



*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# **PROCEEDINGS —**

## ***Twentieth Annual Meeting***

**Theme:**

**“Transportation Alternatives in  
A Changing Environment”**

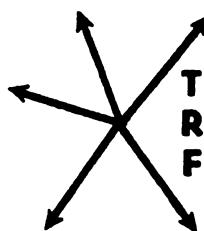
**October 29-30-31, 1979  
Drake Hotel  
Chicago, Illinois**



**Volume XX • Number 1**

**1979**

---



**TRANSPORTATION RESEARCH FORUM**

# An Analysis of the West Coast Longshoring Productivity Trends

by Garland Keesling, Ph.D.\*

## INTRODUCTION

CONTEMPORARY proponents of waterfront modernization advocate that a port's contribution to the national economy is a function of the port's consistent ability to improve cargo-handling productivity. Cargo handling efficiency, in turn, is primarily a function of the technology and prevailing work practices governing the standards and procedures associated with the loading and discharging of cargo tonnage. It is advocated that the elimination of restrictive work practices and the improvement in capital investments would lead to trended improvements in port-wide longshoring accidents, average annual earnings of registered longshoremen, technological expenditures, and ship turnaround time. The favorable evolution of these maritime factors are beneficial in attracting additional berth tonnage and thus are decisive elements in the port's ability to handle greater cargo per gang hour and dollar invested.

Assuming these factors are realized, the normalization of labor-management relations would necessarily follow — a state of affairs that has yet to completely materialize in the West Coast longshore industry.

## HISTORICAL PERSPECTIVE

The year 1948 represented a major turning point in normalizing the relations between the ILWU and the Waterfront Employers' Association, the forerunner of the present day Pacific Maritime Association (PMA). Plagued for years by ideological and political conflicts, the ILWU's leadership was enlightened as to the changes evolving on the Pacific Coast waterfront. Concurrent with the sharp change in the union's bargaining policy was the WEA's complete philosophical change in recognizing Harry Bridges' legitimacy as president of the ILWU and a commitment to bargain in good faith.<sup>1</sup>

Following a severe five month collective bargaining struggle the parties

agreed to a settlement on November 25. The terms of the agreement reflected the "new look" unprecedented in the longshore industry. Important operational provisions provided for the prohibition of strikes and lockouts as unresolved disputes were to be submitted to binding arbitration. The preservation of ILWU's institutional security was granted an extension as the hiring hall procedures were left intact pending court litigation and the grievance procedure was expedited with the union assuming a more responsible role in preventing unauthorized work cessations.

During 1949, a further extension of the "new look" was achieved with the successful merger of the Waterfront Employers' Association and the Pacific American Shipowners Association into the Pacific Maritime Association. The new employers' association assumed the responsibility of centralized negotiations with both the merchant marine seamen and longshoremen engaged in West Coast operations.

The interim years between the "new look" of 1948 and the provocative negotiating sessions preceding the 1959 contract settlement were characterized by generous concessions in the area of compensatory as well as non-compensatory matters. Probably more important than the negotiated terms of contract was Bridges' efforts to unite forces with the International Longshoremen's Association with the intent of formulating an unprecedented national longshore bargaining policy. These efforts were clearly evident in repeated ILWU postponement of contract negotiations in an attempt to coordinate bargaining sessions with that of their East Coast counterpart.<sup>2</sup> In a final attempt to achieve national longshore bargaining, the presidents of the ILA and the ILWU met in Washington, D.C., prior to the ILWU's 1959 negotiations. Failing to reach agreement, Bridges returned to the West Coast and initiated a revolutionary approach to contract negotiations in July, 1959.<sup>3</sup>

An analysis of the background leading up to the 1959 negotiations reveals the parties had informally launched a discussion on the efficiency of cargo handling over the previous two years. Due to high labor costs associated with long-

\*Assistant Professor of Transportation and Logistics, College of Business Administration, Memphis State University, Memphis, Tennessee.

shore cargo handling, the ILWU recognized the inroads being made by truck and rail transport in the carriage of coastal and intercoastal cargo. They also realized that changes in operating procedures were inevitable and failure to conform could have possibly meant the intervention of the government, resulting in a series of settlements failing to measure up to ILWU expectations. Following an extensive study of likely trends in the shipping industry, an informal decision was made in 1957 to permit the ship operators and stevedores to "buy out the property rights" of registered longshoremen previously achieved through negotiated restrictive work practices.<sup>4</sup>

