss and access social events and happenings which they had experienced on the job or elsewhere, as well as the persons they thus had encountered. And, indeed, these parts of their speech provided them with a way to view and discuss and access the nature and social import of every activity of both their own and of others and, hence, too, the whole of their social experience. And they also were thereby provided with the words and phrasings and framework by which they voiced their political consciousness as dockers and trade unionists.

Given its nature and content, it also appears that most of this speech was coined by those who, as dockers everywhere would say, were "working in the hold", i.e., working at the point of production by stowing and unstowing cargoes to and from their shipboard place of rest. And, therefore, too,, evidently, the San Francisco dockers who in the early sixties most frequently used all of its elements both on the job and elsewhere were those who were stationed in the hold as members of a "long-shore gang".\*\*\* And with this so, this must next be noted: since a safe and efficient loading and discharge of vessels can best be sought by the employment of an organized division of labor, the members of which are disciplined and experienced, such "gangs" of dockers had long been so employed on the city's waterfront. And given these circumstances, it must also then be noted that the organization and use of such gangs as of the early sixties dated to arbitrated settlement of the 1934 strike. Thus, Section 11 of that settlement provided for a San Francisco "Labor Relations Committee", which among other things, and as was also so for the "LRC" thereby established in Seattle, Portland, and LA, was to "determine the organization of gangs and methods of dispatching." And, thus, by the early sixties, San Francisco gangs had long been composed of a "gang boss", elected by and from the gang; two winch

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\* Edited by Peter Kemp, (London, New York, and Melbourne: Oxford University Press, 1976), 971 pages. This very highly regarded work is widely viewed in English speaking countries as the *locus classicus* the Anglo-American version of the language of sea and ship.

\*\* And, thus, presumably, too, the same may be said of the language of sea and ship which over centuries has likewise been produced by every maritime nation.

\*\*\* It will later be evident that these things were so because of the nature and demands of the work in the hold and the organization and use of the "gangs".

drivers, who by their seniority had been voluntarily trained and promoted by the local parties to operate the hoisting gear of "conventional" vessels and to also direct and supervise the rigging of that gear; two "frontmen", who had a seniority right to voluntarily be stationed beneath "the hook" on the dock so as to secure each "sling load" to be loaded by the hoisting gear and to also release from that gear the loads discharged; a forklift driver who by seniority had also been jointly trained and promoted to drive a forklift so as to move sling loads to and from the hook and, hence, too, to and from their place of rest on the dock; and four volunteers of any seniority, i.e., from the "new hires" to the "old-timers", to work in the hold and to help to rig and re-rig the hoisting gear. And, of course, as might be supposed, if a gang position had not filled by a volunteer, it would be filled on each job by a docker dispatched from the hiring hall who was authorized to do the work in question. It must be noted, too, that for a discharge of cargo the dockers in hold would be joined by two from the hall and also by four when they were to work a "load-out" of cargo. \*

Since much of this speech was coined when canvas, rather than steam, powered the vessels being worked, the more encompassing and ever-evolving organizational setting in which it was passed down, at least to some extent, by all of those who became a San Francisco docker should also be briefly set out. So, as to that, those dockers first established a union, the Riggers and Stevedores Union, in 1851. And after varying fortunes, their union descendants voted in 1896 to affiliate with the International Longshoremen Association which had been established on the Great Lakes in 1892. The ILA also soon represented, as it does today, the dockers of both the east and the gulf coast. But after mixed fortune, again, the San Francisco ILA local was smashed in a 1919 strike and replaced with a company union established and controlled by the San Francisco Waterfront Employers Association. This organization quickly came to be known as the "Blue Book Union". With the Wagner Act of 1933, which afforded industrial workers the right to organize and thereafter collectively bargain with their employer, ILA organizers arrived, again, on the waterfronts of San Francisco and LA and Portland and Seattle. And when in 1934 the West Coast dockers struck, to also be quickly joined by the seafaring unions in what then became a maritime strike, those of San Francisco did so as members of ILA Local 38 - 79. The strike was long and bitter, but the basic demands of the dockers were awarded to them by an arbitrated settlement. And with another such strike in 1936, prompted in part by "roll-back" demands made by the employers, but importantly, too, by the yet to be secured demands of the seamen unions, the seamen won important demands, And having retained what they had won in 1934, the dockers secured the contractual means to end the employers relentless attempt to speed up the pace of the work by hiring too few dockers and by ordering them to work sling loads of ever-increasing size and weight. And thus within a year and without a strike, they went on to get a manning scale for every operation and a sling-load agreement as to the size and weight of the loads to be worked. And as had been so since 1934 when it came to contract issues of safety and health, these agreements were enforcable by their contract right to only work in accordance with the provisions of the contract and therefore, too, to simply stop work and then arbitrate if in their judgment the employer had sought to violate

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\* And, occasionally, too, with some of the cargoes to be discharged, e.g., bags of coffee beans, the hold men of a gang would be joined by four to six dockers from the hall. And also on a coffee discharge, a "long" gang, too, was always employed, i.e., a gang to which six to a dozen dockers were attached so as to stack the bags on the dock. By the mid-sixties, "unitized" loads of coffee, i.e., coffee on pallet boards and also strapped thereto, were being moved by forklift both in the hold and on the dock.

the contract. \* And having also voted in 1937 to leave the ILA, the West Coast dockers established the union they also now have: the International Longshore and Warehouse Union. And, thus, in brief, this language came to be commonly used, at least to some extent, by virtually every San Francisco docker to the early sixties. And, as in years past, it was then and into the early seventies most often and fully used by those who were posted in the hold to work "conventional" cargoes, i.e., break-bulk and hand-handeled cargoes, as members of a gang. And with this being so, the discussion to follow will largely be so focused.

Now, as for "the work in the hold" into the early sixties, every San Francisco new hire since 1959 had also by contract been required to be so employed for at least five years. That also had initially meant that the new hire had to so work by being dispatched from and by the hiring hall (1) to an established gang, of which in 1959 there were one hundred and seventy-five, (2) to a "make-up" gang, such being put together each shift by the hall when the established gangs could not "cover" all of the work required by the "conventional" ships on berth, \*\* or (3) to a "unit" of eight to twelve holdmen or "volunteers" from other job categories which was also so made up and dispatched to lash and unlash weather deck load of containers aboard a containership. \*\*\* It thus should also be noted that all new hires for the ports of San Francisco Bay, as was so with all ports, were jointly made by the local parties to coastwide contract. And starting in 1959, all such San Francisco hires were made in groups as large as four hundred or more in 1959, 1963, 1965, 1967, and 1969. And with this, of course, it must also be noted that the parties viewed such hires as being necessary because of what they also viewed as the very attractive retirement provisions of their "Mechanization and Modernization" (M & M) contract of July, 1961 to July 1966 and also of their second five-year M & M. Thus - first of all and as of 1961, the contractually "normal" retirement age was 65. But with the first M & M and also with the second, retirements with a very substantial "buy-out" could be voluntarily secured at 62. And as a result, nearly all of "the old timers", i.e., those who had struck in 1934, had retired by the end of the first M & M. And nearly all, too, of the then remaining "old timers" of the '46 and '48 strikes had also retired prior to the end of the second one. Thus, in a word, and in the decade of the nineteen-sixties, the membership of the San Francisco local was completely turned over.

With these things set out, the reader should also be finally advised that the author began to longshore on the San Francisco front in 1963 and, thus, did that, too, as just set out. But with that so and with the paper now at hand, several more things should also here be said. So -- first of all -- and when it was possible, as it initially usually was, the author choose to be dispatched for hold work with a gang and, if

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\* The formulation of these rights as it appeared in Section 11 g. of the agreement of 1937 and, hence, too, in their earliest formulation, was as follows: "The employees shall perform work as ordered by the employer in accordance with the provisions of this agreement. In case a dispute arises, the work shall be continued pending the settlement of same in accordance with the provisions of the agreement and under the conditions that prevailed prior to the time the dispute arose." It should also be noted that the last of the author's earlier published papers details the struggle to get these rights.

\*\* Make-up gangs were composed as were the established ones, excepting, of course, for this: the docker who served as gang boss had not been elected.

\*\*\* Such units were dispatched to follow and work "against" the hoists to be made by the shoreside cranes, which sometimes numbered up to four, which the employer would use. As will soon be noted, they also were dispatched to a "dock walking boss" who then supervised their work as an attachment to the gang in question.

possible, too, an established gang or secondly with a make-up gang. In either case, however, he thereby began to frequently hear the language of sea and ship as it then was spoken by the new hires of 1959 and, of course, too, more frequently by the "old-timers" who, as a winch or lift driver or, of course, an elected boss, much preferred gang work to any work involving containers. And when in 1964 the hires of 1963 were allowed to join a gang to work in the hold, he choose to do that and thus also heard, as well as used, that language more often and fully. And to the extent it was possible, he thus continued to work up to 1973 when he first was elected to serve as one of the locals' two Business Agents - a paid and full-time office. And when out of office thereafter, he was on the dock for a gang or did other dock work from the hall.

### The Stages and Commands of a Passage as Metaphorically Voiced by the Docker -- c. 1965

As a situational language and also one of mission and function and task, the seaman's language of passage has four basic dimensions. The first relates to the stages - or to what seamen routinely call the "legs" or the "runs" \*\* -- of a vessel's passage, e.g., its departure and its arrival. \*\* The second relates to the great many circumstances which will affect or may well affect the safety and efficiency of a particular passage. The third relates to the resources which on a particular passage are available for addressing those circumstances. And the final dimension relates to the ways in which those resources may best be employed - and hence by command will be employed - to maximize the likelihood of maintaining or regaining and then maintaining a safe and efficient passage. And while in these respects this language is uniquely precise, its metaphoric use in great many situations is occasioned by its likewise unique capacity to detail the great many circumstances which can arise during a passage at sea and the means and ways of addressing those circumstances and especially those which threaten the maintenance of a safe and efficient passage.

#### Departure

Prior to departing a dock so as to proceed to sea, a vessel has to be "fully readied for sea" and also "cleared to sail", i.e., have all of her papers in order, as well as "a clean bill of health." \*\*\* With these things accomplished, "she" would be cleared to depart when there was no traffic which would have it otherwise. While such phrasings as these were somehow frequently used to indicate a readiness to start a

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\* It should also be noted here that with the M & M contracts the Port of Oakland was by 1969 the nation's second largest container port, the first being that of greater New York. But with this, it must be noted, too, that with the expiration of the second M & M on July 1, 1971, there began the longest strike in the history of the nation's maritime industry. Thus, having been interrupted by a Taft-Hartley law injunction obtained by President Nixon, it resumed in 1972 to also then last 135 days.

\*\* According to Kemp, (ibid, . p. 474) the use of the word "leg" to refer to a stage of an activity comes from its use by seamen for "the run or distance made on a single tack of a sailing vessel." And having said that "tack" refers to "the operation of bringing a sailing vessel to wind and across it so as to bring the wind on the opposite side of the vessel" (p. 853), he shortly thereafter adds this: "When a sailing vessel wishes to make up to windward, she can only do so by tacking, crossing the wind continuously to make a series of legs, of which the net distance gained is to windward,"

\*\*\* See Kemp, *op. cit*, p. 170 for some of the great many uses of "cleared to".

longshore job which soon was to commence, the actual commencement of such was often preceded by such ancient and universal phrasings as these: stand by to hoist sail -- stand by to loose sail - stand by to shake out the reefs -- the crew is at their stations. And were the vessel (or longshore "crew") to depart from what had been viewed as an "anchorage", e.g., a waterfront cafe, such as this might also then be observed: "She's apeak" or "We're apeak", i.e., the bows of the vessel have been drawn directly over the anchor and it can hence be broken free and hoisted.

### Gathering Way

Once underway, the first report as to any enterprise might be offered thusly: we're steering --- we're gathering way we've got way - we've got passage the sails are drawing we're forging ahead.

### Under way with good passage

As it happens, there are also a number of ancient and universally used phrasings for describing a "good leg" and the technical conditions by which such passage was being enjoyed. Such might also be used in any subsequent report or observation as to virtually any enterprise: we're on the wind -- we're running before the wind -- we're sailing free -- we're full and by -- we're wing and wing -- we're booming. And a phrasing which has long since passed into common parlance might also be employed: we're three sheets (i.e, sails) into the wind.

### Beating to windward

When a particular leg \* or, to speak more accurately, a particular "run" \*\* was being affected with a measure of effort, phrasings which are anciently and universally associated with a vessel being successively tacked from port to starboard and back were also frequently employed. Thus, for example, and in reference to any undertaking, the following might be observed: we're about to beat to windward, again -- we're hauled flat, again - the sails are drawing full, again - we're coming into another good run.

With these few examples, several additional observations as to the use of these and other such phrasings should also be offered. To begin with, then, the perspective from which such phrasings are voiced will dictate the pronoun used. For example, one might say "I'm gathering way" - "You're gathering way" - "We're gathering way" - "They're gathering way" -- "It's gathering way", i.e., when referring to any enterprise -- "She's gathering way", i.e., when literally referring to some particular female who is known by the speaker and his listener(s), or to a ship or to any enterprise. And at the same time, the enterprise or activity which is so referred to can be one which is being undertaken by the person speaking either alone or with others, by another individual, who may or may not be the person addressed, or by a group of persons of which the person(s) addressed may or may not be a members. For example, a San Francisco docker might report "We're gathering way" and thus make a statement about a relationship which he had recently come to have with a woman who was also

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\* It should be noted that such a "leg" or "run", as is also so of all other which here will be set out, excepting those of "departure" and "arrival", will usually be made any number of times during as a passage at sea, as well as during any enterprise.

\*\* Literally speaking, a "run" is a course upon which good sailing before the wind can be made.



known or known about by his listener. He might also be reporting on a leisure-time activity which he and his family had recently begun to enjoy, or on "the labor movement" or "the working class". Such phrasings as those already cited, were also often voiced as a command, either real or mock, or as counsel or advice, or as a report or an observation. For example: Stand by the shake out the reefs (a part of a sail "taken in" to reduce its size), You'd best stand by to shake out the reefs -- We're standing by the shake out the reefs. And as order or counsel or report or observation such phrasings could also often be addressed to all of the types of listeners already cited, too. And for the most part, such phrasings might also be employed, not only in every tense, but as different parts of speech. Thus, once more, for example: We're sailing free -- With luck we'll sail free before we lose the sun -- We'd best sail free in a day or two.

Since many such phrasings may now be seen to have come from the age of sail, it perhaps should be noted that after a voyage from Wellington, New Zealand in fifty-six days, the PARMIR, a four masted barque, was the last square-rigged vessel to commercially call at the Port of San Francisco. And having arrived on November 30, 1944 with 1000 tons of tallow, she also departed with general cargo for the Port of Wellington. And with canvas also quite common in the Alaska fishing trade and the coastal lumber trade up to the late-thirties, some of those dockers throughout that time occasionally "manned and worked the yards" while on a leave of absence. And, indeed, a few of them also did that when canvas in the lumber trade had something of a revival during World War II. \* And, as it thus happened, a goodly number of San Francisco dockers who prided themselves as "canvas sailors now on-the-beach" and who had played a role in union events since the 30's thirties continued to work on the front into the early 60's. And as the union's "culture bearers" *par excellence*, those dockers especially occasioned the continued use of a language of sail.

### Altering course\*\*

As with any purposeful enterprise, it is often necessary to alter the course of a vessel's passage. And, as a result, an ever-growing number of San Francisco dockers found use for the phrasings spawned by such need when urging a "yes" to the first M & M. Thus, for example, and, of course, by all report, those of such persuasion had begun to argue the following by the end of the fifties: We'd best come about - we'd best put the rudder over -- we'd best ease off (which is to say, we'd best ease off the wind). And by the early sixties, those who had so argued, were also using the phrasings spawned by the need to avoid collisions at sea: We'd best give way -- We're the burdened vessel -- They're showing their starboard light. And, thus, too, it should be explained that when two vessels approach one another on what could be a collision course, the international "Rules of the Road" will define one of them as "the privil-

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\* Since the "steam schooners" used in this trade were sometimes steadied by a spread of canvas when at sea, as well as when at anchor, it should also be noted that it was not until 1978 that a section of West Coast docker agreement which dealt with the work which they were to do aboard those vessels was at long last finally deleted.

\*\* In proceeding, again, the ways in which the phrasing to be cited might also be delivered as a command, either for real or by way of humor, or as council, advice, or admonishment, or as report or observation no longer need to be noted. And there also is little need to further suggest the many social settings and the very wide range of circumstance in which all of such phrasings could also often be heard. In other words, the reader may now be left to imagine the ways in which such phrasings might be voiced on-the-job, in discussions of union matters, and in conversations with family, friends, and neighbor and persons somehow just met in other social settings.

ged vessel" and the other, of course, as "the burdened one". And needless to say, perhaps, but it is the burdened vessel which is thus obliged to alter its course and *I* or speed so as to avoid collision. And given the last of these phrasings, it should also be noted that with very few exceptions the vessel deemed the privileged one is defined as the one which to the other is showing her green navigation light. \*

While phrasings of this sort were also commonly voiced within the context of the disputes and conflict generated by a new technology, they and other such phrasings were also routinely used in a wide range of settings. Thus, for example, if a pal got into an argument when he was in a bar, he might be advised "to tiller up" -- to alter course away from the wind. Such counsel might be proceeded, too, by an observation which, again, could be widely employed: I think we're crowding that vessel, And at the same time, such phrasings were often employed to convey an encompassing proposition: "When it comes to cops, you're always the burdened vessel."

### We'll need more steam in these seas

This phrasing was not infrequently heard when to the docker who mused it the activity being referred to had come to require a faster and / or more forceful development, Others of a similar meaning and currency were also available, Thus, pensioners when talking about the presidential campaign of McGovern in 1968 could often be heard to say things of this order: Well, fact is, they need to spread more canvas. And when they were discussing the then ongoing effort to "rebuild" the Steward Council of the San Francisco local they often observed something like: The council won't go, if you don't hoist more sail,"

### We'd best shorten sail

When it was thought, however, that a council program sponsored was somehow developing too fast or forcefully or, of course, both, it might be suggested that some sail should be lowered. Such suggestion might also be preceded by an observation: She's got too much way." And such an activity might also be aborted with this finally concluded, too: We'd do best to spill our wind. And phrasings of this sort were also commonly heard when someone on the job thought that a hoist should be aborted:: We'd best slack the gear - meaning that the strain being put upon the gear was beginning to pose a danger - or "We'd best ease off" - which is to say, that the end being sought cannot be thereby gained. Such phrasings, once again, were also widely employed. Thus, for example, if during the course of a union meeting an officer somehow relented on a program he had been pushing, it might thereafter be observed: "He really shortened sail tonight." Such were also often invoked when social relations were being discussed. Thus, if a docker or some other friend was somehow having trouble in his relationship with his wife or some other woman or with a daughter or

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\* The author learned of these lights from a gang winch driver who had sailed in the coastal lumber trade before and after the '34 strike. And that began with a smile and a question from him: "What's the color of port wine"- - to which I smiled and nodded "red", And with that, he told me this: "And with that so, the red steaming light is on the port side of the vessel." And then he asked me this: "And - in politics - on what side are the so-called 'reds'? "- to which I smiled "on the left." And with that, he said this: "And, then, so, too, the red light is on your left when you're facing the bow." And, then, as it happened, he smiled, again, as he told me this: "The left and right in politics -- and, course, the *ultra*-middle, too -- come from the way political parties were long ago seated in the French parliament as they faced the podium."

son or, of course, anyone else, he might be advised or himself conclude "To slack the gear" or "shorten sail". On the other hand, a man might in this manner also thus complain to a pal: "She don't know when to slack the gear." And another such phrasing which also was often heard was: "You'd best furl your jib." Since, however, a use of that phrasing assumes that the person addressed understands that "the cut" of his or her "jib" refers to a person's manner and demeanor, it should also perhaps be added that the person so addressed was being urged to be more relax.

### We'd best muster a bow and mast watch

At any juncture in virtually any "passage" which is, again, to say, any enterprise, activity or relationship, the need for caution might also be sounded for any number of reasons and in any number of ways. Perhaps, however, the most general and encompassing phrasings for any such warning were these: we'd best batten down, i.e., the hatches -- we'd best call the men to quarters -- keep the fire watch handy - tell the lookouts stay alert - we're passing into the shoals, i.e., into the shoal waters of a passage at hand - the wind could now jibe the mainsail with force (and, dangerously so, of course) -- secure the vessel in all respects, which is to say for heavy seas and weather. And, as a rule, of course, this very encompassing counsel for caution was also available: "We'd best heave to." And, indeed, such was often sounded since a vessel is said to be "heaved to" when she has been completely stopped, but is also fully prepared to proceed.

As might be supposed, other such general phrasings were also often used to warn of a danger. For example, when caution was advisable since a thing unexpected had occurred or was then developing, there was commonly a call "to cast the lead", i.e., to take a sounding. \* or an advisement such as this: "Keep eyeing the barometer." And any number of warnings were also frequently sounded when an evolving circumstance seemed likely destined to pose a threat. Thus, for example: "And on this run we'll need extra care" and "This will call for very careful nursing."

### Avast your heaving

This phrasing or a variation thereof was commonly used when it was felt by the speaker that something which was being done or an enterprise or relationship was to be terminated or should be terminated. All such phrasings meant "Stop what you're doing." Since, however, "Avast your heaving and just lie to" was the most commonly used, it should also be noted that a vessel is said "to be lying to" when her position is being maintained, but without her being anchored.\*\* And thus when used on the job or *vis-a-vis* an activity, such use would accordingly mean: "Stop what you're doing and stand-by" and hence, as well, "Stop what you're doing, but be prepared to proceed." And when used as social advice - "You'd be well advised to avast your heaving and just lie to" -- this would be its meaning: "Stop what you're doing, but be prepared to proceed as things further develop."

Given this use of "lie to", a variation of it might also stand alone -- e.g., we'd best lie to. Since, however, vessels are perhaps most commonly caused "to just lie to" because of stormy seas, such a use usually presupposed the development of conditions unfavorable to progress. In other words, "we'd best lie to" routinely meant "We'd

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\* Once a call to cast the lead had been sounded, the urgency of the matter thus being addressed might also be signified by an adding of this: "... and arm it, too." This meant that those in the drill were to place on the lead a sticky wax so the nature of the bottom, as well as the depth of the water, could be determined.

best lie to in a sea and weather like this." And for this reason, too, a variation quite commonly heard was this: "We'd best bring to," i.e., "We'd best stop by heading into the wind." And, so, too, a further variation was: "We'd best bring to and proceed to anchor." And all such counsel might also be conveyed by this: "We'd do best to ready our grounding tackle," i.e., to ready the gear for coming to anchor. And it follows, too, of course, that "We'd best have our grounding tackle in order" was a warning which could be sounded at any time during any enterprise with its meaning being this: "Since heavy seas may soon be encountered, we'd best prepare in all respects to seek an anchorage."

### The storm is upon us

As already indicated, the vocational language in question offered a host of phrasings to describe conditions which could impede or threaten a passage. And, thus, too, such phrasings as these were also employed when such a condition had come to be posed for those involved in any enterprise: the weather is closing down - there's a squall brewing we're steaming into heavy seas - we soon will labor in heavy seas -- the seas are now choppy and confused -- we're now in the chops of this channel -- we now are in a cross sea. \* And with such things developing, there were also many phrasings to indicate what therefore was occurring or soon would occur: we're losing way - we're about to spill our wind - our sails are going aback - we soon will be adrift - we're about to be dismasted -- our canvas will soon go by the board \*\* -- we're acquiring sternway -- we have lost steam -- our lee rail is completely awash -- we're awash from stem to stern -- we're badly out of trim -- we're shipping seas - we're clawing off, but about to go aground \*\*\* -- we've been beached - we've been beached -- we've been holed. Such phrasings, of course, thus also marked a reduction of options with respect to the means for regaining a safe and efficient passage. And with this so, the most inclusive of all such phrasings was the very precise and pungent - "we're in irons". This was said of a vessel when it was so caught by the wind that she could not alter course. And thus with respect to any relationship or any enterprise such might finally be observed too: "I'm in irons" -- "We're in irons" -- "They're in irons." And with such circumstance, this might be counseled, too: "We'd best lie to and scud this out with bare poles," i.e., with no sail at all or only so much as might establish steerage. On the other hand, the final consequence of any such "worst scenario" might also thus be sounded so as to mark the end of any enterprise: she's on her beam ends -- we're about to heel over -- we're about to founder.

