

UNITED STATES DEPARTMENT OF LABOR

L. B. Schwellenbach, *Secretary*

BUREAU OF LABOR STATISTICS

A. F. Hinrichs, *Acting Commissioner*

WORKMEN'S COMPENSATION
and the
PROTECTION OF SEAMEN



Bulletin No. 869

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1946

For sale by the Superintendent of Documents, U. S. Government Printing Office,
Washington 25, D. C. Price 20 cents

Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., June 1, 1946.

THE SECRETARY OF LABOR :

I have the honor to transmit herewith a report on the protection afforded merchant seamen who are disabled because of injury or disease while in the service of their vessels. The report presents the status of such seamen under both foreign and domestic legislation, and examines the probable results of applying to seamen the recommendations of an Interdepartmental Committee for a workmen's compensation act fitted to the existing rights of merchant seamen. This Interdepartmental Committee was established pursuant to Senate Resolution No. 299 in 1940. Although the Committee made specific recommendations, it did not have the opportunity to determine, except in a very general way, how these recommendations would affect seamen.

The report was prepared by Joseph Zisman, formerly with the U. S. Maritime Commission, under the direction of Max D. Kossoris, Chief of the Bureau's Industrial Hazards Division.

A. F. HINRICHS, *Acting Commissioner.*

HON. L. B. SCHWELLENBACH,
Secretary of Labor.

*Bulletin No. 869 of the
United States Bureau of Labor Statistics*

CONTENTS

	Page
Preface	vii
<i>CHAPTER 1.—Accident and illness hazards of seamen</i>	
Working conditions	1
Organization of shipboard life.....	2
Wages	2
Employment	3
The vessels	4
Legislation and safety of life at sea.....	5
Accident reporting and investigation.....	6
Safety programs	6
Injuries and diseases arising out of and in service of vessel.....	7
Disability cases and vessels on which they occurred.....	8
Occurrences in relation to vessel characteristics.....	8
Size and type of the vessels.....	8
Disability-frequency rates	9
Extent of disability	11
Duration of disability	12
Nature of disabilities suffered.....	14
Injuries	14
Diseases	15
Parts of body affected.....	15
Occupational characteristics of disabled seamen.....	16
Occupational distribution of disabled seamen.....	16
Extent of disability	17
Characteristics of maritime employment and seamen's disability cases.....	18
Periods of disability defined.....	18
Period to the end of the voyage.....	18
Hospitalization period	19
Out-patient and convalescent period.....	19
Distribution of the cases.....	19
Duration of different periods of disability.....	20
Extent of disability	20
Trade of vessel	21
Significance of the periods of disability.....	22
Costs of accidents and illnesses.....	22
Cost to employers	23
Cost to the public	24

	Page
CHAPTER 2.—<i>Present rights of disabled American seamen</i>	
Traditional rights of disabled seamen.....	25
The right to maintenance and cure and wages.....	25
Employers' liability and maritime law.....	27
The duties of the employer.....	27
The employer's defenses	28
Special legislation	28
The LaFollette Act	28
The Jones Act of 1920.....	29
Limitation of shipowners' liability statutes.....	31
Settlement of seamen's disability cases under existing modified employers' liability system	32
Effecting settlements	32
Settlements under insurance policies.....	33
Settlements through seamen's attorneys	34
Attorney fees.....	34
Time required to negotiate settlements.....	35
Cases occurring before 1938.....	35
Cases occurring in 1938.....	36
Cases involving serious disabilities.....	36
Seamen's claims for damages for personal injuries and the courts.....	36
Net recoveries under the existing modified employers' liability system.....	38
Net recoveries and extent of disability.....	38
Net recoveries and attorney fees and cost of litigation.....	39
Net recoveries and settlement items.....	39
Settlement items and extent of disability.....	40
Wages to the end of the voyage.....	40
Maintenance allowances	41
Net indemnities.....	41
Other costs.....	42
CHAPTER 3.—<i>Workmen's compensation legislation and the merchant seaman</i>	
Foreign legislation extending workmen's compensation to merchant seamen...	43
The seamen's traditional rights to wages, and maintenance and cure.....	43
The seaman's right to wages.....	44
The seaman's right to maintenance and cure.....	44
Death benefits under maritime law.....	44
Workmen's compensation laws and the merchant seamen.....	45
Coverage of injuries and diseases.....	45
Benefits provided	46
Medical benefits	46
Cash benefits	46
Temporary total disability.....	46
Permanent partial disability.....	46
Permanent total disability.....	47
Death benefits	47
Funeral benefits	47
Survivor's benefits	47
Financing	48
Right of action for damages under liability laws.....	48

	Page
American attempts to extend workmen's compensation system to merchant seamen	49
Early efforts	49
Federal legislation requested by the seamen.....	51
The seamen and the longshoremen's and harbor workers' compensation act	53
Latest congressional attempts to extend workmen's compensation to seamen	54
International Labor Organization Draft Convention No. 55.....	54
Proposed legislation to implement ILO Draft Convention No. 55.....	55
The Interdepartmental Committee's bill.....	55
The House of Representatives and H.R. 6726 and H.R. 6881.....	56
The Senate and H.R. 6881.....	58
Arguments for and against extension of workmen's compensation to merchant seamen	59
Report of Interdepartmental Committee to study workmen's compensation for seamen.....	61

CHAPTER 4.—*Actual Settlements versus Workmen's Compensation Benefits*

Previous attempts to compare the two systems.....	63
The Interdepartmental Committee study.....	63
Probable awards under system proposed by Interdepartmental Committee versus actual net settlements.....	65
Benefit provisions of the hypothetical law.....	65
Waiting period	65
Benefit scale.....	65
Nonfatal disability.....	65
Fatal cases.....	66
Basis for benefit scale.....	66
Total benefit, or award.....	67
Probable awards under hypothetical workmen's compensation law.....	67
Actual net settlements and probable awards compared.....	67
Settlement amounts versus compensation amounts.....	68
Cases gaining versus cases losing under the proposed system.....	69
Cases involving disabilities of different extents.....	69
Cases settled through seamen's attorneys.....	70
Compensation and settlement items compared.....	70
Items considered under each system.....	70
Values of compensation and settlement items.....	71
Status of temporary total disability cases.....	72
Injury cases versus disease cases.....	73
Conclusion	73
Comparison of different categories of cases.....	74
Cases on vessels engaged in various services.....	74
Cases on vessels of different types.....	74
Cases involving seamen of different occupational levels.....	74
Effects of increasing the compensation rates.....	75

	Page
<i>APPENDIX 1.—Scope and Method</i>	
Seamen covered	78
Period covered	78
Reports on cases.....	78
Company reports	78
Attorney reports.....	79
Hospital reports.....	79
Scope of survey.....	79
Incidence of injuries and diseases.....	79
Estimate of maritime labor force.....	80
Employment on active deep-sea vessels.....	80
Employment on active Great Lakes vessels.....	81
Employment on active inland vessels.....	81
Estimates of total labor force.....	81
Exposure to occupational accidents and illnesses.....	82
Frequency rates.....	83
Estimate of number of cases.....	83
Net recoveries under existing system and probable awards under proposed system	84
Net amounts actually received by seamen, or their dependents.....	84
Probable awards under proposed workmen's compensation system.....	85
Wages to the end of the voyage.....	85
Compensation for hospitalization period.....	85
Compensation for out-patient and convalescence period.....	86
Compensation for permanent physical impairments.....	86
Compensation for death.....	86
Other costs.....	87
Total benefits	87
Comparison	87

APPENDIX 2.—Detailed Tables

Table A.—Percentage distribution of reported seamen's temporary total disability cases by duration, 1938.....	88
Table B.—Percentage distribution of 3,690 reported injury cases, by nature and extent, 1938.....	88
Table C.—Number of reported disability cases, by occupational group, and extent of disability, 1938.....	89
Table D.—Percentage distribution of reported seamen's disability cases, by period and by trade of vessel, 1938.....	90
Table E.—Average duration of reported seamen's disability cases, by period of disability and by extent of disability, 1938.....	90
Table F.—Average duration of reported seamen's disability cases, by period of disability and by trade of vessel, 1938.....	91
Table G.—Distribution of reported seamen's disability cases, by payment lag and method of settlement (cases occurring in 1938).....	91
Table H.—Distribution of reported seamen's disability cases, by amount of recovery (cases closed or pending in 1938).....	92
Table I.—Average gross and net settlements in reported seamen's disability cases occurring in 1938, by extent and method of settlement.....	93

Preface

The cessation of hostilities terminated the special insurance provisions extended under Public Law No. 17 to seamen for injuries and diseases incurred in the service of their vessels in activities connected with the Second World War. Seamen disabled in the course of their employment therefore must depend now solely on their ancient maritime rights and the modified type of employers' liability established under the Jones Act. Disabled seamen do not come under any form of workmen's compensation legislation in the United States.

In nearly every other maritime country of the world, disabled seamen are compensated under some form of workmen's compensation legislation. In 1938 the Senate of the United States ratified Convention No. 55 of the International Labor Organization concerning the liability of shipowners for injuries and diseases of seamen while in their employment. Attempts have been made since then to enact some form of workmen's compensation legislation for this industry.

After considering such a proposal in 1940, the United States Senate found that the characteristics peculiar to the employment of seamen made it difficult to apply to them the usual type of workmen's compensation act. The Senate was confronted furthermore by the anomalous situation in which shipowners proposed, and seamen's organizations opposed, such legislation. Searching for factual guidance, the Senate created an Interdepartmental Committee to study the problem and to offer recommendations.

Unfortunately, the Committee had no opportunity to test its recommendations, and the exigencies of the war precluded further consideration of these proposals. Now that the war is over, however, an objective appraisal of this Committee's recommendations is in order because of the likelihood that the issue will be pressed again.

The study presented here not only examines the conditions under which disabled seamen negotiate their settlements with their employers and how these settlements work out, but also provides statistical comparisons of the probable recoveries under the Committee's proposed compensation act with the present system of settlement. It thus offers a pertinent service toward a better understanding of the issues involved. The statistical data are based on the reports originally collected by the Interdepartmental Committee and subsequently turned over to the Bureau of Labor Statistics.

The Bureau and the author wish to acknowledge the valuable services rendered in the preparation of this study by Spencer H. Reed, Chief of the Labor Research Section of the Division of Economics and Statistics of the U. S. Maritime Commission; Commander William W. Story, U. S. N. R., Chief of the Casualty Review Section of the Merchant Vessel Inspection Division, U. S. Coast Guard; James L. Adams and W. N. Evans, formerly Assistant General Counsels of the War Shipping Administration, and Professors Samuel McCune Lindsay and Leo Wolman, both of Columbia University.

The report was prepared as a Bureau of Labor Statistics study by Joseph Zisman, formerly Assistant Chief of the Labor Research Section of the Division of Economics and Statistics of the U. S. Maritime Commission, under the direction of Max D. Kossoris, Chief of the Industrial Hazards Division of the Bureau of Labor Statistics.

WORKMEN'S COMPENSATION AND THE PROTECTION OF SEAMEN

Chapter 1.—Accident and Illness Hazards of Seamen

Working Conditions

A seaman is generally employed for the duration of a voyage, and in the deep-sea trades accepts employment under the terms of the "shipping articles" on which he has "signed on." This shipping article is a contract of employment signed by the master of the vessel, as representing the employing ship operator, and each member of its crew. It contains, in addition to the terms of the agreement, the approximate duration of the agreement and the destination of the vessel, certain information identifying the seaman, the amounts earned during the voyage, the moneys advanced him during the voyage, the net amount due him at the end of the voyage, etc. Before starting on a voyage, the seaman "signs on" the shipping articles. Upon termination of the voyage he "signs off" as having received the "net wages" due him. For certain voyages, i.e., overseas foreign and intercoastal, the law requires that seamen "sign on" and "sign off" before a United States Shipping Commissioner or his deputy.¹ For other deep-sea voyages, the law simply requires that the master make a written agreement with every seaman on board his vessel.²

From the moment the seaman reports for duty until the voyage ends, he is on board ship "in the service of the vessel." He lives on board ship in quarters assigned to him; he eats on board ship the food prepared on board ship by members of the crew; and he is on duty 8 hours per day.³ The watch system, which prevails, requires that he work 4 hours on "watch" after 8 hours off "watch." When a ship reaches a port en route, the seamen cannot leave it without the permission of the master.

The living accommodations for seamen vary with the different ratings, the officers often having individual staterooms, and the unlicensed men sometimes living as many as eight in a room. While living conditions are good on the newer ships, on the older ships the forecabin offers only the barest comforts. Special accommodations for the disabled or ill seamen are often lacking.⁴ The present law is still a relic of the past and requires that vessels carry a doctor only when 50 or more "immigrants" are carried on board.⁵ The sick or injured seaman, therefore, is usually treated by one of the officers and put ashore at the nearest

¹ R. S. 4512 (46 U.S.C. 565); U. S. Department of Commerce, Bureau of Marine Inspection and Navigation: Navigation Laws of the United States, 1940 (p. 190).

² R. S. 4520 (46 U.S.C. 574); *idem* (p. 195).

³ (46 U.S.C. 673); *idem* (pp. 172, 212). Although this provision is not applicable to the members of the stewards' department, as a result of collective bargaining, the 8-hour day generally prevails for these workers as well.

⁴ This is especially true on the smaller vessels. Vessels carrying a crew of 12 or more and ordinarily making voyages of more than 3 days between ports must be provided with a special hospital compartment.

⁵ Act of August 2, 1882, sec. 5 (46 U.S.C. 155); *idem* (p. 262).

port when conditions require it.⁶ The recent developments in radio communication and of air transport have made it possible in certain emergencies to obtain medical advice via radio from ships carrying doctors (or from shore), to obtain the service of a doctor on board other ships sailing in sufficiently near shipping lanes, or to receive Coast Guard assistance in transferring ailing seamen via Coast Guard planes from the ship to the United States Marine Hospitals.

Organization of Shipboard Life

Seamen on board ship have been described by an authority on maritime labor as "a miniature society whose members are carefully organized for the purpose of discipline, division of labor, and centralization of authority and responsibility."⁷

The hierarchy of shipboard life descends from the master, the supreme authority at sea, through the chief mate to the members of the deck department, through the chief engineer to the members of the engine department, and through the chief steward to the members of the stewards' department. The significance of this organizational pattern is that it rests upon absolute authority. If ordered to carry out a dangerous assignment, the seaman has no choice but to obey.⁸

This organizational pattern has for some time hampered the principle of collective self-help through collective bargaining, for the principle of labor organization is still held, by many, to be incompatible with the principle of undivided authority at sea. Not being well organized until recently, the seamen have not been successful in furthering the movement for accident prevention.

Wages

Unlike other wage earners, seamen are not paid on regular pay days. Although their wages are reckoned on a monthly basis, seamen are paid their wages at the end of each voyage. When signing on the shipping articles, they may allot a fixed portion of their wages to be paid regularly to their families. Under certain conditions, seamen may be advanced during the voyage as much as half of the wages they have earned. Purchases made by them from the ships' stores are charged to them. When the voyages end, they are paid the balance of the wages they have earned. Many seamen, therefore, have substantial sums of money due them at the end of each voyage, so that many injured or sick seamen are able to carry themselves financially for some time after they have become disabled.

One of the characteristics of the industry is the wide range in the prevailing monthly wage rates. Before the war, the range of wages on a typical deep-sea dry-cargo vessel carrying a crew of 37 seamen was

⁶ As a result of the hardships of sailing under war conditions, the War Shipping Administration found it necessary to train the ships' clerks to care for the sick and wounded. A new rating, that of assistant purser-hospital-corpsman was created and beginning with June 1944 all ships under the control of the War Shipping Administration were required to carry it.

⁷ Seamen, by Elmo P. Hohman, *Encyclopedia of Social Sciences*, Vol. VII (p. 611).

⁸ Here, the seaman's creed, in the words of Andrew Furuseth, the late president of the International Seamen's Union, may be recalled: "A seaman must die in order that others may live."

from \$55 for the messboy, to about \$330 monthly for the master. On passenger vessels this range was even greater. Excluding the master and chief engineer, the range in monthly wage rates for the licensed personnel of a typical dry-cargo vessel was from \$155 to \$200 monthly. For the unlicensed personnel in the deck and engine departments, the range was from \$55 to \$82.50, and in the stewards' department, from \$55 to \$135. The most common monthly wage rate was \$72.50, with over 13 percent of the deep-sea seamen paid at that rate. On tankers, wages were somewhat higher. Similarly, on special types of freighters, such as the Pacific coast lumber schooners and the Atlantic coast colliers, and in special seasonal trades, such as the Alaskan and Great Lakes trades, the monthly wage rates were also somewhat higher. The percentage distribution of seamen, employed on American-flag deep-sea vessels of 1,000 gross tons and over, by monthly wage rates payable before World War II is shown below:

Monthly wage rate, 1938:	Percent of seamen
\$49 and under	2.7
\$50 and under \$55	8.6
\$55 and under \$65	14.0
\$65 and under \$75	17.2
\$75 and under \$85	10.5
\$85 and under \$100	17.6
\$100 and under \$135	12.0
\$135 and over	19.4
Total	100.0

In addition to cash wages, seamen generally receive their food and lodgings aboard ship.

Employment

Although Government regulation of the employment of seamen has existed for over 150 years, there are no published statistics with respect to the number of seamen employed on American-flag merchant vessels. From the data collected by the United States Maritime Commission, however, it is estimated that before the war the average monthly employment on these vessels was approximately 132,200.⁹

The most reliable data relate to employment on deep-sea¹⁰ vessels of 1,000 gross tons and over. In normal times, active vessels in this segment of the industry employed an average of approximately 53,500 seamen per month. An additional 3,200 must be added for deep-sea vessels under 1,000 gross tons. The Great Lakes trade is another segment of the industry for which reasonably accurate statistics are available. An average of approximately 15,500 were employed during each month of the season from April to November, inclusive, of each year. There remains the third segment which includes all inland waters other than the Great Lakes (inland rivers, inland lakes, and bays and sounds) and while the employment statistics for this group are rather meager, employment may be estimated as in the neighborhood of 30,000 monthly. Thus, the monthly employment on documented American-flag vessels

⁹ This estimate does not include employment on vessels engaged in the following services: Cable, dredging, elevator, fireboat, fishing, ice breaker, piledriving, pilot, police, patrol, water, welding, and wrecking.

¹⁰ "Deep-sea" operations include operations in the following trades: Coastwise, intercoastal, nearby-foreign, and overseas-foreign.

may be estimated at approximately 102,200 seamen.¹¹ Because of the unusually high labor turn-over in the industry, the total number of seamen attached to it was considerably in excess of this figure—probably by as much as 30,000.

Generally speaking, seamen may be divided into four major occupational classifications, depending upon the department of the ship in which they are employed: deck personnel, engine-room personnel, radio operators, and stewards.¹² Within these major classifications, they are divided into "ratings."

These ratings denote both rank of authority and occupation. The officer personnel is especially trained and is on a professional level. The remainder of the personnel has varying degrees of training and skill. The different occupations on board ship are many, especially in the stewards' department of large passenger vessels where the occupational distribution resembles largely that of the personnel of a large hotel.

A substantial proportion of the personnel of deep-sea merchant vessels are on a professional level. Before the United States' entrance into the war, over 22 percent were on a professional level. Another 45 percent were on a skilled or supervisory level, and over 30 percent were on an unskilled level. The semiskilled group was very small.¹³

The Vessels

In 1938, approximately 18,800 American-flag documented merchant vessels (exclusive of fishing vessels) were engaged in the transportation of passengers and cargo. Of this number, over 16,300 are estimated to have been operated some time during the year. Almost 80 percent of all the seamen necessary to man the documented vessels of the United States are required by these types of vessels. The percentage distribution of personnel necessary to man the documented vessels of the United States is shown below, by type of vessel, as of June 30, 1938. Well over half of the seamen are required on freighters and passenger vessels, and about 10 percent on tankers.

Type of vessel:	Percent of seamen necessary ¹
Freighter	35.2
Passenger	21.8
Tanker	9.4
Towing	10.8
Ferry	2.3
Fishing	17.0
Other	3.5
All types	100.0

¹ Source: Merchant Marine Statistics, 1938 (U. S. Department of Commerce, Bureau of Marine Inspection and Navigation, Report Series No 6, p. 105).

¹¹ Employment on cod, fishing, oystering, and whaling vessels are excluded from this estimate because of the inadequacy of the data available. The Bureau of Marine Inspection and Navigation, however, reported that there were 6,931 such documented vessels on June 30, 1938. If all were active and employing a full crew at the same time, they would require 29,228 seamen. Bureau of Marine Inspection and Navigation. (U. S. Department of Commerce: Merchant Marine Statistics, 1938, Report Series No. 12, pp. 42, 186.) Excluded also is the employment on some 4,000 documented yachts, and 300,000 "numbered" vessels. The latter consist largely of pleasure crafts. No data are available with respect to employment on such vessels. For the most part, they are operated locally and are manned by their owners. Whatever employment they offer is relatively small and highly irregular.

¹² On ocean-going passenger vessels a fifth classification—staff officers—will be found.

¹³ For a detailed description of the occupations on shipboard see Staffing Schedule for Saltwater Freighters and Tankers (Federal Security Agency, August 1942).

Although the majority of the documented vessels are small, under 50 gross tons, the majority of the seamen are employed on large vessels. In 1938, vessels of 1,000 gross tons and over required 58 percent of the total personnel necessary. These vessels, incidentally, included less than 9 percent of the vessels documented in the United States.

Under normal conditions over half of the merchant seamen are employed on vessels operating in deep-sea trades. These include the following: (1) Overseas foreign; (2) nearby foreign; (3) intercoastal (between Atlantic or Gulf ports and Pacific ports, via the Panama Canal); and (4) coastwise. Thus, more than half the seamen are employed on deep-sea voyages of relatively long durations. The remainder are employed on vessels operating between Great Lakes ports, on other inland lakes, on inland rivers, in bays and sounds, and in and around harbors.

Certain types of vessels are of necessity largely confined to specific trades. Thus, special types of bulk dry-cargo vessels equipped with self-loading and unloading equipment are found on the Great Lakes. Similarly, tugs, barges, and ferries are usually confined to bays and sounds, harbor, and river operations.

Most of the vessels operating in the deep-sea and Great Lakes trades are large vessels, over 1,000 gross tons each.

Legislation and Safety of Life at Sea

Because of the nature of the industry, the question of safety of life and property at sea has always been a matter of real concern. The International Labor Organization has been much interested in this problem and has been the leader in promoting minimum international standards for legislation looking to the protection of life at sea. These have been the subject of 10 International Conventions and nine Recommendations dealing with such maritime matters as employment of children and young persons at sea; officers' competency certificates; hours of work; manning scales; shipowners' liability in sickness, injury, or death; sickness insurance; repatriation; welfare in ports; labor inspection; and national seamen's codes.¹⁴

Each of the 45 nations ratified one or more of these Conventions, although only Belgium ratified all 10.¹⁵ The United States ratified 5 Conventions dealing with officers' competency certificates; shipowners' liability in respect to sickness, injury, or death; sickness insurance; hours of work and manning; and employment of young persons at sea.

In the United States, the protection of life and property at sea, before the war, was delegated to the Bureau of Marine Inspection and Navigation,¹⁶ whose Director was charged by Congress with the duty to

¹⁴ For the substance of the texts of these Conventions and Recommendations, see *The International Seamen's Code* (International Labor Office, Montreal, 1942, passim).

¹⁵ *Idem* (p. 55). See also *International Labor Conference: Reports on the Application of Conventions*, Report VI, 27th Session, Paris, 1945, Passim.

¹⁶ Until March 1, 1942, the Bureau was under the jurisdiction of the Secretary of Commerce. On that date its functions were split in two (by Executive Order No. 9083). Those relating essentially to vessel construction and inspection, safety at sea, and manning are now administered by the U. S. Coast Guard; those relating to vessel documentation, vessel port entrances and clearances, collection of tonnage dues and tolls are now administered by the Bureau of Customs of the U. S. Treasury Department.

The above discussion deals with the Bureau as it was constituted before March 1, 1942. This is deemed desirable because this study deals with peacetime conditions. Moreover, while the functions of the Bureau have been divided among the two different agencies, they nevertheless remain essentially the same, except insofar as war conditions necessitated.

Other Government agencies have certain functions affecting the safety of seamen.

- (1) "superintend the administration of the steamboat inspection laws;"¹⁷
- (2) superintend "the commercial marine and merchant seamen of the United States so far as vessels and seamen are not, under existing laws, subject to the supervision of any other officer of the Government;"¹⁸ and
- (3) decide "all questions relating to the issue of registers, enrollments, and the licenses of vessels."¹⁹

The scope of the Bureau's activities with respect to safety at sea is therefore fourfold and embraces (1) vessel construction and equipment; (2) adequacy of crews; (3) passenger facilities; and (4) accident reporting and investigating.

Accident Reporting and Investigation

Casualties, whether involving loss of life or not, must be reported by the master to the Bureau, and investigated. The Secretary of Commerce prescribes the rules and regulations for their investigation, in order to determine whether any incompetence, misconduct, unskillfulness or willful violation of law on the part of any licensed officer, pilot, seaman, employee, owner or agent of owner, or inspector, officer of the Coast Guard, or other officer or employee of the United States, caused or contributed to the cause of such casualty.²⁰

Fatalities must be investigated by a Marine Casualty Investigation Board, appointed by the Secretary of Commerce, consisting of a chairman and two other members. A "serious" casualty is investigated by a marine board, appointed by the Secretary of Commerce. Casualties "less serious" must be investigated by a marine board, consisting of representatives of the Bureau of Marine Inspection and Navigation and appointed by its director. In practice, the lack of personnel does not permit the investigation of all such cases. Generally, their investigations appear to be limited to occurrences on vessels recently inspected.

Safety Programs

The ship operators have also taken an interest in safeguarding the members of their crews.²¹ Many belong to the Marine Section of the National Safety Council, the Accident Prevention Bureau of the Pacific Coast Marine Association, or the Lake Carriers' Association. These three organizations are active in accident prevention and provide safety inspection, posters, monthly circular letters, safety contests, and promote the system of ship safety committees to discuss safety conditions on board ship, recent accidents, accident reporting, etc.

Many ship operators have developed independent safety programs of their own. These, however, follow the general pattern of the association-sponsored programs.

¹⁷ R. S. 4403 (46 U.S.C. 372). See also *Navigation Laws of the United States—1940* (U. S. Department of Commerce, Bureau of Marine Inspection and Navigation, pp. 6-24). For a recent historical treatment of the legal protection of life at sea, see Rudolph Wissmann, *The Maritime Industry* (New York, The Cornell Press, 1942). *Passim*.

¹⁸ Act of July 5, 1884, sec. 2 (46 U.S.C. 2) *Navigation Laws of the United States—1940* (p. 6).

¹⁹ Acts of February 14, 1903, secs. 4, 10; March 4, 1913; June 30, 1932, sec. 501; and May 27, 1936, sec. 1, *idem* (p. 6).

²⁰ Act of June 20, 1874, sec. 10 (33 U.S.C. 361).

²¹ According to the Interdepartmental Committee to Study Workmen's Compensation, 88 companies out of 222 who replied to its questionnaire, when asked whether they had safety programs, answered "Yes," 97 answered "No," and 38 did not answer; see footnote 23.

The unions have also taken an active interest in accident prevention. The National Maritime Union in its weekly publication, *The Pilot*, during the last few years has published cartoons calling the seaman's attention to the dangerous and to the safe ways of performing their various tasks. Its suggestion that safety committees be established has been accepted and put into effect by several vessel operators. The unions have taken an active part in calling to the Bureau of Marine Inspection's attention instances of ship operators' infractions of safety rules and, from time to time, have suggested safety devices and safety regulations to the Bureau.

Injuries and Diseases Arising Out of and in Service of Vessel

Seafaring has often been claimed to be "among the most hazardous of occupations."²² On the basis of shipowners' reports to the Interdepartmental Committee to Study Workmen's Compensation for Seamen²³ and data compiled by the United States Maritime Commission and by the former Bureau of Marine Inspection and Navigation, it is estimated that in 1938 approximately 14,550 seamen suffered occupational injuries or diseases of varying severity, as tabulated below:

	<i>Estimated number of cases</i>		
	<i>Total</i>	<i>Injury</i>	<i>Disease</i>
All disability cases	14,550	9,300	5,250
Fatal	270	155	115
Permanent total	35	15	20
Permanent partial	395	360	35
Temporary total	13,850	8,770	5,080

As would be expected, most of these disabilities were not of a permanent character. The estimates shown above indicate that over 95 percent of them resulted in disabilities of a temporary character. Less than 2 percent were fatal, and less than a fourth of 1 percent resulted in permanent total disabilities. The remainder, about 3 percent, resulted in permanent partial disabilities. Generally, injuries and diseases were of equal severity.

Comparing the injuries with the diseases, it is found that a smaller proportion of the former were fatal or totally disabling. The reverse, however, was true with respect to the permanent partial disability cases. In each group, about the same proportion resulted in temporary total disabilities. On the average, the duration of temporary total disabilities was the same, about 46 days, for both the injury and the disease cases. By comparison, the average duration of this type of disability in manufacturing industries, in 1938, was found to have been 21 days.²⁴

In the maritime industry all diseases arising out of and in the course of service of the vessel have always been considered of an occupational

²² See, for instance, James C. Healy: *Fog's'le and Glory-Hole*, (New York, Merchant Marine Publishers Association, 1936, p. 103).

²³ The results of the work of this Committee hereinafter called the Interdepartmental Committee, are published in Interdepartmental Committee to Study Workmen's Compensation for Seamen: *System of Workmen's Compensation for Seamen* (Senate Document No. 113 (77th Cong., 1st sess.), Sept. 17, 1941).

²⁴ Max D. Kossoris and Swen Kjaer: *Industrial Injuries in the United States During 1938* (Monthly Labor Review, October 1939, p. 882).

character. The courts have held that so long as diseases, whatever their nature, arose out of and in the course of service of the vessel, the seamen had the same rights with respect to them as they had with respect to injuries. The data which are analyzed here and which have been secured from ship operators, indicate that these employers treated diseases and injuries in very much the same manner. The concept which prevails in the industry is somewhat different from that generally prevailing and may be considered by some as envisaging a coverage more akin to health insurance than to workmen's compensation. Although the data here analyzed include many diseases not considered occupational in other industries, and although many of the diseases, while arising out of and in the course of service of the vessel, were not really incurred in the line of duty, this study accepts the prevailing practice in the industry and treats diseases exactly in the same manner as injuries. A comparison between the characteristics of each, however, will be made.

DISABILITY CASES AND VESSELS ON WHICH THEY OCCURRED

The seamen's occupational hazards vary with the services in which the vessels on which they are employed are engaged. In the deep-sea trades, the voyages tend to be of long duration, especially in overseas-foreign operations. Since, except on the few passenger vessels, no physician is carried on board, the hazards of the elements become coupled with the absence of adequate medical facilities. Then, too, the dangers of climatic diseases are present in certain operations. On inland waters, the seamen handle the cargo on and off the ships so that their occupational risks include those of the longshoremen. The same is true with certain coastwise services, especially in the Pacific lumber trade. On the Great Lakes, however, self-loading and unloading equipment is found on nearly all bulk-cargo carriers, but the voyages are short and the vessels nearly always sail close to the shore.