The breakthrough to further developments actually came in 1958, which established the ground work for permitting greater flexibility in operations while simultaneously protecting the job security and earnings of longshoremen. The 1959 contract set the stage for the infamous 1960 Modernization and Mechanization Agreement by establishing a \$1.5 million "mechanization fund" for the fully-registered workforce as an inducement for accepting the introduction of labor-saving devices and recognizing the longshoremen's entitlement to indemnification for their surrendered property rights. Negotiated in late July, 1959, the three-year agreement provided for an immediate eleven-cents-an-hour raise in the straight wage rate, effective July 28, and for an eight-hour daily guarantee effective January 1, 1960. Reopenings on wages, hours, and the mechanization issue were scheduled during the second and third contract years, with the second reopener including an examination of vacation benefits.<sup>5</sup>

Three years of negotiations, augmented with the testing of the ILWU's good faith in a conformance and performance program, finally culminated in an agreement on October 18, 1960. After five months of intensive negotiations, a supplemental agreement on mechanization and modernization was consummated.<sup>6</sup> The settlement provided for the continuance of the mechanization fund with the employers agreeing to a lump sum payment totaling 27.5 million dollars, financially apportioned at five million dollars per annum over a five-and-one-half year period.<sup>7</sup> The fund was established to indemnify fully-registered longshoremen affected by the anticipated reductions in work opportunities arising from the introduction of automated technology and changes in restrictive cargo handling practices.

In exchange for these benefits, the employers were permitted to introduce new

labor-saving machinery, and to possess considerable latitude in adjusting existing work methods and utilizing manpower. Continuation of the sling load limit of 2,100 pounds was permitted in situations where manning, methods and working conditions were the same as in 1937.<sup>8</sup> In all other circumstances, sling load limits were negated for changed operations or where new commodities or operations had been introduced—subject to safety and speedup constraints.<sup>9</sup>

Employers were relieved from restrictions and working rules governing first place of rest and multiple handling. Previous practices which resulted in the requirement of unitized or palletized cargo to first touch with the skin of the dock, depalletized, or repalletized while in transit to or from the ship's hold were eliminated. This provision eliminated unnecessary cargo handling and permitted teamsters to load directly from pallet to truck and unload from truck directly to pallet.

The principal changes in the general provisions regarding gang size and manning were evidenced in the reduction of gang members from previous practices. Instead of the customary eight holdmen assigned to tend each hatch, four holdmen would constitute the minimum gang. Variations of the minimum gang size were permissible when circumstances warranted the placement of additional longshoremen to the gang.<sup>10</sup> Furthermore, greater flexibility in rotating the dockworkers was granted under provisions of the agreement.

The agreement, scheduled to terminate on June 15, 1962, was extended to July 1, 1966, with subsequent reopenings on all negotiable issues, designated annually on June 15, excepting pensions and mechanization.<sup>11</sup>

Negotiating a new contract was not as laborious in 1966 as in 1960. The issues confronting the parties were not as complex and novel as in earlier years. The implementation and experience with the mechanization fund had been tested over the preceding five-and-one-half years as had the precedence of the union either forfeiting or relaxing specific work restrictions. The 1966 agreement was in general a reaffirmation of the basic principles and further clarification of the issues addressed to in the amended 1960 settlement.

Following more than two months of intense negotiations, an agreement was successfully consummated on July 2, and signed by the parties on July 6, 1966. The major terms of the five-year settlement provided for a substantial wage increase of ninety cents, the largest negotiated in longshore history. Other