### The seas and weather are settling down

If and when, however, such unhappy conditions began to pass and a good and safe passage was being regained, such phrasings as these would presently be voiced: the worst is now over -- sure was a blow, but ship and crew did well clear sailing ahead - we'll soon have a run -- relieve the bow and mast watch - ahead two-thirds -- you may pipe the men to their quarters.

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\* A cross sea may be produced by strong winds working at an angle to a strong tidal current. Such may also be produced when having whipped up the sea, the direction of a gale, but not its velocity, is suddenly changed.

\*\* Having been snapped off close to "the board", i. e., the deck, the masts will soon go overboard.

\*\*\* To "claw off" is to be beating windward (sailing in the direction from which the wind is blowing) in an attempt to avoid being driven ashore.

## The promise of "land ho"

With good and safe passage regained and maintained and a "land ho" finally hailed, such would also soon be heard: keep a sharp eye for our first beacon and now with a second, we'll have a cross-bearing. . you may proceed to our channel markers, And, hence, shortly, too, such phrasings as these would often be voiced with a smile: slow ahead to the engine., you may proceed to berth steady -- steady -- steady as she goes . . . ease - ease . . . slack the afterlines . . . to the engine, slow reverse . . . to the engine, stop and secure."

### The Language of Daily Passage -- on what had become an "old-time" job - c. 1965

With these things said, the discussion may turn to the phrasings of passage and command which to the mid - sixties or so were routinely voiced on every "on the job passage" and, of course, elsewhere, too, by members of a San Francisco gang and, as was earlier noted, especially by those who thus were stationed in the hold. \*

## Turning to

Those of the maritime vocations and callings have for centuries used the expression "turn to" and variations thereof to indicate such types of "departures" as the following: (1) the start of a regularly scheduled work shift, (2) the resumption of work after a break to eat (3) the start of some particular work -- and hence of a "leg" or "run" - during the course of a shift, (4) the resumption of activity after a rest period or operational lull, and (5) the start of such activities as may be required during an emergency. Thus, for example, a watch aboard a vessel is said to be "turned to" when it is called to its regularly scheduled duty and station. And those of a deck department may also report that they were "turned to with holy stones" during the course of a watch. \*\* And during a watch, it might also be necessary "to turn a fire watch to." While the San Francisco dockers of the early 1960's commonly used this phrasing in such ways, they also routinely used it in many circumstances. Thus, for example:

A chairman when calling a union committee to order -

Okay, fellas, we got to turn to -- Okay, brothers, let's turn to --

Or, of course, with a smile --

I want a motion for us to turn to.

When discussing a union or other social event:

Me and the family will turn to for that -- Me and her turned to for that.

When discussing an altercation or a disagreement:

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\* As already noted, of course, all of the phrasings "passed on" in this paper had also been passed on, at least, to some extent, to all of those then working on the San Francisco waterfront.

\*\* The stone thus referred to is a soft sandstone which was used to scrub and maintain wooden decks. And, as it happened, sailors called them a "Bible", too, since their use required a kneeling position. And, hence, for example: "We'll soon turn to with Bible in hand." And, thus, too, an old salt in the hold might also jokingly complain of an upcoming cargo of fishmeal or hides or bones: "And *now* we would be better off to *get* turned to with *Bible* in hand."

And then she *really* turned to on me -- And *that* sure led to a *real* turn to.

I want a motion for us to turn to.

When discussing a union or other social event:

Me and the family will turn to for that -- Me and her turned to for that.

When discussing an altercation or a disagreement:

And then she *really* turned to on me -- And *that* sure led to a *real* turn to.

In reference to a press report of a violent event:

And the cops turned a dog to on them.

The language associated with a ship's departure was also often employed as the morning "turn to" time approached. Thus, for example, and over a breakfast and coffee or a coffee and "Danish", the following would begin to be voiced in the cafes on the front some fifteen minutes before starting time: "We'd best cast off with our turn to time being so near." And then there was also this if a good pal had not yet finished his black coffee with cognac "eye-opener": "With turn to time being so near, you'd best come apeak that anchorage." And since it long had been agreed that the turning to of dockers would only occur at the gate of the pier or terminal to which they had been dispatched, rather than, for instance, at the side of the vessel to be worked, all dockers would so gather with a few minutes to spare so as to report to the boss they would have for the day. And depending on what those from the hall had been dispatched to do, that would mean a "morning, how do?" to a gang boss and the members of his gang, or to the "ship walking boss" or the "dock walking boss" dispatched to the vessel in question. \* with that, they would be told by their boss where on the ship or dock they would begin the day and also then hear a "see you there". And at starting time, it was the ship walker who would somehow holler an "Okay, fellas, turn to time" -- to which was often added: "... And muster at the gangway."

### The Gangway Lecture \*\*

When told to so assemble, that was so the ship walker - and occasionally, too, the dock walking boss, and less frequently, too, the superintendent of the stevedore

\* Up to the strike of 1948, ship and dock walking bosses had been members of the San Francisco longshore local, Local 10, and, as such, had also been dispatched from its hiring hall to "walk" the ship or the dock so as to direct and supervise the work of the dockers. With that strike and the 1947 Taft-Hartley labor law which prohibited unionization of supervisory personnel, a walking boss local (Local 91) with a hiring hall such as that of the dockers was established, the initial members of which were those who prior to the strike had been so dispatched and employed. And as in the past, additions to the walking boss ranks would continue for many years to solely from the Local 10 ranks of gang bosses. And while that is no longer true, for reasons which will later be set out, all new members of Local 91 still come from the ranks of 10. It should also be noted that when gangs were being employed the ship walker was obliged to perform his duties by speaking to the gang bosses, rather than the dockers.

\*\* The dockers gave this cynical title to such talks since virtually all of them felt that their employers ordered them held so as to then report on their continuous safety program to their insurance carriers. And thus was spawned, as soon will be noted, the dockers joking about them both on the job and off.

company (the employer of the walkers and dockers) -- might advise all hands of any hazardous or somehow special cargo slated to be handled, e.g., crated plate glass or an insecticide, and also of any "extra precautions" which they were to take for whatever reason. But with or without such special advisements, the audience so gathered would be reminded of some of their standing orders as to safety on the job. And, as a result, the first of the things thus said would often relate somehow to the opening "slogans" of the party's enforcable safety code which as a part of their contract, they had signed since 1949 (Rule 101):

The parties reaffirm the following slogans, originally adopted in 1949, which express the spirit in which the Safety Code is written. However, the conduct of operations shall be governed by the specific rules included in the Code.

In a question of convenience vs. safety, safety first.

In a question of comfort vs. safety, safety first,

In a question of tonnage vs. safety, safety first. \*

And the sort of standing order which was usually mentioned first also often related to the ongoing need to "make ready" for the successive "legs" of the work at hand. Thus, for example: "Things will be properly readied" -- "Things will be eyed before they're taken into use" -- "All things will be attended." And then such orders might also be more specific: "And every block must run free" \*\* -- "And stays and shrouds must be in place" \*\*\* -- "And all guys must be properly rigged" ^ -- "And, as always, the lines must lead well up the dock" ^^ -- And, mind, too, make up your lines as you proceed" ^^ ^ And, with such said, they often began to relate to the manner in which each leg would be "run": "Things will be kept in good order" -- "And nothing under foot" -- "And do your housecleaning as you go along" -- ". . . and, course, with need, pipe your sweepers to start their brooms." And, of course, too, this was often sounded: "All things at all times will be shipshape."

As might be supposed, such remarks were also routinely brought to a close with very broad standing orders related to the ongoing operational need for docker

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\* Given the way these slogans are introduced, Rule 102 must also be cited: "The purpose of this Code is to provide minimum requirements for safety of life, limb and health. In cases of practical difficulty or unnecessary hardship an employer or ship may make exceptions from the literal requirements of this Code and permit the use of other devices or methods, but only when it is clearly evident that equivalent protection is provided."

\*\* This rule is firmly rooted in the ancient safety practice of eyeing the blocks of all ship gear prior to their being put to use.

\*\*\* This refers to the ongoing need to have the standing gear of a conventional ship fully and safely secured prior to any hoist.

^ And this refers to ongoing need to have the running gear of a conventional ship fully and safely rigged prior to any hoist. For the location and also the nomenclature of the standing and running gear of a "conventional" cargo vessel, see the illustrations on pages 18 and 19 below and the "key" for them on p. 20.

^^ This was a standing order" because the fore and aft mooring lines of a vessel must lead well up the dock so as to minimize its fore and aft movement against the dock to which it is moored. When used as a metaphor, as it is here, it means that a measure of stability must be insured prior to the commencement of any activity.

^^^ Broadly speaking, this means that every unnecessary obstruction is to be removed from the location being worked.

"discipline". Thus, for example, such would be finally said: "... And we *all* know what is expected" -- "... So do the right thing - and do it all day" -- "... And stay on station in *all* respects" -- "... and mark well your duty in *every* respect." And with such said, the ship walker would address the dock walking boss and the gang bosses with something like this: "And - so, for the the gaffers I now get to *this*: pipe your men to their stations." And, of course, with that, such would finally be sounded: "Okay, men, *we've* been turned to" or "The pipe has sounded, fellas."

As already suggested, the dockers as they then moved to their work commonly joked and often, too, very pointedly so, about what they had just heard. But it also should be noted that the reasons they had for so doing also perhaps occasioned this: the things thus heard were thereafter repeated only very infrequently by a walking or gang boss and never by a company superintendent. And if a walker or gang boss deemed it necessary to repeat such an order or phrasing, such was always voiced - at least, at first - in a brotherly and jocular way. And that was so, evidently, because they found it awkward - and even, indeed, embarrassing - to have to remind a docker of something axiomatic. But by the same token, if such a reminder was to go unheeded, they clearly felt more justified and comfortable with a subsequent "return to the hall," i.e., an on-the-job firing, of the offender(s). \* On the other hand, all of the dockers routinely laced their on-the-job talk with many such orders and phrasings. And, indeed, they were a part of the continuous banter and joshing which those in the hold routinely enjoyed. When, however, any docker felt that he had to remind a member of the group which he was working with that he was expected to stay on his station or to "really *shake* hands with the cargo", there would often be no humor at all or even, at times, civility in his manner of speech. On the other hand, and even then, the initial rebuke delivered - and, hence, with a proper response, the only one delivered - would often be concluded with this profoundly fraternal one which, as a rule, too, was then conveyed in a bantering tone of voice: "So - do the right thing -- whatever it is." And thus it was acknowledged that the offender was fully aware of what would be "the right thing to do" because he knew full well the maxims, saws, and admonishments and all of the standing orders which set out his on-the-job duties of a docker and union brother. And, of course, it was also thereby assumed that those duties were central to his consciousness as worker and trade unionist. \*\*

### Rigging the gear

Having ascended the gangway, the shipboard men moved to the hatch they had

\* After such a firing, the gaffer involved would often say what virtually every docker would say in a somehow similar circumstance: "Command of the rudder must be maintained."

\*\* As had surely been so since 1937, the effort made by San Francisco dockers in the early sixties to create and maintain an on-the-job and union-measured discipline when working conventional vessels and the reasons they had for doing so are detailed the author's published papers. Those papers also stress that the dockers so employed - as had also been so for all of those who had gone before them - were expected by those they were working with, not to do "crackerjack" work, but simply to do their best and, hopefully, for the length of the shift. And by the same token, all of the dockers of that day - as had also been so for all of their predecessors since the strike of '34 - had the union duty to defend and protect every docker and every newcomer who was doing their best. And, hence, too, those papers detail the reasons why the dockers so employed could take a real pride in their work and their frequent expressions of brotherhood both during and through its performance.



drawn for the day by the inshore fore-and-aft passage way on the ship's weather deck. And when so assembled, each gang proceeded to rig the ship's gear which they would use as they started the day. \* And, as a rule, each gang would "burton" their gear into a "union purchase" so as to then "uncover" their hatch to thereby allow the holdmen to "go below" to then begin the discharge or loading of cargo. \*\* On the other hand, there could be "deck-loaded" cargoes which had to be discharged before the hatch could be "uncovered". And depending upon the size and weight of any such cargo, the gear might have to be rigged in one or another of the ways which now will also be set out. And, of course, too, the loading or discharge of differing cargoes throughout the day would often require a "re-rigging of gear" to one of these several ways. In any event, such various ways of rigging of gear may best be set out as they were by the Steward Council of Local 10 in 1967 for "new hires" and those "brushing up". And that was by using these opening "cargo handling" sections of chapter 9 of Austin Knight's Modern Seamanship. \*\*\*

9.1. Topping and Spotting Booms. Standard cargo booms are capable of handling at least 5 tons. However, the standard booms on the more recent ships are of at least 10 tons' capacity. Booms must be topped (vertical movement) and spotted (horizontal movement) and then secured in position before cargo can be worked.

To position and secure a boom, a knowledge both of the nomenclature (see Fig. 9.1) and of deck seamanship procedures is required.

1. After determining that all winch controls are set in the OFF position, request "Power on Deck." (Steam winches should be drained before use.)
2. Test the winches.
3. Assign men to winches, guys, whips, topping lift, and gypsy heads.
4. Lay out guys and preventers to proper fittings.
5. Lay out topping lift wire or bull line along the deck. Take five or six turns with topping lift wire, or bull line, around gypsy head in the opposite way from the whip (if the whip goes over the top of the drum, run the topping lift wire underneath the gypsy head). A man should be positioned as back-up man on the topping lift.

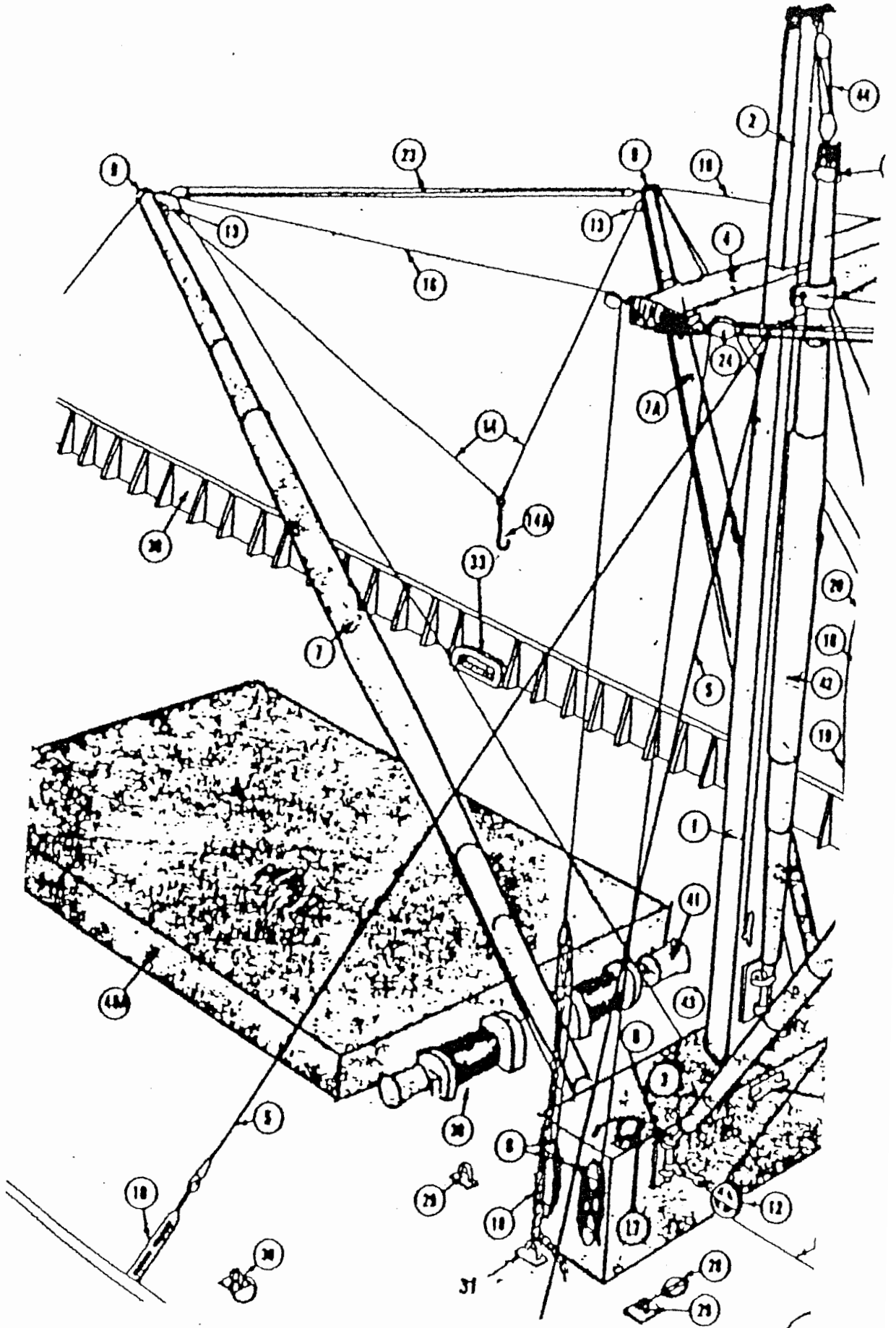
Tending the gypsy is the key job in topping or lowering booms. Five or six round turns about the gypsy are recommended when working with wire rope. Fewer turns are likely to slip, and more turns are likely to form slack in the

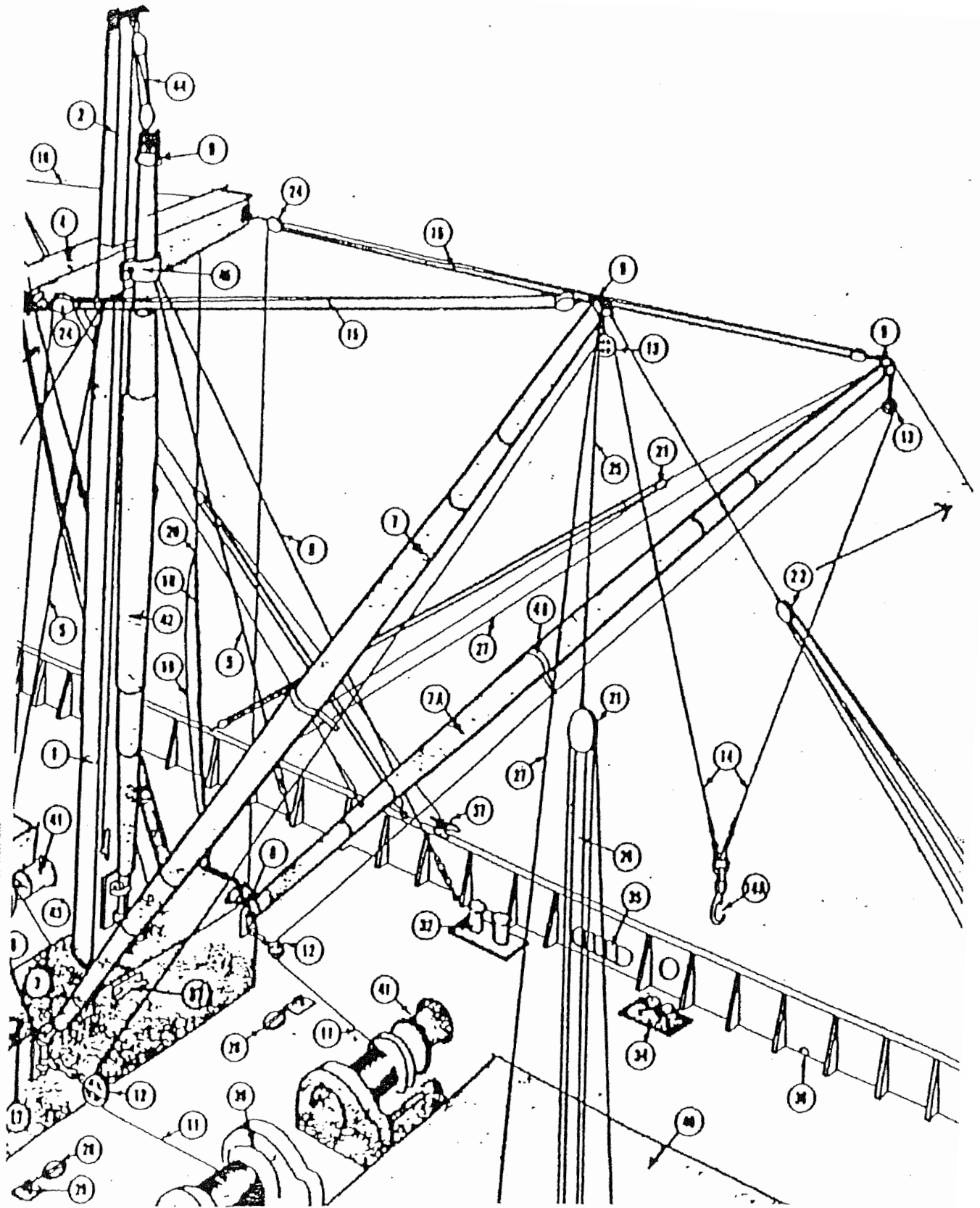


\* Were it to finish the discharge and loading of the hatch at which it had started the day, a gang could be "shifted" to another hatch to also begin by rigging its gear.

\*\* See pp. 18 - 19 for diagrams of "burtoned" gear and therefore, too, of a "union purchase." And see p. 20 for the nomenclature of "conventional" gear so rigged.

\*\*\* Austin M. Knight, Modern Seamanship, U. S. Naval Academy, 1901, Fourteenth Edition - Revised by Captain John V. Noel, Jr. - 1966. This work was copyrighted in 1901, 1910, 1914, 1917, 1921, 1930, 1937, 1945, 1953, 1960, and 1966. While Knight held the rank of Rear Admiral in the US Navy and thus emphasized naval seamanship, his Chapter 9 is excellent in its concise detail and its diagrams.





## UNION PURCHASE (BURTONED) RIGGED GEAR NOMENCLATURE

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 - Mast<br>4 - Crosstree<br>7 - Hatch boom<br>7A - Yard boom<br>10 - Turnbuckle<br>13 - Head block<br>14A - Cargo hook<br>16 - Topping lift (single)<br>19 - Bull line<br>22 - Inboard, guy<br>24 - Topping lift block<br>27 - Preventer<br>30 - Padeye and ringbolt<br>33 - Closed chock<br>36 - Scupper<br>39 - Hatch winch<br>40A - Hatch coaming<br>43 - Gooseneck and step of jumbo boom<br>44 - Breasting- up tackle<br>46 - Slack wire fairlead | 2- Topmast<br>5- Shroud<br><br>8- Gooseneck<br>11- Cargo whip<br>14 - Cargo falls - whips -runners<br>15 - Topping lift (multiple)<br>17- Stopper chain<br>20 - Flounder<br>23 - Midship (schooner guy)<br>25 - Guy pendant<br>28 - Snatch block<br>31 - Shackles<br>34 - Open chock<br>37 - Cleat<br>40 - Cargo hatch<br>41' - Yard winch<br>45 - Boom gate collar | 3 - Mast table<br>6- Topping Bit <i>cleat</i><br><br>9 Linkband<br>12 - Heel block<br><br>18 - Bull chain<br>21 - Outboard guy<br><br>26 - Guy tackle<br>29 - Padeye<br>32 - Bitts<br>35 - Freeing port<br>38 - Bulwark<br><br>42. - Jumbo boom |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



This sketch of rigging the gear was made by Larry Yamamoto, a Local 10 pensioner. Brother Yamamoto, a new hire in 1959, had long been a gang winch driver prior to retiring. This work of his was also once used as a "Seasons Greetings" card by the union's International.

wire. These slack turns may fall over the edge of the gypsy and cause the boom to drop. It is a good practice to assign one or two men to back up the man on the gypsy. These men can keep the wire from kinking, keep it clear of the winch, and aid the man on the gypsy in case of trouble.