OCCURRENCES IN RELATION TO VESSEL CHARACTERISTICS

Almost half of the estimated 14,550 disability cases which occurred in 1938, occurred on large vessels of the so-called "major" types engaged in the deep-sea trades, i.e., on freighters, combination passenger and freight vessels, and on tankers of at least 1,000 gross tons each, engaged in the coastwise, intercoastal, nearby-foreign, and overseas-foreign trades. This is not surprising for, as has been pointed out earlier in this chapter, in 1938 over half of the seamen were employed on such vessels. Yet, these comprised only about 8 percent of the vessels in operation during that year. Thus, it is estimated that over 53 percent of the cases occurred on vessels of 1,000 gross tons and over; that 86 percent occurred on dry-cargo vessels, combination passenger and freight vessels, and on tankers; and that 53 percent occurred on vessels engaged in the coastwise, intercoastal, nearby-foreign, and overseas-foreign trades.

Size and Type of the Vessels

When the cases are examined further it is found that relatively more injuries than diseases occurred on the larger vessels. It is also found that, although the cases which occurred on the vessels of the "major"

types were almost equally divided among the three types, a larger proportion was discovered on tankers; and that, while over a third of the injury cases occurred on dry-cargo vessels, almost 40 percent of the disease cases were found on tankers. The figures below show the percentage distribution of 14,550 seamen's disability cases estimated to have occurred in 1938, by type of vessel:

	<i>All cases</i>	<i>Injury</i>	<i>Disease</i>
Major types of vessels	86.0	83.1	90.9
Dry cargo	27.3	33.9	15.6
Combination passenger and freight	28.3	24.1	35.7
Tanker	30.4	25.1	39.6
Minor types of vessels	14.0	16.9	9.1
Barge	6.5	5.9	7.7
Ferry	2.2	2.9	1.1
Tug	5.3	8.1	.3
All types	100.0	100.0	100.0

The relatively large proportion of disability cases found on these vessels is in large measure explainable by the fact that the vessels of the "major" types employ rather large crews. Table 1 shows that, as a rule, the larger the crew, the greater the average number of disability cases per ship.

TABLE 1.—Average Crew and Average Number of Disability Cases per Ship, by Type of Ship, 1938

Type of ship	Average crew per ship	Average cases per ship		
		Total	Injury	Disease
All types	38.7	0.9	0.6	0.3
Combination passenger and freight.....	114.0	6.5	4.7	1.8
Tanker	32.0	5.9	3.1	2.8
Dry cargo	33.0	2.8	2.1	.7
Ferry	27.6	1.5	1.5	(¹)
Tug	* 29.9	.9	.8	.1
Barge	4.4	.6	.5	.1

¹ Less than 0.1 per ship.

* Allows for the 3-watch system on 24-hour operations, whereas the crews for ferries do not.

DISABILITY-FREQUENCY RATES

One of the measures of the occupational hazards of an industry is the rate of frequency at which occupational injuries and diseases occur, i.e., the number of cases per million man-hours of work. In this study it has been found necessary to adopt a different scale and to express the frequency of disability cases per 100,000 man-days of employment. The reasons for this departure are (1) most seamen are forced to live on board ship and are exposed, therefore, to hazards even when they are not working; (2) no records of the hours worked on board ship are available; (3) some work is performed beyond the usual workday;²⁸

²⁸ While the 8-hour day prevails for most seamen, some emergency work, and work necessary for the navigation of the ship, are not compensated when performed beyond the usual workday. Moreover, overtime payments are not payable to all members of the crew. When payable, they do not represent payment for work performed in excess of the agreed hours, but rather payment for extra, or undesirable work.

and (4) on those ships where seamen do not live on board the vessel, such as certain tugs, two different crews may be employed in 1 day.

For the industry as a whole, it is estimated that in 1938, 36.4 disabilities occurred per 100,000 man-days of employment. Of these, 23 were injuries and 13.4 were diseases. Thus, injuries occurred almost twice as frequently as diseases. The rates of occurrence varied greatly from one type of vessel to another, as shown below in the estimated disability-frequency rates (per 100,000 man days of employment), by type of vessel, for 1938.

	<i>Estimated disability-frequency rate</i>
All types of vessels	<u>36.4</u>
Tanker	80.2
Barge	57.2
Combination passenger and freight	41.2
Dry cargo	35.2
Ferry	22.6
Tug	7.8

The available data show that not only did more cases occur per ship on tankers than on vessels of nearly all other types, but that more cases occurred on tankers per man-days of employment than on vessels of any other type. This was due, in large measure, to the nature of work on this type of vessel. The low over-all frequency rates for tugs and ferries reflect the extremely low disease-frequency rates for these vessels. These are in part explained by the fact that since seamen employed on these vessels do not stay on them after working hours, their exposure to "occupational" diseases is therefore materially reduced.

Except for the two types of ships which had extremely high (tanker) or extremely low (tug) frequency rates, some uniformity existed with respect to the injury-frequency rates. The rates for barges, combination passenger and freight vessels, freighters, and tankers, ranged from 22.3 to 27.9 injuries per 100,000 man-days of employment. With respect to disease cases, no uniformity in frequency rates existed. The rates for these three types ranged from 6.9 to 29.1 disease cases per 100,000 man-days of employment.

In examining the frequency rates it is interesting to note that both the injury- and disease-frequency rates were extremely high on barges, second only to those on tankers. Yet the work on barges is not generally considered especially hazardous—quite the contrary. The high frequency rates, however, may be explained by the fact that this type of vessel often furnishes employment to men in the more advanced age groups, not especially skilled, whose duties resemble more closely those of a guard or caretaker than of a seafaring man. Their hours are long and often only one single bargee will be employed on one or more barges. In case of emergency these older men are less able to take care of themselves. Moreover, their advanced ages render them more susceptible to certain diseases. On combination passenger and freight vessels, the high frequency rates may be due to the fact that a higher proportion of the large passenger vessels are employed in the distant trades and on long voyages. The estimated disability-frequency rates point to the relative safety of work on Great Lakes vessels as compared with work on deep-sea vessels, and inland waters.

The nature of the data does not permit a detailed break-down of experience for the different services, but the following rates (per 100,000 man-days of employment) are indicative:

	<i>Estimated disability-frequency rate</i>		
	<i>Total</i>	<i>Injury</i>	<i>Disease</i>
All trades	36.4	23.0	13.4
Deep-sea	40.3	27.4	12.9
Great Lakes	13.2	12.6	.6
Inland waters	37.9	20.8	17.1

EXTENT OF DISABILITY

As already indicated, less than 5 percent of the disability cases resulted in fatalities and permanent physical impairments. For the different types of ships, however, the proportion of these cases ranged from under 2 percent with respect to ferries to over 13 percent with respect to tugs. This is shown below in the percentages of all disability cases which resulted in deaths and permanent physical impairments, by type of vessel on which they occurred in 1938.

	<i>Percent of all disability cases</i>		
	<i>All cases</i>	<i>Injury</i>	<i>Disease</i>
All types of vessels	4.8	5.6	3.2
Tug	13.3	12.7	42.9
Barge	7.4	9.2	5.0
Dry cargo	6.8	6.3	8.9
Tanker	3.2	4.1	2.3
Combination passenger and freight	2.4	3.4	1.3
Ferry	1.8	2.2	0

The high proportion of deaths and permanent disabilities shown for tugs was caused by the explosion of a small number of tugs. The low proportion shown for tankers may be explained by the fact that the short runs on which these vessels generally operated made proper medical care more readily available to their crews. The presence of physicians on board the deep-sea passenger vessels, no doubt, helped to keep to a low level the proportion of serious cases on these vessels.

As measured by the extent of the disabilities incurred, the proportion of serious cases to the total number of cases varied noticeably among the vessels engaged in the different trades. Although the disability-frequency rates for the Great Lakes trade would suggest that this service offered seamen relatively safer employment than the others, a higher proportion of the disability cases incurred on vessels in this trade resulted in fatalities and permanent physical impairments than those incurred on vessels in other trades. On vessels in inland trades, a smaller proportion of the disability cases resulted in fatalities and permanent impairments than on vessels in other trades. The proportions of serious disabilities (deaths and permanent physical impairments) to the total incurred on vessels in the different trades, in 1938, are shown below.

	<i>Percent of all disability cases</i>		
	<i>All cases</i>	<i>Injury</i>	<i>Disease</i>
All trades	4.8	5.6	3.2
Deep-sea	5.5	5.6	5.4
Great Lakes	8.0	8.2	4.0
Inland waters	3.6	5.4	1.5

DURATION OF DISABILITY

An analysis of the data submitted to the Interdepartmental Committee by the shipowners reveals that for the 5,458 injury and disease cases occurring in 1938, for which sufficient data were available to determine the period of disability, the average duration per case was 48.8 days. The average time lost is shown below by extent of disability for reported disability cases in 1938.

	<i>Number of cases</i>	<i>Average number of days¹</i>
All extents	5,458	48.8
Injury	3,690	48.4
Disease	1,768	49.7
Fatal	130	33.4
Injury	63	12.0
Disease	67	53.6
Permanent total	18	178.1
Injury	8	104.6
Disease	10	236.8
Permanent partial	189	119.7
Injury	176	111.6
Disease	13	229.6
Temporary total	5,121	46.1
Injury	3,443	45.7
Disease	1,678	47.0

¹ For permanent total and permanent partial disability cases, this represents the average duration of the healing period.

When the above averages are applied to the total number of cases estimated to have occurred in 1938, it is estimated that in 1938 a total of approximately 710,000 man-days were lost by the seamen. This does not include the economic loss resulting from fatalities and permanent physical impairments. Over 639,000 man-days were lost as a result of temporary total disabilities alone.

On the average, seamen fatally disabled through injuries and illnesses were incapacitated for over 1 month before death ensued—those fatally injured for about 12 days and those fatally ill for almost 54 days. Before being declared permanently and totally disabled, seamen were incapacitated on the average, for almost 6 months—3½ months in injury cases and almost 8 months in disease cases. The healing period for seamen permanently but only partially disabled lasted, on the average, almost 4 months.

Seamen temporarily disabled were incapacitated for an average of 46 days. Disabilities resulting from injuries and those resulting from diseases lasted approximately the same number of days. A distribution of these cases by duration indicates that less than 5 percent of the cases lasted less than 1 week, 16.5 percent lasted less than 2 weeks, and about 45 percent less than 1 month. About 25 percent of the cases lasted over 2 months, but less than 4 percent over 5 months. The concentration of the temporary total disability cases was found at between 2 weeks and 1 month, and between 1 and 2 months with 23.7 percent and 30.1 percent of the cases, respectively, in each group. These percentages are significant when it is recalled that in 1938 the average duration of temporary total disability cases for all manufacturing industries was found to be 21 days.

Temporary total disability cases which occurred on the major types of vessels were of strikingly similar duration. This was especially true with respect to injuries, which ranged from an average of 45 days on dry-cargo vessels to 46.8 and 48.7 on tankers and on combination passenger and freight vessels, respectively. With respect to diseases, however, the average duration, although approximately the same for combination passenger and freight vessels and dry-cargo vessels, about 51 days, was only 41.9 days for tanker vessels. For the minor types of vessels, the average durations were considerably shorter. This is shown by the following figures on reported temporary total disability cases, by type of vessel, 1938.

	<i>Average duration (in days)</i>		
	<i>All cases</i>	<i>Injury</i>	<i>Disease</i>
All types of vessels	46.1	45.7	47.0
Combination passenger and freight	49.0	48.7	50.6
Dry cargo	46.0	45.0	51.0
Tanker	44.0	46.8	41.9
Barge	41.9	44.3	38.9
Tug	33.0	33.1	20.0
Ferry	29.0	30.4	26.8

The average duration of the temporary total disability cases was somewhat longer for disabilities incurred on deep-sea vessels than on other vessels. Unlike the experience in other trades, the average duration of the disease cases was slightly longer than that of the injury cases. Diseases occurring in connection with employment on Great Lakes vessels were, on the average, 10 days shorter than the injuries so incurred. Both the injury and disease cases occurring in connection with employment on inland vessels were of approximately the same average duration. This is shown by the figures on average duration, by trade, for temporary total disabilities, 1938.

	<i>Average duration (in days)</i>		
	<i>All cases</i>	<i>Injury</i>	<i>Disease</i>
All trades	46.1	45.7	47.0
Deep-sea	47.0	46.6	49.0
Great Lakes	40.4	41.4	31.3
Inland	38.0	38.3	37.7

The above figures indicate that disability cases occurring in connection with deep-sea employment, where the voyages are of relatively long duration, lasted considerably longer than those occurring in connection with employment in other trades. The relation between the average duration of voyages and the average duration of disability cases is clearly shown below.

	<i>Voyage duration¹</i>	<i>Average duration (in days) of—</i>		
		<i>All cases²</i>	<i>Injury cases</i>	<i>Disease cases</i>
Deep-sea trade	55	47.0	46.6	49.0
Coastwise ³	27	43.0	42.8	43.4
Intercoastal	88	46.2	48.9	42.4
Nearby foreign	21	40.2	41.2	37.6
Overseas foreign	89	59.6	56.5	65.6

¹ 1939.

² 1938.

³ Includes voyages to U. S. territorial possessions.

It will be noted at once that the trade (overseas foreign) showing the longest average voyage duration is also the trade showing the longest average disability duration. Similarly, the trade (nearby foreign) showing the shortest average duration is also the trade showing the shortest disability duration. These relationships generally prevailed whether the disabilities were caused by injuries or diseases. The reason for this relationship is not clear.

NATURE OF DISABILITIES SUFFERED

The 5,458 disability cases reported for the year 1938 to the Interdepartmental Committee, already referred to, afford a splendid opportunity to study the kinds of injuries and diseases which seamen suffer in the course of, or as a result of, their service on board ship. It will be recalled that these consisted of 3,690 injury cases and 1,768 disease cases.

Injuries

In examining the 3,690 reported injury cases, it was found that almost half of them were in the nature of strains, sprains, and bruises. Many of these were rather serious. They included almost half of the fatal and permanent injuries. Cuts, lacerations, punctures, and abrasions took the next highest toll, almost 15 percent of the cases. Fractures and dislocations were almost as numerous. Hernias accounted for over 10 percent of the injuries, and burns and scalds for 7 percent. Drownings, although constituting only 1 percent of the cases, accounted for almost half of the death cases. Concussions also accounted for a very small share of the cases, 2 percent, but included over 10 percent of the fatalities. Similarly, it is found that amputations, although accounting for only 1.5 percent of the cases, included 12.5 percent of the permanent total disabilities and 30 percent of the permanent partial impairments. Likewise, fractures and dislocations, although accounting for about 14 percent of the cases, included almost 9 percent of the deaths, 62.5 percent of the permanent total disabilities, and over 40 percent of the permanent partial impairments. It is noteworthy that the permanent impairment cases were concentrated in only four types of injuries.

Except for amputations, concussions were more serious than injuries of any other nature. As is shown in the table below, almost 10 percent of them resulted in death, and almost 3 percent resulted in permanent partial physical impairments. Fractures were also relatively serious.

TABLE 2.—Percentage Distribution of 3,690 Reported Seamen's Injury Cases, by Extent of Disability and by Nature of Injury

Nature of injury	All cases	Fatalities	Permanent			Temporary total
			All cases	Total	Partial	
All cases	100.0	1.7	5.0	0.2	4.8	93.3
Amputations	100.0	0	100.0	1.8	98.2	0
Burns, etc.	100.0	.4	.8	0	.8	98.8
Cuts, etc.	100.0	.7	4.1	0	4.1	95.2
Strains, etc.	100.0	.4	1.5	.1	1.4	98.1
Fractures	100.0	1.2	14.9	1.0	13.9	83.9
Hernia	100.0	.5	0	0	0	99.5
Drowning	100.0	100.0	0	0	0	0
Concussion	100.0	9.6	2.7	0	2.7	87.7
Not elsewhere classified	100.0	12.9	2.3	0	2.3	84.8
Unknown	100.0	16.7	0	0	0	83.3

Diseases

All kinds of diseases were suffered by seamen in 1938. The 1,768 cases reported by shipowners as the basis for settlements for damages, were divided among 50 different diseases ranging alphabetically from adenitis to venereal diseases.

As already pointed out, 1,678 of these disease cases resulted in temporary total disabilities. Of the few fatalities (67), 26 were due to heart diseases, 9 to pneumonia, 7 to tuberculosis, and the remainder to such diseases as appendicitis, meningitis, cancer, rheumatism, stomach ailments, etc. The few permanent total disabilities (10) were caused mainly by tuberculosis and heart ailments, and the permanent partial disabilities (13) by eye diseases, infections, etc.

The 1,678 diseases resulting in temporary total disabilities were, of course, of many different kinds. They included, for instance, 163 cases of appendicitis, 43 of boils, 35 of bronchitis, 34 of simple colds, 113 of dermatitis, 30 of hemorrhoids, 30 of kidney trouble, 45 of otitis, 120 of miscellaneous stomach ailments, 63 of tonsillitis, 19 of tuberculosis, 88 of ulcers, and so on.

TABLE 3.—Percentage Distribution of 1,678 Diseases Causing Temporary Total Disability

Disease, or disease of—	Percent	Disease, or disease of—	Percent
Blood-forming organs	0.5	Lymphatic system	3.7
Bones and cartilages .....	.4	Nervous system	4.9
Circulatory system	4.6	Poisoning .....	.6
Communicable and infectious	12.1	Respiratory system	7.0
Dental .....	.6	Skin	7.7
Digestive system	24.6	Tuberculosis	1.1
Ear, nose, and throat	7.0	Tumors	1.7
Eye .....	.5	Venereal	14.8
Genito-urinary	4.9	Miscellaneous	14.8
Joints and bursae	2.1	Total	100.0

This grouping indicates that most of the seamen's diseases tended to fall into three categories: (1) Diseases related to nature and type of food; (2) diseases related to exposure to the elements; and (3) diseases related to the nature of the work.

The degree of seriousness of any of these diseases is, from a practical point of view, best measured by their average durations. As may be expected, tuberculosis cases had the longest average duration (340 days), and colds the shortest (20 days). Few diseases averaged as little as 20 days' duration. Most of them, almost 92 percent, averaged over 30 days. Therefore, diseases occurring on board ship, like injuries, were relatively serious. Their relatively long duration can be attributed in part to the difficulty of obtaining prompt professional medical attention.

PARTS OF BODY AFFECTED

The data received by the Interdepartmental Committee from shipowners indicate that every part of the body was affected by the cases resulting in permanent partial disabilities. In 39 percent of the cases, the fingers were involved. This is not surprising. It is noteworthy, however, that more cases involved the legs than the arms, but that more injuries involved the hands and wrists than the feet and ankles. The percentage

distribution of reported permanent partial disability cases, by part of body affected, is as follows:

Part of body affected:	Number of cases ¹	Percent of total
Skull	3	1.7
Eye	10	5.6
Head, not elsewhere classified	4	2.3
Trunk	22	12.4
Arm	12	6.7
Hand, including wrist	16	9.0
Finger	70	39.3
Leg	21	11.8
Foot, including ankle	13	7.3
Toe	5	2.8
General (rheumatism)	2	1.1
Total	178	100.0

¹ Source: Interdepartmental Committee to Study Workmen's Compensation for Seamen—System of Workmen's Compensation for Seamen (p. 39).

Occupational Characteristics of Disabled Seamen

As pointed out earlier, work is performed by the different members of the crew under greatly different conditions. Members of the deck department work on deck or in the cargo hatches, those of the engine department are confined below deck and work around the boilers, propulsion machinery, and other mechanical equipment. Members of the stewards' department remain below deck and work around the crew's living quarters, the kitchens, and the messrooms.

OCCUPATIONAL DISTRIBUTION OF DISABLED SEAMEN

Sufficiently detailed information was available from reports received by the Interdepartmental Committee for over 6,000 cases which occurred in 1938 on 2,880 vessels of various types operating in different trades, to permit an analysis of the relative risks of the various occupational groups employed on merchant vessels. This analysis reveals that about 43 percent of the disabled seamen were members of the deck department, 33 percent were employed in the engine department, about 23 percent in the stewards' department, and the remainder in the radio, purser, and other miscellaneous categories.

The departmental distribution of the vessel personnel was ascertained from the United States Maritime Commission's "Vessel Personnel Survey, 1938," for 9,884 vessels of the types and trades included in the present sample. When this broad occupational distribution of vessel personnel is compared with the occupational distribution of the disability cases reported, as is done in table 4, it is at once observed that the departmental distribution of the seamen reported as disabled in 1938 approached that of those reported as employed in 1938. This indicates that the occupational risk in one department was not much greater than that in other departments, especially the risk of becoming injured. The probability of becoming ill, however, was somewhat greater in the engine department than in the other departments of the vessel.

The occupational risk was greater for the unlicensed than for the licensed personnel, especially the deck officers. For the unlicensed per-

sonnel in the deck department the risk of injury was relatively greater than that of disease, but in each of the other two departments the risk of disease appears to have been slightly greater than that of injury. These relationships indicate that the higher the occupational level of seamen, the greater the probability of becoming disabled through diseases than through injuries.

TABLE 4.—Percentage Distribution of Seamen Shown in Vessel Personnel Survey, 1938, and of Reported Disability Cases, 1938, by Occupational Group

Occupational group	Vessel-personnel survey	Reported disability cases		
		All cases	Injury	Disease
Deck department	46.0	42.6	44.8	38.1
Licensed	11.0	5.0	3.1	9.3
Unlicensed	35.0	37.6	41.7	28.8
Engine department	30.0	33.0	31.5	35.9
Licensed	10.0	5.5	4.2	8.1
Unlicensed	20.0	27.5	27.3	27.8
Stewards' department ..	21.0	22.8	22.4	23.5
Miscellaneous ¹	3.0	1.6	1.3	2.5
All groups	100.0	100.0	100.0	100.0

¹ Includes pursers, radio operators, surgeons, etc.

EXTENT OF DISABILITY

Except for the small "miscellaneous" group, a higher proportion of the disability cases found in the deck department involved deaths, and permanent physical impairments, than of those found in each of the other groups. Similarly, disabilities occurring in the stewards' department involved a higher proportion of deaths and permanent physical impairments than those occurring in the engine department. This is shown in table 5.

TABLE 5.—Percentage Distribution of Reported Seamen's Disability Cases by Extent of Disability and by Occupational Group, 1938

Occupational group	Number of cases	Percent of cases which were—				
		Fatal	Permanent			Temporary total
			All cases	Total	Partial	
All groups	6,009	2.2	3.5	0.3	3.2	94.3
Deck department	2,563	2.6	4.6	.5	4.1	92.8
Master	93	6.5	9.6	2.1	7.5	83.9
Other licensed personnel....	209	7.1	2.9	.5	2.4	90.0
Unlicensed personnel	2,261	2.0	4.6	.5	4.1	93.4
Engine department	1,979	1.8	2.1	.5	2.0	96.1
Chief engineer	32	6.2	0	0	0	93.8
Other licensed personnel....	295	3.1	2.0	0	2.0	94.9
Unlicensed personnel	1,652	1.4	2.1	.1	2.0	96.5
Stewards' department	1,368	2.2	3.4	0.2	3.1	94.4
Chief steward	98	4.1	4.1	1.0	3.1	91.8
Other supervisory personnel	53	5.7	1.9	0	1.9	92.4
Other	1,217	1.9	3.4	.2	3.2	94.7
Miscellaneous ¹	99	3.0	5.1	0	5.1	91.9

¹ Includes pursers, radio operators, surgeons, etc.

Characteristics of Maritime Employment and Seamen's Disability Cases

The relatively high duration of cases of disability arising out of and in the course of service on merchant vessels may be explained in the light of the peculiar characteristics of maritime employment.

Seamen are employed to perform work necessary for, or in connection with, the navigation of a vessel. For practically the entire duration of their employment, they are on floating structures, moving from one port to another, on more or less distant voyages. While some medical assistance is obtainable on board passenger ships, most seamen are employed on other types of ships and therefore are generally beyond the reach of professional medical assistance.

A seaman may become disabled either at the beginning of the voyage, during the voyage, or at the end of the voyage. Disabled seamen may, therefore, spend part of their disability period on board ship and part ashore. In many cases, disabled seamen remain on their vessels for the rest of the round-trip voyages for which they were engaged, and are hospitalized or given the necessary out-patient treatment upon the return of the vessels to their original ports of sailing, or other voyage termination points. In other cases, the disabled seamen may be put ashore en route (in a foreign or domestic port) for treatment, and when sufficiently recovered they are brought back to their ports of sailing or some other port agreed upon. In still other cases, the entire disability period is spent wholly within the voyage period. In a discussion of the various periods of disability suffered by seamen, it must therefore be borne in mind that a seaman may spend the first period of his disability on board ship, the second period in a hospital, and the third period receiving out-patient treatment, convalescing, or both.

PERIODS OF DISABILITY DEFINED

Under existing laws a disabled seaman is entitled to wages to the end of the voyage and a maintenance allowance during the out-patient and convalescent period. Under a workman's compensation system designed for seamen, such as that recommended by the Interdepartmental Committee, a disabled seaman would be entitled to (1) wages to the end of the voyage; and (2) compensation for (a) the hospitalization period, if any, beyond the wage period, and (b) the out-patient and convalescent period, if any, beyond either or both the wage and the hospitalization periods. For the purpose of the present study, therefore, it is convenient to divide the time of disability into three periods. Each of these would be exclusive of the others and would coincide with a benefit period under either, or both, the existing employers' liability system and the hypothetical workmen's compensation system. These three periods are (1) to the end of the voyage, (2) hospitalization, and (3) out-patient and convalescence, and have, in this study, the following limitations:

Period to the end of the voyage.—This begins with the date the disability began, and stops with the end of the round-trip voyage for which the seaman was engaged, or the date the seaman is declared fit for duty, whichever occurs first.²⁶ It coincides with the period for which

²⁶ This, and each of the other periods, may also end with the death of the seaman.

the wages are payable under existing law and would presumably be payable under a seamen's workmen's compensation law. Part or all of this period may be spent on board ship. The disability, of course, frequently extends beyond this period.

Hospitalization period.—This begins with the seaman's first day of hospitalization after the "end of the voyage" and includes the entire period during which he receives in-patient treatment. It coincides with the period of hospitalization during which the seaman could receive compensation under a seamen's workmen's compensation law.

Out-patient and convalescent period.—This begins with the first day of out-patient treatment, or convalescence, following either the period "to the end of the voyage," or the "hospitalization" period, as the case may be. It ends with the date (a) the seaman is declared fit for duty, or (b) in cases involving permanent disabilities, when the wound is healed, or medical care cannot effect a cure. It coincides with the period for which the maintenance allowance is payable under existing law, or with the out-patient and convalescent period for which the seaman could receive compensation under a seamen's workmen's compensation law.

From the above definitions it is clear that the "hospitalization" period does not necessarily include the total number of days a seaman was hospitalized, but only those days of hospitalization extending beyond the date on which the seaman would have been discharged (because the voyage had terminated) had he remained with the ship for the full round-trip voyage for which he was engaged. Similarly, the "out-patient and convalescence" period does not necessarily include the total number of days of out-patient treatment, convalescence, or both, but only those days not included within the period "to the end of the voyage."

DISTRIBUTION OF THE CASES

The table below shows the proportion of the seamen who were reported as disabled for the different periods defined above. It shows that almost 65 percent of the 5,458 reported cases involved seamen whose disabilities occurred before the end of the voyage, 33 percent required hospitalization beyond this period, and 82 percent out-patient treatment and convalescence, beyond either or both of these periods. It is noteworthy that the proportion of disease cases which required hospitalization beyond the period "to the end of the voyage" was noticeably greater than the proportion of injury cases falling in this group. What may be said to be peculiar to the maritime industry, however, is the high proportion of cases (over 35 percent) which occurred on the days on which the seamen terminated their employment, i.e., on the last day of the voyage. This peculiarity may be explained, in large measure, by the increased activity on board ship on the last day of the voyage, and by the short duration of Great Lakes and inland-water voyages.

Since temporary total disability cases constituted almost 95 percent of the cases, the distribution of seamen suffering from such disabilities among the different periods of disability was almost identical with that of the total number of seamen. For cases of other extents, however, certain differences are notable. A number of death cases, for instance, were instantaneous. Only a small proportion of fatally disabled seamen were disabled for one or more periods of disability before death ensued. This was especially true with respect to the fatal injury cases.

A high proportion of the permanently and totally disabled seamen (over 60 percent) required hospitalization beyond the period "to the end of the voyage," and 50 percent of them required out-patient treatment and convalescence, or both. Similarly, less than 50 percent of the permanently but partially disabled seamen required hospitalization.

TABLE 6.—*Distribution of Reported Seamen's Disability Cases, by Periods of Disability, 1938¹*

Period of disability	All types of disability		Injury cases		Disease cases	
	Number	Percent	Number	Percent	Number	Percent
All periods	5,458	100.0	3,690	100.0	1,768	100.0
To end of voyage	3,523	64.5	2,437	66.0	1,085	61.4
Hospitalization	1,826	33.4	1,018	27.6	808	45.7
Out-patient and convalescence	4,492	82.3	3,171	85.9	1,321	74.7

¹The number of cases, and percentages, for each period are not additive since seamen may be disabled for one or more periods.

Because of the short duration of Great Lakes and inland-water voyages, only a small proportion of seamen disabled on such voyages became disabled before their voyages ended. Thus, only about 20 percent of the seamen disabled on Great Lakes vessels, and 12 percent of those disabled on inland-water vessels, became disabled before the end of their voyages; yet, 73 percent of the seamen disabled on deep-sea vessels became disabled before the end of the voyage for which they were engaged.

DURATION OF DIFFERENT PERIODS OF DISABILITY

Just as the periods of disability incurred by seamen are prime factors in the settlement of claims made by seamen under the existing system of employers' liability, so would they be under any workmen's compensation system especially designed for seamen, particularly in the great number of temporary total disability cases. The duration of each period of disability is therefore of paramount significance. On the basis of the data collected by the Interdepartmental Committee, it is calculated that the average duration of each period of disability was as follows:

	Average ¹ duration (in days)		
	All cases	Injury	Disease
All periods	48.8	48.4	49.7
To the end of the voyage	16.2	15.1	18.6
Hospitalization	33.0	31.5	34.9
Out-patient and convalescence	33.2	34.5	29.9

¹ Each average applies only to the cases involving the particular period of disability.

The average duration of these periods varied with (1) the extent of disability and (2) the trade in which the vessel was operated at the time the disability was incurred.

Extent of Disability

In the relatively few fatal cases in which seamen were hospitalized or required out-patient treatment, these periods were rather long, almost 3 months each. They were substantially longer in disease cases than in injury cases. The periods to the end of the voyage were relatively short, 12.5 days—shorter than in disability cases of any other extent.

It must be pointed out, however, that in fatal cases the average disability before death was quite short, only 33 days.

In permanent total disability cases, each of the periods had average durations longer than those of the cases of any other extent. The hospitalization period was the longest, and averaged almost 5 months. The out-patient period averaged almost 4 months.