compensatory items provided for the continuance of the mechanization fund with its vesting, disability, and death benefits.<sup>12</sup> Agreeing to an annual payment of 6.9 million dollars, or 34.5 million dollars over the five-year contractual period, an inducement for voluntary withdrawal of the older dockworkers was embodied in the vested benefits providing for a payment of thirteen thousand dollars, payable at retirement in a lump sum or prorated monthly to longshoremen sixty-two years or older with twenty-five or more years of service in the industry.<sup>13</sup> A ten-year monthly pension was adjusted from one hundred sixty-five dollars to two hundred thirty-five dollars for dockers at age sixty-three, with prorated smaller amounts for longshoremen with less than twenty-five years of service, payable to those retiring once the new contract was effectuated. As a deterrent to those contemplating postponement of retirement in the hopes of doing better under the next agreement, punitive terms were introduced to reduce a longshoremen's vested benefits by \$83.83 per month for each month he remained in the workforce beyond the date he became qualified for the full vesting benefit, up to a maximum of three thousand dollars.<sup>14</sup> The ten-year pension agreement was subject to a cost-of-living review on July 1, 1971.

Manning and peripheral areas were the central issue in 1966. The new agreement eliminated work area demarcations, or gear priority, enabling greater utilization of longshoremen possessing specialized skills where needed.<sup>15</sup> Skilled longshoremen who refused work comparable to their skills level were dropped from the skill classification and were denied future promotion and training considerations. The contract terms slightly altered the terms defining the basic gang.<sup>16</sup> In addition, there was no longer a wage guaranty to support out-of-work longshoremen, and no one was guaranteed a job.<sup>17</sup>

The ILWU caucus convened, and agreed on July 20, by a vote of fifty-two to thirty to recommend ratification of the new contract to the membership. On August 4, the rank-and-file by a coast-wide referendum vote approved the negotiated settlement.

The various collective bargaining agreements were scheduled to expire at midnight on June 30, 1971. Having been unable to resolve a serious impasse, since commencing negotiations in November, 1970, the negotiating sessions were to drag on past the termination date, prompting the ILWU to engage in a one hundred thirty-four day work stop-

page embodying all ports except in Alaska—the first major strike since the "new look" of 1948. Principal issues substantially contributory to the impasse and the resultant July 1, coastwide strike centered around four key issues: jurisdictional claims to containerization, work guarantee, employment of steady skilled longshoremen, and wages. Specifically, the container issue involved a demand by the ILWU to handle exclusively all Sea-Land Service, Incorporated containers engaged in any new or expanded freight station facilities. Work guaranty was entangled in the determination of the annual employer contribution to the mechanization fund. The PMA was desirous of an annual ceiling of six million dollars, while the ILWU refused to accept the concept of a ceiling. The controversy surrounding the employment of skilled longshoremen on a steady basis was essentially a problem of contractual language. The PMA demanded adequate assurances to insure their right to steady deployment of skilled dockworkers, particularly when the assignment pertained to the handling of expensive and complicated cargo equipment. Wage negotiations reached an impasse regarding the amount of the concession for the second year of an agreement. Both parties had agreed to a five-dollar-an-hour basic rate for the first year of the proposed contract. The parties were ten cents apart for the second year: the PMA offering five dollars and forty cents an hour, while the ILWU demanded five dollars and fifty cents an hour.<sup>18</sup>

On October 4, 1971, President Nixon appointed a Board of Inquiry to investigate the matters relevant to a pending nationwide dock strike.<sup>19</sup> Subsequently, on October 6, the Board issued its report and the President authorized through the Attorney General's office an eighty-day injunction pursuant to the provisions of the Taft-Hartley Act, bringing the one hundred-day strike to a temporary halt on October 9.<sup>20</sup>

The PMA and the ILWU reached an accord on all economic issues on February 8, 1972—the twenty-third day of the extended West Coast dock strike. On February 21, 1972, the ILWU ratified the proposed agreement and terminated an extended one hundred thirty-four day strike. Scheduled to expire on July 1, 1973, the seventeen-month accord provided for a 34.3 percent increase in wages and fringe benefits.<sup>21</sup> Assurances of a work guaranty totaling thirty-six hours per week was provided for in a Pay Guaranteed Plan (PGP), as was a job security provision protecting ILWU Class A labor in the handling of con-

tainer cargo. The latter measure instituted a one dollar royalty tax assessment to be levied on each containerized long ton loaded and unloaded within a fifty-mile radius of each port in order to finance the wage guarantee.