6. Assign one man to overhaul the whip as the boom is topped.

7. Raise boom to the desired height.

8. Secure topping lift as follows:

- a. *Single Topping Lift.* Shackle bull chain to pad eye as shown at (31) in Fig. 9.1, and slack off on the bull line until bull chain takes the strain. Throw bull line off the gypsy head and secure it to the topping lift cleat with a minimum of three round turns and three figure eights.
- b. *Multiple Topping Lift.* Apply stopper chain to topping lift wire, using stopper (rolling) hitch and two half hitches. Take turns around the wire with the remainder of the chain and hold it. Surge the topping lift wire until the stopper takes the strain and belay it as described for the single topping lift. Remove the stopper.

9. Spot booms in a working position by hauling on the guys. The yard boom is positioned over the pier, clear of the ship's side. The hatch boom is spotted slightly past the centerline over the hatch.

10. Set up on outboard guys and preventers. Guys should be slightly more taut than preventers. Set the inboard or midships guys as taut as possible by hand. Shackle the cargo whips to the cargo hook and pick up a load. Raise the load until the angle formed by the whips is about 120 degrees. Now equalize the outboard guys and preventers by easing off the guy tackles. As outboard guys and preventers are being equalized, take in all slack in the inboard or midship guys. It is a good practice, when originally spotting the booms, to swing them slightly wider than desired. When guys and preventers are equalized, the booms will move inboard into position.

There are several methods of raising and lowering booms. The standard practice is to apply the topping lift wire directly to the drum of the winch. This is the safest method, but the time required may be prohibitive.

Cargo ships being constructed, and some already in service, have special topping lift winches installed on the masts and king posts. These winches offer greater speed in raising and lowering booms. To top booms you merely run the winch until the boom is at the desired angle.

Another method of topping and lowering single topping lift booms is by means of the cargo whip which is led from the head block through a fairlead block at the base of the mast, then shackled to one of the top links of the bull chain. By taking in on the whip, the boom is raised; by slacking off, the boom is lowered. This is the least desirable method and should not be considered unless the other methods cannot be used.

**9.2. Yard-and-Stay Method.** In the yard-and-stay method of cargo handling, two booms are used. One of these booms is called the hatch boom and it plumbs the hatch. The other is called the yard boom and it is rigged out over the side so that it plumbs the dock or pier. (See Fig. 9.2.)

The cargo whips coming from the hatch and yard winches are rove through their respective heel and head blocks and are shackled to the same cargo hook.

If the whip has a thimble spliced in the end in the usual manner, it may be impossible to reeve the whip through the block, making it necessary to remove

the whip from the winch drum so that the winch end may be rove through.

Another method is often used by Navy ships on which cargo operations are not the rule and where cargo-working gear is struck below until needed. A large eye is formed by turning back the end of the whip upon itself and securing, with wire rope clips, the eye thus formed. It is thus an easy matter to remove the clips, reeve the whip through the blocks and replace the thimbles.

The winch controls are usually located in such a position that one man can operate both winches and have an unrestricted view of the hold.

A load is moved from hold to pier in the following manner: The yard whip is kept slack as the hatch whip hoists the load from the hold and clear of the

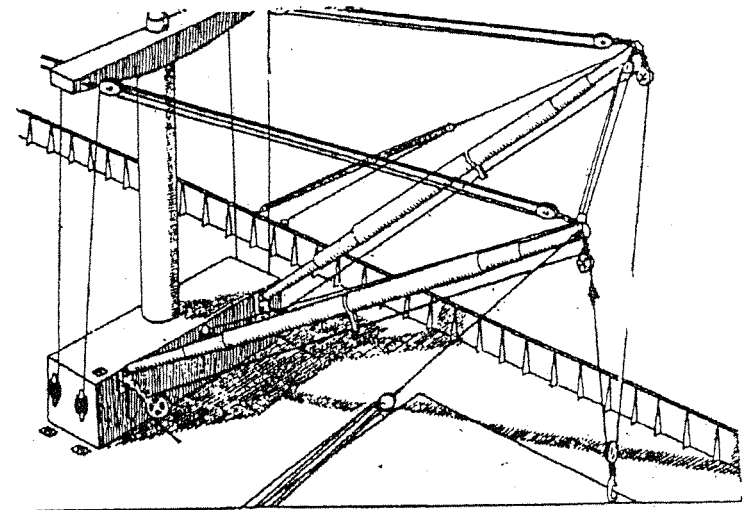


FIG. 9.2 YARD-AND-STAY WITH MIDSHIP GUY

coaming. Then, by heaving around on the yard whip and paying out on the hatch whip, the load is burtoned across the deck and over the side. When the load is plumbed under the yard boom, the hatch whip is slacked off and the yard whip lowers the load to the pier.

Nearly all methods of rigging yard-and-stay cargo-handling gear for heavy lifts require that the cargo whip be doubled-up and a block used. Doubling-up the whip accomplishes two things: it doubles the load that may be lifted by the whip, and it reduces the load on the winch by half.

Most yard-and-stay rigs use  $\frac{5}{8}$ -inch wire; therefore a block with at least a 12-inch sheave must be used for a runner block. Larger whips, of course, will require larger runner blocks ( $\frac{3}{4}$ -inch wire requires a 14-inch block).

The end of the whip may be secured in several ways. The best method is to shackle the eye of the whip to the upper end of the boom. (See Fig. 9.3.) This tends to keep the bight of the whip from turning on itself and becoming

wrapped up. It has the advantage of steadying the swing of the load in a fore-and-aft direction.

**9.3. Yard-and-Stay Double Purchase.** The chief advantage of the yard-and-stay double purchase is that lifts as heavy as the safe working load of the cargo booms can be handled at nearly the same rate as ordinary 1- or 1½-ton drafts. Light filler cargo encountered during the operation can be handled with scarcely any loss of time.

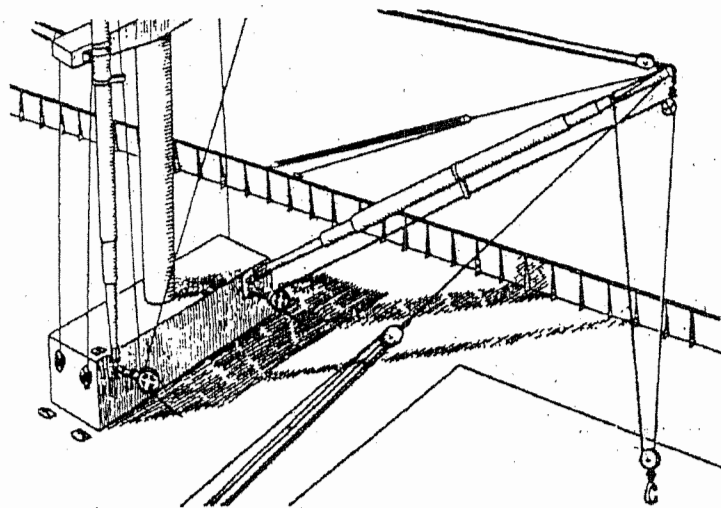


FIG. 9.3 SINGLE SWINGING BOOM WITH DOUBLE PURCHASE

The only difference between this rig and the ordinary yard-and-stay is that both cargo whips are doubled up and the runner blocks shackled to the cargo hook.

**9.4. Single Swinging Boom with Double Purchase.** The single swinging boom with double purchase is considered one of the best methods of rigging for handling loads beyond the capacity of a single whip up to the capacity of a single boom. It is quickly and easily rigged and has the added advantage of flexibility. Load may be placed at any point in the square of the hatch or on the deck.

The yard boom will be the one to be rigged, so the hatch boom is topped up and secured out of the way. (See Fig. 9.3.)

The procedure for rigging the boom is as follows:

1. Strip the hatch whip from its drum and replace it by the yard boom's topping lift wire. Make sure the topping lift wire has a fairlead. This can only be done with a boom which has a multiple topping lift.

2. See that the yard whip is long enough to permit doubling-up (250 to 300 feet).

3. Double-up whip.

4. Remove preventers from yard boom, and lead guys to proper fittings.

5. Top up the boom and swing into position by hauling on guy tackles. The hauling part of the guys may be fairled to winches at adjacent hatches, or men may be assigned to haul on the guys when swinging a load.

**9.5. Two Swinging Booms.** A load greater than the capacity of a single boom may be handled by using two booms working together as a single swing-

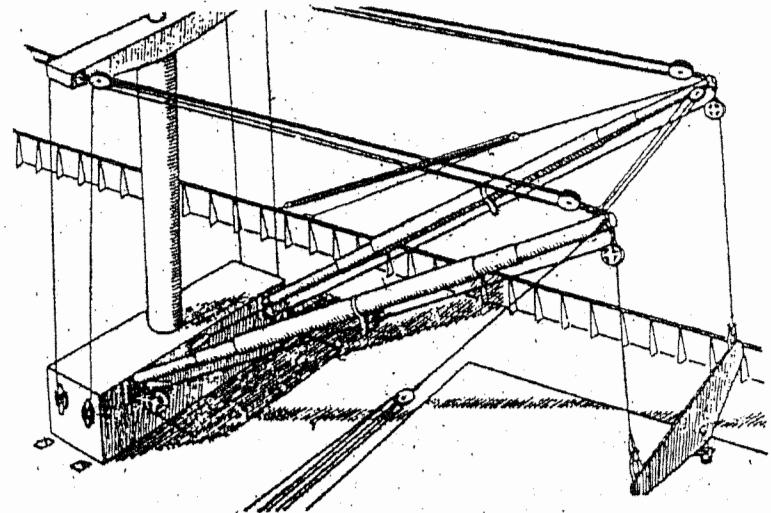


FIG. 9.4 TWO SWINGING BOOMS

ing boom. In this case, the whip of the two booms should be fastened to opposite ends of a lifting bar or strong back, as illustrated in Fig. 9.4. The lifting bar serves to equalize any difference in winch operation.

To move a load from the hold to the pier, it first is hoisted clear of the coaming. Then, by using the guys, both booms are swung in unison until the load is over the pier. The load is then lowered to the pier. Swinging the load is a difficult operation, and it may be necessary to set the load on deck to change the position of the booms. Because this rig is cumbersome and difficult to handle, it should be used with great caution.

**9.6. Block-in-Bight Method of Rigging a Double-Ganged Hatch.** Many ships have double-ganged hatches, i.e., they are equipped with two pairs of ordinary cargo booms. Handling heavy lifts at a hatch in this manner is facilitated by rigging all four booms as illustrated in Fig. 9.5.

The rigging procedure is as follows:

1. Reeve the forward hatch whip through a runner block, and shackle the eye to the eye of the after hatch whip. Reeve the forward yard whip through a runner block, and shackle it to the after yard whip.
2. Run the shackles joining the two sets of whips to within a few feet of the head blocks of the after booms.
3. Shackle the two runners blocks to the cargo hook.

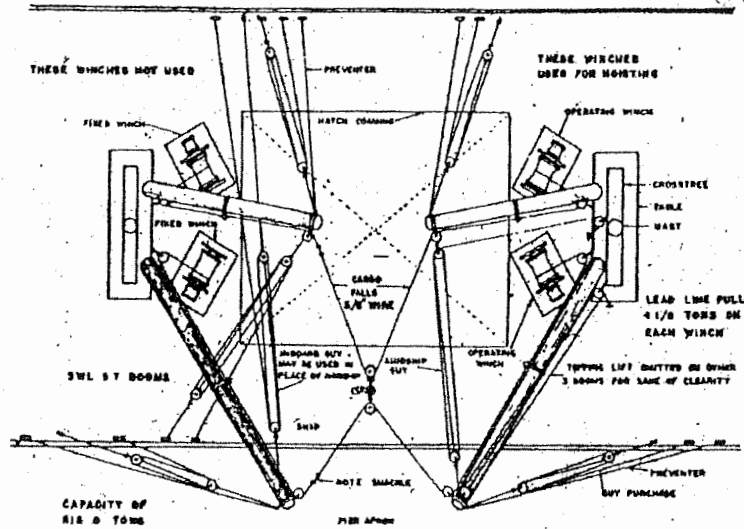


FIG. 9.5 RIGGING A DOUBLE-GANGED HATCH \*

4. Heavy lifts slightly less than the sum of the safe working load of two parts of the cargo whips may now be loaded, or discharged by the usual yard-and-stay method.
5. This rig has the advantage of being quickly rigged without the necessity of lowering the booms, and only two winches are required for its operation. In addition, the gear may be readily singled up for ordinary light loads.

These very instructive words, which, of course, have also included a portion of the ship and gear nomenclature commonly used by San Francisco dockers up to the early sixties are shortly thereafter followed by such words as to the rigging what they called, too, a "jumbo boom."

Most modern ships are fitted with jumbo booms of 30- or 50-ton capacity, normally located at one of the largest hatches of the vessel. Some Navy ships are equipped with 60-ton booms to handle the largest size LCM's. Installations on "Mariner" type cargo ships include a 50-ton boom at the No. 3 hatch and a 50-ton boom at the No. 6 hatch. (See Fig. 9.6.) Cargo ships being built in the "trade-in-build" program under subsidies by the government are now being equipped with cargo booms capable of up to 75 tons. Many are being equipped with "stulcken" booms, which have the ability to serve two adjacent hatches with a 75-ton capability. Additionally, most ships now being built are fitted

\* The words here lost were, of course, "DOUBLE-GANGED". But given the need for this note, this should also be noted: when in the early sixties two San Francisco gangs had been obliged to thus rig their two sets of gear, they said the gear was "frisco'd".

with quick-acting metal hatch covers in place of the older conventional hatch beams and boards.\*

Many ships used in task-force operations are provided with heavy lift gear at practically all hatches for the expeditious discharge of such heavy equipment as landing craft, tanks, and bulldozers. Practically all cargo-handling personnel operating in the field will have occasion to work heavy lift rigs, and for this reason must understand rigging and operating procedures of jumbo booms. (See Fig. 9.7.)

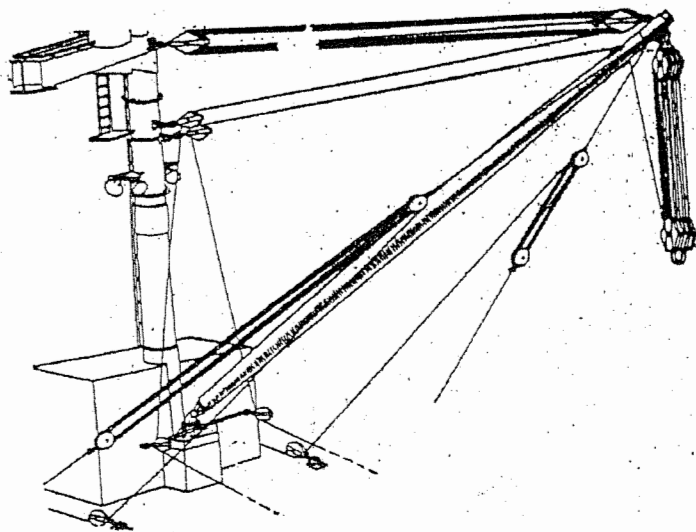


FIG. 9.7 JUMBO BOOM

Most jumbo booms are carried in an upright position, collared to the mast or king post and fully rigged, with topping lift, load purchase, and guy tackles already secured.

This first step in rigging a jumbo boom is to lead all purchases to power. Four sources of power are required. The load purchase and the topping lift wire are led through heel blocks to the winches at the hatch to be worked. The guy tackles are led out to proper fittings, and the hauling parts of the guys are led to adjacent sources of power. The winches at adjacent hatches may be utilized,

\* The "hatch covers" referred to were hydraulically or electrically folded and stood up - and thereafter chained together as a safety measure - as they were drawn to one of the ends of the hatch coaming. And as will soon be said, the "beams" here referred to were "strongbacks" to the dockers of San Francisco.

depending on the location of the boom.

To free the boom for use, it is necessary to send men aloft to release the collar that secures the boom to the mast.

Before making a hoist with a jumbo boom, all gear should be thoroughly checked to make sure blocks are running free and that none of the lines are chafing. Turns of wire on the drums of winches should lay tight and evenly around the drum. Guy tackles should be free of twists, and hauling parts of guys should fairlead to sources of power. Hasps and hooks of snatch blocks should be moused securely with seizing wire. Stays, shrouds, and preventers must be checked and tightened if necessary. This is extremely important, for it is possible to bring down a mast in attempting to handle a heavy lift.

Before a jumbo boom is operated, swing the ordinary cargo booms at the hatch clear of the working area. Generally, it is sufficient to swing these booms outboard against the shrouds and secure them with the guys. In working deck cargo, however, it may be necessary to top the booms very high in order to clear the deck space.

The head of the boom must be plumbed directly over the load and the slings carefully slung and shackled to the lower purchase block. Then the load is hoisted a few inches off the deck and all gear carefully checked for any indication of undue strain. Hoist the load carefully until it is clear of the hatch coaming. By heaving around on the guy tackles, the boom is now swung over the ship's side, and the load may then be set on pier.

One of the greatest difficulties in working a jumbo or heavy lift boom is handling the guys. Every change in position of the boom must be accompanied by a change in adjustment of the guys. When a boom is topped, the guys must be slacked off; when it is lowered, the guys must be taken in. To swing a boom, one guy must be heaved in on and the other slacked off, and this requires coordination between the men handling the guys.

When a boom is swung outboard or inboard, one guy may be considered as a "hauling" guy; the other, as the "following" guy. The latter is generally the troublemaker. Green hands often fail to ease off on this guy smartly enough and it parts with disastrous results. It is good practice to allow a small amount of slack in a following guy, but never enough to permit the boom to slap about.

A heavy lift suspended outboard from the head of a jumbo boom may cause a ship to develop a considerable list. This places a great deal of added strain on the guys. The boom has a natural tendency to swing outboard in the direction of the list, and if this is not properly controlled, a guy tackle may easily carry away.

Prior to these jumbo boom remarks, the author set out the following safety precautions as to the riggings he had to then discussed.



9.8. Safety Precautions. Because topping and lowering booms are dangerous operations, safety must be emphasized. Men must be cautioned to stay from under booms while raising or lowering operations are in progress. The deck should be kept as clear of loose gear and lines as possible. A clean and orderly deck is safest.

The stopper chain of the topping lift must be properly secured; otherwise serious accidents may result. A rolling hitch and two half-hitches with several round turns are recommended. They are applied quickly; hold securely, and may be removed easily.

Topping lift wire should be secured about the topping lift cleats with a minimum of three round turns followed by three figure eights. To prevent the last few turns from slipping off the cleat, mouse the last two figure eights. Never half-hitch a topping lift wire around a cleat. It may tighten and become virtually impossible to remove. In lowering a boom by surging, the mousing and the three figure eights are removed, after which the three or four turns are gradually surged. This should only be done by an experienced man.

When shackling a bull chain to a pad eye, the shackle should be inserted beneath the first slack link in the chain. Otherwise, this loose link and the shackle may crowd the bottom of the chain, thus causing dangerous distortion and strain.

**And after his jumbo boom remarks, Knight concluded his discussion of riggings by thus going back to his ever-present safety concerns.**

9.10. Precautions. Rigging and operation of cargo booms used for heavy lifts require skill, care, and common sense. There are many precautions to be observed, and to neglect any one is to invite trouble.

1. Don't overload. Make certain that the rig will make the lift safely; rig carefully and check each piece of gear as it is rigged. Check stays and shrouds.

2. Plumb the load directly under the boom head. Sling carefully and use dunnage or other suitable chafing gear at points where there may be chafing.

3. Check every part of the rig before picking up the load. Hoist the load a few inches off the deck, and check the rig for indications of undue strain.

4. Hoist, swing, and lower the load slowly and smoothly. Jerking causes terrific strain in the rig and can easily part something. Hoist loads only high enough to clear the coaming and bulwark. A particularly heavy load raised too high will affect the stability of the ship and may cause considerable list. Listing increases the strain on the guys and preventers and, therefore the danger of parting. If something does part when a load is raised high, the effect will be worse than if the load were lower.

5. WATCH while a load is being moved, and keep every part of the rig under constant observation. LISTEN for any change in sound. A wire or fiber rope will normally hum under strain, but when it starts to squeak or squeal, LOOK OUT. A faulty block may give warning by squeaking or groaning.

6. Keep unnecessary personnel out of the area; those concerned with the operation must keep alert.

7. LOOK ALIVE AND STAY ALIVE.

All safety precautions should be strictly observed by all hands at all times. The following list contains common sense precautions that all cargo handlers must observe.

1. Wear safe clothing and shoes. Do not wear trousers that are too long, and do not wear rings while at work.

2. Use the accommodation ladder or brow for boarding and leaving the ship.

3. Climb ladders in the hold only when hoist is not in motion.

4. Use the walkway on ship's side away from the side on which the hoist is operating.

5. Secure hatch rollers properly.

6. Lower blocks, crowbars, chain slings, bridles, etc., into the hold by cargo falls or other lines.

7. Pile hatch covers in an orderly manner.

8. Lay strongbacks flat so they will not tip over on personnel or be dragged into hatches or overboard by slingloads.

9. Stand in the clear when strongbacks and hatch covers are being handled on the deck above.
10. Stand in the clear away from suspended loads.
11. When steadying loads, do not stand between load and any fixed object. Always face the load and keep feet and hands in the clear.
12. Stand clear of slings being pulled from under loads by cargo falls.
13. When using a dragline to move cargo, stand out of the bight and clear of the throw of the block and hook.
14. Be especially attentive when handling objects with sharp or rough edges.
15. Learn to lift properly to prevent strain.
16. Always use a light when entering dark places.
17. Never walk backwards while working with or around cargo on board ship.
18. Step down from elevations—never jump down.
19. Bend over projecting nails in dunnage to prevent puncture wounds.
20. Report to your supervisor any defect in tools, materials, appliances, and gear.
21. When short pieces of dunnage are required, use only the proper cutting tools.
22. Report all injuries (even scratches, cuts, and splinters) to your supervisor and get immediate first-aid or medical attention.
23. Know the location of fire-alarm boxes and fire-fighting equipment.
24. Do not engage in horseplay, practical jokes, or arguments.

### The dockmen setting up.

As the gear was being rigged, the two "front men" for each gang - who worked beneath "the hook" on the dock were raising the doors of the cargo shed through which their gang's lift driver would pass with sling loads for and from the ship. They and their driver would then locate and ready the stevedore gear and tackle which - as "add ons" to the hook or blacksmith - their gang boss had said would be needed to hoist the first of their cargoes. And then they would locate and ready a covered water pail to send with a box of paper cups to the gang's holdmen. And having then cleared their work area of any debris or obstruction, they would construct a suitable seat or "house" for themselves or for any gang member on a break or any visitor pals. And with that, they'd stand by to secure a "saveall" -- a wide cargo net slung between the inshore edge of the ship's weather deck and the edge of the dock and beneath the path of "the hook" so as to stop anyone or any cargo from falling into the water. And if the gang was to be a "long" one, as with a coffee discharge, the dockers dispatched to the dock walking boss would - with a hearing from him - be "setting up" where they would start to de-palletize the loads discharged by the gang they had made "long".