Permanent partial disability cases involved periods of disability, which averaged as long as 2½ months for the hospitalization period, and 3 months for the out-patient period.

The temporary total cases involved the shortest periods of disability. Disability before the end of the voyage averaged one-half month, and the hospitalization and the out-patient periods approximately 1 month each.

As would be expected, therefore, with the exception of the fatal cases, the greater the extent of disability, the longer each period of disability.

Trade of Vessel

The average duration of the period "to the end of the voyage" ranged from less than 5 days on the Great Lakes to almost 27 days on inter-coastal voyages. It was practically as long whether the disability was due to an injury or a disease, although some noticeable differences existed in the nearby-foreign, overseas-foreign, and inland-water trades. The duration of this period bore a direct relation to the duration of the voyage.

The average duration of the period of hospitalization was fairly uniform for the different trades, ranging from about 29 days for disability cases arising on vessels in inland-water trade to about 35 days for those arising in overseas-foreign trade. Except for the coastwise and inland-water trades, the average duration of the hospitalization period was noticeably longer for the disease cases than for the injury cases.

The average duration of the period of out-patient treatment and convalescence was longest for cases arising on the Great Lakes and shortest for those arising in the nearby-foreign trade. The average duration of this period was longer for injury cases than for disease cases, except for cases arising on overseas-foreign voyages.

It is peculiar to the maritime industry that a large proportion of those disabled in the course of their employment are forced to remain for some period of time on the vessels on which their disabilities occurred whether or not professional medical assistance is available. Table 7 shows that in over 45 percent of the cases reported for the

TABLE 7.—*Disability Cases Involving Period on Board Ship and Average Days of Duration of Such Period*

[Reported cases occurring in 1938]

Type of disability	All cases		Cases involving period on board ship		
	Number	Average duration	Number	Percent of all cases	Average duration of period
All types	5,458	48.8	2,485	45.6	10.4
Injury	3,690	48.4	1,624	44.0	10.8
Disease	1,768	49.7	852	48.8	9.7

year 1938, the disabled seamen spent part of their disability period on board ship. The periods spent on board ship averaged 10.4 days.

SIGNIFICANCE OF THE PERIODS OF DISABILITY

In viewing the peculiar characteristics of maritime employment from another angle, in addition to that showing its influence on the extent, nature, and duration of the disabilities incurred, some light is thrown on the effect a waiting period, as a qualification for benefit, would have on a workmen's compensation system for seamen. Waiting periods are imposed in order to reduce the loads on the workmen's compensation systems by (1) discouraging malingering in the early stages of the disabilities, (2) eliminating claims for the large number of disabilities of short duration, and (3) not paying benefits for the first few days of each disability.

It has been observed that (1) in almost two-thirds of the cases, the disability included at least the period "to the end of the voyage" for which the seaman had been engaged—a period for which, under the existing employers' liability system, full wages were payable; (2) relatively few of the cases involved claims for disabilities of short durations; and (3) part of the duration of the disabilities were spent on board ship.

Obviously for the disabled seamen remaining on board ship for some part of the duration of their disability, malingering can easily be controlled.

The fact that there were few claims involving cases of short durations suggests that, by and large, seamen who were disabled for only a few days (except those permanently disabled) find no special advantage in filing claims for settlements, because they are entitled to wages to the end of the voyage.

To impose a waiting period immediately after the beginning of a disability would require legislating out of existence the traditional seamen's right of wages to the end of the voyage, a right long recognized by the courts. On the basis of the cases surveyed, it appears that this would affect two-thirds of the cases.

To impose the waiting period after the end of the voyage would effect a reduction in benefit payments. Although it would not affect seamen whose disabilities would not last beyond the end of the voyage, it would penalize seriously disabled seamen, who would be most in need of financial assistance.

Costs of Accidents and Illnesses

No examination of the magnitude and character of the occupational risks incurred by the American seamen would be complete without some attempt to evaluate the monetary costs of the injuries and diseases suffered by them in the service of the vessel on which they are employed.

In the maritime industry, as in other industries, such costs are borne by (1) employers; (2) disabled employees or their friends and relatives, and (3) the general public. As will be shown in the next chapter, disabled seamen appear to be rather well protected by existing laws. The cost to employers include payments to the seamen as settlements for disabilities incurred in the service of their vessels, as well as other costs. The former compensate the seamen and their dependents, not only for the direct time lost as a result of the disabilities, but, as will be shown

later, for pain and suffering and other considerations. The pecuniary cost to the seamen may therefore be considered to be absorbed, in a large measure, by the employers, so that only the costs to (1) employers and (2) the general public will be considered. For the year 1938, these costs are estimated to have amounted to well over \$5,246,300—\$4,548,600 to the employers and \$697,700 to the public.

COSTS TO EMPLOYERS

Generally, the costs to employers involved one or more of the following: (1) Payments to seamen; (2) premiums to insurance carriers; (3) attorneys' fees; and (4) cost of operating a claims department. The Interdepartmental Committee attempted to obtain data on each of these items. Useful data on payments made to seamen was obtained for 6,239 cases. Data on the other three items were very unsatisfactory. Because of the practice of carrying blanket insurance policies, for which a single premium was paid, covering all risks during the voyage, the reporting companies were not able to indicate the cost of insurance covering injuries and diseases of seamen. Further, the insurance carried was usually of the "deductible" type. That is, the employer paid up to a fixed maximum of, say \$250, of the settlement and the insurance carrier the balance, so that in the majority of the cases the full settlement was paid entirely by the employer. In many cases, on the other hand, the payments made by the insurance carriers offset the insurance premiums paid by the employers. Moreover, employers found it difficult to allocate to seamen's disability cases, attorney fees and costs of operating a claims department, as these attorneys and claims departments handled a great many additional matters.

The present treatment of cost to the employers will therefore be limited to what may be called the direct costs of the disabilities incurred by seamen in the service of the vessels of their employers. These direct costs include (1) payment of full wages for the period to the end of the voyage; (2) maintenance allowance, while the seaman was receiving outpatient treatment, convalescing, or both; (3) indemnity or damages for pain and suffering, permanent physical impairment, death, or other considerations; and (4) other costs such as burial expenses, medical appliances, artificial limbs, medical treatment and care not obtained from the United States Marine Hospitals.

The total gross settlements for the 6,239 cases exceeded over \$2,100,000. The average direct cost to the employers, therefore, exceeded \$335 per case. The average cost for injuries and diseases of different extents of disability are shown below for 6,239 reported seamen's disability cases.

Average gross settlement (6,239 cases)

Extent of disability:	<i>All types of disability</i>	<i>Injury</i>	<i>Disease</i>
Fatal	\$2,752	\$4,156	\$489
Permanent total	5,172	7,586	2,978
Permanent partial	2,599	2,698	1,230
Temporary total	196	213	156

It will be recalled that it was estimated that there were approximately 14,550 injury and disease cases of various extents in 1938. When the above averages are applied to this estimate, the following amounts of estimated gross settlement are obtained:

Extent of disability:	Estimated gross settlement (14,500 cases)		
	All types of disability	Injury	Disease
All cases	\$4,548,585	\$3,597,260	\$951,325
Fatal	700,415	644,180	56,235
Permanent total	173,350	113,790	59,560
Permanent partial	1,014,330	971,280	43,050
Temporary total	2,660,490	1,868,010	792,480

Thus, it is estimated that the direct monetary costs to employers, of injuries and diseases suffered by seamen in the service of their vessels during the year 1938 was approximately \$4,548,600.

COST TO THE PUBLIC

American merchant seamen are entitled to free medical care at the U. S. Marine Hospitals, operated by the U. S. Public Health Service. When possible, seamen disabled in the service of the vessel in which they are employed must obtain their necessary treatment and care at these institutions, unless their employers are willing to make other provisions for them. It is reasonable, therefore, to assume that nearly all the hospital treatment and care was obtained from U. S. Marine Hospitals. Employers do not reimburse these hospitals for the care given to their employees, even though such care is necessitated by disabilities which arose out of, or in the course of, service on their vessels. As these hospitals are supported by the United States Government, the cost of their operation falls on the general public.

No data are available showing the cost of care of American merchant seamen disabled in the service of their vessels, but the United States Public Health Service reports that for the fiscal year ending June 30, 1938, the average per diem cost of in-patient treatment of all patients at U. S. Marine Hospitals was \$3.59.²⁷ From this report, it is estimated that the average duration of in-patient treatment of American merchant seamen was 37.4 days.²⁸ Since at least a third of the disabled seamen required hospitalization, it follows that the 14,550 seamen disabled in 1938 received at least approximately 180,000 days' relief at U. S. Marine Hospitals. At \$3.59 per diem the total cost of hospitalization of American merchant seamen, disabled in 1938 in the service of their vessels, may be estimated at more than \$646,200.

For out-patient treatment, the U. S. Public Health Service estimates that the cost averages approximately \$1.00 per treatment.²⁹ From United States Public Health Reports,³⁰ it is estimated that, on the average, each treated American merchant seaman received out-patient care 4.3 times during 1938. The cost of out-patient treatment was therefore \$4.30 per patient. Since at least 82.3 percent of the disabled seamen received out-patient treatment, the cost of out-patient treatments may be estimated at more than \$51,500.

The above estimates are believed to be somewhat low since, as pointed out above, the percentages of seamen hospitalized, and of those receiving out-patient treatment are minima. The total cost to the public for the year 1938 may be estimated, therefore, at more than \$697,700.

²⁷ Annual Report of the Surgeon General of the Public Health Service of the United States, 1938 (p. 117).

²⁸ *Idem* (pp. 119, 125).

²⁹ By conference with U. S. Public Health officials.

³⁰ Annual Report of the Surgeon General, op. cit., p. 125.

Chapter 2.—Present Rights of Disabled American Seamen

Traditional Rights of Disabled Seamen

Although seamen do not presently have the protection of workmen's compensation laws, they have other rights:¹ (1) The right to maintenance and cure and to wages to the end of the voyage; and (2) the right to sue for damages under employers' liability. Those in effect constitute a modified form of employers' liability.

THE RIGHT TO MAINTENANCE AND CURE AND WAGES

This is an ancient right. While it is traced directly to the Laws of Oleron (13th century), laws dealing with seaworthiness of vessels, wages of seamen, and the master's liability in cases of collision can be traced to the Rhodian Laws (about 900 B.C.) which were, in part, reproduced in the Justinian Code, and even as far back as the first Babylonian Empire, around 2100 B.C.² During the Middle Ages, these laws were revived by the citizens of Barcelona and eventually collected in the *Consolado del Mare* which became binding upon the Mediterranean maritime nations. Impressed by the reputation of these laws, Eleanor of Aquitaine ordered the compilation of the judgments of the Maritime Court of the Island of Oleron, which became known as the Laws of Oleron. They were introduced by her in England when she ruled that country as regent while her son Richard was engaged in The Crusades.³ These laws proved peculiarly adaptable to British commerce and were eventually incorporated in the Black Book of the British Admiralty.

When the English settlers came to this country, they brought with them English laws which formed the basis of our present laws and governmental processes. Our admiralty courts are the descendants of the admiralty courts which existed in the Colonies by virtue of commissions from the Crown. After the Declaration of Independence, each Colony became a separate and independent State until the adoption of the Constitution in 1789. When they organized their judicial systems the Free Colonies adopted the jurisdictions of the colonial vice-admiralty courts as their own. The early American admiralty courts were therefore governed in their proceedings and decisions not only by the regulations of the Congress of the United States, but also by "the laws of Oleron and the Rhodian and the Imperial Laws so far as they have been heretofore

¹ Hearings on H.R. 6881 "An Act to Implement the Provisions of the Shipowners' Liability (Sick and Injured Seamen) Convention, 1936" before a Subcommittee of the Committee on Commerce, U. S. Senate (66th Cong. 3d Sess.), July 1940 (pp. 114-129; 143-150; 216-247).

² For résumés of early maritime laws see Erastus C. Benedict, *The Law of American Admiralty* (6th Ed.), New York, Baker Voorhees Co., Vol. I and III passim; Robert M. Hughes, *Handbook of Admiralty Law* (2d ed.), St. Paul, Minn., West Publishing Co., 1920 (pp. 1-10); Walter MacArthur, *The Seaman's Contract, 1790-1918*, San Francisco, 1919 (pp. IX-XXIV). For a detailed and authoritative compilation see Jean Marie Pardessus, *Collections des Lois Maritimes, Paris, 1828. Passim.*

³ Reference should also be made to the "Laws of Wistby" (about 1400) which are said to have been compiled from the Laws of Oleron and were observed by the Germans, Swedes, Danes, Flemish, and other northern peoples; and the laws of the Hanseatic League (about 1600). In all these laws, the provisions concerning seamen were almost identical. See Pardessus, *idem*, Vol. I Passim.

observed in the English Courts of Admiralty, and by the laws of nature and nations."⁴

Article 7 of the Laws of Oleron reads as follows:

If any member of the crew should become ill in the service of the vessel, the master must set him ashore; and furnish him with lodging, a ship's boy or hire a woman to tend him. He must furnish him with food of the same quantity and quality he would furnish him on board ship if he were well, but the seaman reserves the right to be paid his wages, and, if he should die, his wife or next of kin shall be paid his wages.⁵

Under this principle a seaman who becomes ill or injured in the service of the vessel, regardless of the circumstances, is entitled to (1) maintenance; (2) cure or care; and (3) wages at least to the end of the voyage. It is the duty of the master, or the shipowner, to make certain that the seaman receives adequate maintenance and cure and, if no U. S. Marine Hospital can be reached, these must be provided at the expense of the shipowner. This principle has been firmly established by a series of court decisions.

The broad general right of maintenance and cure, and wages at least to the end of the voyage, was clearly established in 1903 by the United States Supreme Court in its famous *Osceola*⁶ decision, in which it held:

That the vessel and her owners are liable, in case a seaman falls sick, or is wounded, in the service of the ship, to the extent of his maintenance and cure, and to his wages at least so long as the voyage is continued.

Later court decisions elaborated upon this decision. For example, it has been ruled that the duty to provide maintenance is coextensive with that to provide care; that proper care must be provided for a "reasonable" time, i.e., time during which treatment may effect a cure. The seaman, however, must accept care at a U. S. Marine Hospital, if possible;⁷ but negligence on his part⁸ or even drunkenness, if not in itself the major cause of the injury, does not deprive him of his right to maintenance and cure.⁹ If the injury or illness is due to willful misconduct, the seaman is not entitled to maintenance and cure;¹⁰ but the shipowner must, nevertheless, see that the seaman is given proper medical treatment and attendance, or be liable for damages.¹¹

The right to wages means the right to full wages from the date of injury, or illness, to the end of the round-trip voyage for which the seaman was engaged, whether or not he remains on board ship, and whether or not he is able to work. This was asserted several decades ago by a series of court decisions.¹²

This right to maintenance and cure and wages to the end of the voyage is in addition to the seaman's rights to recover at law from the master,

⁴ Robert M. Hughes, op. cit. (p. 10).

⁵ Pardessus, op. cit. Vol. I (p. 327).

⁶ *The Osceola* (1903) 189 U. S. 158, 175; 23 Sup. Ct. 483.

⁷ *Skolar v. Lehigh R. R.* (1933), 60 Fed. (2d) 893; also *Calmar S. S. Co. v Taylor* (1938), 303 U. S. 525.

⁸ *Sorensen v. Alaska S. S. Co.* (1917), 243 Fed. 280.

⁹ *Manhattan Canning Co. v. Wilson* (1914), 217 Fed. 41; *The Quaker City* (1931), 1 Fed., Supp. 840.

¹⁰ Thus it was ruled that a friendly scuffle (*Meyer v. Dollar S. S. Line* (1931), 43 Fed. 425); drunken brawl (*Lortie v. American-Hawaiian S.S. Co.* (1935), 78 Fed. (2d) 819); venereal disease and a willful wrongful act (*The Alector* (1920), 263 Fed. 1007) deprived the seaman of his right to maintenance and cure.

¹¹ *The Osceola* (Supra) p. 56; *Cortes v. Baltimore Insular Line* (1933), 287 U. S. 367.

¹² See for instance, *Callon v. Williams* (1871), D. C. D. Mass. Fed. Case No. 2324; *The North America* (1872), D. C. E. D. N. Y. Fed. Case No. 10514; *The Governor Ames* (1891), D. C. D. Wash. N. D. 55 Fed. 327. This right applies also to the crews of fishing vessels working on shares, the wages due being equal to the seaman's share of the catch of the vessel to the end of the voyage (*Olsen v. Whitney, et al.* (1901), D. C. N. D. Col. 109 Fed. 80).

or the shipowner, for injuries suffered through his unlawful or negligent acts; the right to the former being "grounded solely upon the benefit which the ship derives for his (the seaman's) service and having no regard to the question whether his injury has been caused by the fault of others or mere accident."¹³

EMPLOYERS' LIABILITY AND MARITIME LAW

In order to recover an indemnity for injuries resulting from his employer's unlawful and negligent acts, the seaman must establish his employer's liability under the law. In the absence of a workmen's compensation act, the conditions under which an injured employee can recover at law are based upon (1) the duties of the employer and (2) the employer's defenses. Under maritime law these rules prevail although the Jones Act of 1920 somewhat affects the employer's defenses. The Limited Liability Acts, which may be invoked in cases of collision and other marine disasters, have the force of another employers' defense.

The Duties of the Employer

The duty of the employer to use "reasonable care" in protecting his employees against injury is a generally accepted principle.¹⁴ "Reasonable care" requires the guarding of "only those dangerous conditions over which the employer, by the exercise of reasonable care, should have knowledge."¹⁵ The employer, then, has the duty of exercising reasonable care in furnishing a safe place to work. In the language of the maritime law, the employer has the duty of furnishing a "seaworthy" ship.¹⁶ The definition of "seaworthiness," however, is still a matter for the courts to establish. The various court decisions, so far, make the concept of "seaworthiness" parallel to that of "reasonable care."¹⁷

In Corpus Juris we find the following definition embracing the language of several court decisions:

To be seaworthy within rules governing recovery for injuries to seamen arising from unseaworthiness of the ship, the ship must be staunch and sound, and properly equipped, provisioned, and manned, and must have her cargo properly stowed away. But it has been said that "seaworthiness" is a relative term, escaping exact definition and declared that the standard of seaworthiness varies with the kind of ship and voyage involved.¹⁸

This definition, after listing certain conditions which a seaworthy ship must meet, proceeds to obscure the term it has just clarified by adding the concept of "relative seaworthiness" varying with the kind of ship and voyage involved. While it is clear, therefore, that it is the duty of the shipowner to provide a seaworthy ship as a safe place to work, the burden of proof that the ship was unseaworthy is on the seaman; and in proving unseaworthiness, he is faced with the necessity of establishing the conditions which constitute unseaworthiness. Having established these conditions, he must overcome the employer's defenses.

¹³ *A. Heaton* (1890), C.C.A., 43 Fed. 592. See also *Harden v. Gordon* (1823), 2 *Mason* 541; 11 Fed. Case 480.

¹⁴ *Priestly v. Fowler* (England 1837), 3 *Meeson and Welsley* 1, 6.

¹⁵ *Magee v. Chicago & Northwestern R.R. Co.* (1891), 82 *Iowa* 249, 48 *NW* 92.

¹⁶ *Burton v. Greig* (1920), 265 *Fed.* 418.

¹⁷ In *Schirm v. Dene Steam Shipping Co.* (1914), 222 *Fed.* 587, the court defined seaworthiness as "equivalent of the familiar common-law obligation of an employer to furnish his employee with a suitable place to work. Like that obligation, it is expressed in terms of reasonable care, the care that a reasonably prudent person would take under the circumstances" (p. 589).

¹⁸ 56 *Corpus Juris*, p. 1089, sec. 654.

The Employer's Defenses

Until the passage of the Jones Act in 1920, seamen—like most other workers not covered by workmen's compensation laws—had to overcome several common-law defenses by employers before they could obtain damages for work injuries or diseases. A seaman had to prove that the disability did not arise out of an inherent hazard in the industry or occupation, and that the employer could have eliminated the hazard with the exercise of reasonable care. He had to prove, further, that he did not knowingly accept the risk in performing the particular task at which he was disabled. He had to prove that the accident or disease was not caused by a fellow servant, even though that fellow servant was a superior officer whose orders the seaman was compelled to obey. And, last, but by no means least, the seaman had to overcome the defense that his own negligence had contributed to the disability. To overcome the employers' defenses, therefore, the seaman had to submit a proof so airtight that it was almost impossible for him to recover.

In case of death, the situation was even worse. Under common law, an action for personal injury lies with the person injured. Until the passage of the Death on the High Seas Act and the Jones Act in 1920, modifying the maritime law, recourse could be had only to State laws providing damages if death occurred in waters within the jurisdiction of the State.

SPECIAL LEGISLATION

Two laws were enacted by Congress to give the seaman some relief from the operation of the employer's defenses.¹⁹ These are (1) the Seamen's Act of 1915, popularly known as the LaFollette Act, and (2) the Merchant Marine Act of 1920, popularly known as the Jones Act. Two other statutes are also of special interest. They are the Death on the High Seas Act of 1920, and the Statutes for Limited Liability.

The LaFollette Act²⁰

The employers' defense which imposed a special hardship on seamen injured in the service of their vessels was the fellow-servant rule. After the U. S. Supreme Court ruled in the *Osceola* case that "all the members of the crew, except perhaps the master, are as between themselves fellow servants," it became clear to the seamen that some legislative relief was necessary to protect them from the negligence and improvident orders of those in command. When the LaFollette Act of 1915 was passed it provided, in section 20, "that in any suit to recover for damages for any injury sustained on board vessel or in its service seamen having command shall not be held to be fellow servants with those under their authority."

The relief afforded by this act, however, was short-lived. Its application was soon contested in the *Chelentis v. Luckenbach Steamship Co.*²¹ case which was decided by the U. S. Supreme Court in 1918. This case involved a seaman who lost a leg as a result of an injury sustained while carrying out an allegedly negligent and improvident order of a superior officer. The seaman in his suit for damages invoked section 20

¹⁹ There were, in addition, two unsuccessful attempts by Congress to permit the application of State compensation laws to maritime employment.

²⁰ Ch. 153; 38 Stat. 1164.

²¹ *Chelentis v. Luckenbach SS Co.* (1918) 247 U. S. 372, 38 Sup. Ct. 501.

of the LaFollette Act. No question of unseaworthiness of the ship or her appurtenances was raised by the claimant; nor did he make any claim for maintenance and cure, or wages. Thus, he had set aside his maritime rights and based his claim on common law as modified by the act. In its decision against him, the Court ruled that the act did not indicate Congress' "intention" to give the complaining party an election between common-law and maritime rights. It held that the seaman's rights were those under "the law of the sea," that while section 20 of the act declared that those in command shall not be held to be fellow servants, and "full effect must be given this whenever the relationship between such parties becomes important, . . . maritime law imposed upon a shipowner liability to a member of the crew injured at sea by reason of another member's negligence without regard to their relationship; it was of no consequence therefore to a petitioner whether or not the alleged negligent order came from a fellow servant; the statute is irrelevant." In a later case, a circuit court of appeals citing the above decision as a precedent added further that "there would be . . . little security for careful owners if after furnishing a seaworthy ship and proper appliances, they were still liable for the act of the master in not using the proper appliances furnished, or in using them for purposes for which they were not furnished."²²

The Jones Act of 1920

These decisions were the signals for pressure upon Congress to change the law. An effective change was achieved through section 33 of the Jones Act (Merchant Marine Act of 1920),²³ which amended section 20 of the LaFollette Act by providing that—

- (1) Any seaman injured in the course of his employment may elect to maintain an action for damages at law; with the right to trial by jury; and the application of all statutes "modifying or extending the common-law right or remedy in cases of personal injury to railway employees";
- (2) If death results from the injury, the above rights are transferred to the personal representatives of the deceased seamen; and
- (3) Jurisdiction, in such cases, are under the court of the district in which the employer resides, or has his principal office.

The railway employees' rights and remedies which were transferred to the seamen by the Jones Act are those granted by the Federal Employers' Liability Act of 1908²⁴ which provides that—

- (1) Railroads in interstate commerce are liable in damages to any employee suffering injury while in its employ, or in case of his death, to his personal representative, for injury, or death, due in whole or in part to the negligence of any of its "officers, agents, or employees," or to "its negligence in its care" of its equipment, rights of ways, etc.;
- (2) In cases in which the railroad is guilty of violation of safety provisions, contributory negligence shall not operate as an employer's defense; in other cases, the employee's recovery shall be reduced in proportion to the amount of negligence attributable to him;
- (3) In cases of violation of safety statutes, assumption of risk (by the employee) shall not operate as an employer's defense.

By passing the Jones Act, Congress clarified section 20 of the LaFollette Act. It gave the seaman the election between common-law and maritime rights which the Supreme Court, in the *Chelentis v. Luckenbach* decision asserted had not been granted by the earlier statute. Moreover,

²² *John A. Roebling's v. Erickson* (1919), 261 Fed. 986.

²³ Ch. 250; 41 Stat. 1007.

²⁴ 35 Statutes at Large ch. 149, 45 USC sec. 51 et seq.

it made applicable in cases of personal injuries to seamen, the rights and remedies applicable in cases of personal injuries to railway employees—i.e., the removal or restriction of the employers' defenses.

The constitutionality of the Jones Act was quickly challenged by the employers in the *Johnson v. Panama RR Co.* case, but was upheld by the lower courts and eventually by the U. S. Supreme Court.²⁵ This Court ruled that the right to elect relief either according to the "old rules" or the "new rules" is not a right of election between maritime law and a "nonmaritime system" but between "alternatives accorded by the maritime law as modified."

Later court decisions defined its scope and interpreted its provisions. Thus, the Jones Act applies to all seamen regardless of occupational rating and nationality, so long as the injuries occurred on American-flag vessels, or in American waters. For instance, it covers pilots and masters of vessels,²⁶ foreign seamen on American-flag vessels,²⁷ and seamen on foreign-flag vessels owned by Americans and operating in American trades.²⁸ It never applies to seamen employed on foreign vessels and injured either on the high seas or on foreign waters.²⁹

Action under the Jones Act may be brought in a State court or in admiralty court,³⁰ but if the injury occurred on a vessel owned by the United States Government, action may be brought only in admiralty under the Suits in Admiralty Act.³¹ The right to trial by jury is not extended to cases tried in admiralty courts.³²

Diseases such as those resulting from unsanitary living or working conditions are considered "personal injuries" within the meaning of the Jones Act.³³ Cases involving death must be started within 2 years; otherwise they can be tried only in admiralty.³⁴

In order to recover damages under the Jones Act an injured seaman must be able to prove that his employer was guilty of negligence under common law, not merely that the ship was unseaworthy.³⁵ The usual employers' defenses, however, are either removed or modified. Thus, the fellow servant³⁶ and assumption of risk³⁷ defenses were abolished by the act; and the principle of comparative negligence was substituted for the defense of contributory negligence.³⁸ The employer's failure to observe the safety statutes definitely and completely deprives him of his

²⁵ *Johnson v. Panama RR Co.* (1923), 289 Fed. 964; affirmed (1924), 264 U. S. 375.

²⁶ *The Black Gull* (1936), 82 Fed. (2d) 758; *Warner v. Goltra* (1934), 293 U. S. 155. For a list of maritime workers who have been considered to be seamen by the courts, see E. C. Benedict, op. cit. Vol. I (pp. 243-244). Before the enactment of the Longshoreman's and Harbor Workers Act, longshoremen and other harbor workers were considered to be seamen when injured on board a vessel (*American Sugar Refining Co. v. Nassif* (1930), 45 Fed. (2d) 321; *The International Stevedore Co. v. The Haverly* (1926), 272 U. S. 50; *Urvic v. F. Jarka Co.* (1931), 282 U. S. 234).

²⁷ *Clark v. Montezuma Transport Co.* (1926), A. M. C. 954, 217 N. Y. App. Div. 172 (2d Dept.).

²⁸ *Gerrardin v. United Fruit Co.* (1932), 60 Fed. (2d) 927; the court accepted jurisdiction in a case involving an American citizen (*Shorter v. Bermuda & West Indies SS Co.* (1932), 57 Fed. (2d) 313), but declined jurisdiction in a case involving a German citizen who had signed on a Danish vessel at a Chilean port and was injured in Jacksonville, Fla. (*Peters v. The Paula* (1937), 91 Fed. (2d) 1001).

²⁹ *Hogan v. Hamburg American Line*, 272 N. Y. Supp. 690, 152 Misc. 405. Certiorari denied (1935), 295 U. S. 749.

³⁰ *Engel v. Davenport* (1926), 271 U. S. 33.

³¹ *Sevin v. Inland Waterways Corp.* (1937), 88 Fed. (2d) 988.

³² *Baltimore SS Co. v. Phillips* (1927), 274 U. S. 316; (1927), 47 Sct. 600.

³³ *McCall v. Inter Harbor Navigation Co.* (1936), 50 Pac. (2d) 697.

³⁴ *Rogosich v. Union Dry Dock & Repair Co.* (1933), 67 Fed. (2d) 377.

³⁵ *Kunschman v. U. S.* (1932), 54 Fed. (2d) 987; the *Rawley Warner* (1937), 88 Fed. (2d) 298.

³⁶ *The Edgar v. Luckenbach* (1928), 277 U. S. 226.

³⁷ *Anelich v. Mardesich (The Arizona)* (1936), 297 U. S. 701.

³⁸ *Beadle v. Spencer* (1936), 298 U. S. 124.

defenses.³⁹ Recovery of damages under this act is a cumulative right and is in addition to the right of maintenance and cure and wages.⁴⁰ The alternative measure of relief provided by this act is, therefore, not the alternative between the maritime rights of maintenance and cure and wages, and the right of recovery for compensatory damages for injuries caused by negligence, but is between the latter and the maritime right to recover indemnity for injury occasioned by the unseaworthiness of the vessel.

In cases of death the Jones Act supersedes the Death on the High Seas Act.⁴¹ This was the Supreme Court's ruling in *Lindgren v. U. S. of America*.⁴² In other decisions, it was held that the act applies even when the death occurred while the vessel lay in dock;⁴³ when the death results from the failure to provide proper care to a seaman suffering from illness;⁴⁴ and that the action for recovery of damages must be in favor of a dependent.⁴⁵ Recovery of damages is, however, subject to the statutes for limited liability.⁴⁶

Limitation of Shipowners' Liability Statutes

Marine ventures have always been recognized as peculiarly hazardous. Marine accidents, caused by "Acts of God," and other acts beyond the control or "privity" of the owner, and resulting in loss of life of passenger and crew members, ship, and cargo, sometimes occur. In such accidents, the liability if placed to the full extent upon the shipowner may, unless covered by insurance, become ruinous.