The 1973 negotiations proceeded without any significant work stoppages and ended with the consummation of a two-year agreement. Allowing for generous compensatory concessions, the term of the settlement provided for a continuance of flexibility in manpower utilization, freedom to introduce labor-saving devices in cases where the work would not become onerous or require a speed-up, and assurances of no strikes, lock-outs, and illegal work stoppages, were incorporated in the terms of the contract. In turn, the PMA agreed to finance union concessions by contributing six million dollars a year into a Pay Guaranteed Plan with a weekly abatement of \$115,385 in the event the union or its rank-and-file breached the terms of the contract or refused to abide by the decisions adjudicated by the joint labor relations committee.<sup>22</sup> The PGP in effect continued assurances of a thirty-six hour work week for fully-registered longshoremen.

Due to expire on June 30, 1975, the parties commenced negotiations nearly six months in advance of the expiration date. Initiated on January 8, 1975 at the request of the ILWU, the negotiations would drag on for nearly seven months. Agreed upon on July 1, 1975, the proposed agreement was ratified on July 28, by a 77 percent majority.<sup>23</sup> The three-year accord called for a wage package of \$2.15 an hour ultimately raising the basic rate to \$8.37 an hour for a six-hour day with overtime for the additional two hours.<sup>24</sup> Significant new provisions expressed in the terms of the 1975 accord allowed for the prorated extension in the number of paid holidays from five to a total of nine in 1978. Additionally, the PGP was continued with the PMA's contingent liability equivocating twenty-eight million dollars over the three-year settlement with the usual weekly abatement for the union's breach of contract compliance.<sup>25</sup>

## PRODUCTIVITY ASSESSMENT

The availability of comprehensive data providing for the development of a meaningful productivity index is not available. The dilemma is not unique. The PMA developed a very elaborate system of records during the period of 1960-1963,<sup>26</sup> only to be abandoned as statistically unacceptable due to the inability to accurately quantify the com-

plex number of variables associated with the loading and discharging of cargo. Existing measurements of productivity changes are limited and unrefined. The tonnage and cost-per-man-hour indices fall short of indicating precise changes in productivity given the shifts in cargo mixes, technological innovation, and the elimination of restrictive work covenants. Limited as these indices are, they are indicative of the magnitude of longshore productivity gains experienced during the sixties and seventies, and are in large measure explicable of the removable of restrictive work practices and the resultant introduction of more efficient technology.

Table 1 presents quantitative data indicative of the general cargo stevedoring trend experienced on the Pacific Coast during the years 1960 through 1977. The aggregate data is reflective of several developments: (1) Pacific ports have sustained a general growth in the volume of maritime trade; (2) Longshoremen have logged proportionately fewer hours in the stevedoring of general cargo tonnage, resulting in the handling of greater tonnage in fewer man hours; and (3) The longshore payroll has increased despite the fewer hours associated with stevedoring greater tonnages of general cargo.

The implications of these revelations are borne-out by the productivity indices indicated in Table 1. Succinctly stated, ILWU longshoremen are stevedoring greater cargo tonnages per man hour expended at a recently stable cost per ton, and doing so at personally greater compensatory returns. Figure 1 more clearly demonstrates this development and provides a clearer representation of the magnitude of longshore productivity within the industry since the initial M & M Agreement. Moreover, applying hourly labor costs in effect each year to the hours saved, maintaining the 1960 productivity rate, accrued labor savings approximates nearly 4.1 billion dollars<sup>27</sup> since 1960.

## CONCLUSION

Explanations assessing the productivity gains among the Pacific Coast ports are varied, ranging from specific improvements in technology to elimination of restrictive work covenants. The influence of decasualization has undeniably exerted a favorable impact on the industry. Stabilization of the labor force is a significant contributory factor to improved productivity and once combined with the elimination of restrictive work covenants relative to gang sizes, manning requirements, technological im-