### The holdmen uncovering.

With the gear rigged and with or without there having been a discharge of any deck cargo, \* the holdmen would begin to "uncover" the shelter deck of their hatch. \*\*

\* As might well be supposed, any loading of cargo to the weather deck was almost always delayed until all the work "below decks" had been completed and the hatch then "covered up".

\*\* As was so for all "uncovering" and, of course, all "covering up", for the holdmen this was an "all hands drill". It should also be noted that, since the "shelter" deck was between the weather deck and "lower 'tween", the dockers of San Francisco also called it the "upper 'tween".

This they did by removing its covering tarp which - as the ship had last been readied for sea -- had been battened down to it so as to protect its cargoes, as well as those below it, from any water damage. And with it folded as it was being removed, they would stow it by hand on the offshore weather deck, unless that was precluded by some cargo being there. And if that was the case, and it could be so kept inshore, that is where it would go. If, however, that also was precluded by a cargo being there, it would be hoisted ashore by one of the gang's winch drivers. \* And having been landed on a "four-wheeler" by the frontmen, it would be stowed on the dock or in the cargo shed having been pulled to where it came to rest by the gang's lift driver. \*\* In any event, the holdmen by hand would then remove the hatch boards on which the tarp had been spread. \*\*\* As a rule, they would be stowed as had the tarp. On the other hand, a number of the first removed boards were frequently used to construct a walkway for the hatch-tender's back-and-forth walk between that deck's inshore rail from which he could see the dockmen and thereby signal his partner and the hatch "coaming" from which he could also so signal by having the holdmen in sight. And having completed their hatch board removal and stow, the holdmen removed and also so used or also so stowed the structural members upon which those boards had rested and which also had kept them in place -- the "strongbacks". ^

\* With the job of winch driving having thus been mentioned, again, the following should be noted. As a rule, the two winch drivers, both of whom were almost always members of the gang - would alternate from driving the winches to "tending hatch" every two hours. And as for their work as hatchtenders, they then were by contract the "safety man" for their gang. And that was partly the case since they then controlled the movement of the hook or blacksmith by hand and voice signals to their winch driving partner when from his controls he could not see the dockmen. And if those controls were not right on or right above the hatch "coaming" (for which see footnote A below), the holdmen, too, would soon leave his sight. And when the hoist was made by a pair of separately driven steam winches, the two drivers required could only see the holdmen when they were working on deck and briefly when they were standing on shelter deck cargo. And with such gear, the offshore driver could never see the frontmen and the inshore driver, while he might see them at low tide, would always lose them from sight as the tide came in or the vessel rose in the water due to cargoes being discharged, e. g., on a "long steel" job. And thus on a "three-legged" jobs, the three rotating winch drivers were completely dependent upon their hatchtender's signals throughout the entire "passage".

\*\* See the appendix, p. 16 for a sketch of a four-wheeler being used in the hold. The sketch was done by Jacob Victor Arnautoff in 1967. He then was a member of Local 10, but later transferred to the Seattle local, from which he also retired. And also see p. 30 for a photo of four-wheelers parked on the dock so as to soon be hoisted aboard the vessel there on berth.

\*\*\* See the photo on p. 1 of the photo appendix. As is pictured there, hatch boards were commonly some eight feet long. And their two or so feet of width was made by two lengths of wood being held side-by-side by a metal strap secured across each of their ends. As may also be noted there, each board had a hand-hold at both ends,

^ See, again, the photo on p. 1 of the appendix. Since in that photo the second hatch from the camera had not been fully uncovered, its inshore coaming, but not its forward coaming, is visible. But with this, it should also be said that the coaming of a fully uncovered hatch extends around the four sides of the deck from which its hatch boards and strongbacks or its much larger and steel constructed "hatch covers" - as shown in the bottom photo on p. 4 of the appendix -- have been removed.

### Going below

When the shelter deck had cargoes which were to be discharged they were very frequently stowed to just below the strongbacks and sometimes even between them. In that event, the holdmen -- *having* eased themselves over the coaming -- would usually start their discharge by placing that cargo on pallet boards sent to them by the dock men. And if it were possible by reason of the size of the "square" \* the inshore and offshore hold men would both build such loads, but otherwise they would take turns in their building of one. In any event, they thus continued to "dig down" until they could also palletize whatever cargo was stowed in the "wings" of the hatch. \*\* And shortly after that, the most basic of their tasks was to move such cargo from its place of stow into the square so it then could be hoisted and sent to the dock. Such work would also be required when, as was generally the case, the forward and after ends of the hatch were also beneath the shelter deck. And while the various ways by which such movements were made will not be detailed here, it should nevertheless be noted that until they reached "the skin" of the shelter deck, i.e., the deck itself, the discharge of its wings would sometimes oblige the holdmen to continually extend a flooring from the "face" of the cargo which still was in stow to well beyond the closest edge of the square. \*\*\*

### Going further below

Having thus finished such discharge work as they had been ordered to do in the wings of the shelter deck, the holdmen would - as a rule - uncover its square as they had done on the weather deck. On the other hand, and if there were cargoes then on the dock which were destined for a shelter deck stowing, they would sometimes be loaded then, but only if they then would be at least three feet away from what thereafter *would* be an uncovered deck. ^ But having done on the shelter deck what discharge and loading there was to do, the "going below" would continue. And having reached the upper 'tween deck as they had done on the shelter deck or by climbing down its hatch ladder to reach the cargo to be discharged or, if not that, to reach the skin of that deck, they would begin and conclude their discharge and sometimes load some cargo, if that, again, could be done while leaving three feet of hatch space. And in either case, they then would uncover, again, so as to reach the lower 'tween and to there continue their discharge work and any such loading. And with such work concluded, they would uncover, again, so as to reach the lower hold. But because of the weight and the size of the cargoes which were commonly stowed in the lower hold of hatch #3 and hatch #4, their discharge and loading frequently required either the use of 'frisco'd gear or that of jumbo gear. \* And in any case, the descent of the holdmen into hatch #4 also routinely continued into offshore and inshore "deep tanks". And since "the shaft alley" -- which protected the propellor shaft as it ran 'aft from the

\* The square of the shelter deck or of any lower deck is the area directly beneath the four open sides of the deck above it.

\*\* The wings of a hatch is the space it has to the port and starboard of its square.

\*\*\* The last of such movements commonly extended to over sixty feet in the hatches which were located in a vessel's mid-section. As might be supposed, decisions regarding which of the stevedore's cargo-moving devices and which of his "add-ons" could best be so used would always depend on the nature, size, and weight of the cargo in question, as well as its place of stow and its packaging. For such work on a coffee discharge from a shelter deck, see pp. 13 - 14 of the appendix.

engine room -- lay between these tanks, their access was very restricted as compared to the decks above. And also as result, the holdmen stationed there routinely had to re-spot their booms and frequently, to re-rig them since to work the lower hold they had either been frisco'd with the gear of another gang or swung and raised completely out of the way so the jumbo gear could be used. In any event, however, the skills and experience of the winch drivers surely became even more important when deep tanks began to be worked.

### Loading commences

When their discharge was completed, holdmen routinely began a load-out of cargoes to all of the decks of their hatch by mostly doing in reverse what they had done when going below. \*\* But in so doing, they also brought to bear a far wider range of skill and experience than was required in a discharge. \*\*\* The reasons for that were several. So - first of all - their choice of "a line of stow" was necessarily based in part on the different configurations of the decks they worked. It was also based on where on each deck there were stanchions and other structural features around which cargo would have to be stowed. And more importantly, too, the line of their stow had to closely follow the stowage plan which, with the cargoes booked and their destinations, had been drawn up by the shipping and stevedore companies and then finalized by an officer of the ship and the union chief clerk. And most important of all, they had to achieve a "tight and proper stow" throughout the cargoes they loaded since even a very slight "shifting of cargo" as a result of heavy seas could lead to more shifting and thereby occasion a more serious and ever-increasingly threat to a vessel's stability. And, thus, in a word, such a stow was absolutely essential for the safety of crew and vessel. And, with this so, their use of wood for dunnage, which they cut to needed length, to help prevent any shifting was also very important at every stage of a load-out. And that, of course, too, was also especially so as they began "to go up with the cargo," i.e., to stack cargo 'atop of cargo. And having begun to do that, they would often see that because of the need they shortly would have to "go up", again, they had to "floor off" so as to have a standing space from which they could "go up", again. And, as a rule, of course, a "flooring off" and a "going up" would have to be repeated until the deck being worked had been loaded as planned. And sometimes in the wings, as well as in the square, they might build a "leg" on which they then could stand and which they

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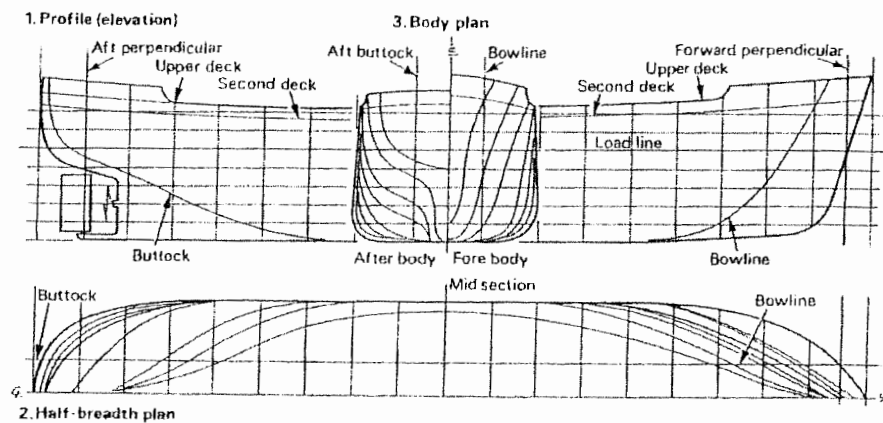
\* These two mid-section hatches were the largest on the vessels in question. As might then be supposed, hatch #3 was just forward of the "house", i.e., the vessel's superstructure, and hatch #4 was just 'aft of it. Each of them had two sets of gear and, hence, too, were commonly worked by two gangs. And hatch #3 was always outfitted with jumbo gear next to the house and hatch #4 sometimes was, too. And if their gear was to be 'frisco'd or if their jumbo was to be rigged, the gangs would work together until they retired the gear they thus had used and began to re-rig their own. In any event, the cargoes discharged from the lower hold of hatch #3 and #4 and those which were loaded to it, were routinely the heaviest, if not always the largest - which were stowed on the weather deck -- of all of the cargoes so carried to sea.

\*\* Some such cargoes may be viewed as they were stored on the dock on pp. 17-18 and 20 of the appendix.

\*\*\* This was so much the case that in the early days of the Riggers and Stevedores Union, the riggers were especially employed for the loading of cargoes and the stevedores especially employed for their discharge.

do by using the cargo being worked or stacks of pallet boards. \* And, then, of course, too, "an eye for the work" was especially best to have when, for instance, they decided to "back-scuttle" bales of cotton by first flooring off the square with bales on their side and three or four high and - with such a "table" built - to then land bales on top of it which then could be rolled to where they would neatly and tightly drop into a place of stow. \*\* And, of course, too, when both of the wings of a deck had thus been brought up to the height of the cotton in its square, this manner of loading cotton was routinely repeated and often, too, for a fourth or fifth time.

The ever-present challenges which thus were posed for holdmen throughout the loading of every hatch of the vessels in question were also increased for those who were stationed at their forward two hatches and their after-most hatch. And, indeed, their additional challenge had long been summed up by this standing order: "take out the sheer." \*\*\* And, thus to explain: the "sheer" which those hatches had was due to their decks having different and ever-changing fore-and-aft curvatures, which also produced in them all a changing vertical curvature. And, hence, too, those curvatures had long been shown in the following type of ship profile. ^



\* In the already cited sketch on p. 16 of the appendix it appears that the figure in the foreground and presumably his partner, too, were beginning to build a "leg" of the cargo being worked.

\*\* And thus with respect especially to cotton, this was often said: "Better down than up."

\*\*\* Due to the safety concerns which underlay the need for a tight stow, a dressing down would always be unleashed from any number of quarters if it was somehow said that a tight stow was really demanded because it meant more tonnage and profit for the ship owner and stevedore. And, by the same token, one of the major insults which might be jokingly aimed at a docker - and sometimes, too, not so jokingly - was some kind of version of this: "You're a master at the yankee-face." And, so, of course, to explain, again: it was sometimes thought and said that a partnership of two dockers - which was how all of the docker work was done on conventional ships -- was really being sloppy about their loading of cargo, but were nevertheless always finishing up with what would pass as a good face on their stow. Such a face - which those who had made it and those who had watched it being made knew that it hid a lot of holes and gaps -- was called a "yankee face".

^ Kemp, *op. cit.*, p. 793. Dunnage would also be used when due to the cargo being worked it was thought best to "take the declivity out of a deck," i.e., its very slight fore -and -aft slope.

And the only way to take those curvatures "out" was to begin the stow in the wings so that the outward 'face" of the cargo being worked closely and tightly followed a line which was perpendicular to "half-breadth" line from bow to stern. And with this task having been well addressed, something like this would be sounded by all: "A tight and proper stow you could take a picture of."

Within the constraints which thus were imposed by the cargoes to be loaded, the spacing available for them, and their destinations, the largest and heaviest cargo which were to be stowed to every deck were saved for its square since then they could be landed directly in their planned place of stow. And when the holdmen had thus completed a loading to the square of the lower hold, they climbed the hatch ladder or by way of just loaded cargo to their first "cover up" and then to work any load-out for the lower 'tween. \* And with that done, they did, again, what they had just done having thus got to the upper 'tween. And with those tasks having been discharged, they would arrive on the weather deck for their final cover-up, which also included the tarp being spread. \*\*



### Loading on deck

They then went on to load any deck cargo, which as a rule there was, having also protected the tarp by landing that cargo on lengths of dunnage. And, as a rule, too, such cargo was the largest, if not, of course, the heaviest, which would be stowed at their hatch since, especially at hatch #3 and #4, the weather deck offered the largest of spaces free of obstacles and with it known that they would fit such cargoes could be landed directly to their place of stow. And having secured any such cargo by lashings of wire-rope drawn tight by turnbuckles, the holdmen sent ashore all of the stevedore gear, e.g., the water can, crowbars and saws, steel or wood ramps used for "road construction", unused pallet boards and any substantial amount of dunnage left over, four-wheelers and handcarts, gravity rollers, and, finally, of course, the save-all. And with that, the hoisting gear would be unrigged and the booms lowered into their "cradles" on deck where they would be secured for sea by the deck crew. And, as for that work, Knight, once again, is very complete and precise. ^

#### 0.7. Unrigging and Securing for Sea.

1. Assign men to winches, guys, whip, topping lift, and gypsies.
2. Cast off preventers.
3. Remove topping lift wire from cleat as described below.
  - a. *Single Topping Lift.* Remove bull line from cleat, place it in a snatch block, fairleading it to the gypsy. Take five or six turns around the gypsy in the same direction as the whip (over the top), and top up.

\* If cargo in the wings of the lower hold or of the lower or upper 'tween was to be stowed up to the decking above, the holdmen would go about halfway up and then for safety reasons begin to load to the square. And since in every hatch the lower hold had by far the highest height, those working its wings were especially so prompted to begin their work in its square. In other words, every holdman came to know only too well the dangers posed by a "shifting" cargo.

\*\* Tarps were battened down by the deck sailors of the ship.

\*\*\* Knight, *op. cit.*, pp. 161 - 162.

boom until the bull chain is slack. Unshackle the bull chain and lower boom to its cradle.

- b. *Multiple Topping Lift.* Pass the stopper chain on the topping lift wire and remove the figure eights from the cleat. Surge the topping lift wire until the stopper takes the strain, then shift the wire to the gypsy. Heave around on the wire until the stopper is slack. Remove the stopper and lower the boom. If the cleat is large enough and conditions warrant, the boom may be lowered to the cradle by surging the wire around the cleat instead of transferring it to the gypsy. However, only experienced men should attempt this.

Regardless of the type of topping lift, men on the guy tackles must keep all the slack out of the guys to prevent the boom from swinging while it is being lowered and cradled.

While the booms are being lowered, cargo whips should be tended to prevent turns from piling up on the drum of the winch.

And with the gear having thus been attended to, \* things of this sort would be passed amongst the gang: "We're about to be piped down" - "And now they'll pipe us ashore" -- "They're about to sound retreat." And, presently, too, the gang would hear something like from their boss: "Okay, fellas 'avast your heaving for the day" -- "And with that, we all can go to berth somewhere" -- "Okay, fellow workers, you may shape your course to anchor " - Okay, men, another good trip." And at the foot of the gangway, he and his gang members would also hear the same sort of thing from the walking bosses and, often, too, the stevedore superintendent. And as they then joined in a walk to the gate with other gangs and others from the hall, salutations of every sort would also be exchanged all around. But before some went to their cars so as to then head for wherever, they would come to roost for a bite or a bracer or both at a pier head cafe. And those who did would always smile and hoist a glass, even if just a soda pop or a cup of coffee -- and often got to a window, too -- when by the law of the sea the ship they just had finished sounded three long whistle blasts to warn of her leaving her berth. \*\*

\* Knight also then continues, of course, to fully speak of the vessel being secured for sea.

When both booms are cradled, all gear should be secured. Whips are rewound smoothly on the drum of the winch and the cargo hook is secured to a ring or cleat with a slight strain. Guys are secured to the heel block, or fittings on the mast table, then set taut. The hauling parts of the guys are coiled over the guy tackles and tied off. Topping lift wires or bull lines are secured to cleats with the remainder of the wire coiled and hung on a cleat. Bull chains are shackled to pad eyes on deck. If the ship is being made ready for sea, all running rigging and cargo-handling gear is secured.

By the early sixties, however it was more and more common for the gangs of San Francisco to call it a day after they had "winged in the gear," i.e., had let go the guys and preventers and hauled the booms in until they stood above the hatch.

\*\* The sequence of "legs" which has just been set out so as to depict and discuss the routine daily "passage" of a San Francisco gang c. 1965 and to also set out some of the language which then was always voiced by those who worked in the hold usually lasted two or three days - and four or five on a coffee discharge - and seven to ten of a cotton load-out. And with that so, all sorts of things in additions to those set out also then often happened. But with that acknowledged, it perhaps should be noted that what most dockers most disliked about such a passage was being "sent to supper" on its last day - and, hence, on occasion, its only day, too. Thus, if a vessel could thereby be "finished", gangs could be "sent to supper" at five, so as to, again, turn to at the gangway at six. And, with that, they could be worked until nine.



## Further Detail on the Docker Syntax of Command

In turning more fully to the syntax of command to which the dockers of San Francisco also long fell heir, it perhaps should first be noted that these parts of their speech were also most often used, again, by way of metaphor, by those who worked in the hold of conventional ships. And this was so, as perhaps it also was when it came to their language of passage, simply because the ever-changing circumstance of the work in the hold very frequently presented them with still another leg of their daily passage. And with each leg there also came, if not, of course, the need, at least the opportunity for one or more dockers to voice a command or two so all would have a laugh or two. But a use of this syntax was also taken to be an indication of one's great respect for the dangers of the sea. And having thus also asserted that the work of dockers therefore entailed heavy responsibilities, the use of that syntax also projected and affirmed an international worker solidarity.

With these things said, it should also be noted that in their limited use of this syntax, the gang and walking bosses -- and in its still more limited use by company superintendents - it was only very rarely to "order" a dockers to do a particular thing with respect to the work at hand. \* And that was even so when, as would occasionally happened, a gang or walking boss or a superintendent made a "show" of using a wording from it when a firing was in the offing. But the rarity of it being so used by the "chain of command" is explained by this: with the conditions the union had won and the technology used to work what by the early sixties had come to be called "conventional" ships, a safe and efficient longshoring could not be fashioned by trying to issue "orders". \*\*

Since this syntax of command was rarely used by the dockers and even more rarely used by their supervision to "issue an order", it should be observed that in its being so used at sea it is by definition assumed what could well be assumed in any enterprise of two or more persons: any order to anyone to do a particular thing may surely be questioned and thereby occasion to some extent a delay or worse. On the other hand, the evolving components of this syntax have long provided a model of what in any given circumstance is *ipso facto* certified as an acceptable manner of speech which in no way implies any disrespect to those being so addressed. And by the same token, it serves as a codification of the acceptable ways of operationally employing the entire vocational language of the maritime trades and callings. And this it does by specifying the ways in which those being directed to work should be addressed, while presuming thereby that such speech will occasion no offense. And, thus, indeed, it was and is the linguistic *etiquette* of all of the sea-related vocations. And thus it also was and is commonly understood and employed vocations as the way to "relate" to those whose work is being directed. And thus it facilitates "the performance of the work required to meet the sea" by virtually eliminating the possibility of an unintended linguistic offense. Now, given this, it also follows that it was by learning and using it and, of course, the necessary substantive language -- that the work so required could be best directed and thereafter performed in an effective, efficient, and expeditious manner. But in this connection one additional, if obvious thing should also here be observed. In any circumstance, an appropriate use of this syntax presupposed a correct and proper judgment as to the work which was, indeed,

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\* And, indeed, the dockers themselves, if mostly in a joking way, much more frequently used it "to issue an order" than any of those who supervised their work.

\*\* For this proposition, see the earlier papers.

required to meet the sea. And this, of course, required an accurate assessment of the situation and of the means both sufficient and necessary for a proper addressing of it. And if this syntax was always so employed - or, at least, very nearly so - "a happy ship" -- "a good undertaking" -- "a job well-done" -- and hence, as well, a measure of mutual respect amongst those so employed would also be fashioned.

It may also be useful here to briefly focus upon what already has been often said: this syntax of command was frequently and commonly used - and now we may say, was almost exclusively used - by the dockers and their "chain of command" in a metaphoric manner. And to focus on such use, take, for example, this universal and ancient command: "Bend to the oars." Since this metaphorically means "attend to the task at hand", it could be sounded at any time and also from any quarter during any longshore "passage". And it also could be so sounded in the framework of virtually every task-related activity in which a docker was somehow involved. And, hence, too, it could be voiced to encourage a child to finish a supper, to encourage a fellow docker to finish his drink, and to encourage a union officer to perform his duties in a conscientious manner. It was also quite commonly employed to characterize or predict the behavior of an individual or a group with respect to an activity: "He's bending to the oars" / "They'll have us bending to the oars." And it often was invoked as advice or counsel: "We'd best be bending to our oars." And it also was frequently used to convey a proposition with respect to the demands or duties and hence, on occasion, to the cautions of everyday life. Thus, for example, it was commonly observed or argued that "A man must bend to the oars" / "A worker must bend to the oars" / "A union man must bend to the oars" / "A husband must bend to the oars" / "A parent must bend to the oars," and "A student must bend to the oars." And without reviewing such use in detail, it may also be observed that of the commands which will presently be cited, the following, as but a few examples, have a like range of metaphoric use: call the crew to quarters / start your engine / hoist the sail / station the watch and lookouts / stand by / you may apply power / stand by to heave away / stand clear / man the boats / *and* shove off. Such phrasings thus were voiced and evidently understood in many circumstances and many social settings. On the other hand, a use of others perhaps assumed a more than common knowledge of sea - related matters. Thus, for example: keep her 'midships / lower away together / ready about / set taut and hoist away / get a fair and proper lead / and stand clear of the bight. In the presence, however, of a modest familiarity with some of such matters, such phrasings were commonly used and evidently understood. In any event, however, the following commands were commonly sounded on-the-job -- and virtually everywhere else -- by those who worked in the hold - c. 1965.