During the Middle Ages, when maritime disasters were very frequent, the various maritime powers, in order to encourage maritime ventures, adopted provisions in their maritime codes, limiting the liability of owners of vessels to their respective interests in the ships involved. Similar provisions are found in later maritime codes. The Ordonnance of Louis XIV, for instance provided that "the owner of a ship shall be answerable for the deeds of the master, but shall be discharged upon abandoning his ship and freight."⁴⁷

Great Britain has adopted a similar provision in its maritime code. In 1851 Congress enacted a statute limiting the liability of shipowners for "any loss, damage, or injury by collision, or for any loss or damage occasioned or incurred without the privity or knowledge of the owner" to the value of his interest in the vessel and her freight.⁴⁸ The courts, feeling that shipowners incur a large risk when they expose their property to the hazards of the sea and the management of seafaring men, not only have upheld this act,⁴⁹ but have enunciated the principle that it

³⁹ *Sellon v. Great Lakes Transit Corp.* (1937), 87 Fed. (2d) 708.

⁴⁰ *Pacific SS Co. v. Peterson* (1933), 287 U. S. 130.

⁴¹ Ch. 111, 41 Stat. 537; 46 USC sec. 761 (Mar. 21, 1920). This act was passed by Congress less than 3 months before it passed the Jones Act. While it was not intended essentially for seamen it applies to them in exactly the same manner it applies to other persons exposed to marine hazards. It provides for recovery of damages in cases of death "by wrongful act, neglect, or default occurring on the high seas beyond a marine league from the shores of any State." It is clearly not applicable to deaths occurring on the Great Lakes or other inland waters.

⁴² 28 Fed. (2d) 725; affirmed (1930), 281 U. S. 39.

⁴³ *The Inca* (1926), AMC 1577.

⁴⁴ *Rafael Cortes, Administrator, v. Baltimore Insular Line, Inc.* (1933), AMC 9.

⁴⁵ *Van Beeck, Administrator, v. Sabine Towing Co.* (1937), 300 U. S. 342.

⁴⁶ *In re East River Towing Co.*, 266 U. S. 355 (1924), 45 Sup. Ct. 114.

⁴⁷ Robert M. Hughes, op. cit. (p. 346).

⁴⁸ Act of March 3, 1851, R. S. 4283, 46 U. S. C. 183.

⁴⁹ *Norwich & New York Transp. Co. v. Wright* (1871), 13 Wall 104; *The China* (1868) 74 U. S. (7 Wall) 53.

must be construed liberally in their favor.⁵⁰ Moreover, the courts have held that the proceeds of insurance policies carried by the shipowner, covering his property, do not affect his right to limited liability, since insurance money, when collected, does not represent an interest in the ship itself but is the proceeds of a collateral contract.⁵¹

Under the old statute, therefore, when the death or injury resulted from shipwreck, the shipowner could disclaim "privity" or knowledge of either unseaworthiness or incompetency of any member of the crew and plead limited liability. The seamen tried, for years, to obtain legislation modifying this statute.⁵² Such legislation was passed in 1935, after the *Morro Castle* and *Mohawk* disasters. This act amended section 183 of the old statute by (1) making the shipowner's liability equal to (a) the value of his interest in the vessel and her freight immediately after the accident, or (b) \$60 per gross tons of the vessel, whichever is greater; and (2) making the "privity or knowledge" of the master, or managing operator at or prior to the commencement of the voyage, the privity or knowledge of the owner.⁵³

The amendment, therefore, makes it harder for the shipowner to prove his right to limit his liability, and makes the amount of limited liability rather substantial. For example, the average gross tonnage of deep-sea dry-cargo vessels in June 1938 was approximately 4,800 gross tons, and their average crew was 35 seamen; at \$60 per gross ton the liability per seaman averaged over \$8,200. The average gross tonnage of such vessels has increased as a result of new ship construction to the point where, even with the larger average crew, the liability per seaman has increased to about \$9,800.

Settlement of Seamen's Disability Cases Under Existing Modified Employers' Liability System

EFFECTING SETTLEMENTS

Immediately after a seaman is injured or becomes sick, a report is made by his superior to the master of the vessel who makes the proper entry in the ship's log, reports to the shipowner, and in some cases to the U. S. Coast Guard as soon as possible.⁵⁴ The seaman is brought back to his original port of sailing or other port agreed upon, and he contacts the claims official of the owner or operator of the vessel, or the latter contacts the seaman. Arrangements are made for such wage and maintenance allowance payments as are due him, and the negotiation of the claim settlement begins.

As will be shown later, negotiations are generally conducted directly with the seamen and are promptly concluded. In death cases, they are conducted with the deceased seamen's dependents.

The settlements include four items previously mentioned: (1) Wages, when due, payable to the end of the round-trip voyages for which the

⁵⁰ *Providence and New York SS Co. v. Hill Mfg. Co.* (1880), 109 U. S. 578.

⁵¹ *The City of Norwich* (1886), 118 U. S. 468.

⁵² For the early efforts of the seamen's union see Proceedings of the International Seamen's Union, 19th Convention, August 1915, Resolution No. 22, and 25th Convention, January 1922, Resolution No. 16. Both of these resolutions sought an amendment to R.S. 4283 increasing the liability of shipowners for personal injuries or death up to \$80 per gross ton.

⁵³ Public No. 391 (74th Cong.)

⁵⁴ Before the war this report was made to the Bureau of Marine Inspection and Navigation of the Department of Commerce.

disabled seamen were engaged; only cash wages are included, no allowance being made for the value of subsistence and lodging; (2) the maintenance allowance for out-patient and convalescence periods, generally computed at a daily rate; before the war this rate amounted to \$2 or \$2.50 per day for unlicensed personnel not in supervisory ratings, and to \$4 or \$4.50 for licensed officers, radio operators, and unlicensed personnel in supervisory ratings;⁵⁵ (3) other costs such as medicines, therapeutic treatment, medical appliances, and hospitalization not furnished by the U. S. Marine Hospitals, artificial limbs, transportation, and burial in cases of death; and (4) indemnity, if the liability of the shipowner can be established, covering compensation for pain and suffering, diminution or loss of future earning power, and sometimes loss of wages until other jobs become available.

Settlement practices differ among the various vessel operators. Some, notably operators of oil tankers, often pay the full wages for the entire duration of the disability to officers and other key vessel personnel who have been employed by them for a long period of time. Some claims adjusters have, over a period of years of experience, developed scales of benefits for various types of disabilities. Others have developed the practice of applying the formulas of certain State workmen's compensation laws. Some of the oil companies operating tankers extend to their vessel personnel the protection of the employee-benefit plans available to their other personnel. These may include death, sickness, and invalidity benefits. In such cases the settlements will include the amounts of these benefits.⁵⁶

When attorneys are employed by seamen, the shipowners will, in most cases, immediately stop all payments to the seamen, whether they are for wages, maintenance, or for any other item. They feel that when seamen employ attorneys, any moneys already paid toward the settlements of claims often command little consideration by them in arriving at final settlements. The final settlements, when concluded, therefore include all payments which may be claimed by the disabled seaman, such as wages, maintenance allowances, indemnities, cost of medical appliances, and so on.

SETTLEMENTS UNDER INSURANCE POLICIES

Although most shipowners carry insurance covering their liability, only a small percentage of the claims are negotiated by the insurance carriers. Less than 8 percent of the 5,354 disability cases reported for 1938 were settled by the insurance companies. Even cases involving fatal or permanent disabilities were generally settled without their services, only 15 percent of such cases being settled by the insurance carriers. The reason is to be found in the type of insurance carried. Shipowners usually carry so-called "protection and indemnity" insurance policies which cover not only their liability with respect to seamen's injuries and diseases, but also other liabilities (e.g., toward shippers) and risks (e.g., loss of vessel). With respect to the liability for seamen's injuries and diseases, these policies contain deductible franchises which vary considerably from policy to policy. While, as a rule they range from \$200 to

⁵⁵ At the present time the maintenance is \$2.75 per day for the lower unlicensed ratings and \$5 for licensed and other supervisory ratings.

⁵⁶ Such benefit plans, although sometimes financed wholly by the companies, are usually supported by joint employee and employer contributions.

\$500, they sometimes exceed \$7,500.⁵⁷ Since most cases are settled for amounts within these deductible franchises, the services of insurance adjusters are not used.

SETTLEMENTS THROUGH SEAMEN'S ATTORNEYS

The disabled seamen's rights are so well established that few of the seamen who are disabled (or their dependents) find it necessary to employ attorneys to negotiate the settlements of their claims. Of the cases reported for 1938, only 17 percent were settled through attorneys, and only 2 percent were litigated in the courts. A higher proportion of the cases involving fatalities and permanent physical impairments, however, were settled through attorneys. Even with respect to these serious disabilities, the seamen's rights appeared so well established that in most cases settlements were effected without the employment of attorneys. Thus, in fatal cases, only 22 percent of the seamen's dependents employed attorneys, and less than 1 percent were carried into the courts. Only 45 percent of the permanently disabled seamen employed attorneys, and less than 10 percent of such cases were carried into the courts.

When the insurance carriers handled the claims for the employers, however, 35 percent of the seamen employed attorneys, and 10 percent of the cases were carried into the courts.

Maritime employer's liability cases tended to be concentrated among a few admiralty lawyers. Of 373 cases handled by the 77 attorneys who reported to the Interdepartmental Committee, 236 were handled by only 10 attorneys.

Many of the cases settled by attorneys were for small amounts, as is shown in the percentage distribution of 373 reported disability cases settled through seamen's attorneys, by amount of gross recovery. Over half of them resulted in gross recoveries (before adjusting for attorney's fee) of \$300 or less. Only one-fifth of the cases involved gross recoveries in excess of \$1,000.

Gross amount of recovery:	Percent of cases
\$100 and under	18.5
\$101 to \$300	32.9
\$301 to \$500	17.5
\$501 to \$1,000	10.7
\$1,001 to \$2,000	6.6
\$2,001 to \$3,000	4.7
\$3,001 to \$5,000	3.4
\$5,001 to \$10,000	3.8
\$10,001 and over	1.9
Total.....	100.0

Attorney Fees

On the average, attorney fees, court and other litigation expenses absorbed about 36 percent of the gross settlements. While four of the reported cases were handled by attorneys at no cost to the seamen, in the other cases those costs ranged from 9 to 80 percent of the gross settlements. In over 31 percent of the cases, attorney fees and costs absorbed 40 percent of these settlements; in 45 percent of the cases these costs amounted to less, and in 23 percent, to more than 40 percent of gross settlements.

⁵⁷ Interdepartmental Committee, *op. cit.* (p. 11). The prevailing practice, introduced by the War Shipping Administration, calls for a standard \$250 deductible clause.

Generally, the larger the settlements, the lower the percentages of the fees and costs. About 70 percent of the cases involving gross settlements of \$100, or less, were settled at a total expense of 40 percent or more of the gross settlements, whereas only 8 percent of the cases involving between \$5,000 and \$10,000 were settled at such cost. None of the cases involving over \$10,000 was settled at a total expense of more than a third of the gross settlements, and one-third of the cases of this magnitude were settled at 20 percent, or less, of the gross settlements.

TIME REQUIRED TO NEGOTIATE SETTLEMENTS

It has been often maintained that one of the objectionable features of the present modified employers' liability system is the long period of time elapsing from the date of the injury, or disease, to the date when settlement is effected. The Interdepartmental Committee's study showed that over three-fourths of the cases closed by March 1941 were settled within 3 months after the date of disability.⁵⁸

As a rule the period of time elapsing from the date of the disability to the date settlement was effected was considerably longer for cases settled through seamen's attorneys than for those settled directly with the seamen. This reflects the fact that the claimants usually employed attorneys when their claims of the shipowners' negligence, or of the vessel's unseaworthiness, were difficult to establish. In death cases, the complicated problems of proof of dependency, or right to represent the deceased seamen, often arise. In such cases, the employers may find it desirable to seek rulings from the courts before making payment to the claimants.

Cases Occurring Before 1938

When the Interdepartmental Committee's data are examined, it is found that it consisted of 361 cases involving disabilities occurring prior to 1938 and 5,348⁵⁹ cases occurring in 1938. Some of the older cases occurred as far back as 1928. In half of them the seamen, or their dependents, employed attorneys to negotiate the settlements. About 9 percent of them were carried into the courts.

Even these old cases did not, as a group, require extended periods of negotiation. Only about 8 percent of them required from 2 to over 4 years of negotiation, and only 2 percent were still pending at the close of the survey in March 1941. Almost 75 percent of these cases occurred in 1937 and were settled within 1 year from the date the disability began, with almost 35 percent settled within 3 months.

When these older cases were handled by attorneys, the payment lag immediately increased several fold, even when not taken into the courts. Thus, less than 65 percent of such cases were settled within 1 year, although 85 percent of the cases settled directly with the seamen were closed within that period; and about 11 percent required 2 years or more of negotiations against less than 4 percent in the cases in which no attorney was employed.

When these cases were carried into court, the payment lag was, of course, much longer. Less than 40 percent were settled within 1 year; almost 50 percent required at least 2 years of negotiation. Almost 23 percent were still pending at the close of the survey. In this connection,

⁵⁸ Interdepartmental Committee, op. cit. (pp. 39-40).

⁵⁹ Excludes 6 cases for which settlements were denied.

it is interesting to note that Frank J. Taylor, president of the American Merchant Marine Institute, testified at Congressional Hearings that it takes 2 or 3 years before seamen's cases are adjudicated in the courts.⁶⁰

Cases Occurring in 1938

Obviously, these 5,348 cases were, as a group, settled much faster than the older cases. Almost 75 percent of them were settled within 3 months, and less than 14 percent required 6 months or more of negotiation. Only 1 percent required 2 years or more.

As in the older cases, those which were handled by attorneys involved a longer payment lag, than those settled directly with the seamen. Whereas 94 percent of the cases settled directly were closed within 6 months from the date disability began, only 58 percent of the cases settled by attorneys, without court action, were closed within so short a period. In both groups, however, 96 percent were settled within 2 years.

Cases carried into the courts constituted a very small proportion of these cases, only 2.4 percent, but they required relatively long periods of negotiation. Almost 50 percent required over 1 year's litigation, and over 22 percent, over 2 years of litigation. Practically 80 percent of the cases still pending at the close of the survey were carried into the courts

Cases Involving Serious Disabilities

As a rule, cases involving fatalities and permanent physical impairments required longer periods of negotiation than those involving temporary disabilities. For instance, all but 7.1 percent of the cases involving temporary disabilities were settled within 1 year, whereas more than half of the fatal (54.6 percent) and of the permanent total (52.2 percent) cases were settled within that period. Moreover, while the proportion of cases involving temporary total disabilities still pending at the close of the survey was negligible, over 8 percent of the fatal cases were pending. These findings are not surprising since the settlement of fatal and permanent impairment cases involved complicated claims for damages which, in many instances, not only required the employment of attorneys but also court actions.

SEAMEN'S CLAIMS FOR DAMAGES FOR PERSONAL INJURIES AND THE COURTS

It has already been shown that in order to be awarded damages for occupational injuries, diseases, or deaths, seamen or their representatives must be able to present conclusive evidence with respect to the ship-owners' negligence. The injured must first prove that he is a seaman, and that the injury was not the result of an ordinary risk of his calling. If the injury was sustained on a vessel owned by the United States Government, he must sue in admiralty without benefit of the jury trial, and not at law with the benefit of jury trial.

When negligence cannot be proven and the injury was not the result of his own willful misconduct, the seaman can still recover for expenses of his maintenance and cure, although such maintenance and cure will not be provided for life. If he has signed a release for a consideration,

⁶⁰ Hearings on H. R. 6726: A bill relating to disability compensation for seamen, and H. R. 6881: A bill implementing Draft Convention No. 55. Committee on Merchant Marine and Fisheries, U. S. House of Representatives (76th Cong., 1st sess.), July 11, 1939 (p. 11).

the seaman cannot sue again unless he can show that the release was obtained under duress.

Litigation usually takes several years, generally over 2 years, and sometimes as many as 11 or 12. Appeals to the lower appellate courts, and if necessary to the United States Supreme Court, involve time and expense.

An examination of 102 litigated seamen's claims, reported in American Maritime Cases during the years 1935 through 1938, reveals that 36 of them resulted in no recovery at all, 15 in recovery of the cost of maintenance and cure and wages only, and 49 in recovery of damages. Cases tried before a jury yielded larger awards than those tried in admiralty, and in certain district courts they were brought to a conclusion faster than in others. In nonfatal cases the amounts of the damage awards bore a direct relationship to (1) the earning power, (2) the physical impairment, and (3) the life expectancy of the injured. In the fatal cases, consideration was given to (1) the earning power of the decedent; (2) number and relationship of the dependents; and (3) life expectancy of the dependents.

Most of the cases which were decided against the seamen had been appealed to higher courts, which, in many instances, had reversed the lower courts' decisions in favor of the seamen. In other cases, they sustained the lower courts' decisions against them.

Few of the cases for which recovery for maintenance and cure only was obtained, and damages denied, were appealed to the higher courts and none to the United States Supreme Court. It is noteworthy that, in only one case in which appeal was made by the defendant, the result was a reversal of the lower court's award of damages to the seamen. This is explained by the fact that the seamen's right to maintenance and cure is seldom challenged by the shipowners and is usually met in a more or less routine manner. Moreover, since the seamen are entitled to free treatment at United States Marine Hospitals, the cost of maintenance and cure is usually borne by the shipowners only when seamen are undergoing out-patient treatment or when facilities of U. S. Marine Hospitals are not available. In practice, shipowners readily pay out-patient maintenance allowances and other costs to the seamen, including cost of hospitalization when it cannot be obtained from a U. S. Marine Hospital. Appeals to higher courts will, therefore, usually be brought by the seamen in efforts to obtain reversals of the lower courts' verdicts disallowing damages.

As to the cases decided in favor of the seamen, no pattern is readily discernible. Litigation lasted as long as 12 years. Appeals were the rule rather than the exception. The damages awarded were often very large. Out of the 32 cases for which the amount of the settlement was shown, 7 were for sums ranging from \$15,000 to \$29,675; but it must be remembered that the seamen paid the lawyers' fees and costs out of these settlements. Even cases involving relatively small sums were dragged through the courts by attorneys of shipowners who took advantage of every possible legal technicality. In many cases verdicts for damages were rendered by the lower courts but satisfaction of these judgments were delayed by petitions for limited liability, rehearings and appeals to State supreme courts, to circuit courts of appeals, and to the United States

Supreme Court. Although the seamen were eventually successful, these delays involved much time, expense, and uncertainty.

Net Recoveries Under the Existing Modified Employers' Liability System

Although the net amounts actually received by seamen (after paying attorney fees and other costs) exceeded \$10,000 in 16 of the 5,812 cases reported as closed or pending in 1938, most of the net recoveries the seamen obtained by the close of the survey were small. As a group, they averaged about \$283. About 50 percent of the disabled seamen received net recoveries of less than \$100; 25 percent, between \$100 and \$200; and less than 2 percent, \$2,500 or more. Less than 1 percent of the disabled seamen obtained net settlements amounting to \$5,000 or more.

As a rule, net recoveries in injury cases were considerably larger than in disease cases, averaging \$333 per injury as against \$169 per disease case. Whereas more than 1 percent of the injury cases resulted in net recoveries of over \$5,000 or more, none of the disease cases netted as much. Moreover, while close to 4 percent of the injury cases resulted in net recoveries ranging from \$1,000 to \$5,000, less than 2 percent of the disease cases resulted in such large net recoveries.

Practically all of the 5,487 reported compensable cases which occurred in 1938, and for which complete data were available, resulted in recoveries to the seamen involved or their dependents. Only 29 were still pending at the close of the survey, and only 104 were closed without recoveries being effected. Of the latter, no formal claims for settlements were made in 76 cases, and in 28 the claims had been denied by the shipowners or their representatives. In the remaining cases, the total recoveries, after deducting attorney fees and other litigation costs, amounted to \$1,434,460. These included a small number of cases (54) which did not result in indemnity settlements, as such, but did result in significant recoveries for wages "to the end of the voyage" and for "other costs," totaling nearly \$8,400.

NET RECOVERIES AND EXTENT OF DISABILITY

Contrary to what might be expected, cases resulting in deaths did not yield, on the average, the largest net recoveries. Table 8 shows that the average of the net recoveries in fatal cases was less than half that in permanent total disability cases, and 7 percent smaller than that in permanent partial disability cases. It will also be observed that for each category of extent of disability, the average net recovery in injury cases was substantially larger than in disease cases.

TABLE 8.—Average Net Recovery, by Extent of Disability
[Reported cases occurring in 1938]

Extent of disability	All cases		Injury cases		Disease cases		Percent average disease recovery is of average injury recovery
	Number	Average net recovery	Number	Average net recovery	Number	Average net recovery	
All extents	5,354	\$268	3,631	\$319	1,723	\$159	50
Fatal	112	1,761	57	3,161	55	310	10
Permanent total ..	18	3,646	8	5,312	10	2,213	41
Permanent partial ..	188	1,898	176	1,968	12	879	45
Temporary total ..	5,036	162	3,390	174	1,646	136	78

The relatively low averages for the fatal cases may be explained by the fact that under the modified employers' liability system, as under workmen's compensation systems, recoveries can be effected only by the victims themselves or by the persons dependent upon them. In fatal cases, therefore, except for the wages, maintenance allowances due for the period before death ensued, and the reimbursement of certain expenses such as those for burial, only dependents could have recovered indemnities for damages under the law. Only a small portion of the seamen, however, are known to have close next of kin dependent upon them. Moreover, the seamen having died, unseaworthiness of the vessels or negligence of the shipowners was difficult to prove. This was especially true with respect to disease cases, which it will be noted, comprised almost 50 percent of the deaths. Further, seamen's dependents were usually not in a position to press their claims very energetically.

NET RECOVERIES AND ATTORNEY FEES AND COST OF LITIGATION

When seamen or their dependents employed attorneys to handle their claims, they averaged noticeably larger net recoveries (after deducting attorney fees and costs)—especially when the claims were carried into the courts—than when they handled the claims themselves. This was generally true regardless of the extent or cause of the disability.

It will be recalled that attorneys were employed in 17 percent of the 5,354 cases here discussed. The average net recovery in these cases was \$617 as compared with only \$197 in cases settled directly with the seamen. When the attorneys reached a settlement, without taking the cases into the courts, the net recoveries averaged only \$532 as compared with \$1,234 when court action was required. Table 9 shows the average net recoveries in cases of various extents of disability settled directly with seamen, or their dependents, and in cases settled through attorneys.

TABLE 9.—Average Net Recovery, by Method of Settlement and Extent of Disability
[Reported cases occurring in 1938]

Extent of disability	All cases		Cases settled by seamen—					
			Directly		Through attorney—			
	Number	Amount	Number	Amount	Out of court		In court	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
All extents	5,354	\$268	4,451	\$197	796	\$532	107	\$1,234
Fatal	112	1,761	187	1,414	24	3,040	1	1,252
Permanent total ..	18	3,646	6	1,829	10	4,312	2	5,266
Permanent partial ..	188	1,898	109	1,220	62	2,365	17	3,955
Temporary total ...	5,036	162	4,249	144	700	229	87	495

¹ Settled with the seamen's dependents.

NET RECOVERIES AND SETTLEMENT ITEMS

The settlements in most of the 5,354 cases studied involved payments for (1) wages to end of the round-trip voyages for which the disabled seamen had been engaged; (2) maintenance allowances while out-patients or convalescents; and (3) indemnities for damages suffered as a result of the shipowners' or the masters' negligence. In a small proportion of the cases the settlements included payments for "other costs" also. The larger share of the \$1,434,460 recovered by the seamen (after paying all legal expenses) represented indemnities for damages. Maintenance

allowances, although received in over three-fourths of the cases, aggregated less than a fourth of the total net amounts recovered. In the aggregate, wages and "other costs" were not very significant. This is shown in table 10.

TABLE 10.—Percentage Distribution of 5,354 Cases Reported Settled in 1938, and Percent of Net Amounts Recovered, by Settlement Item

Settlement items	All cases		Injury cases		Disease cases	
	Percent of cases ¹	Percent of recovery	Percent of cases ¹	Percent of recovery	Percent of cases ¹	Percent of recovery
Wages to end of voyage ...	63	10	67	8	62	18
Maintenance allowance	78	23	80	21	74	30
Net indemnity	69	60	70	65	66	45
"Other costs"	16	7	15	6	16	7
All items	100	100	100	100	100	100

¹ These percentages do not add because a case may involve two or more settlement items.

Each of the above items, except "other costs," were paid in a slightly larger proportion of injury cases than of disease cases.

Seamen actually received wages and maintenance allowances in nearly all cases in which they were due. When, as is done in table 11, the percent of the cases in which seamen were disabled during periods when wages and maintenance allowances were due are compared with the percent of the cases in which such payments were received, it is found that the differences between them were rather small.

TABLE 11.—Percent of Cases in Which Wages and Maintenance Allowances Were Due and in Which They Were Paid, by Extent of Disability
[Reported cases occurring in 1938]

Extent of disability	Percent of cases in which—			
	Wages to the end of the voyage were—		Maintenance allowances were—	
	Due	Paid	Due	Paid
All extents	65	63	82	78
Fatal	26	18	12	7
Permanent total	67	67	50	50
Permanent partial	74	70	81	78
Temporary total	65	65	84	78

SETTLEMENT ITEMS AND EXTENT OF DISABILITY

Each of the four settlement items had different weights in the net amounts recovered by the seamen, depending on the extent of the disability incurred and on whether the disability was caused by an injury or by a disease.

Wages to the end of the voyage were paid in approximately the same proportion of the cases (two-thirds) falling in each extent group, whether caused by injuries or diseases, except in cases involving fatalities. In the latter wages were paid in 9 percent of the injuries and 35 percent of the diseases. Wage payments averaged from \$38 per case in fatal disease cases to \$116 per case in diseases resulting in permanent total disabilities. For all extents combined, wage payments averaged \$43, the lowest amount of any settlement item. For temporary total disability cases the average

wage payment was \$41, as compared with \$110 for permanent total disabilities.

Maintenance allowances averaged next to the smallest settlement item, yet they were found in a higher proportion of the cases (over three-fourths) than any other settlement item. They were considerably larger than the wage payments, averaging \$78 per case. While they were paid in 78 and 79 percent of the permanent partial and of the temporary total cases, respectively, they were paid in only 50 percent of the permanent total and in only 8 percent of the fatal cases. This is not surprising, since the maintenance allowance is not payable while the seaman is hospitalized; it is payable only while the seaman is an out-patient or convalescent, and then only until the wound is healed or while treatment may effect a cure.

When paid, the amounts bore a direct relationship to the period of out-patient treatment and convalescence. Thus, the average maintenance allowance ranged from \$72 in temporary total cases to \$606 in permanent total disability cases.

Because of the high degree of certainty that the maintenance allowances will be paid, and the fact that the rate of such allowance is more or less established throughout the industry, the right to this maintenance allowance is regarded by the maritime unions as a form of workmen's compensation.⁶¹

Net indemnities (after deducting the attorney fees and other legal expenses) represented the largest settlement item included in the amounts recovered by disabled seamen. This was true regardless of the extent of the disability (even in temporary total disabilities), or whether the disability was the result of an injury or an illness. On the whole, when paid, this item averaged \$242, and ranged from an average of \$93 per disease resulting in temporary total disability to \$5,032 per injury resulting in permanent total disability. For each extent of disability category, the average was noticeably smaller in disease than in injury cases.

Obviously, the amounts of the net indemnities recovered were in direct relation to the extents of the disabilities incurred, except that in fatal cases they were noticeably smaller than in permanent total disability cases. Net indemnities in fatal cases averaged only \$3,750 per case.

Next to the maintenance allowance, the indemnity was the settlement item most frequently paid. It was paid in 69 percent of the cases. In temporary disability cases, indemnities were paid in as many as 69 percent of the injury and 67 percent of the disease cases, but they were not paid in all fatal and permanent disability cases. It will be recalled that the cases here studied did include a small number for which no formal claims were presented, although they did result in payments of wages and "other costs." These cases, therefore, did not result in indemnity payments. When an adjustment is made for them, it is found that not all of the claims for fatal and for permanent disabilities resulted in indemnities, and that the percent of successful claims was larger in injury than in disease cases. It is noteworthy, however, that a high proportion of the temporary total cases resulted in the payment of indem-

⁶¹ See for instance, testimonies in Hearings before a Subcommittee of the Committee on Commerce, U. S. Senate (66th Cong., 3d sess.); Hearings on H.R. 6881, An Act to Implement the Provisions of the Shipowner's Liability, Convention, 1936, July 1940 (pp. 217-19, 147).

nities. The percent of successful claims for damages, by extent of disability, are shown for both injury and disease cases:

	<i>Percent of cases</i>	
	<i>Injury</i>	<i>Disease</i>
Fatal	88	45
Permanent total	100	90
Permanent partial	90	82
Temporary total	69	67

The explanation for the failure of all claims for damages, for deaths and permanent physical impairments, to result in the payment of indemnities may be found simply in the fact that (1) in death cases, no indemnity could be paid except to the deceased's dependents; and (2) in all cases, damages were payable only when unseaworthiness of the vessel, or negligence on the part of the shipowner (or his representative), could be proven, and that in disease cases this was often very difficult and may have depended upon the energy with which the claims were pressed.

Whether the disabilities were permanent or temporary or the results of injuries or diseases, it is observed that a high proportion of disabled seamen were successful in recovering damages. This fact, coupled with the relative difficulty of proving the vessel's unseaworthiness, or the employer's negligence in disease cases, supports the contention made earlier in this study that diseases occurring in the service of the vessel were treated by the shipowners in very much the same manner as injuries.

"*Other costs*" were paid in fewer instances than any other settlement item, except in cases resulting in deaths. They were paid in over 80 percent of the fatalities reported and averaged about \$200 per case, the amount usually paid by claims adjusters as reimbursements for burial expenses. When paid, this item averaged from \$76 for temporary total disabilities to \$588 for permanent total disabilities.

Chapter 3.—Workmen's Compensation Legislation and the Merchant Seamen

*Foreign Legislation Extending Workmen's Compensation to Merchant Seamen*¹

The obligation of the master of a merchant vessel to assist a seaman who falls sick or is injured during the voyage is universal. It is a necessity imposed by the peculiar conditions surrounding employment at sea. It was recognized by the ancient maritime customs which governed the relations between the master and the members of his crew before the establishment of national laws. Its origin has been discussed in chapter 2.

As the merchant marines of the various nations acquired increasing importance as commercial ventures and as auxiliary weapons of military domination, the nations began to draw up maritime regulations which would best serve their own interests. "Customary maritime law" was gradually replaced by national legislation such as the "Ordonnance Sur la Marine" of 1681, prepared under the direction of Colbert and promulgated by Louis XIV.² This French example was followed by other nations; and during the 18th and 19th centuries, a series of national maritime codes, embracing among other customs of the sea the seamen's traditional rights to wages and maintenance and cure, were promulgated. These codes evolved not merely from the desire of the various nations to protect their merchant marines and make seamanship more attractive but also as a result of the development of social legislation for industrial workers, especially workmen's compensation laws.

THE SEAMEN'S TRADITIONAL RIGHTS TO WAGES, AND MAINTENANCE AND CURE

Unlike American seamen, the foreign seamen's traditional rights are not defined by a series of court decisions but are clearly spelled out in the various nations' "merchant marine" or "seamen's" laws. The extent of these rights are usually controlled by the provisions of the workmen's compensation laws covering merchant seamen. The maritime rights are intended to protect the seamen merely during the period when their employment at sea makes it difficult for them to come within the protection of the agency administering the workmen's compensation laws. They make the shipowners liable to the seamen for full wages for a stipulated period of time and for medical care and maintenance while receiving such care.