TABLE I  
**PRODUCTIVITY OF PACIFIC COAST LONGSHORING: 1960-1977**

	Weighted Tonnage <sup>1</sup>	Longshore hours	Longshore Labor Cost	Cost Per Hour	Tons Per Hour	Cost Per Ton	Hours Per Ton	Productivity Index (cost per hour)	Productivity Index (cost per hour)	Productivity Index (cost per ton)	Productivity Index (hours per ton)
1960	19,877,926	21,757,382	\$ 98,208,415	\$ 4,113	.817	\$ 4.94	1.193	100.0	100.0	100.0	100.0
1961	18,776,312	22,291,093	98,615,616	4,422	.842	5.25	1.877	100.6	106.3	99.3	99.3
1962	19,741,461	21,210,919	98,380,206	4,655	.932	4.99	1.073	112.6	101.6	101.6	89.8
1963	21,307,926	22,512,410	109,986,947	4,897	.964	5.07	1.037	115.2	111.4	111.4	86.8
1964	21,416,125	22,498,509	114,268,757	5,088	1.044	4.88	.961	123.0	118.4	118.4	86.8
1965	26,701,377	24,387,133	129,577,905	5,311	1.095	4.95	.913	128.6	130.8	99.2	76.4
1966	31,233,729	26,653,343	156,934,437	5,49	1.172	5.02	.853	142.6	140.0	101.6	71.4
1967	33,584,221	25,482,708	167,835,294	6,39	1.318	4.85	.759	154.7	157.5	63.5	63.5
1968	37,789,710	25,225,089	161,672,283	6,41	1.498	4.28	.668	155.2	179.0	55.9	55.9
1969	39,731,275	24,310,961	157,891,812	6,49	1.634	3.97	.612	157.1	195.2	51.2	51.2
1970	39,497,613	19,461,920	136,664,689	6,94	2,006	3.46	.499	168.0	239.7	41.4	41.4
1971	32,163,466	14,817,569	106,318,355	7,01	2,022	3.19	.454	170.2	261.1	66.6	38.0
1972	40,916,526	15,826,121	140,718,785	8,89	2,586	3.44	.287	215.2	306.7	49.6	32.4
1973	46,112,060	15,774,563	153,542,018	9,76	2,521	3.13	.241	236.3	350.2	67.4	26.5
1974	49,671,278	14,702,734	158,527,346	10,71	2,354	3.19	.298	249.3	400.7	64.6	24.9
1975	43,246,113	12,110,379	148,917,246	12,28	3,365	3.44	.281	297.3	423.8	69.6	22.5
1976	52,284,186	12,349,210	140,323,480	14,60	4,234	3.45	.236	333.5	505.9	69.3	19.7
1977	56,498,413	12,024,084	148,775,763	15,53	4,899	3.31	.213	376.0	561.4	67.0	17.8

<sup>1</sup> Weighted tonnage is total general cargo tonnage added to 1/5 of dry bulk cargo tonnage.

Source: Pacific Maritime Association, *Annual Report*, 1977, p. 26.

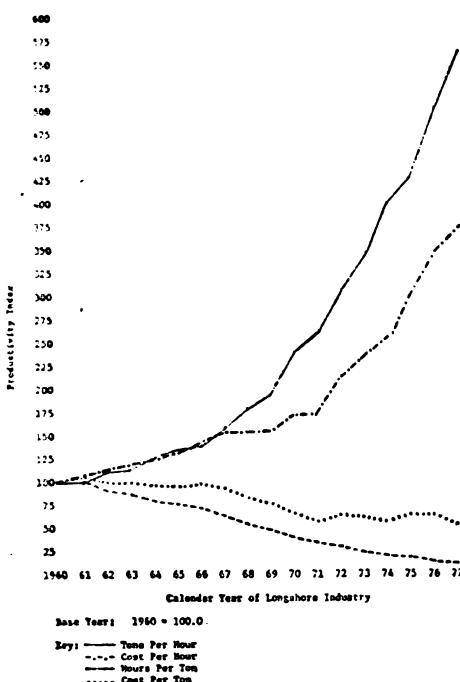
LONGSHORING COST PER TON INDICES,  
PACIFIC COAST PORTS: 1960-1977

FIGURE 1

plementations, and the like, improvements in productivity are further magnified.