### Commands of an on-the-job passage

When at sea, the daily work routines, which is also to say, the daily "legs" or "runs" of a passage at sea, are commenced and ended with commands of a general and - for the dockers in question - often and widely used sort. For example:

Call the men to quarters.  
Muster the watch.  
Station the watch.  
Post the bow watch.  
Relieve the masthead watch.\*

\* From an old timer who in his youth had gone to sea, this command would frequently prompt this response: "Aye, matie - lay down from aloft it is."

Relieve the deck watch.  
Relieve the wheel and lookouts.  
Tell the watch to go below.

And any number of rather specific commands might also be voiced during the daily and very routine performance of a wide variety of shipboard work, both at sea and at berth. To illustrate these commands, which were also often and widely voiced by the dockers here focused upon, the following may be cited.

Stand by -- stop and await command or direction.  
Word-to-be-passed -- calls for silence prior to passing an order.  
Set taut and hoist away.  
Haul, haul, haul -- keep pulling together, e.g. on a mooring line.  
Heave, heave, heave -- the same, but used when pulling on a component of the ship rigging.  
Heave taut the line.  
Belay to the cleat --- stop and secure to a ship fitting.  
Get a fair and proper lead - a lead that minimizes the strain being put on a line.  
See that she's properly secured .  
Break out the . . . -- remove a piece of gear from its shipboard stowage and ready it for use.  
Unship the . . . -- the same, except that the gear in question remains affixed to the ship.  
You may apply power.  
Stand clear.  
Stand clear of the bight -- the area through which a line will pass if it or to what it is secured should fail.  
Stand clear of the throw -- for example, of a line and hook to which power is being applied.  
Don't part the guy - do not strain a rigging to breaking.

And a command which might always be voiced to stop an activity: 'avast there, mates.\*

#### The course of a leg or run of a passage

The commands and advisements commonly voiced by the holdmen of a gang to the mid-sixties would also rest, of course, upon an assessment of the existing circumstance and / or the soon-to-be circumstance of a leg of the passage. And as might be supposed, the most common situation in which these parts of their speech were most routinely voiced related to the need to change the course of a leg underway. Thus, for example, those at the helm of a ship routinely receive commands such as these and such were often jokingly voiced by the dockers, too,

Right full rudder, matie.  
Right standard rudder, laddie.  
Left standard half rudder, swabbie 'o mine.  
Left twenty degrees, Number One.  
Keep her so.

\* There is, evidently, some reason to think that "avast" derives from the "basta" -- the Spanish for "enough".

And during a change of course, these types of refinement might also be ordered.

More rudder.  
Ease the rudder.  
Ease to ten degrees .  
Meet her -- this is given to check the swing of a vessel.  
Midships - bring the wheel 'amidships.  
Steady.

And, finally, too, there often was this: Steady . . . Steady as she goes.

Since commands of this sort are essential to the safety of the vessel, the person giving them must be assured that they have been heard and understood. These things being so, the helmsman is required to repeat them. It should also be noted, however, that the response to many other types of commands has been typically and commonly shortened to a simple "aye". And in the many situations the fact that an order was heard and understood is immediately established as it is carried out. In any event, however, when dockers were so addressed, they would as a rule "go along with the joke" by somehow responding verbally.

#### The speed of a leg or run

In open water, the speed of a "run" can routinely be made either as needed or as is desired and possible. And, as a rule, a change of course in open waters will not require a change of either speed or direction. Should there be such need or both such needs -- as there routinely is, for example, when berthing a vessel or going to anchor or clearing a dock -- an order "for the engine", which is to say, for those who are manning the engine room, will be verbally given and it repeated by the operator of the bridge to engine telegraph as he also repeats it. \* Thus, for example, and with a single engine: \*\*

Ahead two-thirds . . . Ahead two-thirds  
Back one-third . . . Back one-third.  
Engine stop . . . . Engine stop

And quickly, too, he will also say:

Engine answers ahead two-thirds.  
Engine answers back one-third.  
Engine answers stop.

And when there is more than one engine, such will first be heard:

All engines ahead one-third.  
Port engine back one-third.  
Starboard engine ahead two-thirds.

And then will be heard corresponding repeats and corresponding answers back.

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\* On modern vessels, the use of this telegraph, if not its installation as an emergency back-up, has been eliminated by automatic bridge-to-engine controls.

\*\* With more than one engine, the engine to which the order is sent is named first, and then the direction is given, and finally the speed.

## Advise as to course

During a day in the hold, a change in "the setup" -- e.g., in the stevedore gear being used, in the flooring, in the cargo-moving devices employed, was, of course, periodically necessary during every operation . \* As might by now be supposed, the signal that such a circumstance was at hand might be sounded in a number of ways and also, as always, from any quarter. Thus, for example:

We'd best attend to our course.  
We'd best come about.  
We'd best ease off (the wind).  
We'd best put the rudder over.

And when changing course was viewed as more urgent, things of this sort would be sounded:

We're at the boom-stops.  
We're at the limit switches.  
This boom is bent. \*\*  
We're two-blocked . \*\*\*  
We're tight-lined. ^  
We can't sail into the eye of this wind.  
We'd need a cargo jack to get more.

And when there seemed to be no clearly good remedy for a particular problem, this - as suggested earlier -- was commonly sounded: "We're in irons". ^^ In such circumstances, however, a solution could often be found in a simple refinement of a single component of the set-up. Thus, for example, such might be observed with regard to the hoisting bridle being used: "We've got too many add-ons." ^^

During the day for those who were working in the hold there was, of course, the recurrent need to "adjust" the downward or upward "course" of the sling loads they were to stow and those they were to discharge. ^^ And, indeed, the follow-

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\* Generally speaking, the phrasings which follow, as with others which might be cited, could be translated thusly: "We've gained as much as possible with this set-up" or "To try for more with this set-up could really lead to problems."

\*\* A boom which has been bent is greatly weakened.

\*\*\* A purchase is said to be "two-blocked" when it cannot travel further because its moving block has been hauled up to its standing block.

^ Gear that is rigged as a union purchase is said to be "tight-lined" when the angle between the yard and midship falls begins to exceed 120 degrees -- a situation made dangerous by the resulting stresses, especially on the preventers and guys.

^^ This might be observed with respect to any activity. For instance, a man might complain: "We got too many add-ons when me and the family go camping." By the same token, the staffing of a union program might be said to entail unnecessary add-ons. And such an observation might also be preceded by an inquiry of this sort: "What's the weight of those add-ons?" -- which, of course, is to ask of the cost of the staffing in question. Generally speaking, then, an observation that there were too many add-ons meant: this should be simplified.

^^^ As was earlier noted, the inshore and offshore division of those working in the hold began when they first rigged the gear and continued throughout the job. And with this so, the eight dockers so stationed when they were loading cargoes would be

ing kinds of "advise-ments" were the only real "orders" the holdmen ever addressed to their winch driver and, of course, his signal man.

Come back, winchie -- to have the sling load lowered still more.  
Back.  
Back.  
*Easy*, now.  
Slack your yard -- to slightly move the load offshore.  
Slack your midship -- to so move it inshore.  
Easy.  
Steady.  
Steady.  
*Come back.*

And when a load was ready for hoisting to the dock, it would be slung to what was called an "empty hook" - which nearly always was an "empty" add-on provided by the stevedore company - with advise-ments such as now follow.

Come back, Mr. Winch - to have the now "empty hook" lowered further.  
... Easy.  
... Easy.  
*Hold her there.*  
... Take a strain.  
Easy.  
... Steady.  
Take her on the yard -- to move the load inshore.  
Steady.  
... Set tight.  
... Take it a little  
*Hold it.*

And with the load then briefly checked while hoisted a foot or so, things of this sort would be called out with a wave of a hand and a smile.

*You got it, my friend.*  
*Take her away, Mr. Winch.*  
*Now - put her on the dock.*  
*Take her up Market. \**  
*You may apply power.*  
*Hoist away, old buddy 'o mine.*  
*And now you're now in charge.*  
*You're in command.*

composed both onshore and offshore of two partnerships of two dockers. And as the sling loads arrived they would be landed and stowed first by a partnership inshore and then by one offshore. And the next two loads would also be landed and stowed in that order by the other two partnerships. And in a discharge, the three partnerships of two dockers would take turns in sending ashore the sling loads they had built. And with that, those who had just sent a load to the dock would begin to build another one so as to be able to "meet the hook" when it was their turn again.

\* Which, of course, was to say, San Francisco's Market Street.

### The need to refine or strengthen a set up

Phrasings commonly used to indicate a need to somehow refine an activity might also thus be voiced: "We have to respot the booms " And a need to somehow soon obtain: having come in with a number of inshore loads, the empty hook would soon be traversed offshore so as to hoist to the dock its stack of empty pallet boards. strengthen a setup might also be thus signaled: "We'd best double-up." Such use of this phrasing evidently derives from the command "Double-up (and secure)" which is routinely voiced after the first several mooring lines of a vessel coming to berth have been secured. It accordingly means to run and secure such additional lines as may be needed. Since, however, conventional shipboard hoisting gear was commonly fitted with winches which had both a "high" and a "low" gearing ratio, "double-up" it also referred to placing such winches in their low, compound gear. And there also were phrasings which were commonly used when there was a need to stabilize a set-up. Thus, for example, such was often observed: "She'll have to be lashed lest she break free and take charge as would a loose cannon" And, thus, as so used, "breaking free and taking charge" means that someone or something has begun to move all about in a dangerous and unpredictable way and hence has become in effect a loose cannon on deck. Another phrasing to indicate the need to make a set-up of whatever sort and purpose more stable was even more ancient: "We'd best frap the shrouds." And this could be so used since the tension on "the shrouds" - the ropes which secure and steady a mast - can be increased by "frapping" them, which is to say by securing them closer together with a rope line which leads directly across them. Generally speaking, then, to frap the shrouds means to somehow affect a greater stability with respect to any set-up. Since some cargoes which might "break free" could not be easily secured by lashings of chain or wire rope drawn taut by turnbuckle, this then might also be observed: "This calls for shoring." And, if that was settled upon, a stout wooden frame would soon hold the cargo in question in a very firm and stable embrace. On the other hand, it could, of course, happen that while a change in a set-up might well be required, the best possible change was simply not evident. And when that was the case, an extended discussion was commonly suggested by phrasings such as these: we'd best seek open water - we'd best stand out to sea -- we'd best slack the gear on this" , which is also to say, we'd best take a real good look at this.

### The need to improvise

In such circumstance, it could finally be decided , of course, that improvisation was needed. And when that was so, such would be acknowledged - both on the job or anywhere else - by a phrasing such as: "We'll have to jury rig it." So - technically speaking, a "jury" is a temporary makeshift of one sort or another which is affected so as to allow a disabled vessel to proceed to harbor. Thus, for example, a "jury mast" is a mast that is erected and secured to replace a mast which was carried away. And, hence, too, in that case, the "jury rig" would be a makeshift contrivance of masts and booms and sails which would permit a disabled vessel to get under way. And, by the same token, a temporary and makeshift means of steering the course of any enterprise would be a "jury rudder".

### Emergency commands and drills

Other important sets of commands relate to the work which all hands would be ordered to perform so as to address an emergency. Thus, for example, the monthly sounded "boat drill". This drill and the commands which structure it varies with the

machinery used to lower and thereafter hoist the life boats in question and the means by which they are propelled. However, and after Boat Drill is sounded and stations are accordingly manned, the nature and flavor of all such commands may be suggested by these

Man the boats.  
Lower away together.  
Stand by the oars.  
Up oars.

Or, at this point and alternatively,

Start your engine - in accord with a standing order, this would be done with the propellor shaft disengaged  
Pay out the falls - slack the ships machinery and tackle as the boat becomes buoyant  
Cast off the after falls -- the ship's tackle attached to the stern.  
Cast off the forward falls.  
Shove off the bow.  
Engage your engine and get underway.

When clear of the vessel and powered, the boat would thereafter proceed as ordered by these bell signals. \*

I stroke	Ahead slow.
2 strokes	Disengage propellor shaft.
3 strokes	Back slow.
4 strokes	Full speed in the direction in which the boat is moving at the time of the signal.

And when oars were employed commands of the following sort would be issued.

Let fall -- put oars into oarlocks.  
Give way together -- begin and continue rowing.  
Bend to the oars.  
Give way port -- back-water starboard.  
Give way port -- hold water starboard.  
Bend to the oars.  
Trail oars.  
Stern all -- issued when moving forward.  
Back water.  
Secure the forward falls.  
Secure the after falls.  
Ship oars.  
Up oars away.  
Set taut.  
Hoist away.

And, again, when sail was used, such would also be voiced:

Stand by to step the mast -- to raise and secure the mast.  
With starboard sheet make sail.



Hoist away.  
Ready about -- prepare for upcoming tack to return.  
Secure the forward falls.  
Secure the after falls.  
Let fall and secure the sail,  
Unstep the mast.  
Set taut the falls,  
Hoist away.

And, finally, of course, in all cases, a "secure all gear" and a "you've been piped down" would end the drill.

### The most fundamental commands

Meet the hook.

It may, of course, be imagined that a voicing of this or a version thereof by the employers of dockers throughout the world has always been the command most frequently addressed to them. By all report, however, the West Coast dockers began to voice it on the job and in all other union settings in the latter part of 1937. The port where that began cannot, of course, be determined, its rapid spread coastwide is explained by the contract gains their union made that year. Thus - having secured in 1934 a contract safety code which they could enforce by stopping work and, if necessary, by winning an immediate arbitration, they also secured in 1937 a manning scale for every operation and a sling load maximum of size and weight for all cargos then being worked, both of which could also be so enforced. \* So - in a word - it thereby became the union duty of every West Coast docker to "meet the hook" by means of a conscientious performance of the work he was ordered to do when an operation conformed to the safety code and the manning and sling load agreements. And if and when that was not completely so, each docker had the contract right, as well as the union duty, to refuse to so work and, if necessary, to arbitrate immediately. And, needless to say by now, but this command by all report was also quickly voiced by the San Francisco dockers with all the pronouns and tenses by which they voiced the many such phrasings already set out. \*\* And at the same time, of course, it could also be thus expressed to a docker on the job: "Don't let the hook hang." \* And, by the same token, of course, if a gang or walking boss saw that a hook had been hanging

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\* These achievements prevented the employers from instituting a "speed-up" on the job. They are detailed, as are the struggles which led to them, in the tenth of the earlier published papers. It should here be noted, however, that the dockers also then secured an elimination of what their employers had always successfully voiced as "managerial prerogatives" through the language of Section 11 of the 1937 contract: "The employee shall perform work as ordered by the employer in accordance with the specific provisions of this agreement. In case a dispute arises, work shall be continued pending the settlement of same in accordance with the provisions of the agreement and under the conditions that prevailed prior to the time the dispute arose."

\*\* And as with the other already cited phrasings of command, "meet the hook" was also quickly used as it routinely is today: as advisement, admonishment, maxim and saw. And in discussions with other dockers it still is so invoked in many circumstances: e.g., a union man must meet the hook, a husband must meet the hook, a parent must meet the hook, a union family must meet the hook, a good neighbor must meet the hook, a student must meet the hook.

either with a load or empty for what to him was "too long", he would investigate with this command in mind.

### A tight and proper stow

Having met the hook in a load-out, the duty of those in the hold -- and, once again, by metaphor, of each and every docker -- was summed up by a second and very inclusive command and one already set out: "Make a tight and proper stow." And since as earlier noted, this command was underwritten by an abiding concern for the safety of crew and vessel, it had no doubt been often voiced by many a West Coast docker since the Gold Rush. But, by all report, and with union achievement of 1934, this also underwrote it and also did so to the mid-sixties: "With *brothers* at the other end having to work this stow, sure *best* it don't shift." And hence, of course, too, it may well be imagined that a great many dockers throughout the world and for centuries have also so expressed their solidarity with many unknown crews and many unknown dockers as they performed their daily labor. But any event, and to summarize what was earlier said: such a stow, while tightly packed is also made "proper" by it taking out the sheer and by having throughout a good line of stow - and hence, too, never a "yankee face".

### Face me or face the ladder. \*

By all report, once again, "Face me or face the ladder" also began to be voiced by San Francisco dockers as "meet the hook" was becoming common coin. And whatever its port of origin, its coining was even more clearly the work of those in the hold. And that is because it said this: "There is in this situation what every docker knows is the right thing to do. So - do the right thing and thereby earn the right to face me and every other docker -- or face and climb the hatch ladder and - with that done - quit and leave the job" - if not, indeed, on occasion -- ". . . and quit the waterfront." And at a minimum, too, this was also thereby said: if you now fail to do the right thing, you will be totally ostracized. And, thus, evidently, it may have been especially said, at least, initially, to strongly encourage one or more holdmen "to meet the hook" or "to make a tight and proper stow". And because of such meaning it also came to be frequently used in many circumstances both on-the-job and within the union. But as with "meet the hook", it was seldom used in any other setting since, as was sometimes noted: "Who, but a docker, would know what it means?"

### Do the right thing

As was suggested earlier, when in the mid - sixties a San Francisco docker told another docker "to do the *right thing - whatever* it is," he was partly joking so as to lessen the insult otherwise conveyed of having thus felt it his duty to remind a docker of his duty. But as that humor suggested, too, he also was saying that both he and the docker so addressed knew that his reminder simply summed up what was known by them both and virtually every member of Local 10 to be "the basics" of their work and hence of their union, too: "meet the hook" and "make a tight and proper stow" and "face me or the ladder". And with this being so, it may be said that, given the nature of their work -- and especially that of those in the hold -- the work day of the San Francisco docker was an ongoing and always constantly changing moral oppor-

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\* The use of this phrase is set out in some detail in this earlier paper: "The San Francisco Waterfront: A Morality Play Moves On."

tunity -- as well as, of course, a challenge by reason, again, of the work -- "to do the right thing." And, hence, of course, too, it was this everyday circumstance which presented those dockers with an ongoing opportunity to fashion and then maintain a true personhood and profoundly moral character. And with this so, it surely should be added that virtually all who ended up a docker rose to that challenge and in doing so came to very much like their life. Thus, when thinking back, pensioners routinely summed up the working life of a San Francisco docker in words of this order: "Well, fact is, the work was mostly pretty darn hard . . . and nearly all hands had sure been hurt any number of times . . . and, course, again, too, a pretty fair number had also got killed . . . but somehow or other . . . and, course, with all the good pals that everyone had, we always looked forward to going to work . . . I mean, truth to tell, it was like going to a darn club, but to *get in that club* and to stay in it, you *always* had to do the right thing and *do* the work. And, *course, that's why* we miss it, too."

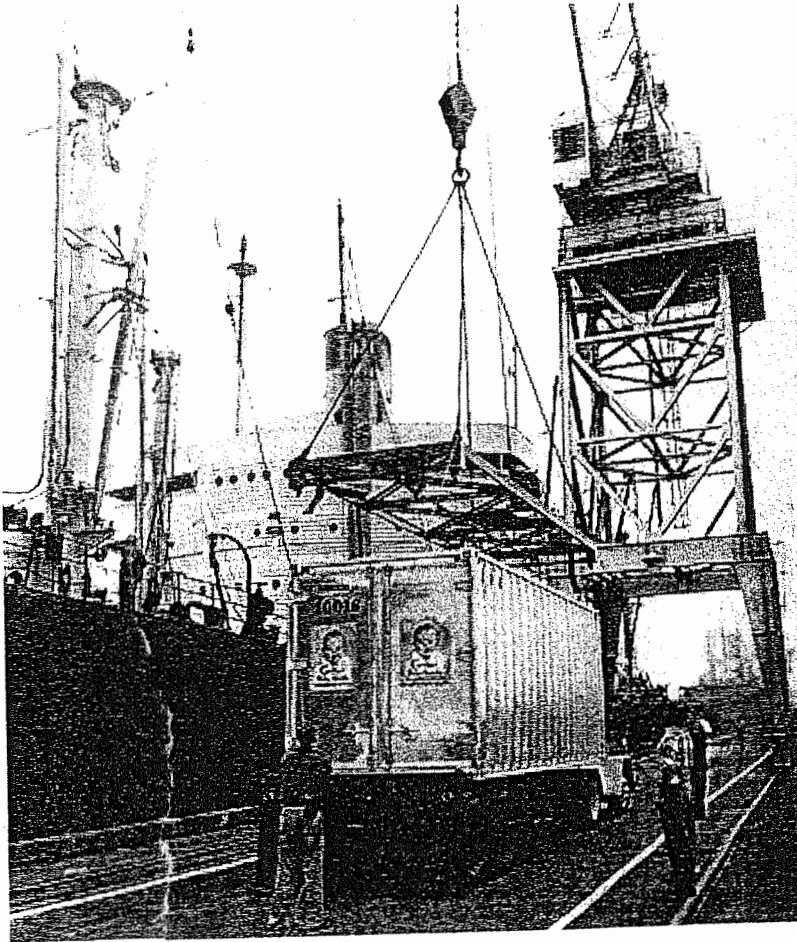
As all of these several things suggest, and for reasons set out in the present and earlier papers, when their employer was fully complying with the contract, the dockers who worked in the last of the San Francisco gangs conscientiously sought to maintain an on-the-job discipline and likewise took pride in helping to create and maintain a union - measured discipline. On the other hand, and as was noted earlier, no San Francisco docker ever expected each of his fellow - workers to be a "cracker-jack" docker. And, by the same token, it was widely and well understood by those dockers that for any number of reasons and in any number of ways there were dockers who always did the best they could, but also "never quite got it". And with these things being so, what was expected was this: to do the best one could do -- and, if possible, to do it all day. And, as a result, when they were so called upon, virtually all of those dockers, as had been so in the past, would "do the right thing" and thus defend such a docker and also every newcomer who was doing their best.

#### A Brief Delineation of West Coast Containerization to c. 1980 and the Dockers' Loss of Their Language of Passage and Command.

As earlier papers have detailed, the technology of "the container revolution" began to greatly impact the San Francisco docker's life in the early sixties. The start of that revolution in the Pacific dates to 1956 when Matson Navigation launched a study designed to determine "the most efficient freight handling system for the Hawaiian trade." That study prompted Matson to refit the weather deck of its HAWAIIAN MERCHANT so it could accommodate 20 twenty-four foot containers. And having thus been loaded at a temporary facility located at the Todd Shipyard in Alameda, the MERCHANT sailed for Honolulu on August 31, 1958. And on January 6, 1959 that vessel also arrived in Honolulu having been loaded at Matson's new Encinal container terminal by the world's first shoreside crane specifically designed for the handling of containers between ship and shore. And thus as can be seen in the photographs which follow, the first Pacific "Lift - On, Lift - Off" container service was begun.