¹The laws of the following countries were examined: Argentina, Australia, Belgium, Brazil, Canada, China, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, India, Italy, Japan, Latvia, Lithuania, Netherlands, New Zealand, Norway, Portugal, Sweden, and Yugoslavia.

²Pardessus, J. M., opus. cit. Vol. IV (p. 366).

The Seaman's Right to Wages

While this right varies with the different national laws, wages are always payable to disabled seamen at least as long as they remain on board ship.³ In a few countries the laws extend their payment for stipulated periods after the seamen are disembarked.

The Scandinavian countries of Denmark, Norway, Sweden, and Finland, and the Baltic nations of Latvia and Estonia have almost identical seamen's acts. In these countries, the laws provide for the payment of full wages for the duration of the employment and for the following additional periods: 3 months for masters, 2 months for other officers, and 1 month for unlicensed seamen. The Danish law, however, differentiates between seamen employed in European navigation and those employed in non-European navigation. Officers in the latter group are entitled to wages for only 1 month after discharge, unlicensed seamen for only 1 week.

The provisions found in other European laws vary greatly. For instance, the British and Yugoslavian laws limit the wage payment to the period the seamen remain on board ship; the French, Greek, Italian, and Portuguese laws extend it for 4 months after the seamen are discharged, or put ashore, whichever occurs first; the Belgian law, like that of the United States, provides for full wages for the full round trip for which the seamen are engaged, whether or not they remain on board ship; and the Netherlands law for the period the seamen remain on board ship, and 80 percent of the wages for as long as 26 weeks thereafter.

The non-European laws also vary greatly from one another. Thus, the Canadian, Australian, and New Zealand laws provide for wage payments only while the seamen are on board ship; the Chinese and Japanese laws while the seamen are under medical care, and for an additional month in the case of Japan. The South American laws generally provide for the payment of full wages until the seamen are repatriated.

The Seaman's Right to Maintenance and Cure

Unlike the American practice which calls for maintenance and cure until the seamen are cured or medical care can no longer effect a cure, the foreign laws usually limit the shipowners' liability in this respect to 3 months. A few laws (e.g., Great Britain, Yugoslavia, and Canada) limit the shipowners' liability to the date the seamen are repatriated. In Canada, seamen, who are employed on vessels for which the shipowners have paid the necessary duty toward maintenance of marine hospitals, may obtain maintenance and cure at such hospitals for as long as 1 year. The Argentine, French, Brazilian, and Chinese laws follow the American practice, providing maintenance and cure until the seamen recover or until medical care can no longer effect a cure. The German law limits the liability of the shipowners to the time when the sickness or accident institution can take charge of the seamen.

Death Benefits Under Maritime Law

All the foreign laws examined require that the seaman be given a decent burial (ashore, if possible), and that his wages be paid to his heirs

³ It will be recalled that according to the American law the seaman is entitled to full wages for the duration of the entire round-trip voyage, whether he remains on board ship or not. See p. 26.

for the period to and including the date of his death, if it occurred during his period of employment.

There are, however, a few variations from this general rule. The law of Finland, for instance, makes the shipowner liable for funeral expenses only if the death occurred abroad. The Latvian law provides that if the death is the result of an occupational injury or illness, the provisions of the workmen's compensation law be applied. The Norwegian, Danish, and Chinese laws provide for dependents' benefits. The first two laws provide merely for 1 month's wages. The third law provides for 1 year's wages if the death was occupationally incurred and 3 months' wages if it was not so incurred. The Belgian law provides that wages be paid to the end of the leg of the voyage during which the death occurred.

WORKMEN'S COMPENSATION LAWS AND THE MERCHANT SEAMEN

Nearly all foreign countries have enacted workmen's compensation laws which cover merchant seamen who have become ill or injured in the course of their employment or in the service of their vessels. While a few countries (Australia, Belgium, France and Norway) have enacted special seamen's workmen's compensation laws, others (like Germany) include workmen's compensation coverage for seamen within their general social insurance codes.

Most foreign merchant seamen, however, are covered by general workmen's compensation laws which have been enacted for industrial workers.⁴ These laws simply include merchant seamen either by definition of the terms "employer" and "employee," or by not listing them or the shipping industry among the groups excluded from their coverages. A few of these laws, such as the British, Danish, and Italian, have special sections dealing with merchant seamen.

In nearly all workmen's compensation laws, benefits become applicable after maritime benefits have been exhausted. In Sweden, however, benefits under the workmen's compensation law are offset against those received under maritime law.

Regardless of their differences, most of these laws follow the usual pattern of workmen's compensation laws:

- (1) They cover only work injuries and diseases;
- (2) They make the employer responsible for the benefits specified;
- (3) The benefits provided consist of (a) medical treatment including hospitalization, physiotherapy, artificial limbs, etc.; and (b) cash benefits for temporary total, permanent partial, permanent total, and fatal injuries and diseases; and
- (4) The benefit payments are secured either by the purchase of workmen's compensation insurance, or the posting of adequate security with the proper authorities.

Coverage of Injuries and Diseases

The coverage of work injuries presents no special problem since the fact that an injury is incurred occupationally can usually be established readily. The reverse is frequently true of industrial diseases. In the drafting of workmen's compensation laws, many countries have fol-

⁴ Canada, which has no national workmen's compensation law, is one of the few exceptions. The various Provinces have their own laws.

lowed the practice of listing, either in the law itself or in administrative regulations, those diseases which are to be considered "occupational."

In the laws specially enacted for seamen, these diseases are often described as "inherent to seafaring," "climatic," and "epidemic."⁵

Benefits Provided

MEDICAL BENEFITS

As already indicated, medical benefits under the workmen's compensation laws are not available to merchant seamen until similar benefits under the maritime laws have been exhausted. They are provided by nearly all workmen's compensation laws. The law of Great Britain is a notable exception in that it does not provide medical benefits,⁶ except in disabilities resulting in death and involving individuals who do not leave any dependents.

Medical benefits under the workmen's compensation laws are intended to restore the individual to working capacity. Thus, medical aid is given until the seaman again becomes fit for duty or is declared permanently incapacitated. In permanent disability cases, medical care is given until the wound heals and, if possible, until the seaman is "rehabilitated." Rehabilitation often includes retraining so as to enable the individual to re-enter gainful employment.

CASH BENEFITS

Cash benefits, like the medical benefits, became payable after similar benefits under maritime law have become exhausted; or, as provided in the Swedish law, are offset against them. Within certain specified minimum and maximum amounts, the benefit rates vary with the extent of the disability incurred.

Temporary total disability.—While the benefit rates specified in the laws examined range from 50 percent (e.g., Great Britain and Chile) to 70 percent (Netherlands) of the wages recently earned by the disabled, the benefit rate most often specified is 66⅔ percent of basic wages. A few countries (France, Italy, and Australia), who have established systems of family allowances, provide additional benefits for dependents. Benefits are usually payable for the full period of the disability, or for a specified period (often 1 year) after which the disability is deemed permanent.

Permanent partial disability.—While the benefit formula found in workmen's compensation laws of the United States—i.e., schedules of benefits for specific physical impairments—is found in some of the foreign general workmen's compensation laws, it is not usually found in the special seamen's workmen's compensation laws. Of the countries having such laws, only Australia has established a benefit schedule applicable to permanent partial physical impairments; these benefits range from £75 for the loss of a toe at the first joint to £675 for the complete loss of an arm or its use. Most foreign workmen's compensation laws simply provide for benefits equivalent to specified percentages of the loss of earning power resulting from the disability. Although most of these laws provide that benefits be paid for the duration of the dis-

⁵ To the extent that the disease coverage is thus limited, the existing American modified employers' liability system affords broader coverage than the foreign laws. As has been pointed out, the American practice appears to be that of treating all diseases occurring or aggravated during service on board ship in the same manner as injuries occurring on or aggravated during service on board ship.

⁶ When required, these are furnished under the sickness insurance system.

ability, in some payments are limited to a period equal to that for which permanent total disability benefits are payable, when these are limited; in a few laws, payments are limited to shorter periods.

Permanent total disability.—Most foreign laws provide for benefits in proportion to the wages last earned by the seaman, ranging from 50 percent of wages (Great Britain)⁷ to 75 percent (France, Lithuania), with 66 $\frac{2}{3}$ percent being most commonly paid. In a few cases (e.g., France) the benefit rates are higher than for temporary total disabilities. A few laws (e.g., Australia, Brazil and Greece) provide for lump-sum payments of £750, 3 years' wages, or 6 years' wages, respectively. Dependents' benefits are provided by those countries having family allowance systems. In Finland, for example, the law provides that if the seaman has dependents the benefit will be 66 $\frac{2}{3}$ percent of his wages, but if he has no dependents, it will be only 50 percent. Most laws provide for a slight increase in benefits if the disabled seaman requires the constant attendance of another person.

Death benefits.—These consist of (a) funeral benefit and (b) survivors' pensions.

Funeral benefits.—Funeral benefits, provided in most laws, are expressed either in flat amounts, regardless of the rating of the seaman, or in terms of a specified number of days' pay. The British law differs from the others in that it provides this benefit only if the seaman has no dependents, and limits it to £15. In the laws of the countries which relate the benefit to wages, the benefit ranges from 20 days' pay (Estonia) to 60 days' pay (Finland).

Survivors' benefits.—These benefits are usually provided only to the widow and orphans of the deceased. In the absence of such close next of kin, some laws provide for benefits to other dependent next of kin. All the laws which provide for survivors' pensions specify that the widows' pensions are to cease upon remarriage. Although orphans' pensions are payable only until the children reach age 16, or 18, depending on the country, most laws extend these benefits for another 2 or 3 years, if necessary, so as not to interrupt the children's education or training.

Widows' pensions range from 20 percent (Norway) to 50 percent (Italy) of the deceased's wages. Usually, however, they are fixed at 33 $\frac{1}{3}$ percent. In about half of the laws examined, the orphans' pensions amount to 15 percent, and in the other half to 20 percent, of the deceased's wages.⁸ The aggregate payable to the widow and the children of the deceased is limited to amounts ranging from 50 to 66 $\frac{2}{3}$ percent of the deceased's wages.

The British law fixes the survivors' benefit to sums equal to the wages of the deceased for 3 years; but, while the respective minimum and maximum benefits are £200 and £300, it specifies that if the seaman leaves dependent children the maximum shall be raised to £700. The Greek and Danish laws provide for survivors' benefits amounting to the seaman's wages for 5 and 3.6 years, respectively, the Australian and Brazilian laws for 4 and 2 years, respectively.

⁷ It is of interest that in establishing the recent increases in maximum weekly benefits, these maxima were raised an additional 5 shillings for the first 13 weeks of disability and 15 shillings for the period thereafter, if the disabled has a wife; and that an additional 5 shillings weekly per child was allowed during each period, up to a maximum aggregate benefit of seven-eighths of the wages if he has a wife and children.

⁸ Larger orphans' pensions are payable when the seaman leaves no widow.

The benefit formula found in the Belgian law is most interesting. Under this law, a widow's pension amounts to the life annuity obtainable for her at the time of her husband's death by the expenditure of 30 percent of the amount he would have earned had he lived, his full life expectancy. For example, let us assume that at the time of his death (1) The seaman was 50 years of age; (2) he earned 10,000 francs per year; and (3) his widow was 45 years of age. The life expectancy of a male at age 50 is approximately 20 years. The amount the seaman would have earned during that period, had he lived, would therefore have been 200,000 francs. The widow's annuity would then be the amount obtainable by 30 percent of 200,000 francs, or 60,000 francs. Let us assume, further, that a life annuity of 1 franc for a female aged 45 were obtainable for approximately 16 francs, the widow's pension would therefore amount to 60,000 divided by 16, or 3,750 francs annually.

Financing

It has already been pointed out that the employer is liable for the benefits under workmen's compensation laws. With but few exceptions, the employer is required to bear the entire cost of providing this compensation. The French law is one of the few exceptions. It provides that benefits be financed by taxing the shipowners 3½ percent of the wages paid by them, the officers 1 percent of the wages they receive, and other seamen ¾ of 1 percent of their wages. These taxes cover sickness insurance as well. A few laws provide that the State contribute toward the administrative cost of the system. This is especially true of the countries requiring that the risk be insured. Thus, Sweden not only pays the administrative cost of the system, but also makes certain grants to the insurance associations to enable them to meet their management expenses. Similarly, the Danish law provides that the State not only pay a portion of the insurance premiums of small firms, but also bear some of the administrative expenses of the State mutual insurance funds.

In most countries the employers are required to insure their risks with approved insurance carriers. In many, the employers have the option of insuring or depositing securities with the proper authorities. In all countries, strict supervision is exercised by a designated government authority. Generally the method of arriving at the premium to be charged for the insurance is left to the insurance institutions, subject, however, to the approval of the proper governmental authority. The Norwegian law has an interesting provision in this respect. The premium is to be calculated, partly as a percentage of the earnings of the seamen and partly at a fixed rate per gross ton of the vessel operated, in such a way that half the total cost of carrying the risk is covered by the amount paid on the basis of the seamen's earnings, and the other half by the amount paid on the basis of tonnage. The final premium is fixed by the Crown and approved by the Parliament.

RIGHT OF ACTION FOR DAMAGES UNDER LIABILITY LAWS

As a general rule, the foreign laws covering merchant seamen provide that action for damages cannot be instituted except when the injury or illness was the result of the negligence of the shipowner (or the master), or when the injury or illness was the result of a violation of the safety

statutes.⁹ In such cases, the claimant can receive only the excess of the amount awarded for damages over that awarded under the workmen's compensation law.

The British law, for instance, provides that when the injury is caused by the "personal negligence or willful act of the employer, or some other person for whose act or default the employer is responsible" the worker may elect to claim his compensation under the act, or take action "independently of this act." If the action fails, the claimant may seek compensation under the compensation act, and the cost of the action (in whole or in part) may be deducted from the compensation.¹⁰

The Norwegian law places the liability for damages on the "ship-owner, master, or other person in command" only if it is proven by "criminal conviction" that he has caused the injury "purposely or through gross neglect."¹¹

American Attempts to Extend Workmen's Compensation System to Merchant Seamen

Although the history of workmen's compensation legislation in the United States shows that labor generally advocated and employers usually opposed the extension of the workmen's compensation system, proposed legislation to extend it to merchant seamen has for many years been opposed by the merchant seamen and supported by the shipowners. This anomalous situation has not always existed. The history of the attempts to enact a workmen's compensation law for seamen shows that, at least until the passage of the Jones Act, efforts to obtain such legislation were exerted by the seamen.

EARLY EFFORTS

In the United States, the early efforts to extend workmen's compensation to merchant seamen date back to the enactment of the first State workmen's compensation law in 1910. At the end of 1913, 22 States had such laws. By that time seamen, like other workers, had become very discouraged with the operation of the existing employers' liability system. Although the new system was still in its experimental stages, its advantages over the old one appealed forcefully to the seamen. It is not surprising, therefore, to find the editor of the *Coast Seamen's Journal*, the publication of the International Seamen's Union, commenting upon the union's failure to obtain specific inclusion of seamen in the California's workmen's compensation law, announcing that the seamen will keep up their fight for "equal rights with all other classes of labor" and for "the recognition of the seamen's right to compensation,"¹² and asserting that if seamen could not be covered by State legislation, compulsory compensation would be demanded from Congress.¹³

The movement to obtain a Federal workmen's compensation law for seamen was officially set in motion at the annual convention held by

⁹ Of the laws examined, those having such provisions are Australia, Belgium, Finland, France, Great Britain, Greece, India, Italy, Netherlands, Norway, Portugal, and Sweden.

¹⁰ "An act to consolidate the law relating to compensation to workmen for injuries suffered in the course of their employment." 15 and 16, George V, ch. 84, December 22, 1925, as amended (sec. 29).

¹¹ Act respecting accident insurance for seamen, dated June 24, 1931, amended July 10, 1936 (sec. 28).

¹² *Coast Seamen's Journal*, Vol. XXVI, No. 34, May 7, 1913 (p. 7).

¹³ *Idem*, No. 36, May 21, 1913 (p. 6).

the International Seamen's Union in May 1913, when the following resolution was passed:

Whereas the workmen's compensation laws enacted by the various States and by the United States do not include seamen, the latter being left to seek whatever relief they may be entitled to under the maritime law, and

Whereas under these circumstances it becomes a practical impossibility for a seaman to secure damages or compensation for injuries received in the course of his calling; and

Whereas the rights of seamen in this regard have been recognized by all other maritime countries by inclusion of that craft in the benefits of workmen's compensation laws; Therefore be it

*Resolved by the International Seamen's Union of America, in convention assembled, that the workmen's compensation laws, State and Federal, should be extended to embrace all classes of seamen, and the legislative committee is hereby instructed to take the necessary steps to accomplish this object.*¹⁴

At the next convention, in 1914, an identical resolution was passed.

The union, however, appeared to be uncertain as to how to proceed to improve the position of the seaman disabled in the service of his vessel, and followed two different approaches—(1) to modify the existing employers' liability system; (2) to obtain a Federal workmen's compensation law for seamen. The Seamen's Act became law in 1915. It contained a clause (sec. 20) which modified the fellow-servant rule by defining the term "fellow servant" so as not to include seamen "in command." At the convention held that same year, two resolutions were introduced—one calling for a "Federal insurance act to provide relief for sick, disabled and aged seamen," and the other for an amendment to the Statutes for Limited Liability (R.S. 4283); the resolution calling for insurance was rejected in favor of the other. The Marine Firemen, Oilers, and Watertenders' Union, however, urged the introduction of a bill calling for workmen's compensation in addition to maintenance and cure.¹⁵

Although the Coast Seamen's Journal continued to press for a Federal workmen's compensation law, interest in modifying the existing employers' liability system was again displayed at the next convention when the union's New York attorney urged the consideration of a law making the employer liable for injuries resulting in death.¹⁶ The emphasis, however, was on workmen's compensation.

Shortly after the United States entered the First World War, Congress passed a law providing for the insurance of merchant seamen against the loss of life or personal injury resulting from the risks of war. In order to take care of the so-called marine risks, Congress passed the Johnson amendment in 1917 which extended to seamen and other maritime workers the rights and remedies given shore workers by the State workmen's compensation laws. The latter was looked upon with a great deal of uncertainty by the seamen. The United States Supreme Court had just ruled that the New York State workmen's compensation law could not be applied to maritime workers since they came under maritime law.¹⁷ Moreover, some of the State laws specifically excluded merchant seamen. The Coast Seamen's Journal again came out with the

¹⁴ Proceedings of the International Seamen's Union of America, 17th Annual Convention, Seattle, Wash., May 12-20, 1913 (p. 47).

¹⁵ Idem, 19th Convention, August 2-10, 1915 (pp. 62, 70).

¹⁶ Except when covered by State death statutes, no recovery for death can be had at common law.

¹⁷ *Southern Pacific v. Johnson*, 244 U. S. 205, 37 Sup. Ct. 525 (1917).

exhortation that "Congress should follow the lead of other maritime nations and enact just and comprehensive Federal law for all American seamen."¹⁸ The union's San Francisco attorney, on the other hand, advised the seamen as follows:

1. In cases of unseaworthiness, keep away from the compensation boards, and sue in admiralty.
2. In cases of negligence of seamen in authority, also keep away from compensation boards, and sue in admiralty.
3. In other cases, since seamen have no claim in admiralty, go to the compensation boards.¹⁹

FEDERAL LEGISLATION REQUESTED BY THE SEAMEN

The first bill which was introduced in Congress was the result of a recommendation made at the International Seamen's Union convention, held in December 1917, by its president, Andrew Furuseth. This recommendation called for the drafting of legislation by the union's legislative committee, which would have the support of other seamen's unions, notably the Masters, Mates and Pilots Organization and the Marine Engineers' Beneficial Association. The committee prepared two bills, one of which received the endorsement of these two organizations, and was introduced in April 1918 by Senator Hiram W. Johnson of California.²⁰ It provided for:

- (1) Medical benefits.
- (2) Cash benefits based on the seaman's wages, and the extent of the disability incurred.
- (3) The payment of the above benefits to the exclusion of all other legal remedies, except in cases involving the shipowner's negligence when it provided for the election to claim the above benefits or to maintain an action for damages at law or in admiralty; and
- (4) The payment of the above benefits in addition to the existing traditional maritime rights.

The war, however, interfered with the progress of this legislation. In the meantime, section 20 of the Seamen's Act had been invalidated by the United States Supreme Court. The officials of the seamen's unions, while anxious to obtain a workmen's compensation law for their members, were coming to the conclusion that under no circumstances should the seamen relinquish any of their existing rights.²¹ In March 1920, the Johnson amendment was declared unconstitutional.²² The State workmen's compensation acts were, therefore, definitely inapplicable to maritime workers. A few weeks later, Senator Jones (State of Washington) introduced a bill amending section 20 of the Seamen's Act. The bill was passed and became law on June 5 of the same year. As was shown in the preceding chapter this law, which became popularly known as the Jones Act, not only accomplished what the Seamen's Act had failed to do, but it also removed or restricted most of the other common-law employers' defenses.

¹⁸ Coast Seamen's Journal, Vol. XXXI, No. 6, October 17, 1917 (p. 7).

¹⁹ Idem, Vol. XXXI, No. 8, October 31, 1917 (p. 6).

²⁰ S.4342 (65th Cong., 2d sess.). The other bill was almost identical except for a provision which would have increased the benefits by 50 percent in cases of willful misconduct on the part of the shipowner, and reduced the benefits by 50 percent in cases of willful misconduct on the part of the seamen.

²¹ International Seamen's Union Proceedings, 22d Convention, January 1919 (p. 69).

²² *Knickerbocker Ice Co. v. Stewart* (1920), 253 U. S. 149.

Until the Jones Act was upheld by the Supreme Court, the seamen were doubtful of its value. The editor of the *Coast Seamen's Journal* continued to advocate a Federal seamen's workmen's compensation law.²³ Two weeks before the passage of this law, he expressed his doubt that the act would add anything to the seamen's existing rights to bring suit for damages for injuries suffered in the course of his employment, voiced his belief that the railroad workers were none too satisfied with the operation of the Federal Employers' Liability Act, and urged the passage of Senator Johnson's bill which was then pending before Congress. At the International Seamen's Union convention held in January 1921, one of the union's attorneys told the membership that the law "was but of little value" and that "a compensation law should be enacted."²⁴ Its legislative committee, while recognizing that the enactment of that law "resulted in an improvement" over the previously existing conditions, also urged the enactment of a Federal seamen's workmen's compensation law. It recommended the approval of a bill (S. 4708), prepared by the American Association for Labor Legislation, patterned after the New York workmen's compensation law, and introduced by Senator Johnson, on the condition that it be amended to (1) include fishermen; (2) safeguard the seamen's traditional maritime rights; and (3) give the seamen the option to bring an action for damages or claim the workmen's compensation benefit.²⁵

The last two conditions were very important. From then on, the seamen's spokesmen insisted upon them.²⁶ This was vividly brought out at the International Seamen's Union's convention of 1923, when an animated discussion of a seamen's workmen's compensation law versus the liability laws as modified by the Jones Act took place. The union's legislative committee had recommended the approval of a bill (S. 746) drafted by the American Association for Labor Legislation, although it would have deprived the seamen of the right to sue. It expressed its conviction that the right to sue was "a theoretical rather than a substantial consideration." A report on this question, prepared by a Seattle admiralty lawyer and presented to one of the union's officials, was submitted to the convention. This report consisted not only of an opinion on the bill itself, but also on the committee's recommendation. The attorney sharply criticized the recommendation, and asserted that, with the employer's defenses removed, as under the Jones Act, the right to sue was most effective. Instead of a seamen's workmen's compensation act, he urged an amendment to the Jones Act which would (1) permit an action before any court (State or Federal); (2) provide for jury trial in admiralty; and (3) deny the shipowner's right to limited liability in certain cases involving collision, or shipwreck.²⁷

At the next convention, in January 1924, Andrew Furuseth still insisted that a seamen's workmen's compensation act must retain all existing remedies, including the right to sue. He announced, however, that it would not be wise to press for new legislation until the United States Supreme Court had rendered its decision on a case involving the constitutionality of the Jones Act which it had under consideration.

²³ *Coast Seamen's Journal*, Vol. XXXII, No. 38, May 26, 1920 (p. 6).

²⁴ International Seamen's Union Proceedings, 24th Convention, January 1921 (pp. 140-141).

²⁵ *Idem* (p. 157).

²⁶ *Idem*, 25th Convention, 1922 (pp. 12-19); 26th Convention, 1923 (pp. 76-78).

²⁷ *Idem*, 26th Convention, 1923 (pp. 71-79, 152-167).

He did, however, urge the amendment to the Jones Act described above.²⁸ This act was upheld during the year²⁹ and at the convention held the following January, no mention of workmen's compensation was made. Instead the amendment to the Jones Act, recommended at the previous convention, was pressed again.

Thus, the position of the union became clear. It would accept a seamen's workmen's compensation law as an *additional remedy*, not as a substitute for the seamen's existing rights. It insisted especially upon the right to sue under the Jones Act, if the seaman chose to do so rather than claim his workmen's compensation benefit. The shipowners, by that time, had also made their position clear. Seeing the manner in which the Jones Act was being applied by the courts, they began to push the workmen's compensation principle as the exclusive remedy. The lines became clearly drawn. The unions concluded that if the shipowners sought such legislation, it could not be good for the seamen. This was the attitude displayed at the 1926 convention in Furuseth's report on workmen's compensation. The report emphasized that such legislation should not modify any of the seamen's existing remedies and should include the choice between compensation and the right to sue. It stressed the advantages of an employers' liability system with restricted employers' defenses as a device to force employers to make provisions for the safety of their employees, and added that workmen's compensation insurance as applied to merchant seamen could not be as effective as the above device coupled with the traditional rights of maintenance and cure.

THE SEAMEN AND THE LONGSHOREMEN'S AND HARBOR WORKERS' COMPENSATION ACT

That the seamen would not relinquish any of their existing rights in favor of workmen's compensation became clear again when Congressional hearings were held prior to the enactment of the present Longshoremen's and Harbor Workers' Compensation Act. The law which had given longshoremen the protection of the State workmen's compensation laws, and which had been passed in 1922, was invalidated in 1924. The longshoremen, therefore, again became active in their efforts to obtain a Federal law. Heretofore, they had merged their interests with those of the merchant seamen, but the Jones Act had been enacted exclusively for the latter. The longshoremen were still plagued by the employers' defenses. The bills which had been drawn by the American Association for Labor Legislation had been intended to cover both seamen and longshoremen. However, since the former were insistent in their desire to retain their exclusive remedies, they were eventually excluded from the bills finally introduced in 1926 by the simple device of defining the term "employee" as excluding the "master or member of a crew of any vessel." The attitude of the shipowners was revealing. In opposing this bill, the counsel for the American Steamship Owners Association, while asserting that "the association is heartily in favor of a workmen's compensation act to cover the industry as a whole," added that it was against the bill for several reasons—the first being that it covered only a part of the industry. The association, he said, believed that seamen should also be covered, and felt that no particular class of people should be picked from

²⁸ *Idem*, 27th Convention, 1924 (pp. 11-19).

²⁹ *Johnson v. Panama R. R. Co.*, see *supra* (p. 30).

the industry to be left out.³⁰ The bill was passed in 1927³¹ and applied to longshoremen only.

Thereafter no legislation which would have extended the workmen's compensation principle to merchant seamen was introduced at the request of seamen or their representatives. Several bills were, however, introduced at the request of the shipowners. The seamen's unions on the other hand, sought the enactment of amendments extending the scope of the Jones Act.³²

LATEST CONGRESSIONAL ATTEMPTS TO EXTEND WORKMEN'S COMPENSATION TO SEAMEN

No legislation which would have extended the workmen's compensation system to merchant seamen has been introduced in Congress in the last few years. The last bill introduced was H.R. 6881—"An Act to Implement the Provisions of the Shipowners' Liability (Sick and Injured Seamen) Convention, 1936." In its original form, and as passed by the House of Representatives on July 31, 1939,³³ it confined itself to the implementing of this convention. When the Senate received the bill for action, the Subcommittee on Merchant Marine of its Committee on Commerce, which was considering the bill, made certain changes in it before holding its hearings. One change was very important. It provided for the extension of the provisions of the Longshoremen's and Harbor Workers' Compensation Act to merchant seamen.³⁴ The development of this bill is interesting.

International Labor Organization Draft Convention No. 55

At its 21st Session held at Geneva, October 6-24, 1936, the International Labor Conference adopted several Draft Conventions and recommendations affecting merchant seamen. One of them was Draft Convention No. 55 "concerning the liability of the shipowner in the case of sickness, injury, or death of seamen."

In August of the following year, the Secretary of State placed this draft, together with the other documents, before the President of the United States with a view to its transmission to the Senate to receive, subject to certain considerations advanced by the Secretaries of Commerce and Labor and the Chairman of the United States Maritime Commission, the advice and consent of that body to its ratification. The Secretary of Labor recommended its ratification, the Secretary of Commerce did not oppose it, and the Chairman of the United States Maritime Commission saw no special advantage to it, asserting that American law provided substantially equal or greater rights than those provided in the Draft Convention.

The most important provisions of Draft Convention No. 55³⁵ are as follows:

(1) The shipowner's liability extends to sickness and injury occurring between the date of reporting for duty and the termination of the

³⁰ Subcommittee of the Judiciary Committee, U. S. Senate (69th Cong. 1st sess.): *Hearings on S. 3170, March-April 1926* (p. 46).

³¹ Longshoremen's and Harbor Workers' Compensation Act (ch.509; 44 Stat. 1424).

³² S. 3376 of 1927; S. 181, 1977, and 3616 of 1932; S. 1080 of 1935; S. 3216 and H. R. 8208 of 1940.

³³ This bill was slightly different from the original draft, c. f. Title I of Committee Print No. 4 of H.R. 6881 in Hearings before a Subcommittee on Commerce, U. S. Senate, on H.R. 6881 (76th Cong., 3d sess.), July 1940 (pp. 4-5); and reprint of H.R. 6881 in Hearings before the Committee on Merchant Marine and Fisheries, House of Representatives, on H.R. 6726 and H.R. 6881 (76th Cong., 1st sess.), July 1939 (p. 142).

³⁴ Senate Hearings on H.R. 6881, op. cit. (p. 1-7).

³⁵ International Labor Office: *International Seamen's Code* (pp. 25-28).

engagement, as well as death resulting from such sickness or injury (art. 2).³⁶

(2) The liability covers the cost of medical treatment, medicines, appliances, board and lodging, until the seaman has been cured or the incapacity is declared of a permanent nature (arts. 3 and 4).

(3) National laws or regulations may limit the liability for the above expenses to a period not less than 16 weeks from the date of the injury or the commencement of the sickness (art. 4).