As was indicated, the general trend of increased productivity levels in cargo handling evolved through a period when more tonnage could be stevedored with fewer numbers of longshoremen expending less time per cargo ton. This development is in part suggestive of the decasualization programs, albeit probably less significant than the transition in the industry's capital investment structure. An analysis of the 1946-1972 Pacific Coast capital investment expenditures reveals nearly 71 percent of the aggregate outlay was expended during the 1960-1972 years with approximately 41 percent of the total allotted in the seven year interim of 1966 through 1972.<sup>28</sup> This compares with the United States average of 61 percent for port development expenditures during 1960-1972 with an estimated 34 percent of the aggregate apportioned in the 1966-1972 years.<sup>29</sup> Comparatively, the Pacific Coast region proportionately ranked second to none in expenditures allocated for spe-

cialized general cargo facilities during the most recent seven year interim.<sup>30</sup>

The Pacific Coast longshore industry has made significant progress since the turbulent years preceding 1948. Pursuant to the more progressive viewpoint regarding the industry's problems, the parties have made conciliatory agreements advantageous to both the PMA and ILWU. To this end, the nation has witnessed a general stabilization in Pacific Coast labor-management relations that has proven beneficial to fully-registered longshoremen through improved assurances of regular employment combined with increases in both the amount and coverage relative to compensatory and fringe items. Shipowners also have been the recipient of marked benefits particularly traceable to the improved methods of cargo handling efficiency and in overall berth throughput. As a result, shipping interests and port administrators have been able to promulgate and exercise more definitive measures conducive to sound maritime management.

## FOOTNOTES

1 Heretofore, the employers had taken a "hard line" approach to bargaining while perceiving Bridges as a left-winger supported by Communist influence. The WEA had attempted in many ways to purge Bridges from office—all to no avail. The antagonistic employer-union relationships were clearly evident in the West Coast labor history between the years 1934 and 1948. The industry experienced over 20 major port strikes, more than 300 days of coastwide strikes, approximately 1,300 local "job action" strikes, and nearly 25 arbitration awards. Refer to Betty V. H. Schneider and Abraham Seigel, *Industrial Relations in the Pacific Coast Longshore Industry* (Berkeley: University of California, Institute of Industrial Relations, 1956), pp. 2-3.

2 West Coast contract negotiations were initially suspended previous to the 1954 contract bargaining sessions and subsequently in 1956.

3 ILA President Captain William V. Bradley later reported that the intent of his meeting with Harry Bridges, the ILWU chieftain, was "to make it crystal clear to Bridges that he wanted nothing to do with him" and to "clear the docks" of past rumors of "secret deals" with Bridges in preparation for forthcoming negotiations with employers. . . . See "Developments in Industrial Relations," *Monthly Labor Review* (Washington, D.C.: U.S. Government Printing Office, August, 1959), p. 918.

4 Excerpts from the 1957 ILWU caucus, inclusive of the directive initiated to informally study mechanization in the longshore industry, are included in the Hearings before the Senate Subcommittee on Employment and Manpower of the Committee on Labor and Public Welfare, *Nation's Manpower Revolution, Part 5* (Washington, D.C.: U.S. Government Printing Office, 1963), pp. 1710-1715.

5 Harold M. Levinson, *Determining Forces in Collective Wage Bargaining* (New York: John Wiley and Sons, Inc., 1966), p. 196; *Wage Chronology: Pacific Longshore Industry, 1934-70*, pp. 4, 13.

6 A reproduction in summary form of the Memorandum of Agreement on Mechanization and Modernization, January 1961-June 1966, is provided by Herbert J. Blitz, ed., *Labor-Management Contracts and Technological Change: Case Studies and Contract Clauses* (New York: Frederick A. Praeger, Inc., 1969), pp. 202-213.

7 The frequently cited figure of \$29 million is inclusive of the \$1.5 million conceded by PMA during the contract year of 1969. The annual \$5 million was to be apportioned in the following manner: \$3 million allotted for early retirement, cash vesting, and death benefits and \$2 million allocated in the form of a GAI. From Charles C. Killingsworth, "The Modernization of West Coast Longshore Work Rules," *Industrial and Labor Relations Review*, April, 1962, p. 303.

8 The 2,100 pound sling load restriction was originally negotiated in the 1937 agreement.

9 Speedup was understood to refer to an onerous workload on the individual worker.

10 The employer could order supplemental men as the class of cargo demanded. For example, for break-bulk cargo (cargo manhandled as cartons, bags, boxes, etc.) the gang was supplemented by two additional holdmen on discharging operations and four additional men on loading, and additional mechanical equipment if necessitated.