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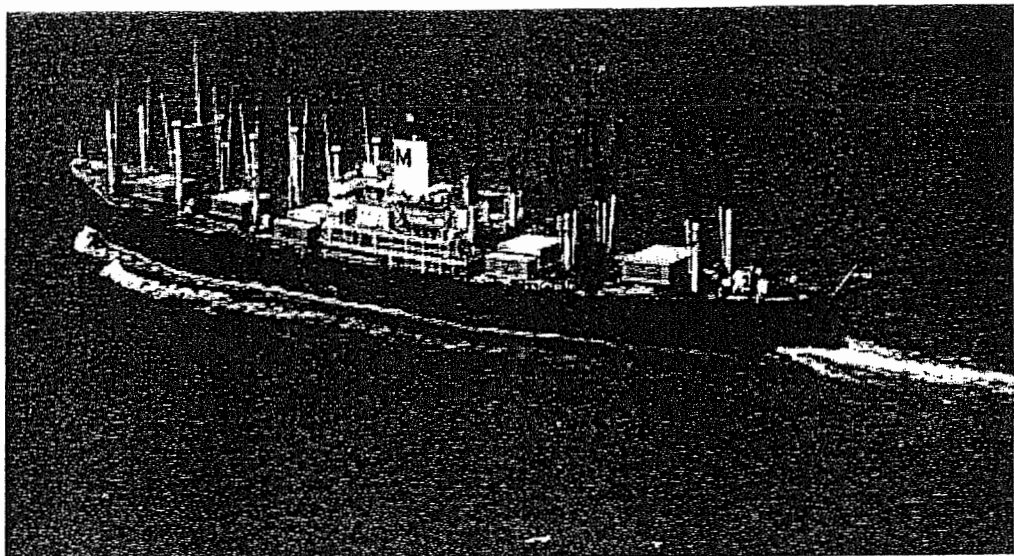
\* In the trade routes of the Atlantic and Gulf, Malcolm McLean, the owner of a North Carolina trucking company, was the first to introduce what by the early-sixties was being called "the container revolution". Having formed McLean Industries in 1956, he purchased and converted the decks of two tankers into trailer platforms. And thus in the words of World Trade Magazine (09 - 01 - 2004): "... on April 26, 1956 a Pan Atlantic tanker dubbed the Ideal X sailed from the Port of Newark, New Jersey to Port Houston, Texas with 58 35-foot containers. The container era in world trade had begun."



Source:  
Smithsonian Institute  
America On The Move

Loading *Hawaiian Merchant*  
Matson Navigation Company

The first container loaded to the *MERCHANT* at Todd Shipyard had a placard secured to its doors advertising its contents -- Gerber Baby Food.



*Hawaiian Merchant* under way  
Matson Navigation Company



The initial use of the first container crane for another deck-loading to the **MERCHANT**.



The initial use of Matson's second container crane for a loading of the HAWAIIAN CITIZEN in the early 1960's.

The scale and pace and geographic scope of the technological changes which thus were launched in the trade of the Pacific - and the impact it had on the dockers of the West Coast - may first be briefly suggested by the table below. And, thus, too -- as was earlier noted -- Matson by 1969 had led the way in making the Port of Oakland the nation's second largest container port. And throughout the years which that table reports upon, Matson also played an important role in fashioning still other container technologies and also the information computer technologies which together have become the technological bases of the present day global economy.

COASTWIDE: TONNAGE AND MAN-HOURS \*

Year	Tonnage	Hours	Hours
1960	28,495,619	23,757,382	100.0%
1961	28,097,062	22,293,093	93.8
1962	27,762,094	21,210,919	89.3
1963	32,292,305	22,512,410	94.8
1964	34,222,791	22,498,509	94.7
1965	40,151,909	24,387,133	102.7
1966	45,640,702	26,653,343	112.2
1967	49,685,315	25,482,708	107.3
1968	54,459,228	25,235,089	106.2
1969	67,761,482	24,310,961	102.3
1970	60,025,612	19,693,920	82.9
1971	48,477,874	14,838,061	62.5
1972	59,633,061	15,824,173	66.6
1973	70,954,893	15,734,545	66.2
1974	75,537,386	14,808,231	62.3
1975	66,968,534	12,130,379	51.1
1976	76,289,936	12,349,221	52.0
1977	78,570,431	12,024,044	50.6
1978	91,973,495	12,909,558	54.3
1979	103,135,709	13,540,083	57.0
1980	113,682,374	13,376,301	56.3
1981	112,898,187	12,523,708	62.7

It happens, however, that one of the consequences which containerization had for the dockers of San Francisco was their ceasing to use and thereby pass on their language of passage and command. \*\* A basic reason for that being so - and this is made clear in the earlier published papers - were the changes thus made in the work they increasing did since they occasioned not only its "routinization", but also their "atomization" as a workforce.\*\*\* And, indeed, these changes not only ended their continuous and vital operational need to communicate, but also their chance to converse as the work proceeded. And with containerization the loss of such bonding was especially occasioned by the disappearance of "conventional" longshore work and the "schools" in which their language of passage and command had been passed on. That linguistic loss also resulted from the younger retirement age and the early retirement, "lump sum" benefit provided by the M & M agreements. Those benefits and the large new hirings which they occasioned in 1959, 1963, 1965, 1967, and 1969

\* Pacific Maritime Association - Annual Report, 1981, pp. 16 17. The tonnage is given in short tons.

\*\* Needless to say, but the many unhappy consequences which containerization had for the dockers of the West Coast as a result of the M & M contracts underwrote their strike of 1971 - 72.

\*\*\* These changes are most fully set out in the first two papers.

resulted in a complete and rapid turnover of the San Francisco docker ranks. \* And while the effect of each of these circumstances cannot, of course, be judged, it may be observed that by 1980 or so the language here set out, excepting for its commands of "meet the hook" and "do the right thing", was virtually never heard on the San Francisco waterfront.

Before going on to more such aggregate data, some such data as to the Port of Oakland should be offered. Thus, to begin with, this is how it became as large as it did by 1969. \*\*

<u>Year</u>	<u>Containerized Tonnage</u>
1965	365,084
1966	707,748
1967	950,047
1968	1,530,518
1969	3,001,072

And, as to these figures, it must be noted, too, that the container tonnage of the port constituted nearly a half of the coastwide total. And, hence, too, these things as to the port and its tenant Sea-Land should also here be noted. Thus, the first containership, as distinct from the vessels which carried a mix of conventional and containerized cargoes, to call at the port was Sea-Land's ELIZABETHPORT, which arrived on September 27, 1962. At that time, Oakland had only one berth for container loading and discharge. That berth had six acres for container storage and no container cranes such as Matson had at its Alameda facility. By 1969, however, the Sea-Land container berths had four such cranes and sixty acres for storage. \*\*\* But to very briefly return to Matson during the years here in question, it should also be finally noted that in 1969 the company launched the first of its containerships, the HAWAIIAN ENTERPRISE and, shortly thereafter, its second, the HAWAIIAN PROGRESS. ^ Those vessels had



The Hawaiian Progress begins its maiden voyage, Oakland to Hawaii, 1970  
Matson Navigation Company

\* The 1969 hire was made with parties assuming that a portion, at least, of the "stuffing" and "unstuffing" containers (i.e., of loading and discharging their cargoes) would soon accrue to the dockers.

\*\* These figures, as well as those which follow for 1970 to 1982, are reported in the November, 1982 "Official Statement" of the Port of Oakland - p. 16.

\*\*\* "Sea-Land in Oakland," mimeographed, 1973, 10pp.

^ In 1978 the names of these vessels were change to the MANUKAI and MANULANI respectively. Both were also still active in 1980.





The HAWAIIAN ENTERPRISE departing the Golden Gate.

the following specifications: 720 -feet long, 23,880 ton displacement, 32,500 horse-power turbine engines (which provided for a speed of 23 knots and a reduction of nearly 2 days from the usual six-day trip between the West Coast and Hawaii), 988 twenty-four-foot containers and 94 forty-foot containers. \*

Since a very high percentage of the Sea-Land tonnage -- as well as that of a number of other steamship lines -- which was shipped from the Port of Oakland was military cargo destined for Vietnam, comparable annual increases of the total tonnage shipped from the port were also reported during the West Coast docker strike of 1971 - 1972.

<u>Year</u>	<u>Containerized Tonnage</u>
1970	3,650,699
1971	3,887,698
1972	4,577,451
1973	5,395,094

And while its tonnage growth curve was thereafter flattened by a worldwide shipping slowdown, another accelerated growth began in 1976 and continued through 1982.

1974	5,670,712
1975	5,647,979
1976	6,705,452
1977	7,309,328
1978	8,061,622
1979	8,792,442
1980	9,287,537
1981	9,036,694
1982	9,350,000

### Coastwide Tonnage and Man-Hours

In turning to some aggregate figures on the coastwide impact of containerization up to 1981, we may begin with the PMA chart on the 1960 to 1981 coastwide tonnage and man-hours on the following page. It may there be noted that the number of hours worked by West Coast dockers in 1960 is reported to be 23,757,382. And while in ten years the coastwide tonnage had more than doubled, the dockers hours in 1970 had fallen to 19,643,920 -- a decrease of 17 percent. And in the first full year after the strike of 71 - 73, it was reported that 15,734,545 man-hours -- a decrease of 20 percent from the 1970 figure - were required to handle a tonnage which had increased by 18 percent over that of 1970. And in 1981, and with a tonnage exceeding that of 1973 by another 59 percent, coastwide man-hours had declined to 12,523,700 -- a decline from 1973 of nearly 21 percent. In brief, then, the hours worked by West Coast dockers was decreased by 47.3 percent between 1960 and 1981, while the tonnage they handled was increased by 296 percent.

\* For a very brief update as to Matson's role in the present day global economy, see the Appendix, pp. 69ff. Also see the Appendix, pp. 73ff. for such an update as to the specifications of so-called "Panamax" containerhips of the present day -- (i.e., those which have the maximum beam for passage through the Panama Canal), as well as those of having "Post-Panamax" specifications.

## COASTWIDE: TONNAGE AND MAN-HOURS

<b>YEAR</b>	<b>TONNAGE</b>	<b>HOURS</b>	<b>HOURS</b>
1960	28,495,619	23,757,382	100.0%
1961	28,097,962	22,293,093	93.8
1962	27,762,094	21,210,919	89.3
1963	32,292,305	22,512,410	94.8
1964	34,222,791	22,498,509	94.7
1965	40,151,909	24,387,133	102.7
1966	45,640,702	26,653,343	112.2
1967	49,885,315	25,482,708	107.3
1968	54,459,228	25,235,089	106.2
1969	57,761,482	24,310,961	102.3
1970	60,025,612	19,693,920	82.9
1971	48,477,874	14,838,081	62.5
1972	59,633,061	15,824,173	66.6
1973	70,954,893	15,734,545	66.2
1974	75,537,368	14,808,231	62.3
1975	66,968,534	12,130,379	51.1
1976	76,289,936	12,349,221	52.0
1977	78,570,431	12,024,044	50.6
1978	91,973,495	12,909,558	54.3
1979	103,135,709	13,540,093	57.0
1980	113,682,374	13,376,301	56.3
1981	112,960,157	12,523,700	62.7

This report also offered for the first time a 1972 to 1982 coastwide, regional, and port, year-by-year codifications of longshore man-hours, "revenue" tonnage, local membership size, and the average hours worked per employee. These figures coastwide were as follows.

### COAST TOTAL

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	11,013	15,824,173	1,449	59,633,061
1973	10,157	15,734,545	1,524	70,954,893
1974	9,833	14,808,231	1,503	75,537,736
1975	9,314	12,130,379	1,289	66,968,534
1976	8,795	12,349,221	1,399	76,289,936
1977	8,263	12,024,044	1,421	78,570,431
1978	8,168	12,909,558	1,533	91,973,495
1979	8,177	13,540,093	1,595	103,135,709
1980	8,389	13,376,301	1,571	113,682,374
1981	8,059	12,523,700	1,541	112,960,157
1982	8,119	11,207,525	1,423	104,206,486

\* PMA, Annual Report, 1982, p. 21. The hours include the hours secured by being traveled to another port, i.e., the contract "travel hours". It should also be borne in mind that fifty-two weeks of employment at forty hours per week totals 2088 hours. See the Appendix, pp. 77ff. for the 1973 -1981 walking boss and ship clerk man-hours and the size of their port locals.

Before proceeding to other such figure, it must be noted, of course, that the "revenue tonnage" figures which were here and henceforth reported by the PMA were defined by it as the tonnage figure of "the manifested cargo upon which ocean revenue is computed." And with this definition set out, the PMA would also go on to note that such computations were "subject to the following rules."

- 1) When ocean revenue is based on measurement, 40 cubic feet is considered one ton regardless of whether ocean revenue was determined on some other measurement basis.
- 2) When ocean revenue is based on weight, 2,000 pounds is considered one ton regardless of how manifested.
- 3) Automobiles are reported on the basis of 40 cubic feet to the ton regardless of how manifested.
- 4) Lumber and logs are reported on the basis of 1,000 board feet to the ton regardless of how manifested. Logs are converted to board feet using the Brereton Log Scale. The formula for the Brereton Log Scale is

$$D^2 \times 0.7854 \times L/12 = \text{contents in board feet.}$$

"D" is the average middle diameter of a log in inches determined by averaging the diameter of both ends. The square of the diameter  $\times$  0.7854 gives the area of the circle. "L" is the length of the log in feet.

And when reporting figures as to tonnage, this and successive reports, as well as some of the earlier ones, also included these explanations.

"Tonnage reporting categories have been changed several times over the years. AUTOMOBILE tonnage that had previously been included with (OTHER) GENERAL CARGO was reported separately beginning in 1962. AUTOMOBILE tonnage shown prior to 1962 has been estimated. CONTAINER tonnage that had previously been included with (OTHER) GENERAL CARGO was reported as a separate category beginning in 1969. CONTAINER tonnage shown prior to 1969 has been estimated. The estimated AUTOMOBILE and CONTAINER tonnage has been subtracted from the (OTHER) GENERAL CARGO category. Cargo that has been containerized including automobiles, trucks, lumber, logs, or dry bulk commodities is reported as CONTAINER tonnage.

And with these things having thus been set out, we may go on to such regional figures and then to such for each port.

And these were the regional figures.

### SOUTHERN CALIFORNIA

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	3,315	4,650,328	1,437	17,651,187
1973	3,044	4,443,612	1,510	21,080,636
1974	2,943	4,371,155	1,552	24,649,388
1975	2,775	3,555,182	1,301	20,468,718
1976	2,624	3,707,277	1,428	23,702,925
1977	2,409	3,758,781	1,486	25,853,661
1978	2,474	4,386,155	1,616	30,264,446
1979	2,569	4,251,750	1,605	33,802,803
1980	2,507	4,363,966	1,653	37,370,719
1981	2,409	4,495,585	1,731	40,148,958
1982	2,710	4,086,729	1,526	39,043,375

### NORTHERN CALIFORNIA

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	3,617	4,133,952	1,258	13,940,170
1973	3,247	3,742,353	1,277	15,273,137
1974	3,092	3,554,445	1,284	16,185,935
1975	2,901	2,660,143	1,010	14,746,069
1976	2,744	2,530,047	1,002	15,228,579
1977	2,607	2,436,725	1,059	16,078,529
1978	2,417	2,539,826	1,194	18,530,628
1979	2,321	2,644,134	1,251	20,145,940
1980	2,286	2,460,843	1,266	21,623,397
1981	2,143	2,246,160	1,198	19,812,005
1982	2,040	1,962,228	1,104	18,838,030

### OREGON

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	2,035	3,420,894	1,645	15,804,772
1973	1,939	3,907,365	1,846	19,492,552
1974	2,000	3,669,980	1,726	20,749,406
1975	1,936	2,966,538	1,481	17,917,638
1976	1,817	2,994,972	1,676	20,358,536
1977	1,722	2,763,285	1,591	19,959,194
1978	1,723	2,780,456	1,628	22,648,366
1979	1,661	2,925,540	1,720	25,303,358
1980	1,714	2,941,529	1,645	25,992,853
1981	1,730	2,698,532	1,562	26,551,995
1982	1,657	2,383,838	1,444	23,793,897

**WASHINGTON**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	2,046	3,618,999	1,602	12,236,932
1973	1,927	3,641,215	1,631	15,108,568
1974	1,798	3,212,651	1,546	13,953,057
1975	1,702	2,948,516	1,514	13,836,109
1976	1,610	3,116,925	1,694	16,999,896
1977	1,525	3,065,253	1,709	16,679,047
1978	1,554	3,203,121	1,792	20,530,055
1979	1,626	3,718,669	1,918	23,883,808
1980	1,882	3,609,963	1,740	28,695,405
1981	1,777	3,083,423	1,655	26,447,199
<b>1982</b>	<b>1,712</b>	<b>2,774,730</b>	<b>1,608</b>	<b>22,531,184</b>

And as for the figures by port, these were reported.

**SOUTHERN CALIFORNIA**

	<b>LOS ANGELES/LONG BEACH</b>		<b>Local 13</b>	
	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	3,061	4,419,251	1,490	16,942,602
1973	2,791	4,256,167	1,568	19,983,163
1974	2,707	4,205,107	1,612	23,316,148
1975	2,558	3,383,790	1,340	19,447,433
1976	2,418	3,588,774	1,486	22,674,338
1977	2,226	3,614,309	1,530	24,885,025
1978	2,336	4,193,311	1,643	28,807,896
1979	2,436	3,940,370	1,611	31,975,346
1980	2,381	4,030,843	1,664	35,365,826
1981	2,291	4,178,073	1,741	37,887,502
<b>1982</b>	<b>2,585</b>	<b>3,790,136</b>	<b>1,531</b>	<b>36,962,381</b>

	<b>PORT HUENEME</b>		<b>Local 46</b>	
	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	130	31,311	467	128,468
1973	130	22,633	381	65,459
1974	117	24,700	448	56,264
1975	103	22,699	390	57,216
1976	100	38,707	565	76,601
1977	94	40,461	708	187,791
1978	56	46,947	743	264,895
1979	49	120,183	1,303	424,380
1980	37	197,206	1,693	596,182
1981	35	176,768	1,613	530,132
<b>1982</b>	<b>41</b>	<b>159,331</b>	<b>1,342</b>	<b>649,972</b>

**SAN DIEGO Local 29**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	124	199,766	1,366	580,117
1973	123	164,812	1,389	1,032,014
1974	119	141,348	1,273	1,276,976
1975	114	148,693	1,265	964,069
1976	106	79,796	986	951,986
1977	89	104,011	1,237	780,845
1978	82	145,897	1,482	1,191,655
1979	84	191,197	1,722	1,403,077
1980	89	135,907	1,395	1,408,711
1981	83	140,744	1,568	1,731,324
1982	84	137,262	1,438	1,431,022

**NORTHERN CALIFORNIA****SAN FRANCISCO BAY AREA Local 10**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	3,179	3,750,596	1,291	11,273,544
1973	2,840	3,279,375	1,276	12,034,851
1974	2,728	3,091,370	1,294	12,449,298
1975	2,560	2,274,196	1,005	10,812,952
1976	2,420	2,051,695	981	11,843,171
1977	2,304	1,949,038	1,048	12,636,765
1978	2,147	2,105,541	1,181	14,229,203
1979	2,068	2,103,511	1,231	15,160,182
1980	2,034	2,050,388	1,251	15,460,292
1981	1,911	1,830,329	1,167	14,378,470
1982	1,813	1,637,213	1,097	15,027,536

**SACRAMENTO Local 18**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	35	71,941	1,572	770,249
1973	31	114,931	2,067	877,368
1974	31	183,138	2,048	801,770
1975	30	142,450	2,197	1,149,791
1976	35	223,569	1,951	1,109,861
1977	39	249,852	1,985	1,133,263
1978	39	175,750	1,968	1,678,140
1979	40	267,418	2,061	1,794,878
1980	44	143,811	2,075	2,871,058
1981	39	109,191	2,080	2,665,094
1982	39	141,103	1,685	1,825,446

**EUREKA Local 14**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	154	135,239	1,184	407,469
1973	141	174,796	1,572	666,934
1974	124	140,839	1,420	830,718
1975	118	108,378	1,117	754,000
1976	113	113,003	1,222	928,711
1977	102	73,672	957	974,728
1978	89	78,755	1,062	831,956
1979	79	51,336	912	885,965
1980	71	41,771	862	927,349
1981	62	42,091	862	470,618
1982	62	36,695	877	403,541

**STOCKTON Local 54**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	249	176,176	839	1,488,908
1973	235	173,251	1,004	1,693,984
1974	209	139,098	964	2,104,149
1975	193	135,119	821	2,029,326
1976	176	141,780	960	1,346,836
1977	162	164,163	1,048	1,333,773
1978	142	179,780	1,249	1,791,329
1979	134	221,869	1,501	2,304,915
1980	137	224,873	1,445	2,364,698
1981	131	264,549	1,534	2,297,823
1982	126	147,217	1,139	1,581,507

**CRESCENT CITY Local 49**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	18	9,096	804	68,810
1973	17	11,394	1,209	77,225
1974	17	9,256	870	68,326
1975	15	6,552	614	72,980
1976	15	8,109	774	56,797
1977	11	8,632	780	67,160
1978	9	7,995	892	74,486
1979	8	7,480	608	69,558
1980	5	7,016	643	59,910
1981	5	4,826	464	36,007
1982	4	2,181	220	21,637



OREGON

**NORTH BEND/COOS BAY Local 12**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	289	481,474	1,527	4,132,184
1973	281	597,255	1,819	4,979,681
1974	330	527,031	1,585	5,523,121
1975	319	411,228	1,365	4,163,611
1976	302	452,599	1,535	4,697,440
1977	283	341,090	1,263	4,713,850
1978	272	327,206	1,236	4,260,860
1979	245	334,553	1,372	4,993,728
1980	232	297,844	1,249	4,307,407
1981	213	237,199	1,170	3,439,279
<b>1982</b>	<b>204</b>	<b>285,883</b>	<b>1,321</b>	<b>3,321,504</b>

**NEWPORT Local 53**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	40	32,039	1,319	82,091
1973	36	39,598	1,461	123,110
1974	30	34,527	1,183	97,768
1975	27	43,461	1,108	118,955
1976	24	38,160	978	123,706
1977	24	23,686	672	109,125
1978	23	18,543	774	83,811
1979	22	28,825	939	90,874
1980	21	3,732	536	30,801
1981	21	2,052	429	19,348
<b>1982</b>	<b>19</b>	<b>2,694</b>	<b>578</b>	<b>15,814</b>

**ASTORIA Local 50**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	122	313,371	1,870	828,721
1973	116	238,884	1,732	805,319
1974	140	215,681	1,480	780,510
1975	136	237,522	1,483	752,654
1976	131	268,922	1,712	830,686
1977	128	218,569	1,492	724,756
1978	138	176,555	1,375	444,265
1979	140	186,727	1,533	533,163
1980	131	170,415	1,526	420,714
1981	125	118,394	1,271	272,528
<b>1982</b>	<b>121</b>	<b>129,421</b>	<b>1,257</b>	<b>388,858</b>

**PORTLAND Local 08**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	913	1,400,926	1,602	6,363,416
1973	863	1,760,198	1,839	8,100,593
1974	873	1,690,247	1,735	8,185,071
1975	848	1,305,693	1,445	6,413,387
1976	775	1,268,351	1,675	7,818,705
1977	722	1,253,180	1,678	8,655,183
1978	741	1,233,818	1,706	10,540,600
1979	719	1,380,467	1,810	12,499,078
1980	800	1,375,902	1,644	13,303,651
1981	818	1,379,984	1,663	14,556,917
<b>1982</b>	<b>778</b>	<b>1,022,247</b>	<b>1,354</b>	<b>12,610,956</b>

**WASHINGTON****VANCOUVER Local 04**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	240	329,694	1,608	1,423,288
1973	225	353,965	1,798	1,757,700
1974	217	360,028	1,807	1,831,549
1975	209	253,915	1,383	2,156,450
1976	197	302,367	1,664	2,258,574
1977	192	298,069	1,650	1,802,699
1978	189	381,848	1,898	2,676,114
1979	187	350,260	1,860	2,364,299
1980	206	298,154	1,746	2,657,416
1981	201	282,295	1,534	2,347,296
<b>1982</b>	<b>195</b>	<b>253,873</b>	<b>1,440</b>	<b>2,348,293</b>