(4) Where incapacity for work results, the shipowner is liable for full wages as long as the seaman remains on board ship; if the seaman has dependents, the shipowner is liable for wages in whole or in part, as prescribed by the national laws or regulations, from the time he is landed until the condition is cured or declared permanent. The national laws or regulations may limit this obligation to not less than 16 weeks (art. 5).

(5) Countries where there are arrangements for compulsory sickness insurance, accident or workmen's compensation insurance, may provide in their laws or regulations that the shipowner shall be relieved of such liability from the time the seaman becomes entitled to benefits under such arrangements (arts. 4 and 5).

(6) The Convention is binding only upon the members of the International Labor organization whose ratifications have been registered with the Secretary-General of the League of Nations. It comes into force 12 months after the ratification of two members have been registered (art. 15).

In June 1938, the Senate consented to the ratification of the Convention. The ratification was deposited with the Secretary-General of the League of Nations on October 29, 1938. Belgium having already ratified it, the Convention became effective for the United States on October 29, 1939. It therefore became necessary to implement it.³⁷

PROPOSED LEGISLATION TO IMPLEMENT ILO DRAFT CONVENTION NO. 55

On June 12, 1939, the Secretary of State recommended to the President that Congress be requested to enact legislation to implement the Draft Convention. He transmitted, with this recommendation, a draft of a proposed bill prepared and approved by an interdepartmental committee composed of representatives of agencies interested in the Draft Convention.³⁸ Accordingly, on June 15, 1939, the President submitted these documents to Congress, and urged that legislation be enacted at the then current session of Congress, as the Convention was to become effective for the United States on October 29, 1939.

The Interdepartmental Committee's Bill

The bill simply implemented the draft convention by—

(1) Providing that where the sickness or injury results in incapacity for work the shipowner is liable for (a) full wages as long as the seaman is on board ship, and (b) if he has dependents, full wages from

³⁶ Except certain conditions such as those resulting from willful acts, etc.

³⁷ Also ratified by Mexico on September 15, 1939. See, International Labor Conference: Report on the Application of Conventions, Report VI, 1945 (p. 68).

³⁸ These agencies were The Departments of Commerce, Justice, Labor, State and Treasury, the Maritime Labor Board, the Social Security Board, the United States Employees' Compensation Commission, and the United States Maritime Commission. This committee is not to be confused with the Interdepartmental Committee to Study Workmen's Compensation for Seamen created by Senate Res. 299, and referred to throughout this report as Interdepartmental Committee.

the time he is landed until he has been cured or declared permanently incapacitated;

(2) Requiring that the Secretary of Labor, with the cooperation of the Secretary of State, the Secretary of Commerce, the United States Public Health Service, and the United States Maritime Commission, submit by January 3, 1943, to the Congress, a report on "the manner and extent to which the shipowners and the United States have rendered services specified in the Convention or this act,"; and

(3) Providing that nothing in the Convention, or the act, shall affect any existing rights of the seamen which insure or provide more favorable conditions, rights, or remedies than those provided by the Convention or the act.³⁹

The bill, therefore, not only affirmed the seamen's traditional maritime rights, and the right to sue under the Jones Act, but with respect to seamen who had dependents, would have provided full wages, in lieu of the maintenance allowances during out-patient treatment and convalescence, from the time they are landed, whether hospitalized or not, until they are cured or declared permanently incapacitated. The report to Congress required by the bill was decided upon by the members of the interdepartmental committee after they had considered the desirability of recommending the extension of the Longshoremen's and Harbor Workers' Compensation Act, or some similar act, to merchant seamen. The committee concluded that such action should be withheld until a careful study of all the questions involved could be completed and consequently provided for such a study in the bill.

The House of Representatives and H. R. 6726 and H. R. 6881

In compliance with the President's wishes, the House of Representatives considered the proposed legislation. It also gave consideration to the immediate extension of workmen's compensation to merchant seamen. Accordingly, when it held public hearings in July 1939, two bills were discussed: H.R. 6726—"a bill relating to disability compensation for seamen," and H.R. 6881—"a bill implementing Draft Convention No. 55."⁴⁰

H.R. 6726 contained no reference to the International Labor Organization's Draft Convention. It simply would have made, by inference, the provisions of the Longshoremen's and Harbor Workers' Compensation Act applicable to merchant seamen by adding a Title XII to the Merchant Marine Act of 1936, an amendment which would have provided that:

(1) In the administration of the laws with respect to compensation for death or disability of persons employed in maritime employment upon navigable waters of the United States, the provisions of such laws be applicable in cases of injury or death of officers and members of the crews of merchant vessels;

(2) The merchant seaman's rights to maintenance and cure remain unimpaired, provided that the value of any maintenance provided by the employer shall be deducted from the seaman's average weekly wage in

³⁹ The other provisions of the Draft Convention were considered self-executing.

⁴⁰ Shipowners' Liability (Sick and Injured Seamen) Convention, 1936—Disability Compensation, Hearings before the Committee on Merchant Marine and Fisheries of the House of Representatives (76th Cong., 1st sess.) on H.R. 6726—A bill relating to disability compensation for seamen, and H. R. 6881—A bill implementing Draft Convention No. 55, July 11, 1939.

computing the workmen's compensation payable in respect to any period during which such maintenance is provided; and

(3) The provisions of the Limited Liability Act of 1851 be inapplicable.

H.R. 6881 was the identical bill prepared by the interdepartmental committee and transmitted by the President to Congress a few months earlier. During the hearings, three facts became clear: (1) The shipowners objected to H.R. 6881 but urged the application of the Longshoremen's and Harbor Workers' Compensation Act to merchant seamen; (2) although the seamen's unions preferred no legislation at all at that time, they were willing to accept H.R. 6881; and (3) the various Government agencies, which had been represented on the committee, approved H.R. 6881, but were not in agreement with respect to the desirability of extending workmen's compensation to merchant seamen at that time.

The shipowners objected to H.R. 6881 on the alleged grounds that (a) not only did it impose a larger liability on them than the Draft Convention required, but (b) it placed them at a distinct disadvantage in competition with foreign shipowners, because the latter were able to limit their liability by taking advantage of the workmen's compensation laws of their countries, while this bill would not make it possible for the American shipowners to do likewise. They therefore urged the application of the Longshoremen's and Harbor Workers' Compensation Act to merchant seamen.

The seamen's unions strenuously opposed the extension of workmen's compensation to merchant seamen, especially the Longshoremen's and Harbor Workers' Compensation Act, on the alleged grounds that seamen had more liberal benefits under the existing modified employers' liability system than they could possibly have under any compensation act.

The Government agencies which had made up the interdepartmental committee all favored workmen's compensation in principle. However, with the exception of the United States Maritime Commission and the United States Employees' Compensation Commission, they were unwilling to recommend its extension to merchant seamen before having had an opportunity to study the entire question carefully. The United States Maritime Commission, while not recommending the enactment of H.R. 6726, and while not opposing the enactment of H.R. 6881, was of the opinion that inasmuch as seamen with no dependents were, in the absence of a workmen's compensation law, remitted to the usual civil remedies, the desirability of the enactment of such a law should be considered. It felt that the framers of the Convention anticipated the application of insurance and compensation standards to the liability for payment of wages. The United States Employees' Compensation Commission simply reiterated its position, expressed in its annual report to Congress the previous year, recommending the enactment of a workmen's compensation law for seamen patterned after the Longshoremen's and Harbor Workers' Compensation Act.

The House of Representatives, after considering all the arguments raised pro and con, during the hearings before the Committee on Merchant Marine and Fisheries, passed H.R. 6881 almost as it had been drafted by the interdepartmental committee. It eliminated from it, however, section 9 which required that a report be submitted to Congress on

the manner and extent to which shipowners have "rendered services specified in the Convention or this act." It also limited the shipowners' liability, after the seaman had been landed, and in the event he had dependents, to \$10 monthly for a period not to exceed 16 weeks from the date of the injury or the commencement of the sickness.

The Senate and H. R. 6881

The Senate did not act on this bill during that session of Congress, but at the next session it held hearings before the Subcommittee on Merchant Marine of the Committee on Commerce, on a revised bill (H.R. 6881) which differed materially from the bill passed by the House.

The new bill was also entitled "An act to implement the provisions of the shipowners' liability (sick and injured seamen), Convention, 1936." It was divided into Titles I and II. Title I consisted of most of the provisions of the bill passed by the House, but substituted the provisions of the Longshoremen's and Harbor Workers' Compensation Act (as amended) for the shipowners' liability to seamen who had dependents. Title II (a) amended the Longshoremen's and Harbor Workers' Compensation Act so as to extend its coverage to merchant seamen; (b) incorporated the seamen's traditional maritime rights as offsets against the compensation benefits; and (c) provided for sickness benefits to seamen after they leave the ship, if they have dependents, but limited them to a period not to exceed 16 weeks from the commencement of the sickness.

This bill was not approved by the Subcommittee, apparently because of the mixed reaction to it. The various Government agencies whose views had been sought by the Subcommittee (namely, those which were on the interdepartmental committee) were in disagreement as to the desirability of passing it in its revised form, especially with respect to extending the Longshoremen's and Harbor Workers' Compensation Act to merchant seamen at that time. Their views are summarized below:

(1) The Department of Labor felt that the bill, in certain respects, failed to comply with the treaty obligations of the United States. Moreover, the extension of the Longshoremen's and Harbor Workers' Compensation Act to seamen did not take full advantage of the advances made in such legislation by progressive States.

(2) The Department of State, likewise, felt that the bill, in certain respects, would not satisfy this country's international obligations under the Convention. It also informed the Subcommittee that the provisions of the Longshoremen's and Harbor Workers' Compensation Act, with reference to "sickness," were not as broad as the provisions in the Convention or in the existing American statutory law.

(3) The Maritime Labor Board⁴¹ felt that the bill would, in certain respects, restrict the benefits under the Convention. It stated, further, that in its "judgment it would be a mistake to blanket seamen under the Longshoremen's and Harbor Workers' Compensation Act in connection with the adoption of legislation for the implementing of the Convention in question," and that if it was desired to pass a workmen's compensation law for seamen at that time this should be done by drafting separate legislation.

⁴¹ The Chairman of this Board had been one of the two United States Government delegates to the International Labor Conference which had adopted the International Labor Organization Convention No. 55.

(4) The Department of Commerce⁴² stated that the bill probably failed to implement the provisions of the Convention in two respects, one of them being that extension of the Longshoremen's and Harbor Workers' Compensation Act would fail to provide adequately for sick seamen.

(5) The Department of Justice simply informed the Committee that it preferred not to make any suggestion with reference to the desirability of enacting a compensation act for seamen.

(6) The United States Employees' Compensation Commission reiterated its position as favoring the extension of the Longshoremen's and Harbor Workers' Compensation Act to seamen.

(7) The Federal Security Agency, while not attempting to advise the Committee relative to the desirability of extending the Longshoremen's and Harbor Workers' Compensation Act to seamen, pointed out that "it has been suggested that the Longshoremen's and Harbor Workers' Compensation Act is not entirely adaptable to special conditions of the maritime industry."

(8) The United States Maritime Commission recognized that the bill failed to implement the Convention in certain respects, and while it was in favor of extending workmen's compensation to seamen, it was of the opinion that unless the bill under consideration (revised in certain respects) could be passed with little delay, the bill as passed by the House should be enacted since it met the treaty obligations of the United States. The extension of workmen's compensation to cover seamen could be decided by Congress at a later date after a consideration of all factors involved.

Other witnesses before this Subcommittee seemed to divide themselves into two groups: (a) Those who approved the extension of workmen's compensation for seamen (namely, shipowners) and persons interested in the extension of social legislation in general; and (b) those who felt that the existing modified employers' liability system gave the seamen better protection than the extension of the workmen's compensation system could give them (namely, merchant seamen and their representatives). The first group definitely favored the enactment of the bill, the second definitely opposed it.

ARGUMENTS FOR AND AGAINST EXTENSION OF WORKMEN'S COMPENSATION TO MERCHANT SEAMEN

When the arguments for and against the extension of workmen's compensation to merchant seamen presented at the hearings on H.R. 6726 and H.R. 6881 by the proponents and opponents of the measure are carefully examined,⁴³ it is found that proponents of the measure advanced all the arguments which decades earlier labor had advanced in favor of the workmen's compensation principle and which the employers then resisted. Moreover, they advanced additional arguments supporting the provisions of the proposed measure, and referred to statistical analyses to substantiate their claims. Thus, they asserted that the maximum award of \$7,500 provided in the Longshoremen's and Harbor Workers'

⁴² The Director of Ships' Personnel of the Department's Bureau of Marine Inspection and Navigation was the other United States Government delegate to the International Labor Conference which adopted the International Labor Organization Convention No. 55.

⁴³ See Interdepartmental Committee, *op. cit.* (pp. 23-29).

Compensation Act was liberal by comparison with similar provisions in most of the other American compensation acts. Furthermore, they referred to the statistical studies of the Bureau of Labor Statistics, United States Maritime Commission, and their actuarial consultant, as substantiating their belief that the seamen would fare better, in dollars and cents, under the proposed measure than they actually did under the existing modified employers' liability system.

The arguments advanced by the representatives of the seamen in opposition to the bill, on the other hand, reflected the attitude of individuals who have a "good thing" and do not want to give it up for something which is presented to them as "better" but of which they are suspicious. They were suspicious of the proposed legislation because the proponents of the measure had never before voluntarily offered to "do anything for the seamen." Their arguments rebutted all of those advanced by the proponents, restated the seamen's position previously expressed in the consideration of similar legislation, namely, that they did not want to relinquish their traditional rights and that they wanted to retain the right to sue under the Jones Act. In addition, they asserted that (1) the benefits under the proposed measure were too low; (2) the probable awards under the proposed law would be smaller than the settlements obtainable under the existing modified employers' liability systems; (3) the Bureau of Labor Statistics study was more than 12 years old, and conditions in the industry had changed since the completion of that study; and (4) only a year previously, Government agencies interested in the problems of seamen had agreed in conference that a study of the problem should be made before Congress could pass on the advisability of extending the workmen's compensation system to merchant seamen.⁴⁴

Thus, it became clear that while, by and large, the principle of workmen's compensation was admittedly more equitable to all concerned than the principle of employers' liability, the extension of the system to merchant seamen involved certain specific considerations which are far different from those facing its extension to shore workers. First, the seaman is protected by his ancient maritime rights; and second, he is protected from the full force of the employers' defenses under the employers' liability system. If a workmen's compensation system is to be extended to merchant seamen, it appears to be agreed by all concerned that it must be done in such a way that will result in an improved method of providing adequate and fair relief to seamen disabled while in the service of their vessels and to the dependents of those who died in such service. Moreover, this relief must be at least as liberal as that provided by the existing system. Since the existing system departs from the ordinary employers' liability system by making special provisions to meet the peculiar characteristics of the seaman's maritime employment, the workmen's compensation system must also depart from the usual workmen's compensation formula and make special provisions to meet these peculiar characteristics. The hearings before the Subcommittee on Merchant Marine of the Senate Committee on Commerce emphasized this problem and pointed out that its solution was retarded by the lack of adequate statistical information. Consequently, the Chairman of this Subcommittee, Senator Overton, introduced, and the Senate adopted, Senate

⁴⁴ See statement by Bjorne Halling, Hearings on H.R. 6881, U. S. Senate (pp. 282-284).

Resolution 299 providing for an Interdepartmental Committee⁴⁵ "to make a thorough study of workmen's compensation with a view to determining whether the same, by act of Congress, should be made applicable to seamen; to supply the Senate with statistical information and other data that may be helpful in considering such legislation . . . and to report to the Senate . . . the findings and specific recommendations" of the Committee.

**REPORT OF INTERDEPARTMENTAL COMMITTEE TO STUDY WORKMEN'S
COMPENSATION FOR SEAMEN**

This Interdepartmental Committee set about to study the existing modified employees' liability system governing the settlement of seamen's (or their dependents') claims for injuries, diseases, or deaths occurring in the service of their vessels, compared the amounts of the actual recoveries in almost 6,000 claims closed or pending in 1938 with those which would have been awarded under a hypothetical workmen's compensation law for seamen. It sought the answer to three questions:

(1) Is workmen's compensation in principle a more desirable and satisfactory method of providing recovery for injured workers than a system of liability, based upon negligence?

(2) Can a workmen's compensation system be devised that will retain essentially desirable features of this form of remedial legislation and yet preserve to injured seamen their long-standing rights to full wages to the end of the voyage and maintenance and cure?

(3) Would a modified workmen's compensation plan as indicated in question 2 be desirable and advantageous from the standpoint of the seamen, the industry, and the public?⁴⁶

Its answers to the first two questions were in the affirmative. With respect to the third question, the Committee observed that although the history of workmen's compensation legislation shows that labor has generally advocated its adoption and management opposed it, maritime labor opposed it and shipowners supported it. It noted that the seamen's objections were due to the fact that admiralty laws provide them certain advantages not enjoyed by industrial workers generally. From its statistical studies, the Committee recognized that temporarily disabled seamen would probably not fare as well under the proposed workmen's compensation system as they did under the existing system. It felt, however, that this inadequacy would be more than offset by the more adequate probable recoveries in cases of major injuries or deaths. It concluded that a workmen's compensation act that will provide benefits to seamen which exceed or even equal the benefits and advantages of the existing modified employers' liability system must incorporate certain features "not typical of existing compensation statutes."⁴⁷

The Committee was unable to compare the probable cost to the employers of the proposed system with that of the existing system.⁴⁸ The industry's spokesmen, however, had emphasized before Congressional Committees their belief that a workmen's compensation system would assist in improving employment relations within the industry. More-

⁴⁵ The Interdepartmental Committee consisted of representatives of the Department of Commerce, the Department of Labor, the United States Maritime Commission, the United States Employees' Compensation Commission, and the Maritime Labor Board. The report originally was to have been submitted to the Senate by February 15, 1941, but an extension of time to July 1, 1941, was granted by Senate Resolution 72.

⁴⁶ Interdepartmental Committee, op. cit. (pp. 3-4).

⁴⁷ Idem (p. 5).

⁴⁸ Idem (p. 7).

over, their testimonies before these Committees indicated that should the proposed system involve a greater cost to them than the existing system, they were willing to bear it.⁴⁸

So far as the public is concerned, the Committee observed that "the principle of public responsibility for the care of the indigent" was gaining more general acceptance. Any system, which would assure a minimum of instances in which disabled seamen and the dependents of deceased seamen would be forced to turn to public relief or charity, would therefore be advantageous to the public. While this objective might be attained through some modifications of the present system, the Committee believed workmen's compensation offered greater assurance of its fulfillment.

The Committee summarized its conclusions as follows:

(1) The principle of workmen's compensation legislation provides the most satisfactory method thus far designed for the adjustment of claims arising out of industrial accidents, and such legislation is in the interest of the public, employers, and particularly the workers themselves;

(2) It is possible to devise a plan of workmen's compensation for seamen which would retain the essentially desirable features of the system without requiring seamen to relinquish their long-standing rights to full wages to the end of the voyage and maintenance and cure while undergoing treatment after the end of the voyage; and

(3) The minimum standards of workmen's compensation for seamen should be a plan which (a) takes effect without a waiting period upon termination of the wages at the end of the voyage; (b) pays benefits during period of out-patient treatment and convalescence not less than the maintenance to which the injured seamen is entitled during a period of temporary disability; (c) provides benefits computed on full-time wage base, together with the value of subsistence and lodging and renumeration for overtime and bonuses; and (d) provides benefits at least equal to those provided under the Longshoremen's and Harbor Workers' Compensation Act but without limitation of total benefits payable for death or disability."⁴⁹

⁴⁸ Interdepartmental Committee, *op. cit.*

⁴⁹ *Idem* (p. 2).

Chapter 4.—Actual Settlements Versus Workmen's Compensation Benefits

Previous Attempts to Compare the Two Systems

Since the enactment of the Longshoremen's and Harbor Workers' Compensation Act, there have been four attempts to compare the monetary value to disabled seamen of the existing modified employers' liability system with that of workmen's compensation systems. These are— (1) Settlements for Accidents to American Seamen (U. S. Bureau of Labor Statistics, Bulletin No. 466, October 1928); (2) Actual Settlements to Seamen Versus Probable Awards Under a Workmen's Compensation Law (U. S. Maritime Commission, 1939; an unpublished report); (3) Calculations made by an actuarial consultant for the American Merchant Marine Institute in 1940, presented at hearings on H.R. 6881, Workmen's Compensation for Seamen and Shipowners' Liability, before a Senate Subcommittee on Commerce, July 1940; and (4) System of Workmen's Compensation for Seamen (Interdepartmental Committee to Study Workmen's Compensation for Seamen, Senate Doc. No. 113, 77th Cong., 1st sess., September 17, 1941).

The first three studies ended with the conclusions that disabled merchant seamen would have fared better under a workmen's compensation system than they actually did under the existing modified employers' liability system.

The first study consisted of a comparison of the actual settlements in 1,195 claims, consummated by the more important shipping companies and marine underwriters, in the New York City area in 1926, and the probable awards which would have been obtained by the seamen involved, or their dependents, if the claims had been adjudicated under the Longshoremen's and Harbor Workers' Compensation Act which had been passed a year earlier. This study had certain weaknesses, owing largely to the nature of the data and an over-liberal interpretation of the workmen's compensation provisions.

The second study, while based on a fairly representative sample of cases, suffered from the fact that the data used had not been collected for the purpose of comparing the two systems. Much essential information was lacking, making it necessary to estimate certain factors. Moreover, the provisions of the workmen's compensation act, which were applied in estimating the probable awards, were interpreted too liberally.

The third study involved the application of the benefit experience under the workmen's compensation law of New York State to some 8,000 cases settled by six shipowners in 1935, 1936, and 1937. Obviously, since merchant seamen were not covered by the New York State law, the application of the average benefit per case under that law to the 8,000 cases could not have been conclusive.

The Interdepartmental Committee Study

The Interdepartmental Committee had the advantage of working with data collected especially for the purpose of comparing the two systems.

Its objective and general conclusions have been stated in the preceding chapter.

The Committee tested several different applications of the benefit provisions of the Longshoremen's and Harbor Workers' Compensation Act.¹ Thus, it compared two different compensation methods with the existing modified employers' liability system.² The first method, modified compensation, substituted the amounts actually paid for maintenance and cure for the amounts payable under the provisions of the workmen's compensation act whenever the former were larger than the latter. In the second method, straight compensation, no such substitution was made. In both methods, the effects of the following three different waiting periods were tested: (a) 7-day, from the date of disability; (b) 7-day from the end of the voyage; and (c) no waiting period.

The Committee's calculations showed that applications of the Longshoremen's and Harbor Workers' Compensation Act's benefit formula in accordance with each of the methods cited above would have yielded less in pecuniary benefits to the disabled seamen as a group than they actually received in settlement of their claims under the existing modified employers' liability system. This would have been true with respect to all extent categories of cases, except the cases resulting in fatalities or permanent total disabilities. Moreover, they showed that even under the modified compensation method, with elimination of the waiting period, (1) about 55 percent of the seamen were better off under the existing system than they would have been under the assumed workmen's compensation system; (2) 20 percent were as well off; and (3) only about 25 percent were worse off.³

In making its calculations, however, the Committee was handicapped by the fact that in most cases the shipowners' reports lacked the information necessary to compute the average monthly earnings of the seamen affected. Since the Longshoremen's and Harbor Workers' Compensation Act provides weekly benefits of 66⅔ percent of the "average" weekly wage, computed as one fifty-second part of the "average annual wage,"⁴ this factor was important. The Committee consulted officials of shipowners' associations and of seamen's unions, with a view to determining the average number of months seamen are employed per year. As a result, the Committee calculated the average monthly wage of the seamen involved on the assumption of an average employment period of 8½ months per year per seaman. This had the effect of yielding a relatively low average monthly benefit, and was an important factor contributing to the relatively poor showing, indicated in the preceding paragraph, of the workmen's compensation system. Further calculations by the Committee showed that even if the average yearly employment had been 10 months, the total of the workmen's compensation benefits would still have been lower than the total of the actual net settlements under the existing system. The Committee estimated, however, that if employment for the full year were assumed, the total of the workmen's compensation benefits would have been greater than the total of the actual net settlements recovered. The difference in favor of the workmen's compensation sys-

¹ This act calls for benefits, during the full period of total disability, of 66-2/3 percent of the worker's average weekly wage, not to exceed \$7,500 in the aggregate.

² For details of the procedure used, see Interdepartmental Committee, op. cit. (p. 32).

³ Interdepartmental Committee, op. cit. (p. 36).

⁴ Longshoremen's and Harbor Workers' Compensation Act, Public No. 803 (69th Cong.), sec. 8 and 10.

tem would have been small, only 8 percent under the most liberal compensation method tested. The Committee pointed out that, even under this liberal application of the workmen's compensation system, seamen temporarily or partially disabled would have fared worse than they actually did.

On the basis of the above results of its statistical analysis and the careful consideration of other factors, the Committee reached the conclusion outlined in the preceding chapter and set minimum standards for a workmen's compensation system for merchant seamen. The Committee, however, had no opportunity to test the adequacy of these standards. While it was in a position to state that the benefits thereunder would, on the whole, have exceeded the actual recoveries under the existing system, but that temporarily disabled seamen as a group would lose, it did not make a detailed comparison of the probable benefits under the minimum standards it proposed with the actual recoveries under the existing system. It left many questions unanswered. For example: (1) What kind of disability cases would fare better under the proposed system than under the existing system? (2) What proportion of the injury cases, resulting in the different extents of disability, would benefit under the proposed system? (3) What proportion of the disease cases would fare better? (4) Would the proposed system benefit seamen disabled on dry-cargo vessels more than those on tankers? Would it benefit those on long foreign voyages more than those on short inland-water voyages? (5) Would it benefit the licensed officers more than the unlicensed seamen? (6) Which of the compensable items, if any, would fare better under the proposed system?

Probable Awards Under System Proposed by Interdepartmental Committee Versus Actual Net Settlements

The present attempt to compare the pecuniary value of the two systems seeks to evaluate the adequacy of the minimum standards set by the Interdepartmental Committee. It assumes a hypothetical workmen's compensation law for merchant seamen meeting the minimum standards set by the Committee. It is based on the primary data collected by the Interdepartmental Committee. The probable award, under such a law, was computed for each case reported to the Committee which contained sufficient data for the purpose. This probable award was then compared with the actual net settlement effected in the particular case.

BENEFIT PROVISIONS OF THE HYPOTHETICAL LAW

Waiting Period

There would be no waiting period. Compensation would begin after the period "to the end of the voyage."

Benefit Scale

The benefit scale would be the same as that provided in the Longshoremen's and Harbor Workers' Compensation Act (sections 8 and 9), but with minimum and maximum benefit rates modified to conform with the standards set by the Interdepartmental Committee:

Nonfatal disability.—Benefits would amount to two-thirds of average monthly earnings; with a minimum daily benefit rate of \$4 for super-

visory and officer personnel and \$2 for other personnel, and a maximum daily benefit rate for all personnel of \$4. These benefits would be payable as follows:

(a) Temporary total disability, for the duration of the disability.

(b) Permanent partial disability, for specified number of weeks depending on the extent of the disability, and in accordance with the provisions of section 8(c) of the Longshoremen's and Harbor Workers' Compensation act.⁵

(c) Permanent total disability, for life.

Fatal cases.—Benefits would be the same as those provided in section 9 of the Longshoremen's and Harbor Workers' Compensation Act, but the dependents' benefits would be calculated on the basis of maximum weekly earnings of \$42 and minimum weekly earnings of \$21. Funeral expense benefit would not exceed \$200, and dependents' benefits would be as follows:

(a) Wife or husband, 35 percent of average earnings, during widowhood.

(b) Children, if no surviving parent, 15 percent of average earnings to first child, and 10 percent to each additional child, under age 18, or incapable of self-support by reason of mental or physical disability.

(c) Children, if parent survives deceased, 10 percent of average earnings to each child, under age 18, or incapable of self-support by reason of mental or physical disability.

(d) Grandchildren, brothers, sisters, if there be no surviving wife or husband, or dependent children, or the amounts payable to them is less than $66\frac{2}{3}$ percent of average earnings, 15 percent of average earnings to each such person, under age 18, or incapable of self-support by reason of mental or physical disability.

(e) Parent, or grandparent, if there be no surviving wife or husband, or dependent children, or the amounts payable to them is less than $66\frac{2}{3}$ percent of average earnings, 25 percent of average earnings to each such person during period of dependency.

(f) The aggregate amount payable under (a), and (b) and (c) above, not to exceed $66\frac{2}{3}$ percent of average earnings; the aggregate amount payable under (d) and (e) above, not to exceed the difference between $66\frac{2}{3}$ percent of average earnings and the amount payable to surviving wife or dependent husband, or children.

Basis for benefit scale.—The benefit scale would be based upon the average monthly earnings of the seaman derived as follows: Total cash wage payments for the period of employment immediately preceding the disability (as reported by the shipowner), divided by the number of months in such period of employment. (These payments include all cash payments, such as basic wages, overtime, bonuses, and all other emoluments.) To this average monthly cash earnings, the monthly value of subsistence and lodgings (\$48 for officer and supervisory personnel, \$36 for other personnel) would be added. This formula would satisfy the Inter-

⁵ Section 8(c) reads as follows: "Permanent partial disability: In case of disability partial in character but permanent in quality, the compensation shall be $66\frac{2}{3}$ per centum of the average weekly wages, which shall be in addition to compensation for temporary total disability paid in accordance with subdivision (b) of this section, and shall be paid to the employee, as follows: (1) Arm lost, two hundred and eighty weeks' compensation. (2) Leg lost, two hundred and forty-eight weeks' compensation. (3) Hand lost, two hundred and twelve weeks' compensation. (4) Foot lost, one hundred and seventy-three weeks' compensation. (5) Eye lost, one hundred and forty weeks' compensation. (6) Thumb lost, fifty-one weeks' compensation, etc." (Comparable benefits provided for other anatomical losses, or physical disabilities).

departmental Committee's recommendation for benefits "computed on full-time wage base, together with the value of subsistence and lodgings and remuneration for overtime and bonuses."

Total benefit, or award.—This would be calculated according to the provisions of the Longshoremen's and Harbor Workers' Compensation Act, subject to the preceding modifications, and the waiving of the limitation of total benefits to \$7,500, imposed by the Longshoremen's and Harbor Workers' Compensation Act.⁶

PROBABLE AWARDS UNDER THE HYPOTHETICAL WORKMEN'S COMPENSATION LAW

The Interdepartmental Committee received from shipowners, 5,990 case reports involving claims closed or pending in 1938, which contained sufficient data to be evaluated under the hypothetical workmen's compensation law. These included 141 injury and disease cases involving neither permanent disabilities nor loss of time, and 37 cases still pending when the reports were filed with the Committee in the winter of 1940. Since the 141 cases would not have been compensable under the hypothetical workmen's compensation act and the actual settlements for the 37 pending cases was not yet known, the comparison between the actual settlements and the probable awards, undertaken in the present study, could be made in 5,812 cases. These cases include 156 cases for which no claims were actually made, or for which settlements were denied to the seaman or his representative, but which were nevertheless considered compensable under the hypothetical workmen's compensation law. In some of these cases, wages to the end of the voyage, or outpatient or convalescent maintenance allowances, or both, were paid by the shipowners.