11 The 1960 M & M agreement was subsequently amended in 1961 and 1962 under the re-opener provisions. The 1961 contract settlement was ultimately arbitrated and the 1962 agreement was consummated following nearly six weeks of negotiations. Terms of the settlements dealt with compensatory items, exclusively. The 1965 contract provisions, exclusive of the compensatory items, included two fifteen-minute paid relief periods, a revision of the call-in pay terms, and prohibition of multiple jobholdings resulting in the "deregistration" of longshoremen refusing to terminate any non-longshore jobs. (See *Wage Chronology: Pacific Longshore Industry, 1934-70*, p. 8.

12 Evidence clearly supports PMA's willingness to extend the M & M Fund. Estimates of the benefits accrued to the employers from the removal of numerous impediments to change since the 1960 agreement proclaimed a net gain of \$120 million with a decrease in the labor cost of handling a ton of cargo by almost 4 percent. See Max D. Kosoris, "1966 West Coast Longshore Negotiations" *Monthly Labor Review*, October, 1966, p. 1087. Hartman estimates that the overall productivity increase above 1960 to be about 20% by 1968 and about 32% by 1964 and attributes the most important sources of productivity change were the elimination of restrictive work rules and practices [Paul T. Hartman, *Collective Bargaining and Productivity: The Longshore Mechanization Agreement* (Berkeley: University of California Press, 1960), p. 187]. Productivity gains were also attributable to the additional savings in capital utilization with more expedient ship turnaround, reduced work stoppages, expansive introduction of mechanization and containerization, and a late 1966 successful negotiation between the parties involving the jurisdiction dispute between the ILWU and Teamsters. For a more detailed discussion on the jurisdictional dispute, see Phillip Ross, "Waterfront Labor Response to Technological Change: A Tale of Two Unions," *Labor Law Journal*, July, 1970, pp. 414-416.

13 Prorating the lump sum payment meant monthly installments of \$218.87 or \$270.84, over five or four years, respectively. Refer to Hartman, op. cit., p. 182.

14 Clearly, qualified longshoremen under the 1960 agreement improved their position by remaining in the workforce until July 1, 1966: \$7,920 vs. \$13,000, respectively. *Ibid.*

15 Employers had repeatedly complained that their demands for specialized dockworkers were only being partially met by the hiring hall dispatchers and were not being met at all, in some instances, where skilled dockers refused to shift from the docks to the holds of ships when needed. In those cases involving the more seniored skilled men or those physically impaired to perform hold work, the terms of the 1966 settlement provided for the joint labor relations committees of each port to develop a preferential list that would in effect restrict specified men to dock work. See Kosoris, op. cit., p. 1070; and Levinson, op. cit., p. 327.

16 The gang base, not universally present in all of the Pacific Coast ports, could be eliminated

if he does not or cannot perform his supervisory and related duties. The old requirement of a winch driver and a hatch tender was replaced with "skill deck man or men when required." Moreover, the requirement that the basic gang be supplemented by two men for unloading and four for loading operations involving hand-handled cargo was slightly modified to apply only to "hand-handled piece by piece cargo." In addition, the required four holdmen must include two skilled machine operators. See Hartman, op. cit., p. 184; Kosoris, op. cit., p. 1071; and Levinson, loc. cit., p. 327.

17 During the preceding 5½ years of the 1960 agreement, the average hours of work never fell below the weekly minimum guarantee of 35 hours. As a result, in June, 1966, there existed a surplus of \$18 million deposited in the work guarantee which was distributed to 8,726 Class A longshoremen on a per capita basis or amounting to \$1,228 for each longshoreman fully-registered in June, 1960, and active in June, 1966. See Levinson, op. cit., p. 334; *Wage Chronology: Pacific Longshore Industry, 1934-70*, p. 8.

18 Board of Inquiry, *Report to the President: Inquiry into the Longshore Disputes Affecting Ports on the Atlantic, Gulf, and Pacific Coasts, and in the Great Lakes of Chicago*, October 6, 1971. Supplemental Report, November 25, 1971. Sixty-day report, December 5, 1971. Also see Senate Hearings before the Committee on Labor and Public Welfare, *West Coast Dock Dispute*, January-February, 1972 (Washington, D.C.: U.S. Government Printing Office, 1972).