**LONGVIEW Local 21**

	<b>REGISTRA- TION</b>	<b>LONGSHORE HOURS</b>	<b>AVG. HRS. PER EMP.</b>	<b>REVENUE TONNAGE</b>
1972	413	854,294	1,845	2,906,262
1973	401	906,071	2,001	3,648,924
1974	393	833,210	1,940	4,263,061
1975	382	708,167	1,759	4,239,601
1976	373	656,464	1,861	4,572,050
1977	362	620,059	1,760	3,886,421
1978	351	634,491	1,792	4,568,230
1979	340	637,228	1,853	4,752,658
1980	319	788,466	1,998	5,212,954
1981	347	673,782	1,753	5,880,620
<b>1982</b>	<b>336</b>	<b>687,539</b>	<b>1,851</b>	<b>5,089,037</b>

**ABERDEEN Local 24**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	222	377,978	1,551	1,171,333
1973	216	373,534	1,578	1,253,849
1974	202	308,050	1,401	1,049,089
1975	189	268,472	1,395	951,806
1976	181	363,521	1,662	1,142,686
1977	168	296,971	1,513	950,402
1978	178	321,460	1,676	1,114,182
1979	216	482,584	1,932	1,371,274
1980	206	363,250	1,621	1,130,233
1981	194	238,966	1,382	799,051
<b>1982</b>	<b>187</b>	<b>332,486</b>	<b>1,719</b>	<b>1,099,802</b>

**OLYMPIA Local 47**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	93	89,201	1,300	217,446
1973	88	57,493	1,368	133,557
1974	80	51,388	1,112	130,947
1975	77	43,238	1,138	124,916
1976	54	44,841	1,458	105,437
1977	52	53,036	1,402	121,410
1978	42	70,342	1,627	153,263
1979	39	79,429	1,945	176,293
1980	54	59,834	1,312	152,452
1981	48	43,794	1,089	111,076
<b>1982</b>	<b>47</b>	<b>39,164</b>	<b>1,277</b>	<b>101,536</b>

**TACOMA Local 23**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	357	933,675	1,867	3,415,444
1973	344	1,031,413	1,973	4,424,282
1974	313	958,390	1,910	3,927,351
1975	303	835,878	1,854	4,191,315
1976	300	839,438	1,986	4,862,983
1977	289	885,063	2,035	4,731,830
1978	373	904,169	2,041	6,881,348
1979	349	1,011,233	2,098	9,038,022
1980	456	1,186,580	2,038	11,615,872
1981	443	1,082,713	2,020	10,548,536
<b>1982</b>	<b>430</b>	<b>908,651</b>	<b>1,815</b>	<b>7,567,444</b>

**SEATTLE Local 19**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	1,081	1,617,665	1,568	5,409,006
1973	998	1,555,620	1,563	7,241,521
1974	936	1,413,987	1,555	6,917,735
1975	885	1,251,318	1,478	6,417,542
1976	833	1,225,971	1,618	8,599,713
1977	777	1,234,367	1,697	8,765,092
1978	723	1,277,647	1,745	9,970,393
1979	684	1,344,199	1,821	10,678,879
1980	800	1,393,298	1,755	13,326,622
1981	737	1,287,709	1,754	12,537,621
<b>1982</b>	<b>703</b>	<b>1,026,749</b>	<b>1,526</b>	<b>11,623,490</b>

**EVERETT Local 32**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	76	270,241	1,937	865,083
1973	73	281,749	2,065	865,660
1974	72	234,665	1,807	819,794
1975	69	264,809	1,983	959,473
1976	67	301,184	2,082	881,048
1977	68	299,477	2,110	902,420
1978	67	300,023	2,138	1,060,458
1979	127	318,012	1,987	938,143
1980	125	279,169	1,776	1,021,165
1981	122	218,675	1,620	894,037
<b>1982</b>	<b>120</b>	<b>284,539</b>	<b>1,795</b>	<b>877,815</b>

**BELLINGHAM Local 07**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	65	98,120	1,410	654,192
1973	61	71,718	1,322	597,680
1974	56	42,616	1,007	634,319
1975	50	78,542	1,336	671,672
1976	48	55,677	1,367	715,237
1977	47	52,378	1,277	607,471
1978	46	43,023	1,421	614,298
1979	42	53,286	1,632	768,761
1980	53	63,722	1,406	859,267
1981	53	71,392	1,438	1,051,955
<b>1982</b>	<b>51</b>	<b>43,012</b>	<b>1,360</b>	<b>840,281</b>

**ANACORTES Local 25**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	26	33,462	1,557	60,216
1973	24	35,993	1,374	65,917
1974	24	15,826	1,068	25,791
1975	24	21,373	1,225	50,819
1976	24	21,863	1,355	38,140
1977	23	12,333	1,125	23,322
1978	23	19,853	1,444	33,642
1979	16	29,833	1,774	42,063
1980	26	21,060	943	31,007
1981	26	10,579	746	78,954
1982	28	5,850	873	12,784

**PORT GAMBLE Local 51**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	39	17,737	1,435	48,320
1973	39	11,694	1,377	20,320
1974	33	7,326	1,023	10,284
1975	30	8,522	985	29,007
1976	31	9,005	1,260	37,318
1977	30	2,637	1,203	26,288
1978	29	5,588	1,563	36,822
1979	28	4,224	1,944	61,437
1980	37	2,944	1,238	30,568
1981	35	6,296	905	56,210
1982	31	3,631	1,260	39,363

**PORT ANGELES Local 27**

	REGISTRA- TION	LONGSHORE HOURS	AVG. HRS. PER EMP.	REVENUE TONNAGE
1972	87	180,920	1,470	395,892
1973	84	222,001	1,584	505,782
1974	82	180,403	1,381	437,747
1975	75	176,364	1,483	439,559
1976	72	255,425	1,847	617,334
1977	71	228,991	1,658	550,812
1978	73	261,015	1,707	665,649
1979	125	395,869	2,023	808,936
1980	125	240,106	1,461	528,219
1981	119	123,299	1,034	369,759
1982	117	130,648	1,405	368,689

## The Coastwide Mix of Commodities as of 1981

In its annual report of 1981 the PMA also included the following aggregate figures as to the 1959 to 1981 coastwide "mix" of what it classed as generic freight commodities and the coastwide total tonnage for each of the years thus reported upon. And, hence, too, it must also be noted that the tonnage figures also came with this explanation. \*

Tonnage reporting categories have been changed several times over the years. AUTOMOBILE tonnage that had previously been included with (OTHER) GENERAL CARGO was reported seperately beginning in 1962. AUTOMOBILE tonnage shown prior to 1962 has been estimated. CONTAINER tonnage that had previosly been included with (OTHER) GENERAL CARGO was reported as a separate category beginning in 1969. CONTAINER tonnage shown prior to 1969 has been estimated. The estimated AUTOMOBILE and CONTAINER tonnage has been subtracted from the (OTHER) GENERAL CARGO category. Cargo that has been containerized including automobiles, trucks, lumber, logs, or dry bulk commodities is reported as CONTAINER tonnage.

YEAR	LUMBER AND LOGS	AUTOMOBILES	CONTAINERS
1959	1,531,187	1,044,785	45,000
1960	1,647,425	1,174,758	723,899
1961	2,024,142	1,304,731	1,402,798
1962	1,990,822	1,434,704	2,081,697
1963	2,554,574	1,554,429	2,760,597
1964	3,008,002	1,969,937	3,439,496
1965	3,201,633	2,333,695	4,118,395
1966	3,375,926	2,790,661	4,797,295
1967	4,423,723	2,445,764	5,476,194
1968	6,028,645	3,433,662	6,155,093
1969	5,550,856	4,384,191	6,833,993
1970	5,742,211	4,524,600	8,782,425
1971	4,390,446	4,805,033	8,237,217
1972	6,103,609	5,233,750	12,427,891
1973	6,771,119	5,302,086	17,286,133
1974	6,045,637	6,502,908	19,645,497
1975	5,901,839	5,561,014	17,826,596
1976	6,877,271	7,828,243	23,221,682
1977	6,805,138	9,457,329	26,414,368
1978	7,116,000	10,571,245	28,819,244
1979	7,512,088	11,243,783	31,004,124
1980	5,778,206	12,889,020	34,961,122
<b>1981</b>	<b>4,663,983</b>	<b>11,361,442</b>	<b>35,285,833</b>

\* It must also be noted, of course, that - with the fond hope of somehow aiding the reader - the author added the figures which here are shown -- as they also are on his page 48 -- as to the "(TOTAL HOURS)" for each of the years reported upon.

YEAR	GENERAL CARGO	DRY BULK	TOTAL TONNAGE	(TOTAL HOURS)
1959	14,428,868	8,095,634	25,145,474	—
1960	14,177,421	10,772,116	28,495,619	23,757,382
1961	11,714,223	11,652,088	28,097,982	22,293,093
1962	12,254,080	10,000,791	27,762,094	21,210,919
1963	12,192,269	13,230,436	32,292,305	22,512,410
1964	12,299,523	13,505,833	34,222,791	22,498,509
1965	13,685,021	16,813,165	40,151,909	24,387,133
1966	16,668,103	18,008,717	45,640,702	26,653,343
1967	17,168,267	20,371,367	49,885,315	25,482,708
1968	18,004,930	20,836,898	54,459,228	25,235,089
1969	18,454,681	22,537,761	57,761,482	24,310,961
1970	15,316,358	25,660,018	60,025,612	19,693,920
1971	11,282,218	19,762,760	48,477,674	14,838,081
1972	12,432,221	23,435,590	59,633,061	15,824,173
1973	10,542,056	31,053,499	70,954,893	15,734,545
1974	11,022,499	32,320,845	75,537,386	14,808,231
1975	8,033,396	29,645,689	66,968,534	12,130,379
1976	8,134,498	30,228,242	76,289,936	12,349,221
1977	8,563,580	27,330,016	78,570,431	12,024,044
1978	9,844,671	35,622,335	91,973,495	12,909,558
1979	9,402,025	43,973,689	103,135,709	13,540,093
1980	9,485,736	50,568,290	113,682,374	13,376,301
1981	9,101,434	52,547,465	112,960,157	12,523,700

And since it may be assumed that the port distribution of this 1981 mix of cargoes was much like that of the following year, the distribution figures which the PMA also included in its report of 1982 should here be cited, too. \*

#### REVENUE TONNAGE BY PORT BY COMMODITY JANUARY THROUGH DECEMBER 1982

If tonnage of a commodity handled in a port is 10% or more of the total of that commodity on the coast, the tonnage figure is shown in **bold type**.

	COMMODITY CATEGORY					Total Tonnage	% of Total
	Lumber/Logs	Automobiles	Containers	Other General Cargo	Dry Bulk		
<b>SOUTHERN CALIFORNIA</b>							
Los Angeles/Long Beach	143,837	<b>3,578,552</b>	<b>17,829,345</b>	<b>4,128,251</b>	<b>11,482,396</b>	36,962,381	35.48%
San Diego	76,082	20,407	44,816	116,795	1,172,922	1,431,022	1.37
Port Hueneme	839	488,801	10,486	149,846	—	649,972	.62
Total	220,758	4,087,760	17,684,647	4,394,892	12,655,318	39,043,375	37.47%
% of Commodity	4.07%	39.69%	45.70%	52.97%	30.51%		
% of Area Total	.57%	10.47%	45.29%	11.26%	32.41%	100%	
<b>NORTHERN CALIFORNIA</b>							
San Francisco Bay Area	12,212	<b>1,868,614</b>	<b>10,555,348</b>	<b>1,263,616</b>	1,327,746	15,027,536	14.42%
Eureka	29,865	—	—	300,417	73,259	403,541	.39
Sacramento	3,905	—	—	95,065	1,726,476	1,825,446	1.75
Stockton	—	—	3,621	50,893	1,526,993	1,581,507	1.52
Total	45,982	1,868,614	10,558,969	1,709,991	4,654,474	18,838,030	18.08%
% of Commodity	.85%	18.14%	27.29%	20.61%	11.22%		
% of Area Total	.24%	9.92%	56.05%	9.08%	24.71%	100%	

\* PMA Annual Report - 1982, p. 25.

**OREGON**

Vancouver, WA	65,297	71,631	2,636	159,590	2,049,139	2,348,293	2.25%
Portland	191,237	<b>2,333,771</b>	763,546	374,323	<b>8,948,079</b>	12,610,956	12.10
North Bend	<b>564,670</b>	—	3,512	58,211	2,695,111	3,321,504	3.19
Longview, WA	<b>1,122,791</b>	59	28,381	310,151	3,627,655	5,089,037	4.88
Crescent City, CA	13,834	—	—	7,803	—	21,637	.02
Astoria	286,059	—	27,944	30,202	42,451	386,656	.37
Newport	15,814	—	—	—	—	15,814	.02
Total	2,259,702	2,405,461	826,019	940,280	17,362,435	23,793,897	22.83%
% of Commodity	41.63%	23.36%	2.13%	11.33%	41.85%		
% of Area Total	9.50%	10.11%	3.47%	3.95%	72.97%	100%	

**WASHINGTON**

Bellingham	6,323	—	—	178,503	655,455	840,281	.81%
Seattle	23,471	947,891	<b>8,598,572</b>	495,690	1,557,866	11,623,490	11.15
Tacoma	<b>862,653</b>	988,664	1,030,067	487,347	<b>4,198,713</b>	7,567,444	7.26
Aberdeen	<b>1,022,690</b>	—	—	115	76,997	1,099,802	1.06
Anacortes	12,784	—	—	—	—	12,784	.01
Port Angeles	278,654	—	30	23,329	66,656	368,669	.35
Everett	<b>559,082</b>	25	99	67,152	251,457	877,815	.84
Olympia	97,147	—	—	—	4,389	101,536	.10
Port Gamble	39,363	—	—	—	—	39,363	.04
Total	2,902,167	1,936,580	9,628,768	1,252,136	6,811,533	22,531,184	21.62%
% of Commodity	53.46%	18.80%	24.88%	15.09%	16.42%		
% of Area Total	12.88%	8.60%	42.73%	5.56%	30.23%	100%	
<b>Coast Total</b>	<b>5,428,609</b>	<b>10,298,415</b>	<b>38,698,403</b>	<b>8,297,299</b>	<b>41,483,760</b>	<b>104,206,488</b>	<b>100.00%</b>
<b>% of Coast Total</b>	<b>5.21%</b>	<b>9.88%</b>	<b>37.14%</b>	<b>7.96%</b>	<b>39.81%</b>	<b>100.00%</b>	

With these figures at hand, it may be said that containerized tonnage increased by some 568 percent between 1960 and 1965 and by 1970 had also more than doubled, the figure being by 213 percent. And it also may thus be said that by 1973 it had nearly doubled once more -- it was up by 196 percent -- and further still said that it was up another 204 percent by 1981. And as a correlate to these increases, it also appears that such tonnage constituted 2 percent of the total coastwide tonnage in 1960; ten percent of that tonnage in 1965; 14 percent in 1970; 24 percent in 1973; and 31 percent in 1981. And hence as the following figures show, the coastwide tonnage of cargoes not containerized had thereby severely declined. And as might then be supposed, the biggest impact of that being so was on those of a San Francisco gang.

**Coastwide Conventional Tonnage**

Year	Tonnage	% Down	% of Total Tonnage
1960	14,177,421	--	49
1965	13,685,021	4	34
1973	10,542,056	26	14
1981	9,101,434	36	8

**Indices of Increased Productivity**

When the PMA presented its increased productivity figures up to the end of the first M & M, it cautioned the reader thusly: "With the multiplicity of operations on the West Coast and with the varying applications and effects of contract provisions from company to company and between the areas, the gross figures used in this and



future reports , regardless of how modified or refined, obviously cannot be considered as data reflecting individual company performance." \* Thus, as then was also said, "such figures at best can reflect an industry trend." \*\* The association then also added this: "Since these are average figures, and longshoring consists of many radically different kinds of operations, it is axiomatic that in some operations the operator has more than offset his increased labor costs (as occasioned by higher wages and increased benefit costs - HM), while certain other operations, because of their nature, can offset only part or none of the increased labor costs."

Within the unknown limits thus imposed and acknowledged, the longshore productivity "trend" of the initial M & M was pictured as follows.

COASTWIDE PRODUCTIVITY TREND: 1960 - 1965

<u>Year</u>	<u>Weighted Tonnage</u> ***	<u>Tons per Hour</u>	<u>Hours per Ton</u>
1960	19,877,926	.837	1.195
1961	18,776,312	.842	1.187
1962	19,761,461	.932	1.073
1963	21,707,956	.964	1.037
1964	23,418,125	1.041	.961
1965	26,701,377	1.095	.913

It thus would appear that from 1960 to 1965 the weighted tons per hour figure was increased by 30.8 percent, while the hours per ton was reduced by 23.6 percent.

And, as on occasion already indicated, the trends which developed during the second M & M were evidently even more marked. Thus, the following figures subsequently reported.

COASTWIDE PRODUCTIVITY TREND: 1966- 1970

<u>Year</u>	<u>Weighted Tonnage</u>	<u>Tons per Hour</u>	<u>Hours per Ton</u>
1966	31,233,729	1.172	.853
1967	33,588,221	1.318	.759
1968	37,789,710	1.498	.688
1969	39,731,275	1.634	.612
1970	39,487,613	2.006	.499

On this basis, then, the 1970 tons per hour figure was higher than the 1965 by 71 percent and higher than the figure of 1960 by 240 percent, while the reduction of hours per ton was 41.5 and 58.2 respectively.

\* PMA Annual Report - 1966, p. 8. Such figures, too, of course, could not be viewed as reflecting the role of any particular local in their realization.

\*\* As might be supposed, such figures were also thereafter presented in the PMA Annuals Reports. However, the one for 1980 will henceforth be cited here since its figures begin with those of 1960 and that is not so for the reports of 1981 or 1982. As earlier noted (p. 48, n.\*) the PMA did not include in any such figures the hours worked by the union walking bosses and the union ship clerks so as to facilitate the longshore work. And as noted there, too, see the Appendix, p. 66 for the 1973 - 1981 size and manhours of all walking boss and clerk locals.

\*\*\* Dry bulk cargoes were treated as equivalent to 1 / 5 of their actual tonnage.

<u>Year</u>	<u>Weighted Tonnage</u>	<u>Tons per Hour</u>	<u>Hours per Ton</u>
1970	39,487,613	2.006	.499
1971 - 1972 ^			

And, as it happened, the trends thus measured were also destined to be still yet more dramatic between 1973 and 1980 .

<u>Year</u>	<u>Weighted Tonnage</u>	<u>Tons per Hour</u>	<u>Hours per Ton</u>
1973	46,112,090	2.931	.341
1974	49,680,710	3.355	.298
1975 *	43,251,982	3.566	.280
1976	52,197,342	4.219	.237
1977	56,706,417	4.716	.212
1978	63,475,628	4.917	.203
1979	67,956,753	5.019	.199
1980	73,538,059	5.498	.182

Briefly put, these increases in the tons handled per hour may also thus be pictured.

<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1973</u>	<u>1980</u>
100%	131%	240%	351%	657%

And, by the same token, the decrease in the hours required per ton may likewise be so pictured.

1960	1965	1970	1973	1980
100%	76.47%	41.76%	23.43%	15.23%

And as these charts show, these years also saw an increasing concentration of tonnage and, as well as the "mix" of commodities through the major port areas.

Distribution of Coastwide Revenue Tonnage - by percent: 1976

	Containers	General Cargo	Auto	Dry Bulk	Logs/Lumber	Total
LA / Longbeach	43.5	44.8	40.4	17.3	6.4	29.7
SF Bay Area	29.8	19.4	23.0	5.1	.1	15.7
Seattle	22.6	7.9	18.4	4.2	.4	11.3
Portland	3.2	7.1	13.5	17.1	3.6	10.1
Tacoma	<u>.7</u>	<u>8.3</u>	<u>1.9</u>	<u>10.7</u>	<u>11.9</u>	<u>6.7</u>
	99.8	87.5	97.2	54.4	22.4	73.5

PMA - Annual Report , 1976, p. 20. The first such figures released.

Distribution of Coastwide Commodities by percent: 1976

	Containers	General Cargo	Auto	Dry Bulk	Logs/Lumber	Total
LA / Longbeach	44.1	17.0	13.9	23.0	2.0	100
SF Bay Area	57.6	14.1	15.2	13.0	.1	100
Seattle	60.4	7.9	16.7	14.7	.3	100
Portland	9.3	7.8	13.6	66.1	3.2	100
Tacoma	3.0	14.0	2.9	63.9	16.2	100

In reporting these figures as of 1976 the PMA had highlighted concentrations thusly: When a port handled 10 percent or more of the total coastwide tonnage of a particular commodity, its tonnage figure for that commodity would appear in bold print.

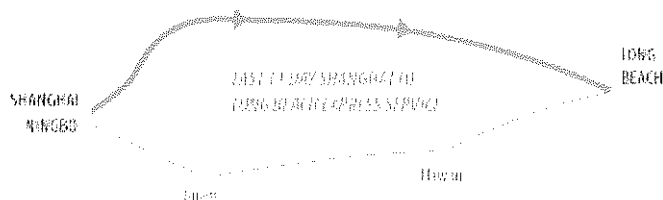
	Lumber/Logs	Automobiles	Containers	Other General Cargo	Dry Bulk	Total Tonnage	% of Total
<b>SOUTHERN CALIFORNIA</b>							
Los Angeles/Long Beach	270,937	<b>3,582,024</b>	<b>16,185,634</b>	<b>4,295,306</b>	<b>13,553,601</b>	37,887,502	33.54%
San Diego	94,368	18,384	52,363	58,179	1,508,030	1,731,324	1.53
Port Hueneme	5,723	375,113	10,746	138,550	—	530,132	.47
Total	371,028	3,975,521	16,248,743	4,492,035	15,061,631	40,148,958	35.54%
% of Commodity	7.96%	35.00%	46.05%	49.36%	28.66%		
% of Area Total	.92%	9.90%	40.48%	11.19%	37.51%	100.00%	
<b>NORTHERN CALIFORNIA</b>							
San Francisco Bay Area	12,581	<b>2,246,514</b>	<b>9,001,285</b>	<b>1,550,184</b>	1,567,906	14,378,470	12.73%
Eureka	21,316	—	—	307,590	141,712	470,618	.42
Sacramento	21,869	4,267	314	17,158	2,621,486	2,665,094	2.36
Stockton	—	—	174	105,916	2,191,733	2,297,823	2.03
Total	55,766	2,250,781	9,001,773	1,980,848	6,522,837	19,812,005	17.54%
% of Commodity	1.20%	19.81%	25.51%	21.76%	12.41%		
% of Area Total	.28%	11.36%	45.44%	10.00%	32.92%	100.00%	
<b>OREGON</b>							
Vancouver, WA	53,740	319,916	4,961	182,230	1,786,449	2,347,296	2.08%
Portland	212,501	<b>2,548,868</b>	862,314	700,225	<b>10,233,009</b>	14,556,917	12.89
North Bend	429,177	—	19	109,309	2,900,774	3,439,279	3.04
Longview, WA	<b>858,529</b>	10,609	22,939	271,213	4,717,330	5,880,620	5.21
Crescent City, CA	33,387	—	—	2,620	—	36,007	.03
Astoria	244,653	68	11,931	15,876	—	272,528	.24
Newport	19,348	—	—	—	—	19,348	.02
Total	1,851,335	2,879,461	902,164	1,281,473	19,637,562	26,551,995	23.51%
% of Commodity	39.69%	25.34%	2.56%	14.08%	37.38%		
% of Area Total	6.97%	10.84%	3.40%	4.83%	73.96%	100.00%	
<b>WASHINGTON</b>							
Bellingham	13,298	11	3,087	209,507	826,052	1,051,955	.93%
Seattle	35,391	1,037,932	<b>8,155,193</b>	549,093	2,760,012	12,537,621	11.09
Tacoma	<b>727,364</b>	<b>1,217,736</b>	974,873	417,413	<b>7,211,150</b>	10,548,536	9.34
Aberdeen	<b>725,247</b>	—	—	4,396	69,408	799,051	.71
Anacortes	17,802	—	—	—	61,152	78,954	.07
Port Angeles	287,908	—	—	15,907	65,944	369,759	.33
Everett	419,730	—	—	150,762	323,545	894,037	.79
Olympia	102,904	—	—	—	8,172	111,076	.10
Port Gamble	56,210	—	—	—	—	56,210	.05
Total	2,385,854	2,255,679	9,133,153	1,347,078	11,325,435	26,447,199	23.41%
% of Commodity	51.15%	19.85%	25.88%	14.80%	21.55%		
% of Area Total	9.02%	8.53%	34.53%	5.09%	42.83%	100.00%	
<b>Coast Total</b>	<b>4,663,983</b>	<b>11,361,442</b>	<b>35,285,833</b>	<b>9,101,434</b>	<b>52,547,465</b>	<b>112,960,157</b>	<b>100.00%</b>
<b>% of Coast Total</b>	<b>4.13%</b>	<b>10.06%</b>	<b>31.24%</b>	<b>8.06%</b>	<b>46.51%</b>	<b>100.00%</b>	

## APPENDIX

Re: Matson's most recent role in the global economy.  
 Excerpts from Yahoo: Matsonchinaexpress, p. 1, item #1.