When the benefits for each of the 5,812 cases are evaluated in accordance with the provisions outlined above, it is estimated that under a seaman's workmen's compensation law, incorporating the minimum standards recommended by the Interdepartmental Committee and applied in the manner indicated above, the total awards for these cases would have amounted to about \$2,197,800. The estimated probable awards for injury and disease cases of varying extents of disability are shown in table 12.

ACTUAL NET SETTLEMENTS AND PROBABLE AWARDS COMPARED

The total probable awards for the 5,812 cases under a workmen's compensation law incorporating the minimum standards recommended by the Interdepartmental Committee would have exceeded the total net settlements actually effected. As against a total for actual net settlements of \$1,637,300,⁷ the probable awards would have amounted to about \$2,197,800.

⁶ Longshoremen's and Harbor Workers' Compensation Act, as amended, sec. 14(m).

⁷ Actually, the gross settlements for the above cases amounted to \$1,977,195 or only \$220,615 less than the estimated probable awards. Thus, the awards would have amounted to only 10 percent more than the actual total paid by the shipowners. When an allowance is made for the employers' liability insurance premiums (that part of the protective and indemnity insurance applicable to personal injury coverage) shipowners' attorney fees, costs of operating a claims department, and other costs incident thereto, the actual outlay by employers undoubtedly exceeded not only the total probable awards, but probably also the other costs which would have been incurred. Had the claims reported been covered by a seaman's workmen's compensation law.

TABLE 12.—Probable Awards Under a Hypothetical Seamen's Workmen's Compensation Law, by Extent of Disability
[Cases reported closed in 1938]

Extent of disability	All cases			Injury cases		
	Number	Probable awards		Number	Probable awards	
		Total amount	Average per case		Total amount	Average per case
All extents	5,812	\$2,197,805	\$375.75	3,957	\$1,426,362	\$360.47
Fatal	139	735,744	5,293.12	71	454,667	6,403.76
Permanent total	21	225,053	10,716.81	9	69,736	7,748.44
Permanent partial	224	426,682	1,904.83	208	377,257	1,813.74
Temporary total	5,428	810,326	149.27	3,669	524,702	143.01

Extent of disability	Disease cases		
	Number	Probable awards	
		Total amount	Average per case
All extents	1,855	\$771,443	\$415.87
Fatal	68	281,077	4,133.48
Permanent total	12	155,317	12,943.08
Permanent partial	16	49,425	3,089.06
Temporary total	1,759	285,624	162.38

Settlement Amounts Versus Compensation Amounts

The cases involving fatalities and permanent total disabilities would have fared much better under the compensation system than those involving permanent partial or temporary total disabilities. Thus, while the former would have aggregated over \$670,000 more than they actually did, the latter would have aggregated almost \$109,500 less. This is shown in table 13.

TABLE 13.—Comparison of Probable Awards with Actual Net Recoveries, by Extent of Disability
[Cases reported closed in 1938]

Type and extent of disability	Number of cases	Probable award	Net recovery	Difference ¹		
				Total amount	Average per case	Percent
All extents	5,812	\$2,197,805	\$1,637,281	\$560,524	\$96.45	34.2
Injuries	3,957	1,426,362	1,326,067	100,295	25.35	7.6
Diseases	1,855	771,443	311,214	460,229	248.10	147.8
Fatal	139	735,744	216,987	518,757	3,732.06	239.1
Injury	71	454,667	199,121	255,546	3,599.24	127.8
Disease	68	281,077	17,866	263,211	3,870.75	1473.0
Permanent total	21	225,053	73,792	151,261	7,202.90	205.0
Injury	9	69,736	46,552	23,184	2,576.00	49.8
Disease	12	155,317	27,240	128,077	10,673.08	470.2
Permanent partial	224	426,682	437,437	-10,755	-48.01	-2.5
Injury	208	377,257	423,865	-46,608	-224.07	-11.0
Disease	16	49,425	13,572	35,853	2,240.80	264.2
Temporary total	5,428	810,326	909,065	-98,739	-18.19	-10.9
Injury	3,669	524,702	656,529	-131,827	-35.93	-20.1
Disease	1,759	285,624	282,536	33,088	18.81	13.1

¹ Unless indicated by (—) minus signs the differences indicate gains over the net recoveries.

Similarly, the advantages of the proposed system would have been far greater in disease cases than in injury cases. Moreover, all extent groups of disease cases, including the permanent partial and temporary total cases, would have experienced a gain under the proposed system.

In general, the pecuniary advantage of the proposed workmen's compensation system would have been in direct relation to the extent of the disability. The more serious the disability, the greater the advantage.

Cases Gaining Versus Cases Losing Under the Proposed System

Since the temporary total disability cases included over 93 percent of all cases compared, the above observation throws some doubt upon the pecuniary advantage of the workmen's compensation system over the existing employers' liability system. An analysis of the number and types of disability cases in which recoveries would have been greater, smaller, and equal under a workmen's compensation system than those actually effected under the existing system leads to the conclusion that almost half of the cases resulted in actual net recoveries that exceeded the probable awards. Only about 46 percent of the cases would have been better off under the proposed system, and less than 5 percent of them would have been just as well off.

TABLE 14.—*Cases Gaining Versus Cases Losing Under a Proposed Workmen's Compensation Law, by Extent of Disability*

[Cases reported closed in 1938]

Extent of disability	All cases	Cases in which workmen's compensation as compared with employers' liability would have resulted in—					
		Gain		Loss		Neither gain nor loss	
		Number	Percent	Number	Percent	Number	Percent
All cases	5,812	2,680	46.1	2,868	49.3	264	4.6
Injury	3,957	1,653	41.8	2,161	54.6	143	3.6
Disease	1,853	1,027	55.4	707	38.1	121	6.5
Fatal	139	129	92.8	10	7.2	0	0
Injury	71	61	85.9	10	13.1	0	0
Disease	68	68	100.0	0	0	0	0
Permanent total	21	21	100.0	0	0	0	0
Injury	9	9	100.0	0	0	0	0
Disease	12	12	100.0	0	0	0	0
Permanent partial	224	131	58.5	92	41.1	1	.4
Injury	208	115	55.3	92	44.0	1	.5
Disease	16	16	100.0	0	0	0	0
Temporary total	5,428	2,399	44.2	2,766	51.0	263	4.8
Injury	3,669	1,468	40.0	2,059	56.1	142	3.9
Disease	1,759	931	52.9	707	40.2	121	6.9

Cases Involving Disabilities of Different Extents

Only in fatal and permanent total disability cases would disabled seamen definitely have fared better under workmen's compensation. In permanent partial disability cases, on the other hand, as many as 41 percent would have fared worse. Of the temporary total cases, which comprised 93 percent of the cases studied, only 44 percent would have fared better, less than 5 percent as well, and 51 percent would have fared worse. Thus, the larger proportion of the temporarily disabled seamen actually recovered larger sums under the existing employers' liability system than they would have under the proposed workmen's compensation system. While this is especially true with regard to injured seamen, seamen disabled through disease would not have obtained much more under the proposed system than they actually recovered. Only 40 percent of the injury cases and not quite 53 percent of the disease cases would have been better off under the proposed system.

Another factor casting some doubt on the monetary advantage of the proposed workmen's compensation system over the existing employers' liability system is that when the cases are separated into those in which the proposed system would have resulted in a monetary gain over the existing system, and those in which a loss would have resulted, it is found that for permanent partial and temporary total cases (these include over 97 percent of all the cases compared) the average gain would have been substantially smaller than the average loss.

From a strictly financial point of view, therefore, the proposed system does not appear to be preferable to the existing system. While nearly half of the cases reported actually did fare better than they would have, over 45 percent of the cases did not.

Cases Settled Through Seamen's Attorneys

Seamen who employed attorneys were only slightly better off, after having paid their attorneys' fees, than they would have been under the proposed workmen's compensation system.⁸ About 50 percent of them netted more than they would have under the proposed system, and their actual net recoveries aggregated 50 percent more than the amounts which would have been awarded to them. While only 48 percent would have been awarded more than actually received, the amounts would have exceeded the settlements by 120 percent.

Comparing temporary total disability cases only, it is found that almost 54 percent of the seamen who employed attorneys⁹ recovered net settlements which were larger than the amounts which would have been awarded under the proposed system. The reverse would have been true for only 45 percent of these seamen. It is interesting to note that while the proportion of injured seamen, who were actually better off under the existing system than they would have been under the proposed system, was greater for those who employed attorneys than for those who did not; the proportion of seamen suffering from diseases who were actually better off under the existing system was smaller for those who employed attorneys than for those who did not.

COMPENSATION AND SETTLEMENT ITEMS COMPARED

The somewhat stronger position of the existing employers' liability system, as compared with the proposed workmen's compensation system, is due largely to relative weights given the items presently considered in arriving at the amount of settlement to be paid in each case.

Items Considered Under Each System

The proposed system would retain the seamen's traditional rights, but instead of negotiated or litigated indemnities for pain and suffering and for permanent physical impairments, a definite scale of compensation awards for lost time and for permanent physical impairments would be substituted. A comparison of the items considered under each system will, therefore, throw light on how they differ from each other.

⁸ This is not surprising since seamen who employed attorneys received on the average larger net settlements than those who did not. See *supra* (p. 39).

⁹ This group included 17 percent of the seamen temporarily disabled.

TABLE 15.—Comparison of Certain Provisions Under Both Liability and Compensation Systems

PRESENT MODIFIED EMPLOYERS' LIABILITY SYSTEM	PROPOSED WORKMEN'S COMPENSATION SYSTEM
<p>1. <i>Wages to the end of the voyage:</i> Full cash wages (exclusive of the value of subsistence and lodging) from the date disability begins to the date it ends, or the end of the round-trip voyage for which the seaman was engaged, which ever occurs first.</p>	<p>1. <i>Wages to the end of the voyage:</i> Same.</p>
<p>2. <i>Maintenance and cure:</i> (a) <i>Hospitalization.</i> No cash payment during this period. (b) <i>Out-patient and convalescence period.</i> Cash allowance at \$4 to \$4.50 per day for licensed and supervisory ratings, and \$2 to \$2.50 for others.</p>	<p>2. <i>Maintenance and cure:</i> (a) <i>Hospitalization:</i> Cash compensation for loss of time, at 66-2/3 percent of average daily earnings (including the value of subsistence and lodging). Minimum \$2 per day, maximum \$4 per day. (b) <i>Out-patient and convalescence period.</i> Same as above.</p>
<p>3. <i>Indemnity, negotiated or litigated:</i> Payable, regardless of extent of disability, if negligence of employer (or his representative) can be proven. None in cases of force majeure.</p>	<p>3. <i>Scheduled benefits:</i> Payable only in fatal and permanent disability cases, but regardless of negligence, or force majeure.</p>
<p>4. <i>Other costs:</i> Actual expenses incurred for funeral, artificial limbs, appliances, traveling expenses, hospitalization and medical care not furnished by U. S. Marine Hospitals, etc.</p>	<p>4. <i>Other costs:</i> Same.</p>

Values of Compensation and Settlement Items

The comparative monetary value of each of these items is set forth in table 16.

Wages, being payable for the same periods and at the same rates, would have identical values. Similarly "other costs" covering exactly the

TABLE 16.—Comparison of Average Actual Net Settlements in Reported Disability Cases Occurring in 1938, with Probable Award Under Proposed System, by Item

Status of cases under workmen's compensation	Total			Wages settlement or award ¹	Hospitalization award ²
	Number of cases	Settlement	Award		
All cases	5,458	\$263	\$359	\$28	\$31
Cases gaining	2,507	213	572	25	45
Cases losing	2,697	326	186	30	20
Cases neither gaining nor losing	254	82	82	37	3

Status of cases under workmen's compensation	Out-patient or convalescent		Indemnity or scheduled benefit		Other costs settlement, or award ¹
	Settlement	Award	Settlement	Award	
All cases	\$60	\$80	\$158	\$203	\$17
Cases gaining	69	100	105	385	18
Cases losing	59	66	222	53	16
Cases neither gaining nor losing	29	31	5	0	13

¹ These payments would be the same under each system.

² Under the present system no cash payment is made for the hospitalization period.

same items under each system would have the same value. The hospitalization period, however, is not compensable in cash under the existing system since this system requires simply that maintenance and cure be provided, and these are provided in most cases at United States Marine Hospitals at no cost to the shipowner or the seaman. In the few cases when these are provided in private hospitals they appear as "other costs" and are included under that heading.

The entire group of cases, as a group, would have averaged larger payments for the out-patient and convalescent period under the workmen's compensation system than they did under the existing system. On the other hand, the average of the scheduled benefits under the workmen's compensation system would have exceeded that of the indemnity payments under the existing system only in the cases which would have benefited under that system. The indemnities paid in these cases averaged less than half those paid in the cases in which the seamen would have lost under the proposed system. It must be pointed out, moreover, that in the cases which would have suffered under the proposed system the hospital benefits which would have been payable only under the workmen's compensation system would not have been large enough to offset the large indemnities paid.

Status of Temporary Total Disability Cases

Since the temporary total disabilities comprised the great proportion of all cases, and since less than 45 percent of them would have benefited under the proposed workmen's compensation system, a comparison of the average payments for each compensation and settlement item is enlightening.

TABLE 17.—Comparison of Average Actual Net Settlements in Reported Temporary Total Disability Cases Occurring in 1938, with Probable Awards Payable Under Proposed System, by Item

Status of cases under workmen's compensation	Total		Wages ¹	Hospitalization award ²	Out-patient or convalescent		Indemnity settlement only ³	Other costs ¹	
	Number of cases	Average			Settle-ment	Award			
		Settle-ment							Award
All cases	5,114	\$159	\$139	\$28	\$28	\$57	\$76	\$62	\$10
Cases gaining ..	2,255	104	167	25	40	62	95	10	7
Cases losing ...	2,605	215	126	30	19	66	64	116	13
Cases neither gaining nor losing	254	34	84	37	3	29	31	5	13

¹ These payments would be the same under each system.

² Under the present system no cash payment is made for the hospitalization period.

³ Payable under the existing system only. No scheduled benefit payable for temporary total cases under the proposed system.

The average probable award for the out-patient and convalescent periods in the temporary total disability cases, as in all cases, would have been greater than the average actual maintenance allowance, regardless of whether or not the cases would have fared better under the proposed system than they actually did. However, the indemnities payable in temporary total cases under the existing system could not be offset by scheduled benefits, since under the workmen's compensation system these would not have been payable in temporary total disability cases. These indemnities were considerably larger in the cases which would have lost under

the proposed system than in those which would have gained. Moreover, the average compensation for the hospitalization period (although payable under the proposed system and not payable under the existing system) would be relatively small. It is not surprising, therefore, that in over 50 percent of the temporary total disability cases, the proposed system would have resulted in compensation awards which would have been smaller than the actual net settlements effected under the modified employers' liability system.

Injury Cases Versus Disease Cases

That the payment of indemnities under the existing system is the factor making the settlements of seamen's disability cases more advantageous under the existing system than under the proposed workmen's compensation system becomes even more obvious when the comparison of the results under each system is made separately for the temporary total injury cases and for the temporary total disease cases. Since the payments for wages, and for "other costs" would be the same under each system, these items need not be considered. A comparison of the other significant compensable or settlement items is made in table 18.

TABLE 18.—Comparison of Average Net Settlements in Reported Temporary Total Disabling Injuries and Diseases Occurring in 1938, with Probable Awards Under Proposed System, by Item

Type of case and status of case under workmen's compensation	All items			Hospitalization (award only)	Out-patient and convalescent		Indemnity (settlement only)
	Number of cases	Settlement	Award		Settlement	Award	
All cases	5,114	\$159	\$139	\$28	\$57	\$76	\$62
Injury cases	3,436	172	138	22	64	80	72
Gaining	1,376	106	159	29	69	101	7
Losing	1,924	227	127	16	61	68	123
Neither	136	75	75	3	51	54	7
Disease cases	1,678	133	150	42	44	66	47
Gaining	879	102	182	59	50	86	15
Losing	681	181	120	26	42	52	97
Neither	118	90	90	2	3	4	3

The figures in table 18 show quite clearly that the indemnities in the cases which actually fared better under the existing system than they would have under the proposed system, were quite substantial and were several times the amount which would have been paid for the hospitalization period. In injury cases they averaged almost 8 times the probable hospital period compensation, and in disease cases almost 4 times. While in each group the average probable award for the maintenance and out-patient periods would have been greater than the average actual settlement for this period, the difference would have been relatively small.

Conclusion

The conclusion, therefore, is that the indemnity payable under the existing system—payable even in temporary total disease cases—is the settlement item which makes the existing system advantageous in dollars and cents. If a workmen's compensation law for seamen is to yield pecuniary benefits to individual seamen comparable to those payable under

the existing system, it must contain a benefit formula liberal enough to offset this item. The difference, obviously, lies in the fact that workmen's compensation is supposed to compensate for actual or anticipated wage loss, but not for pain and suffering—which is covered by the indemnity item under the existing settlement system.

Comparison of Different Categories of Cases

CASES ON VESSELS ENGAGED IN VARIOUS SERVICES

The conclusions reached with reference to all cases appear to apply regardless of the type of trade or type of vessel on which the disability occurred. Thus, except for the Great Lakes service, it is found that the proportion of the disabled seamen who would have gained under the proposed system would have been somewhat smaller than those who would not. Nevertheless, there are some differences. Table 19 shows the proportions of the cases occurring in each service which would have resulted in gains, losses, or neither under the proposed system.

TABLE 19.—Percent of Cases in Which Workmen's Compensation Would Have Resulted in Gain, Loss, or Neither Gain nor Loss, by Service of Vessel
[Seamen reported disabled in 1938]

Service	Number of cases	Average gain or loss	Percent of cases which would have resulted in—		
			Gain	Loss	Neither gain nor loss
All services	5,458	+ \$96	45.9	49.4	4.7
Coastwise	2,599	+ 66	46.7	50.1	3.2
Intercoastal	482	+ 113	31.8	59.3	8.9
Nearby foreign	405	+ 123	44.4	51.9	3.7
Overseas foreign ..	1,211	+ 90	46.7	45.9	7.4
Great Lakes	188	+ 196	54.8	42.6	2.7
Inland	593	+ 178	49.9	46.7	3.4

CASES ON VESSELS OF DIFFERENT TYPES

With the exception of the few cases which occurred on ferries, fishing vessels, tugs, and an unclassified group of vessels,¹⁰ the proportion of those which would have benefited financially under the proposed system were somewhat smaller than those which would have lost, regardless of the type of vessel on which the seamen were disabled. (See table 20.)

CASES INVOLVING SEAMEN OF DIFFERENT OCCUPATIONAL LEVELS

Classifying the seamen by major occupational groups, it is found that, with the exception of fishermen and a miscellaneous group which includes pursers, ships' surgeons, clerks, etc. (about 1 percent of the total) no occupational group would have fared definitely better financially under the proposed system than it did under the existing system. Certain groups, such as masters and chief engineers, would have fared much worse. As a group, members of the stewards' department would have fared somewhat better than those of other departments, and the members of the deck department would have been worse off than those of other departments.

¹⁰ These include only 4 cases.

TABLE 20.—Percent of Cases in Which Workmen's Compensation Would Have Resulted in Gain, Loss, or Neither Gain nor Loss, by Type of Vessel
 [Seamen reported disabled in 1938]

Type of vessel	Number of cases	Average gain or loss	Percent of cases which would have resulted in—		
			Gain	Loss	Neither gain nor loss
All types	5,458	+ \$96	45.9	49.4	4.7
Barge	107	+ 394	43.0	54.2	2.8
Ferry	78	+ 182	76.9	16.7	6.4
Fishing	38	+ 268	68.4	29.0	2.6
Freight	2,151	+ 121	44.0	50.0	6.0
Passenger	1,217	+ 11	42.5	52.2	5.3
Tanker	1,750	+ 81	47.5	49.8	2.7
Tug	113	+ 392	64.6	31.0	4.4
Unclassified	4	— 54	75.0	25.0	0

Except for the fishermen and the miscellaneous groups already mentioned, in only 5 of the other 18 occupational groups would more than 50 percent of the disabled seamen have fared better under the proposed system than they actually did, and in none of them would more than 59 percent have fared better. (See table 21.) It must be pointed out, however, that in each of the remaining 12 groups (excepting chief engineer) the proportion which would have benefited under the proposed system was significant, ranging from 32.6 to 49.8 percent.

TABLE 21.—Percent of Cases in Which Workmen's Compensation Would Have Resulted in a Gain, a Loss, or Neither Gain nor Loss, by Occupational Group
 [Seamen reported disabled in 1938]

Occupational group	Number of cases	Total average gain ¹	Percent of cases in which workmen's compensation would have resulted in—		
			Gain	Loss	Neither gain nor loss
All groups	5,458	\$96	45.9	49.4	4.7
Master	92	486	32.6	64.1	3.3
Deck department	2,217	71	44.3	51.6	4.1
Licensed officer	197	303	45.2	49.2	5.6
Petty officer	261	62	47.1	49.1	3.8
Able seaman	1,203	30	45.6	51.3	3.1
Ordinary seaman	527	77	39.1	55.0	5.9
Other	29	202	58.6	41.4	0
Engine department	1,808	89	46.3	48.9	4.8
Chief engineer	31	59	19.4	80.6	0
Other licensed officers	271	241	39.9	55.7	4.4
Petty officer	569	136	50.6	43.4	6.0
Fireman, etc.	486	29	49.8	46.9	3.3
Wiper	382	5	42.7	51.6	5.7
Other	69	15	43.5	53.6	2.9
Steward's department	1,341	117	47.5	46.7	5.8
Chief stewards	89	408	55.1	37.1	7.8
Other supervisory	47	212	57.5	31.9	10.6
Skilled ratings	295	188	55.9	39.3	4.8
Waiters, etc.	636	59	43.1	50.3	6.6
Other	184	41	42.9	54.4	2.7
Radio operator	24	501	41.7	50.0	8.3
Fisherman	28	45	89.3	10.7	0
Miscellaneous ²	38	11	63.1	31.6	5.3

¹ No average loss would have resulted for any one category.

² Includes pursers, ships' surgeons, clerks, etc.

Effects of Increasing the Compensation Rates

From the comparisons in the preceding pages it seems clear that the proposed workmen's compensation system does not offer the seamen as

a group, any distinct monetary advantage over the present modified employers' liability system. The probable awards under the proposed system, estimated for the cases compared, were computed on the basis of the compensation rate most commonly found in American workmen's compensation laws—66⅔ percent of the average earnings.¹¹

It may be suggested, however, that this compensation rate, although finding support in existing workmen's compensation legislation, is too low.¹² Indeed, it has been argued that a disabled individual's living expenses are no smaller than those of a perfectly healthy one and that the compensation rate should be at least equal to the full average earnings of the individual.¹³ What constitutes an equitable and just workmen's compensation rate is beyond the scope of this study. But, the comparison between actual settlements under the existing modified employers' liability system and probable awards under a workmen's compensation system especially designed for seamen would be more complete, if the probable awards were estimated on the bases of various alternative compensation rates. Accordingly, two additional estimates of probable awards, one using 75 percent of the average earnings, and the other using 80 percent of the average earnings, were made with a view to determining whether, and if so to what extent, those higher rates would make workmen's compensation more advantageous financially to the seamen than the existing system.

The comparisons made on the basis of a compensation rate of 66⅔ percent of average earnings make it clear that in a high proportion of the fatal and permanent disability cases the probable awards would have been greater than the actual settlements. Only about 44 percent of the temporary total disability cases, however, would have benefited under the proposed workmen's compensation system. It is only necessary, therefore, to test the additional compensation rates on the temporary total disability cases. The results are shown below in the percentage distribution of the 5,114 reported temporary total disability cases in which workmen's compensation would have resulted in gains, losses, or neither gains nor losses, by assumed compensation rate.

Compensation rates (assumed):	Percent of cases—		
	Gaining	Losing	Neither gaining nor losing
66⅔ percent of earnings.....	44.2	51.0	4.8
75 percent of earnings.....	50.0	45.8	4.2
80 percent of earnings.....	53.0	43.0	4.0

As is to be expected, the higher the compensation rate, the greater the proportion of cases which would have benefited under the hypothetical workmen's compensation system. The effect of the higher compensation rates, however, would have been small.

From a strictly pecuniary point of view, it appears that the proposed workmen's compensation system is likely to be of distinct advantage to only about half of the disabled seamen. In the aggregate, however, the awards which would be payable thereunder may be expected to be somewhat higher than the total of the net amounts recoverable by disabled

¹¹ See Problems of Workmen's Compensation Administration, Bureau of Labor Statistics Bulletin No. 672 (pp. 204-210).

¹² The Sixth Annual Conference on Labor Legislation held in 1939, recommended this rate as a "minimum." Senate Hearings on H. R. 6881, op. cit. (p. 56).

¹³ Idem (p. 282), Statement by Bjorne Halling, executive secretary, CIO Maritime Committee.

seamen under the existing modified employers' liability system. Moreover, the proposed system is definitely certain to benefit the more serious cases—i.e., the fatal and the permanent total disability cases. The foregoing analysis shows that in the majority of cases—i.e., the temporary total disability cases—barely half would benefit under the benefit formula of the proposed system. If it is recognized that the workmen's compensation system sets a minimum standard of adequacy, then it follows that under the existing system about half of the temporarily disabled seamen are not adequately protected. On the basis of the minimum standards recommended by the Interdepartmental Committee and applying the compensation rate most commonly found in American workmen's compensation laws—66⅔ percent of wages—it is estimated that over 44 percent of the temporarily disabled seamen are not adequately protected under the existing modified employers' liability system.

Appendix 1.—Scope and Method

Seamen Covered

This study deals with seamen employed on merchant vessels operating under the American flag. It includes the masters and all the members of the crews of such vessels, whether in the pay of the ship operators or of concessionaires; whether engaged in navigating the ship or in operating or servicing its mechanical equipment, serving other members of the crews or passengers, or performing other work.

The vessels whose personnels are included in this study are restricted to the so-called merchant types, i.e., combination passenger and freight vessels, dry-cargo vessels, tankers, ferries, tugs, and barges. Thus, military vessels of the United States Navy and Army are excluded. Similarly, such Government vessels as those of the United States Geodetic Survey, harbor-patrol boats, and fireboats, are also excluded. Except where specifically mentioned, fishing vessels are excluded because of the peculiar method of wage payment prevailing in that industry. Other types of excluded vessels are those engaged in special services such as cable-laying, dredging, pile-driving, elevator, icebreaking, pilot, welding, and wrecking. No exclusion was made on the basis of the trades or services in which the vessels were operating.

Period Covered

The period covered is the calendar year 1938.

The year 1938 was chosen because it was the last year during which merchant seamen, engaged in deep-sea shipping, sailed under peacetime conditions. Although the United States did not enter World War II until December 8, 1941, American shipping on the high seas was immediately interfered with when the war broke in Europe in September 1939.

Reports on Cases

COMPANY REPORTS

Ship operators were requested to submit a separate report for each case of injury, illness, or death, closed or pending in 1938. These reports, in addition to certain identifying and other information, called for the following pertinent data regarding—

(1) The vessel on which the injury, illness, or death occurred: (a) Type of ship, tonnage, and its destination; and (b) dates showing beginning and end of the voyage.

(2) The seaman involved: (a) His age and occupational rating; (b) monthly wage rate, the duration of employment with the responding shipowner during the 12 months immediately preceding the date of the injury, illness, or death, and the total earnings during such period; and (c) in case of death, the number and relationship of his dependents.

(3) The injury, illness, or death: (a) The date the injury or illness began, or the death occurred; (b) the nature of the injury or illness,

and extent of permanent physical impairment; and (c) date pronounced fit for duty.

(4) Hospitalization: (a) Name and address of hospital; and (b) date admitted, discharged; number of days in-patient, out-patient, and convalescent.

(5) The settlement: (a) The total amount, if any, and its component parts, i.e., wages, maintenance, indemnity, and other payments; (b) method of settlement, i.e., directly with the seaman, through seaman's attorney, court, insurance company; and if through seaman's attorney, the latter's name and address; and (c) date of settlement.

In addition to the case reports, ship operators were requested to submit a report giving the following basic information sought for the year 1938:

(1) The name of each ship under their control which had been active during the calendar year, or part thereof; (2) the average number of months these ships were active; (3) the total man-days of employment on all active vessels; and (4) the cost of handling the cases closed or pending.

ATTORNEY REPORTS

The seamen's attorneys whose names were obtained from the above case reports were requested to give, for each individual case handled by them such information as: (a) The amount of the gross settlement; (b) the attorney's fee; (c) the amount of other legal expense; and (d) the net amount finally recovered by the seaman.

HOSPITAL REPORTS

These were designed to supplement the shipowners' reports. In many cases, shipowners had been unable, from their records, to furnish such information as the nature and extent of the disability, the duration of the treatment; and the date the disabled was fit for duty. To obtain these vital data, a questionnaire requesting the missing information was sent to the hospital indicated on the case report, as having treated the seaman.

Scope of Survey

The scope of the Interdepartmental Committee's survey is revealed by the fact that the Committee received replies from 337 shipowners operating 2,769 vessels, and employing approximately 65,000 merchant seamen. Case reports involving 7,434 seamen were filed by 262 of the 337 shipowners. The other 75 shipowners informed the Committee that they had had no cases closed or pending in 1938. Reports on 433 cases, 373 of which contained adequate data, were received from seamen's attorneys.¹

Incidence of Injuries and Diseases

The statistical treatment of this subject involved four broad steps: (1) The development of an estimate of the labor force involved, so as to obtain some measure of the number of individuals affected; (2) the development of a measure of the exposure to injuries and diseases; (3) the development of injury and illness frequency rates; and (4) the application of these rates to the exposure.

¹ Interdepartmental Committee, op. cit. (pp. 31, 32).

Estimate of Maritime Labor Force

The maritime labor force is divided into two groups: (1) Merchant seamen aboard active vessels, and (2) merchant seamen ashore between voyages.

The number of seamen a ship carries may vary with (a) its type, (b) method of propulsion, (c) size, and (d) trade or service. In the case of passenger vessels, the number of passengers carried is another factor. The total number of seamen on active vessels is therefore the product of the number of vessels active and the above factors. For the purpose of the present estimate it is convenient to divide the active labor force into seamen on vessels operating on (1) the deep sea, (2) the Great Lakes, and (3) inland waters other than the Great Lakes.

EMPLOYMENT ON ACTIVE DEEP-SEA VESSELS

This consists largely of merchant seamen employed on board steam and motor merchant vessels of 1,000 gross tons and over, operated in the coastwise, intercoastal, and foreign trades. They are essentially of the following types: Combination passenger and freight, dry cargo, and tanker.

The United States Maritime Commission's series of estimates of employment on active vessels in this segment of the industry, for the period from January 1936 through the first 9 months of 1939,² were as follows:

*Estimated Average Monthly Employment of Merchant Seamen on Active United States Flag, Deep-sea Merchant Vessels of 1,000 Gross Tons and Over, by Trade and by Year*¹

Year	Total	Foreign	Intercoastal	Coastwise
1936	53,000	22,900	5,800	24,300
1937	57,200	24,100	7,400	25,700
1938	50,900	20,600	5,700	24,600
1939 ²	52,600	20,300	6,900	25,400

¹ Source: United States Maritime Commission, Division of Economics and Statistics. Includes only steam and motor vessels of the following types: Combination passenger and freight vessels, dry cargo, and tanker.