19 A work stoppage had begun in October 1, in many Atlantic ports as negotiations between the NYSA and ILA broke down. The impact of the 1971 West Coast dock strike was astronomical in terms of losses to the parties directly and indirectly linked to the shipping industry. It was reported that California's economy was losing \$17 million a day while, according to PMA figures, direct wages and fringe benefits lost during the initial 100-day strike was \$45 million. See "Many Firms in West Fear Lasting Impact Despite Tentative Accord in Dock Strike," *The Wall Street Journal*, February 10, 1972, p. 36. At the peak of the strike some 46 U.S. flag vessels and 203 foreign flag vessels were rendered inoperative resulting in a deficit of \$500 million in the U.S. balance of trade during 1971. Losses in port service industries were estimated to be about \$8 million a week while wholesale and retail trade sectors lost \$29 million a week with some \$46 million a week lost in the industrial and agricultural sectors. Farm exports alone were estimated to have been reduced \$6 million per day for every day the strike remained in effect. Excerpts from testimonies before the Senate Committee on Labor and Public Welfare, *Legislation for Settlement of West Coast Dock Strike* (Washington, D.C.: U.S. Government Printing Office, 1972), pp. 4-5, 10-11. For additional information relative to the losses incurred during the initial 100-day West Coast dock strike, see *Presidential Message to the House on Emergency Action to End Dock Strike, West Coast* (Washington, D.C.: U.S. Government Printing Office, 1972), p. 4.

20 Despite the ILWU's and PMA's agreement to extend the December 25 expiration date of the injunction and intensive negotiations under the auspices of J. Curtis Counts, Director of the Federal Mediation and Conciliation Service, the strike resumed on January 17, 1972. In addition, with the PMA's willingness to acquiesce to the demanded contributions to be paid to the mechanization fund (\$5.5 million per year) and an attempt to resolve the container issue, (\$1-a-ton royalty tax on cargo loaded by non-ILWU members within the waterfront jurisdiction), the work stoppage was to last for another thirty-four days.

21 The Pay Board under the provisions of the Economic Stabilization Act subsequently pared the scheduled first year's 20.9% wage benefits to 14.9%. The decision in effect pared the first year package from 72 cents to 42 cents and precipitated the resignation of four of the five labor members seated on the Board. See "Dockers Raise Cut to 14.9% by Pay Board," *The Wall*

Street Journal, March 17, 1972, p. 8. The reader is also directed to the Department of Treasury, Historical Working Papers of the Economic Stabilization Program: August 15, 1971 to April 30, 1974—Part I (Washington, D.C.: U.S. Government Printing Office, 1974), pp. 399-400.

22 Pacific Coast Longshore Contract Document 1973-1975: ILWU-PMA, p. 94.

23 "West Dockers Ratify 3-Year Pact," The Wall Street Journal, July 29, 1975, p. 9.

24 Pacific Coast Contract Document 1975-1978: ILWU-PMA, pp. 131-170.

25 The specifics of the PGP called for maximum contributions of \$10,000,000 for the first year; \$9,000,000 the second year; and \$9,000,000 the third year. Weekly contributions (abatements) were derived by taking one fifty-second of each year's amount. *Ibid.*, p. 108.

26 Pacific Maritime Association, Productivity Study, Longshore Operations, Pacific Coast, 1966-

1963 (San Francisco: 1965). An additional source relative to Pacific Coast longshore productivity analyses is Paul T. Hartman, *Collective Bargaining and Productivity: The Longshore Mechanization Agreement* (Berkeley & Los Angeles: The University of California Press, 1969), pp. 110-178.

27 The actual figure is \$4,877,871.

28 U.S. Department of Commerce, Maritime Administration, North American Port Development Expenditures Survey, March, 1974.

29 *Ibid.*

30 *Ibid.* Fifty-four percent of the Pacific Coast region's expenditures was expended on containerization, roll-on/roll-off and barge-ship investments, whereas the North Atlantic region, although expending nearly \$80 million more, proportionately spent 45% of their capital expenditures for like investments during the same time period.