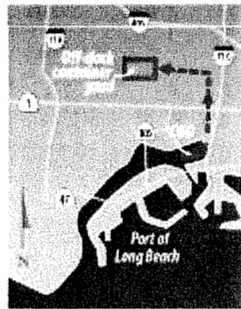
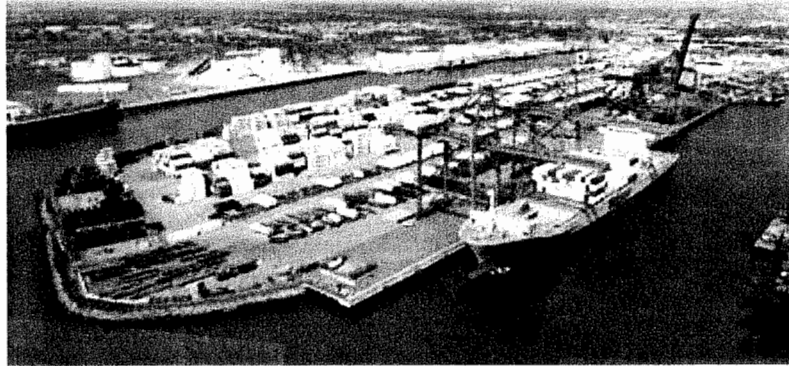
**NEW SERVICE FROM CHINA TO WEST COAST**



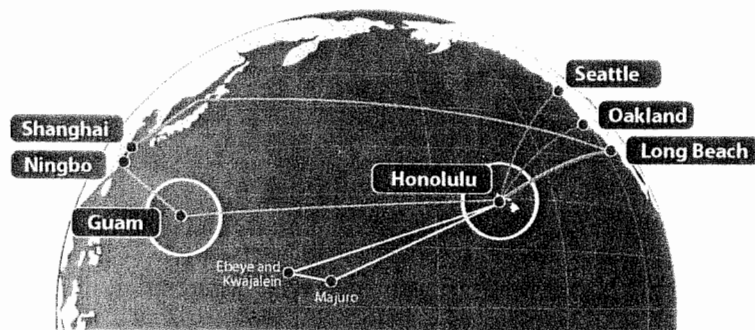
- Container volume both westbound (Hawaii and Guam) and eastbound (China)
- Competitive transit times in China - Long Beach trade lane: Ningbo to Long Beach in 13 days, Shanghai to Long Beach in 11 days
- Fast, reliable, weekly service provides the best total cost solution
- Newer, fuel efficient vessels
- Dedicated Matson Long Beach facility, fast efficient gate turn times (avoiding congestion of large multi-user international container terminals)
- Online technology that provides total intransit cargo visibility
- Subsidiary Matson Integrated Logistics can expedite shipments to virtually any inland U.S. destination

## MATSON'S DEDICATED LONG BEACH TERMINAL

### YOUR CARGO GETS FIRST PRIORITY



- Sunday arrival, Monday availability
- An efficient, state-of-the-art facility servicing Matson vessels only
- Fast truck turn times - approximately 30 minutes
- Three crane offload capability
- Conveniently located off-dock container yard
- One-stop intermodal connections provided by Matson Integrated Logistics



Note: Since nautical "containers" are of different lengths, the unit used to measure a ship's "container capacity" is its "TEU" number - i.e. its twenty-foot equivalent number. Thus, for example, when a ship is said to have a capacity of "2600 TEU" it is being said that it can accommodate the equivalent of 2600 20-foot containers.

Yahoo: Matsonchinaexpress - item #2.

Thursday February 23, 7:45 AM

## **Matson Launches New China - Long Beach Express**

**OAKLAND, Calif.--(BUSINESS WIRE)--Feb. 22, 2006--Matson Navigation Company, Inc. (Matson) officially launched its new China - Long Beach Express today with the departure of the MV Manulani from Shanghai. The new weekly calls by Matson vessels in Ningbo and Shanghai will provide customers with express service from China to Long Beach. The 11-day transit time from Shanghai to Long Beach is one of the fastest in the trans-Pacific trade. The start up marks Matson's entry into the China market, expanding its reach in the Pacific, which it has been serving since 1882. Matson's five most modern, fuel-efficient vessels will be deployed in the service, including four new containerships built in the past four years. Matson's dedicated terminal facility in Long Beach also will help expedite delivery, resulting from the operation's fast throughput and next day cargo availability. The deployment is part of a new Matson Guam - China service that, in total, represents a \$365 million investment in vessel, container and terminal assets; the new port rotation is Long Beach, Honolulu, Guam, Ningbo, Shanghai, Long Beach.**

**"The China - Long Beach Express is an exciting new growth opportunity for Matson," said James Andrasick, Matson president and CEO. "Since announcing our plans for this venture a year ago, Matson has developed a service that will offer competitive transit times, fast and efficient cargo availability in Long Beach and high quality customer service, both in China and the U.S. Matson's offices in Shanghai and Ningbo are staffed with personnel experienced in China's ocean transportation and logistics market. Our U.S. sales and customer service management team also has considerable expertise in the trans-Pacific trade. While the costs of operating a U.S.-flag service are higher than those for international carriers, the economics of this new service will benefit from Matson's westbound cargo volumes moving to Hawaii and Guam, allowing us to price our service competitively."**

**While Matson's 2,600-TEU vessels will compete with larger containerships in the trans-Pacific trade, the company underscores the fact that these relatively smaller ships add to the overall service package of operating efficiencies. Most of the bigger vessels in the trade, up to 9,000 TEUs, include additional stops in Asia to fill the ships before sailing to the West Coast. In addition, unloading these larger ships requires three or four days in port, further hampered by congestion at large multi-user terminals. In contrast, Matson will sail direct from Ningbo and Shanghai to Long Beach, arriving every Sunday at Matson's dedicated facility, with cargo availability the next day. For added convenience, Matson is offering customers the option of draying their cargo to an off-dock container yard four miles from the harbor, allowing large retailers to avoid the congestion of the Ports of Los Angeles and Long Beach. For inland moves, Matson will leverage its intermodal and logistics subsidiary, Matson Integrated Logistics.**

**"Matson selected the ports of Shanghai and Ningbo because of their strong growth potential, as well as their close proximity in the Yangtze River corridor, allowing Matson to maintain a fixed-day weekly schedule during its 35-day port rotation," said Andrasick. "We view this new service as a long-term growth opportunity for the company, which today serves relatively mature markets."**

**Matson provides ocean transportation, intermodal and logistics services. Matson is a wholly-owned subsidiary of Alexander & Baldwin, Inc. of Honolulu (NASDAQ:ALEX).**

**Yahoo: Matsonchinaexpress - item #5 - The Port of LongBeach News Release:**

## **Matson Begins China-L.B. Service**

U.S.-based Shipping Line Enters International Trade

March 6, 2006

Port of Long Beach and Matson Navigation Co. officials on Monday, March 6, celebrated the arrival of a new express shipping service that marks U.S.-based Matson's first entry into the Chinese market.

Matson, an ocean carrier based in Oakland, is one of the few U.S. companies with vessels calling in China. Matson's new weekly China - Long Beach Express service will move goods from Shanghai to Long Beach in 11 days, among the fastest travel times in the transpacific trade.

"We have few U.S.-based shipping lines moving international cargo," said Long Beach Harbor Commissioner Mario Cordero, who welcomed the captain and crew of the Matson Manulani, the first ship in Matson's new service, on Monday with a plaque presentation. "It's very encouraging to see an American company, especially one as highly regarded as Matson, expand into this area of international trade."

Also encouraging, Cordero added, were recent discussions between top Port officials and Matson executives regarding environmental improvement initiatives.

The China - Long Beach Express will deploy five vessels, each capable of carrying 2,600 twenty-foot-long container units. The ships will call at the Chinese ports of Ningbo and Shanghai before heading to Long Beach and the 70-acre Pier C terminal that SSA Marine operates jointly with Matson.

Matson is one of the leading U.S. domestic ocean carries, and has been deploying vessels in the Pacific since 1882. Prior to the launch of the China - Long Beach Express, the company's services were focused on Pacific Ocean routes between Long Beach and Hawaii and Guam.

James Andrasick, Matson's President and CEO, said the expansion makes economic sense, despite the higher expenses associated with U.S. crews.

"The China - Long Beach Express is an exciting growth opportunity for Matson," Andrasick said. "While the costs of operating a U.S.-flag service are higher than those for international carriers, the economics of this new service will benefit from Matson's westbound cargo volumes moving to Hawaii and Guam, allowing us to price our service competitively."



## Goggle: Panamaxcontainerships - entry # 9.



### ANTWERPEN EXPRESS - CONTAINER SHIP

The 4,864 TEU panamax containership Antwerpen Express was built by Hyundai Heavy Industries in South Korea and delivered to owner Hapag-Lloyd Container Line in April 2000. The owner planned to deploy the vessel on its Far East express routes, conducted with its operating partners, P&O Nedlloyd, NYK, OOCL and MISC, within the framework of the Grand Alliance.

Antwerpen Express is the first in a series of seven panamax containerships under construction for Hapag-Lloyd at Hyundai. Of the subsequent six newbuildings, three are owned by Hapag-Lloyd, while the other three will be chartered from Greek owner Costamare Shipping.

Antwerpen Express flies the German flag and has Germanischer Lloyd classification.

#### DESIGN

In common with the earlier series of eleven containerships led by Hannover Express, Antwerpen Express has panamax main dimensions of 294m overall length, 32.2m moulded breadth and a maximum draught of about 13.5m.

Improvements in engine design from MAN B&W enabled Antwerpen Express' naval architects to gain extra cargo space within the given hull envelope. Hannover Express had a cargo capacity of about 4,600, compared to Antwerpen Express' greater capacity of 4,864 TEU. This increase derives in part, about 70 TEU, from the change in engine design. In addition, an extra bay of containers has also been gained by the construction of a shorter accommodation block.

Antwerpen Express' cargo arrangements comprise six cellular cargo holds, five of which are arranged forward of the superstructure and engine room, with the sixth positioned aft. Being of the so-called 'girderless' type, the underdeck area has been optimised for container stowage, to give a maximum of eleven rows and eight tiers of TEU in the hold spaces in the parallel body. The beam also allows an upper deck stow of 13 rows of boxes.

Hyundai, the builder of the vessel, has put the vessel's maximum capacity at 4,890 TEU. Of this, 2,326 TEU can be stowed in the holds and 2,564 TEU can be accommodated on the weatherdeck and pontoon type hatch covers. 350 sockets are available for the transport of reefer containers.

#### PROPULSION

Antwerpen Express has been fitted with a seven-cylinder MAN B&W two-stroke K98MC engine. The engine was developed by MAN B&W in Denmark and its twelve-cylinder 93,360bhp configuration has been chosen by Hapag-Lloyd for its 7,200 TEU series of containerships under construction at Hyundai.

The earlier series of Hannover Express class containerships were fitted with the K90MC engine, which was the widest two-stroke machinery at the time of ordering. The greater power density of the K98MC has enabled Antwerpen Express' power needs to be met with two cylinders less than the nine cylinders used in these preceding vessels.

The 9K90MC installation in each of the Hannover Express sisters delivers 55,980bhp at 94rpm, at a mean effective pressure of 18bar, whereas the seven-cylinder examples for the Antwerpen Express series turn out 54,460bhp at the crankshaft speed, on 18.2bar. The slight reduction in maximum power was regarded as acceptable on the basis of the speed performance of the vessels already in operation.

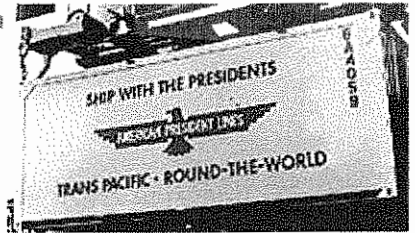
The 7K98MC engine is supercharged by three units of the TPL85-B11 turbo charger design developed by ABB Turbo Systems based in Switzerland, providing one of the first applications for the new TBL-B generation, tailor-made for two-stroke machinery.

Goggle: Panamaxcontainerships - entry #13.



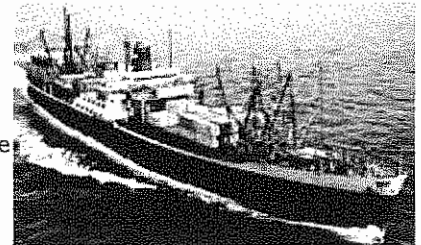
## 50 Years of Containerization

Containerization is 50 years old this year, and APL has been one of its prime movers, providing customers and the industry with innovations that helped to standardize containers as the standard shipping unit, extend intermodalism around the globe, and expand trade to the far reaches of the world.

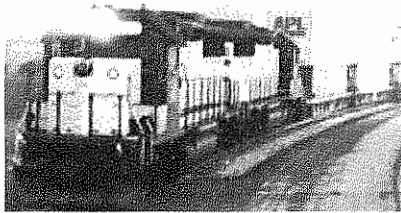


**1958: Realizing the Opportunity.** APL sent a fact-finding team to 26 major ports to assess the world's readiness for containerization. The report was positive, and APL began to integrate the container into its operations.

**1973: Fully Cellular Ships.** Four new Pacesetter class vessels, including the President Jefferson, were built between 1973 and 1974. They were the first fully containerized ships launched by APL.



**1979: APL LinerTrain.** The harsh winter of 1977-78 shut down large segments of the U.S. road and rail transportation system. APL's ultimate response was the LinerTrain, the first dedicated train service operated by an ocean-shipping company.



**1984: APL Stacktrain.** The LinerTrain evolved into the APL Stacktrain with the introduction of APL's double-stack rail cars in 1984. The stackcar's initial appeal was its lower cost per container versus traditional Trailer on Flat Car (TOFC) equipment. An unexpected benefit was a sharp decrease in cargo damage because the stackcar had a much smoother ride than conventional railcars.

**1982 and 1986: 45-foot and 48-foot containers.** With their 50-foot wells, stackcars offered economies of scale from longer containers. APL introduced 45-foot and 48-foot containers in 1982 and 1986, respectively. Both were used on ocean and land.

**1988: Post-Panamax containerships.** The reliability and transit times provided by the stacktrain led APL to develop the first-ever containerships too wide for the Panama Canal. Five 4300-TEU, C10-class vessels were delivered in 1988. The decision committed APL to intermodal container transportation in the Transpacific and started another chapter in the history of containerization.

**1989: 53-foot containers.** APL introduced 53-footers (for land transport only). The longer containers allowed customers to lower their unit costs of shipping goods.

**1995: Second-generation Post-Panamax containerships.** APL launched six 4832-TEU, C11-class containerships, three built in Germany and three in South Korea.

**1995: Launch of [www.apl.com](http://www.apl.com).** The industry's first web site went live. Just a year later, it enabled customers to track their shipments using BL or container numbers, another industry first.

**1997: U.S. West Coast Superterminals.** Global Gateway North and South, in Seattle and Los Angeles, opened and were the largest and most efficient of their kind, with deep-water berths, post-Panamax cranes, on-dock rail, and computerized container tracking.



**1999: HomePort.** The industry's first web portal for customers centralized their shipment information and transactions.

**2003: New Reefer Markets.** APL shipped the first-ever reefer container of highly perishable longan fruit from China to the U.S.



**2005: Real-Time Locating System for containers.** APL's Global Gateway South terminal at the Port of Los Angeles became the first to use a Real Time Locating System (RTLS) to find and track containers. Accurate to within one parking space, the new system has cut misplaced containers by 70%. It's probably no coincidence that Global Gateway South was recently voted the best ocean terminal in the LA-Long Beach harbor by the California Trucking Association.

**Goggle: Panamaxcontainerships - entry #13.**

**February 28, 2001**

## **MOL Chooses Builders for Eight New Panamax Containerships**

**TOKYO ? On December 27, 2000, Mitsui O.S.K. Lines (MOL) (President Kunio Suzuki) announced plans for eight new Panamax containerships. MOL has now decided on the shipyards for the construction of those ships. The eight new ships will expand MOL's cargo capacity on transpacific routes.**

**Four of the new ships will be built at Mitsubishi Heavy Industries, Ltd. Kobe Shipyard and four at Ishikawajima-Harima Heavy Industries Co., Ltd. Yokohama Shipyard. Launching is slated for 2003.**

**The new ships will have a container capacity of about 4,500 TEU, including plugs for 400 refrigerated containers. They have an overall length of about 294 meters, with a beam of about 32.2 meters. The ships are also faster than those currently in operation, with a service speed of 25.5 knots.**

**MOL Group companies will own four of the new ships. MOL will operate the others under long-term charter contracts with Japanese shipowners.**

**The faster, larger ships will replace 2,800 TEU class vessels now serving MOL's transpacific routes. The new ships are part of MOL's mid- and long-term strategy to improve service quality and cargo capacity on routes served by The New World Alliance (TNWA).**

**The 16 containerships MOL now has on order will bring its Over Panamax and Panamax containership fleet to 25, with 13 Over Panamax vessels and 12 Panamax ships.**

**Goggle: Panamaxcontainerships - entry #14.**

**April 26, 2004**

## **MOL to Add 12 New Large-Size Containerships**

**TOKYO - Mitsui O.S.K. Lines, Ltd. (MOL; President: Kunio Suzuki) today announced plans to upgrade its fleet with an additional 12 new Over Panamax full containerships. The move is aimed at improving service quality on liner services that show steady growth and strengthening the company's competitiveness.**

### **Outline of New Containerships**

**Four 8,100 TEU Over Panamax containerships**

**Shipbuilder**

**Mitsubishi Heavy Industries, Ltd.**

**Service speed**

**25.0 knots**

**Delivery**

**2007 to 2008 -4 ships**

**Eight 6,350 TEU Over Panamax containerships**

**Shipbuilder**

**Imabari Shipbuilding Co., Ltd.**

**Service speed****25.5 knots****Delivery****in 2005 - 4 ships****in 2006 - 2 ships****in 2007 to 2008 - 2 ships****Impact of new containerships, and future plans**

The company will deploy newly built containerships on major east-west trades in succession to enhance and improve services. When the new ships are delivered, MOL will have 13 containerships in the 6,350 TEU range, including existing five of the same or similar size ships. These ships will serve as the core of the company's liner fleet on east-west services. The 8,100 TEU ships will serve Asia-Europe routes, taking full advantage of their increased capacity. The company will finalize the details of the deployment plan after reviewing trade and market conditions.

With this fleet expansion, MOL fleet will consist of 25 Over Panamax containerships by 2008, and containership fleet will reach a total of 77 vessels, including those already in operation.

The Union Walking Bosses and Union Ship Clerks \*

Walking Boss Manhours

	<b>SOUTHERN CALIFORNIA</b>	<b>NORTHERN CALIFORNIA</b>	<b>OREGON</b>	<b>WASHINGTON</b>	<b>COAST TOTAL</b>
1973	608,755	327,052	218,732	311,992	1,466,531
1974	601,459	303,400	205,974	283,278	1,394,111
1975	488,702	244,903	160,142	269,370	1,163,117
1976	506,503	225,778	211,503	330,216	1,274,000
1977	523,870	221,937	199,367	329,032	1,274,206
1978	620,664	234,966	204,836	343,648	1,404,114
1979	596,190	244,567	219,170	393,055	1,452,982
1980	598,592	241,482	217,413	385,760	1,443,247
1981	591,456	220,364	193,671	335,395	1,340,886
1981 as % of 1973	3↓	33↓	12↓	7↑	9↓

and . . .

Walking Boss Local Size

	<b>SAN DIEGO</b>	<b>PORT HUENEME</b>	<b>SAN FRANCISCO</b>	<b>PORTLAND</b>
1973	11	9	139	95
1974	11	10	133	95
1975	11	7	122	94
1976	11	2	103	87
1977	11	2	112	76
1978	10	2	98	76
1979	9	2	95	78
1980	7	3	92	90
1981	7	3	93	87
1981 as % of 1973	37↓	66↓	33↓	9↓

\* PMA - Annual Report, 1981, p. 23. In both instances, the figures include "full" and "limited" registrants.

Walking Boss Local Size

	LOS ANGELES	SEATTLE	TOTAL FOREMEN *
1973	263	135	652
1974	254	137	640
1975	239	128	601
1976	237	117	557
1977	213	122	536
1978	226	137	549
1979	221	144	549
1980	223	145	560
1981	214	140	544

1981  
as %  
of  
1973

19↓

3↑

17↓

### Ship Clerk Manhours

	SOUTHERN CALIFORNIA	NORTHERN CALIFORNIA	OREGON	WASHINGTON	COAST TOTAL
1973	1,176,271	1,338,829	316,572	559,830	3,391,502
1974	1,145,401	1,266,605	308,013	526,562	3,246,581
1975	888,380	962,007	223,671	494,601	2,568,659
1976	958,013	876,629	445,049	705,694	2,985,385
1977	970,084	856,161	425,752	733,468	2,985,465
1978	1,131,124	918,579	423,408	767,204	3,240,315
1979	1,095,963	940,743	441,770	850,799	3,329,275
1980	1,185,512	913,835	434,950	850,496	3,384,793
1981	1,192,630	847,959	400,430	817,320	3,258,339
1981 as % of 1973	1↑	37↓	26↑	45↑	4↓

### Ship Clerk Local Size \*

	EUREKA	TACOMA	SAN DIEGO	SAN FRANCISCO	PORTLAND
1973	2	33	19	685	185
1974	2	43	18	652	182
1975	3	44	18	597	173
1976	3	47	17	539	187
1977	3	44	17	511	176
1978	3	47	15	486	170
1979	3	50	15	457	163
1980	3	53	10	435	182
1981	3	45	10	425	212
1981 as % of 1983	50↑	36↑	48↓	38↓	14↑

\* op. cit., p. 21 It should be noted that Eureka, Tacoma, San Diego, and Port Hueneme are "combination" locals, i.e., the clerks are members of the port longshore local. However, the clerks of Los Angeles, San Francisco, Portland (who travel to all of the ports on the Columbia River and the Oregon Coast), and Seattle (who "travel" to the other ports of the Puget Sound and Washington Coast) are organized into separately locals.

	PORT HUENEME	SEATTLE	LOS ANGELES	TOTAL CLERKS
1973	7	216	466	1,613
1974	6	226	455	1,584
1975	6	213	432	1,486
1976	5	212	421	1,431
1977	5	198	405	1,359
1978	5	221	395	1,342
1979	5	217	381	1,291
1980	8	236	369	1,296
1981	8	250	354	1,307
1981 as % of 1973	14↑	15↑	25↓	19↓