² First 9 months only.

The average for the period prior to the beginning of the present war is therefore estimated at about 53,500.

In addition, an allowance must be made for the employment on vessels other than steam and motor combination passenger and freight, dry-cargo, and tanker vessels, and on vessels under 1,000 gross tons. This employment can be estimated by referring to the Vessel Personnel Survey, 1938, by the U. S. Maritime Commission. This survey, which covered about 74 percent of the vessels in this service, indicates that approximately 2,400 seamen were employed on July 15, 1938, on the vessels reported. Adjusting this figure to include all the vessels in this group the average prewar employment on all active deep-sea vessels other than steam and motor combination passenger and freight, dry-cargo, and tanker vessels of 1,000 gross tons and over, may be estimated at approximately 3,200 seamen.

The total average monthly employment on all active American-flag deep-sea merchant vessels may therefore be estimated at 56,700 merchant seamen.

² Ending, therefore, with the month when World War II started.

EMPLOYMENT ON ACTIVE GREAT LAKES VESSELS

The U. S. Maritime Commission's series of estimates of employment on active steam and motor combination passenger and freight, dry-cargo, and tanker vessels of 1,000 gross tons and over operating on the Great Lakes show wide variations in the volume of employment from year to year. For the period 1936-39, inclusive, the average monthly employment on these vessels during the 8-month Great Lakes navigation season was estimated to be 11,300 in 1936, 13,300 in 1937, 7,500 in 1938, and 11,300 in 1939. The average for the four seasons may therefore be estimated at 11,000 monthly.

To this number must be added the employment on vessels other than those of the three types listed above and on vessels under 1,000 gross tons. For these vessels, the Vessel Personnel Survey, 1938, which covered about 60 percent of the Great Lakes tonnage, shows the reported employment for July 15, 1938, to have been approximately 2,650 seamen. Raising this figure to include all such vessels, the employment for this segment of the Great Lakes fleet may therefore be estimated at 4,500 seamen. The total average monthly employment for the 8-month season is therefore estimated at 15,500. While some employment exists during the winter months, such may be disregarded, since it is relatively small, very irregular, and is made up of individuals included in the above figures.

EMPLOYMENT ON ACTIVE INLAND VESSELS

The only data available on employment on vessels operated in the inland service are those assembled in the U. S. Maritime Commission's Vessel Personnel Survey, 1938. No similar survey was ever made for any other period and in view of the fact that the year 1938 was not one of average activity on inland waters, these data must be used carefully. In that survey approximately 27,600 merchant seamen were reported as employed on July 15, 1938, on combination passenger and freight vessels, dry-cargo vessels, tankers, tugs, ferries, and barges operated on inland waters other than the Great Lakes. Since the coverage of the survey did not exceed 80 percent of the tonnage in this service, the total employment on that date may have been around 34,500. The month of July, however, tends to be the month of peak employment in this service, and although no study has ever been made of monthly fluctuation of employment on the inland waters, if the monthly employment pattern of the Great Lakes service is used as a guide, it may be estimated that the average monthly employment was around 30,000 merchant seamen.

ESTIMATES OF TOTAL LABOR FORCE

So far, the above estimates deal with employment on active vessels, that is, the average number of jobs in the industry. Because of the nature of the industry, few seamen are continuously employed on their vessels throughout the year. As a rule, a vessel's stay in port is of very short duration—so short that it allows the seaman very little time to spend with his family, especially if his family does not reside in the port where the vessel is docked, or to attend to his personal affairs ashore. This condition compels many seamen to leave their ships at the end of a voyage and to seek employment on other ships when they have taken care of their personal affairs, or when their visits with their families are completed. This characteristic of the industry requires that the labor force

be at least large enough to allow for a shore reserve to furnish replacements for seamen leaving their ships at the end of their voyages. While no comprehensive study of the size of this shore reserve under peacetime conditions has been made, the Interdepartmental Committee was informed by representatives of the shipowners and of seamen's unions that for the deep-sea labor force the average period of employment was as follows: For unlicensed seamen, approximately 7½ months per year; and for licensed officers, approximately 11 months per year.³ This averages approximately 8½ months for the entire crew.

Information obtained by the U. S. Maritime Commission from the Lake Carriers' Association indicates that for Great Lakes operations the shore reserve required during the navigation season is relatively small. A bonus is paid at the end of the season to seamen who have served throughout the period. As a result, licensed officers tend to serve for the full season, and only 10 percent of the unlicensed personnel fail to do so.⁴

Little is known with respect to the shore reserve requirement of vessels in inland services. Because of the short duration of the voyages in these services, and the fact that the seamen employed therein tend to live at or near their vessels' terminal ports, only a small shore reserve may be sufficient, probably about 15 percent.

Applying the above factors, to the employment estimates for active vessels developed in the preceding pages, a total shore reserve of approximately 30,000 seamen may be required. The total labor force is, therefore, estimated at about 132,300 merchant seamen.

Exposure to Occupational Accidents and Illnesses

The best method of arriving at an estimate of the number of disability cases which occurred during a given period in any industry is that of applying the disability-frequency rate for the period, in the industry concerned, to the exposure to occupational accidents and illnesses in the industry. As a rule the frequency rate is expressed in terms of number of cases per 1,000,000 man-hours of exposure. As already explained in the body of this report, it is not practical to measure employment on board merchant vessels in terms of 1,000,000 man-hours, but rather in terms of 100,000 man-days of employment.

From the Interdepartmental Committee's Form No. 2, the number of man-days of employment reported were classified by type, size, and trade of vessels operated. For example, for deep-sea vessels of 1,000 gross tons and over, the man-days of employment reported were as follows:

	<i>Man-days</i>
All types of vessels	13,307,150
Barge	6,000
Ferry	12,600
Dry cargo	6,729,300
Combination passenger and freight	3,877,650
Tanker	2,662,400
Tug	19,200

³ Interdepartmental Committee, op. cit. (p. 32).

⁴ Unemployment Insurance for Merchant Seamen, Hearings on Committee Prints 1 and 3, before the Committee on Merchant Marine and Fisheries, House of Representatives (78th Cong., 1st sess.), June 24, 1943 (p. 303).

The total number of man-days of employment in the various segments of the industry was estimated by raising the number of man-days reported, for each segment, by factors representing, for each segment, the ratio of the number of vessels involved in the cases reported to the Interdepartmental Committee to the total number of active vessels as estimated from the Vessel Personnel Survey of 1938 and Merchant Marine Statistics. Accordingly, the number of man-days of employment on active deep-sea vessels of 1,000 gross tons and over, active in 1938, was estimated to be as follows:

	<i>Man-days</i>
All types of vessels	<u>18,639,300</u>
Barge	109,200
Ferry	25,200
Dry cargo	8,936,600
Combination passenger and freight	4,684,800
Tanker	4,845,100
Tug	38,400

FREQUENCY RATES

Frequency rates were developed separately for injuries and illnesses, by extent of resulting disability, for each segment of the industry in accordance with the following procedure.

From the Interdepartmental Committee Form No. 1, the cases reported were classified by extent of disability resulting, and by type, size, and trade of the vessel on which they occurred. For example, the number of injury cases reported to have occurred in 1938, on deep-sea dry-cargo vessels of 1,000 gross tons and over, by extent of disability was as follows:

	<i>Number of cases</i>
Extent of disability: Total	<u>1,429</u>
Fatal	19
Permanent total	5
Permanent partial	64
Temporary total	1,341

The number of cases reported for each class of vessels was divided by the man-days, expressed in 100,000's, of employment reported for each class of vessel. The results were the frequency rates for each class of vessels. Thus, the estimated injury-frequency rates for deep-sea dry-cargo vessels of 1,000 gross tons and over were calculated, by extent of disability as follows:

Extent of disability	(1) Man-days of employment (in 100,000's)	(2) Number of cases	(3) Estimated frequency rate (col. 2 ÷ col. 1)
Total	67.3	1,429	21.22
Fatal	67.3	19	.28
Permanent total	67.3	5	.07
Permanent partial	67.3	64	.95
Temporary total	67.3	1,341	19.92

ESTIMATE OF NUMBER OF CASES

As already indicated, the number of cases which occurred in 1938 is merely the product of the man-days of employment and the frequency

rate. For example, for deep-sea dry-cargo vessels of 1,000 gross tons and over, the estimated number of injuries in 1938 was calculated, by extent of disability as shown below:

Extent of disability	(1) Estimated man-days of employment (in 100,000's)	(2) Estimated frequency rate	(3) Estimated number of cases (col. 1 X col. 2)
Total	89.4	21.22	1,897
Fatal	89.4	.28	25
Permanent total	89.4	.07	6
Permanent partial	89.4	.95	85
Temporary total	89.4	19.92	1,781

Net Recoveries Under Existing System and Probable Awards Under Proposed System

In order to compare the pecuniary value of the existing modified employers' liability system with that of the proposed workmen's compensation system, it was necessary to ascertain for each case (1) the net amount actually received by the seaman, or his dependents in case of his death, and (2) the amount the beneficiary would have received under the proposed system.

NET AMOUNTS ACTUALLY RECEIVED BY SEAMEN, OR THEIR DEPENDENTS

On Interdepartmental Committee Form No. 1, shipowners were requested to report for each disability case the amount of the settlement reached with the seaman, or his dependents, in the following detail: (a) Wages to the end of the voyage, (b) maintenance and cure, (c) indemnity, (d) other costs, and (e) the total amount. In many cases shipowners reported only the total amounts paid. In other cases they failed to report the amounts paid altogether. For the purpose of comparing the existing system with the proposed system the latter group had to be set aside. Those reports in which only the total settlements were shown were edited in accordance with the suggestion given by the shipowners to the Interdepartmental Committee, that in each case the wages paid and the maintenance allowances payable could be computed on the basis of the data contained in the case report on dates the disability occurred, the voyage ended, between which the seaman was hospitalized, and on which he was declared fit for duty. Following this procedure, it was therefore assumed that (a) any amount in excess of wages would consist of maintenance allowances, indemnity, and other costs; and (b) any amount in excess of wages plus maintenance and other costs would constitute the amount of the indemnity.

As already indicated, each case report showed whether or not an attorney was used by the merchant seaman, or his dependents, to negotiate the settlement. The shipowners were further requested to report the names and addresses of such attorneys. The attorneys involved were requested by the Interdepartmental Committee to submit data relative to the amounts of the fees and other costs charged with respect to each case handled. For a large number of these cases, it was therefore possible to obtain the actual attorneys' fees and other legal costs. For the cases for which such information was not available, estimates of attorneys' fees

and other legal costs were made by applying to the gross settlements, in each case, the appropriate average attorney fee and other legal costs developed from an analysis of such costs for the 373 cases reported by the attorneys. The proportion that average attorney fees and other legal costs formed of gross settlements in the 373 reported cases follows:

Gross settlements of—	Average attorney fees and other costs (percent of gross settlement)
\$100 and under	37
\$101-\$300	37
\$301-\$500	39
\$501-\$1,000	36
\$1,001-\$2,000	35
\$2,001-\$3,000	37
\$3,001-\$5,000	35
\$5,001-\$10,000	33
Over \$10,000	20

PROBABLE AWARDS UNDER THE PROPOSED WORKMEN'S COMPENSATION SYSTEM

For each case report (Interdepartmental Committee Form No. 1 on which the amount of settlement was reported), the probable award was evaluated in accordance with the benefit formula of the proposed system⁵ in the following detail: (1) Wages to the end of the voyage; (2) workmen's compensation for (a) the hospitalization period, (b) the out-patient and convalescent period for which maintenance allowances were payable under the existing system, and (c) for permanent physical impairments and fatalities; and (3) other costs.

Wages to the End of the Voyage

This amount was computed as the product of the monthly basic wage rate reported, and the period from the date disability began to the date the voyage for which the seaman was engaged was terminated.

Compensation for the Hospitalization Period

Before estimating this amount, it was necessary to establish the benefit rate. This rate was established in accordance with the recommendation of the Interdepartmental Committee as follows:

Basis for benefit rate.—The interdepartmental Committee recommended that the benefits be "computed on a full-time wage base together with the value of subsistence and lodging and remuneration for overtime and bonuses." The basis for the benefit rate was computed, therefore, by dividing the total cash amount reported as earned during the period of employment immediately preceding the disability by the duration of that period, in months. To this amount was added the monthly value of subsistence and lodging established for the purpose of taxation under the Social Security Act as \$48 for licensed officers and supervisory personnel, and \$36 for all other members of the crew.

Benefit rates.—The Interdepartmental Committee recommended that the benefit rates be "at least equal to those provided under the Longshoremen's and Harbor Workers' Compensation Act, but without limitation of the total benefits payable for death or disability" and that the benefits "during period of out-patient treatment and convalescence" be "not less than the maintenance to which the injured seaman is entitled during a period of temporary disability."⁵ This benefit formula was used

⁵ As recommended by the Interdepartmental Committee op. cit. (p. 8).

for the hospitalization period as well as for the out-patient and convalescence period.

The Longshoremen's and Harbor Workers' Compensation Act specifies that the benefit during disability shall be $66\frac{2}{3}$ percent (section 8) of the average weekly wages, but not less than \$8, nor more than \$25 per week (section 6). In this study, the benefit rate used was $66\frac{2}{3}$ percent of the monthly wage as computed above. The Interdepartmental Committee recommended that the benefit rate shall be not less than the maintenance allowance paid under the existing system. In 1938, these were usually from \$4 to \$4.50 per day for licensed and supervisory personnel, and from \$2 to \$2.50 per day for other personnel. The minimum benefit rate used in this study, therefore, was \$4 per day for licensed and supervisory personnel and \$2 per day for other personnel; the maximum benefit rate used was \$4 per day.

The compensation was calculated at the above rate, without waiting period, for that part of the hospitalization period following the period for which full wages were paid.

Compensation for Out-Patient and Convalescence Period

For this period the same benefit rate as that applied to the hospitalization period was used. Compensation was computed for the entire period reported, without waiting period, except that if the period to the end of the voyage extended into the out-patient and convalescence period, the benefit was computed for the period beginning after the end of the voyage.

Compensation for Permanent Physical Impairments

The benefits for permanent physical impairments were also computed at the same rate as for the hospitalization, and out-patient and convalescence periods. In accordance with the provisions of the Longshoremen's and Harbor Workers' Compensation Act, as modified by the recommendations of the Interdepartmental Committee, the benefit for permanent total disability was computed for the full life expectancy of the disabled seaman, based on his age as reported on Interdepartmental Committee Form No. 1 and a table of life expectancy of disabled persons prepared by the U. S. Employees' Compensation Commission. The present-day value of such benefit was calculated by discounting it at the rate of 4 percent per annum.

For permanent partial disability, the benefit was computed for the number of benefit weeks specified in the Longshoremen's and Harbor Workers' Compensation Act for the particular disablement (section 8(c)). After adjusting for mortality experience the present-day value of such benefit was calculated by applying the discount rate of 4 percent per annum.

Compensation for Death

The benefits payable to surviving dependents of the deceased were calculated at the rates specified in the Longshoremen's and Harbor Workers' Compensation Act (section 9), except that the amounts stated therein as the maximum and minimum weekly wages to be used in computing the benefits were raised from \$37.50 to \$42 and from \$12 to \$21, respectively. In deciding upon these figures, it was recalled that the act provides that the maximum and minimum weekly disability benefits shall be \$25 and \$8, respectively, and that the benefit rate shall be $66\frac{2}{3}$ per-

cent of the individual's weekly wage. These maximum and minimum benefits are therefore equivalent to $66\frac{2}{3}$ percent of the maximum and minimum wages assumed in the act. The maximum and minimum weekly benefits assumed in the hypothetical workmen's compensation law and used in the present study are \$28 and \$14, respectively. These amounts represent $66\frac{2}{3}$ percent of the \$42 and \$21 stipulated above as the maximum and minimum wages assumed for the purpose of calculating the death benefits.

Similar to benefits for permanent physical impairments, the total benefit was derived by multiplying the monthly benefit by the life expectancy of the dependent. The life expectancy was determined by referring to the American Experience Mortality Table. No correction was made for the remarriage rate of widows. To arrive at the present-day value of the death benefit, the total amount was discounted at the rate of 4 percent per annum.

In fatal cases in which a period of disability preceded the death, such disability period was considered to be temporary total disability, and benefits were computed accordingly. The dependents' benefits were allowed in addition.

Other Costs

The amount allowed for "other costs" was the identical amount reported in Interdepartmental Committee Form No. 1, except that for death cases, when no amount was reported for funeral expenses or when the amount reported was less than \$200, \$200 was allowed.

Total Benefits

For disability cases, the total benefits finally allowed were the sums of (1) wages to the end of the voyage; (2) the compensation for (a) hospitalization, (b) out-patient and convalescence periods, and (c) for permanent physical impairments; and (3) other costs.

For death benefits, the total benefits allowed were the sums of (1) the disability benefits, (2) the dependents' benefits, and (3) other costs.

In accordance with the recommendations of the Interdepartmental Committee, no limitation was placed upon the totals of these benefits.

COMPARISON

For each case reported comparisons were made between each settlement item and each corresponding compensation item, as well as between the total net settlement and the total probable award.

Appendix 2.—Detailed Tables

The detailed tables in this section are based on the shipowners' reports of seamen's occupational injuries and diseases to the Interdepartmental Committee to Study Workmen's Compensation for Seamen.

TABLE A.—Percentage Distribution of Reported Seamen's Temporary Total Disability Cases, by Duration, 1938¹

Duration	All cases ¹		Injuries		Diseases	
	Percent of total	Cumulative percent	Percent of total	Cumulative percent	Percent of total	Cumulative percent
Under 4 days	1.9	1.9	2.1	2.1	1.6	1.6
4 and less than 7 days	2.7	4.6	2.4	4.5	3.2	4.8
7 and less than 14 days	11.9	16.5	11.9	16.4	11.8	16.6
14 and less than 30 days	28.7	45.2	27.9	44.3	30.5	47.1
30 and less than 60 days	30.1	75.3	29.5	73.8	31.6	78.7
60 and less than 90 days	13.6	88.9	15.2	89.0	10.3	89.0
90 and less than 120 days	5.0	93.9	5.1	94.1	4.7	93.7
120 and less than 150 days	2.3	96.2	2.4	96.5	2.2	95.9
150 and less than 180 days	1.1	97.3	1.1	97.6	1.0	96.9
180 and less than 210 days .....	.6	97.9	.5	98.1	.7	97.6
210 and less than 240 days .....	.4	98.3	.4	98.5	.4	98.0
240 and less than 270 days .....	.3	98.6	.2	98.7	.5	98.5
270 and less than 300 days .....	.2	98.8	.2	98.9	.1	98.6
300 and less than 330 days .....	.2	99.0	.2	99.1	.2	98.8
330 and less than 365 days .....	.1	99.1	(2)	99.1	.2	99.0
1 year and over .....	.9	100.0	.9	100.0	1.0	100.0
Total	100.0	.....	100.0	.....	100.0	.....

¹ Includes 5,121 cases—3,443 injuries, and 1,678 diseases—occurring in 1938.

² Less than a tenth of 1 percent.

TABLE B.—Percentage Distribution of 3,690 Reported Injury Cases, by Nature and Extent, 1938

Nature of injury	All injury cases	Fatal	Permanent			Temporary total
			All cases	Total	Partial	
Amputations	1.5	0	29.3	12.5	29.9	0
Burns and scalds	7.0	1.5	1.0	0	1.1	7.0
Cuts, lacerations, punctures, sprains, and bruises	14.4	5.9	11.9	0	12.4	14.7
Strains, sprains, and bruises	48.5	10.4	14.6	25.0	14.1	51.7
Fractures and dislocations	13.9	8.8	41.7	62.5	40.8	12.5
Hernia	10.3	2.9	0	0	0	0
Drowning .....	.9	48.5	0	0	0	0
Concussions	2.0	10.3	1.0	0	1.1	1.8
Not elsewhere classified and unknown	1.5	11.7	.5	0	.6	12.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE C.—Number of Reported Disability Cases, by Occupational Group and Extent of Disability, 1938

Occupational group	All cases			Fatalities			Permanent total disability			Permanent partial disability			Temporary total disability		
	Total	Injury	Disease	Total	Injury	Disease	Total	Injury	Disease	Total	Injury	Disease	Total	Injury	Disease
All groups	6,009	4,131	1,878	134	64	69	19	9	10	191	178	13	5,665	3,880	1,785
Deck department	2,563	1,848	715	67	44	23	14	8	6	104	95	9	2,378	1,701	677
Master	93	37	56	6	4	2	2	0	2	7	5	2	78	28	50
Other licensed officer	209	91	118	15	9	6	1	0	1	5	5	0	188	77	111
Petty officer	286	211	75	8	4	4	1	1	0	12	12	0	265	194	71
Able seaman, etc.	1,355	1,032	323	25	15	10	8	6	2	61	56	5	1,261	955	306
Ordinary seamen, etc.	586	447	139	12	11	1	2	1	1	18	17	1	554	418	136
Miscellaneous	34	30	4	1	1	0	0	0	0	1	0	1	32	29	3
Engine department	1,979	1,303	676	34	12	22	2	0	2	39	36	3	1,904	1,255	649
Chief engineer	32	17	15	2	0	2	0	0	0	0	0	0	30	17	13
Other licensed engineer	295	157	138	9	3	6	0	0	0	6	6	0	280	148	132
Petty officer	624	407	217	14	4	10	2	0	2	21	19	2	587	384	203
Qualified members	540	380	160	7	4	3	0	0	0	6	5	1	527	371	156
Wipers, etc.	416	298	118	2	1	1	0	0	0	5	5	0	409	292	117
Miscellaneous	72	44	28	0	0	0	0	0	0	1	1	0	71	43	28
Steward department	1,368	927	441	30	8	22	3	1	2	43	42	1	1,292	876	416
Chief steward	98	55	43	4	0	4	1	1	0	3	3	0	90	51	39
Other supervisory ratings	53	34	19	3	0	3	0	0	0	1	1	0	49	33	16
Skilled ratings	320	213	107	8	5	3	1	0	1	12	11	1	299	197	102
Messman, waiter, etc.	693	483	210	13	2	11	1	0	1	18	18	0	661	463	198
Other steward	204	142	62	2	1	1	0	0	0	9	9	0	193	132	61
Pursers and clerk	9	3	6	0	0	0	0	0	0	0	0	0	9	3	6
Radio operator	27	13	14	2	0	2	0	0	0	0	0	0	25	13	12
Surgeon	2	0	2	0	0	0	0	0	0	0	0	0	2	0	2
Fisherman	30	18	12	0	0	0	0	0	0	1	1	0	29	17	12
Other	31	19	12	1	0	1	0	0	0	4	4	0	26	15	11

TABLE D.—Percentage Distribution of Reported Seamen's Disability Cases, by Period and by Trade of Vessels, 1938

Trade	Number of cases	Percent of cases, by periods ¹			
		All periods	To end of voyage	Hospitalization	Out-patient and convalescence
All trades	5,458	100.0	64.5	33.4	82.3
Injury cases	3,690	100.0	66.0	27.6	85.9
Disease cases	1,768	100.0	61.4	45.7	74.7
Overseas foreign	1,210	100.0	81.6	30.1	79.0
Injury cases	801	100.0	81.7	26.4	87.7
Disease cases	409	100.0	81.4	37.7	62.1
Intercoastal	482	100.0	86.5	23.2	54.2
Injury cases	330	100.0	85.8	22.4	63.3
Disease cases	152	100.0	88.1	24.3	34.2
Coastwise	2,579	100.0	65.9	34.8	86.7
Injury cases	1,767	100.0	67.2	27.8	88.5
Disease cases	812	100.0	62.9	50.1	82.8
Nearby foreign	405	100.0	76.5	35.5	90.4
Injury cases	299	100.0	76.6	22.1	93.6
Disease cases	106	100.0	76.4	52.8	81.1
Great Lakes	189	100.0	20.6	34.9	81.0
Injury cases	170	100.0	21.2	32.3	83.5
Disease cases	19	100.0	15.8	57.9	57.9
Inland	593	100.0	12.0	40.6	87.7
Injury cases	323	100.0	14.2	31.0	84.5
Disease cases	270	100.0	9.3	32.2	91.5

¹ The percentage of cases shown for each period are not additive, because seamen may be disabled for one or more of the above periods.

TABLE E.—Average Duration of Reported Seamen's Disability Cases, by Period of Disability and by Extent of Disability, 1938

Extent of disability	All periods ¹		To end of voyage		Hospitalization		Out-patient and convalescence	
	Number of cases	Average duration days	Number of cases	Average duration days	Number of cases	Average duration days	Number of cases	Average duration days
All extents	5,458	48.6	3,523	16.2	1,826	33.0	4,492	33.2
Injury cases	3,690	48.4	2,437	15.1	1,018	31.5	3,171	34.5
Disease cases	1,768	49.7	1,086	18.6	808	34.9	1,321	29.9
Fatal	130	33.4	34	12.5	28	90.4	16	86.8
Injury cases	63	12.0	4	12.5	8	75.5	4	24.8
Disease cases	67	53.6	30	12.5	20	96.4	12	107.5
Permanent total ..	18	178.1	12	43.8	11	145.5	9	119.9
Injury cases	8	104.6	5	37.4	5	36.4	3	156.0
Disease cases	10	236.8	7	48.3	6	236.5	6	101.8
Permanent partial ..	189	119.7	140	21.2	94	70.4	154	84.7
Injury cases	176	111.6	128	21.4	84	68.5	143	78.0
Disease cases	13	229.6	12	19.8	10	85.9	11	171.6
Temporary total ..	5,121	46.1	3,337	15.9	1,693	29.2	4,313	30.9
Injury cases	3,443	45.7	2,300	14.8	921	27.7	3,021	32.4
Disease cases	1,678	47.0	1,037	18.6	772	31.0	1,292	27.6

¹ The number of cases shown for each period are not additive, because seamen may be disabled for one or more periods.

TABLE F.—Average Duration of Reported Seamen's Disability Cases, by Period of Disability and by Trade of Vessel, 1938

Trade	All periods ¹		To end of voyage		Hospitalization		Out-patient and convalescence	
	Number of cases	Average duration days	Number of cases	Average duration days	Number of cases	Average duration days	Number of cases	Average duration days
All trades	5,458	48.8	2,523	16.2	1,826	33.0	4,492	33.2
Injury cases	3,690	48.4	2,437	15.1	1,018	31.5	3,171	34.5
Disease cases	1,768	49.7	1,086	18.6	808	34.9	1,321	29.9
Coastwise	2,579	46.2	1,699	9.4	898	34.2	2,236	32.3
Injury cases	1,767	45.3	1,188	9.2	489	33.3	1,564	33.7
Disease cases	812	48.0	511	9.9	409	35.2	672	29.1
Intercostal	482	48.2	417	26.8	111	27.9	261	34.3
Injury cases	330	52.1	283	27.4	74	24.2	209	36.5
Disease cases	152	39.8	134	25.6	37	35.1	52	25.4
Nearby foreign ...	405	41.6	310	10.0	144	32.0	366	25.0
Injury cases	299	41.8	229	9.1	88	34.6	280	26.3
Disease cases	106	41.1	81	12.6	56	28.0	86	20.6
Overseas foreign ..	1,210	62.1	987	26.2	366	35.1	956	38.1
Injury cases	801	60.2	655	23.7	212	29.5	703	37.6
Disease cases	409	65.9	332	31.2	154	42.8	253	39.6
Great Lakes	189	45.8	39	4.9	66	31.6	153	41.7
Injury cases	170	47.4	36	4.8	55	34.5	142	42.2
Disease cases	19	31.0	3	5.7	11	17.1	11	34.9
Inland	593	39.3	71	9.5	241	28.7	520	30.2
Injury cases	323	38.4	46	7.9	100	27.7	273	33.9
Disease cases	270	40.3	25	12.3	141	29.3	247	26.1

¹ The number of cases shown for each period are not additive, because seamen may be disabled for one or more of the above periods.

TABLE G.—Distribution of Reported Seamen's Disability Cases, by Payment Lag and Method of Settlement [Cases occurring in 1938]

Payment lag	All cases			Cases settled directly with seamen		
	Number	Percent—		Number	Percent—	
		Of total	Cumulative		Of total	Cumulative
Less than 3 months	3,996	74.3	74.3	3,699	83.1	83.1
3 and less than 6 months	638	11.9	86.2	436	9.8	93.9
6 and less than 9 months	206	3.8	90.0	89	2.0	95.9
9 and less than 12 months	145	2.7	92.7	31	.7	95.6
12 and less than 18 months	122	2.3	95.0	22	.5	96.1
18 and less than 24 months	46	0.7	95.7	13	.3	96.4
24 and less than 36 months	27	0.7	96.4	4	.1	96.5
Unknown duration	167	3.1	99.5	151	3.4	99.9
Pending	29	0.5	100.0	6	0.1	100.0
Total	5,377	100.0	.....	4,451	100.0	.....
Payment lag	Cases settled through attorney—					
	Number	Without court action		With court action		
		Of total	Cumulative	Number	Percent—	Cumulative
Less than 3 months	281	35.2	35.2	16	12.3	12.3
3 and less than 6 months	183	23.1	58.3	19	14.6	26.9
6 and less than 9 months	103	12.9	71.2	14	10.8	37.7
9 and less than 12 months	97	12.2	83.4	18	13.8	51.5
12 and less than 18 months	80	10.0	93.4	20	15.4	66.9
18 and less than 24 months	24	3.0	96.4	9	6.9	73.8
24 and less than 36 months	17	2.2	98.6	6	4.6	78.4
Unknown duration	11	1.4	100.0	5	3.9	82.3
Pending	0	.....	.....	23	17.7	100.0
Total	796	100.0	.....	130	100.0	.....

TABLE H.—Distribution of Reported Seamen's Disability Cases, by Amount of Recovery
[Cases closed or pending in 1938]

Amount of net recovery	All cases			Injury cases			Disease cases		
	Number	Percent—		Number	Percent—		Number	Percent—	
		Of total	Cumulative		Of total	Cumulative		Of total	Cumulative
None	126	2.2	2.2	67	1.7	1.7	59	3.2	3.2
\$1-\$9	62	1.0	3.2	44	1.1	2.8	18	1.0	4.2
\$10-\$49	1,188	20.5	23.7	704	17.8	20.6	484	26.1	30.3
\$50-\$99	1,495	25.7	49.4	977	24.7	45.3	518	27.9	58.2
\$100-\$149	891	15.3	64.7	629	15.9	61.2	262	14.1	72.3
\$150-\$199	585	10.1	74.8	431	10.9	72.1	154	8.3	80.6
\$200-\$249	355	6.1	80.9	253	6.4	78.5	102	5.5	86.1
\$250-\$299	212	3.6	84.5	162	4.1	82.6	50	2.7	83.8
\$300-\$399	250	4.3	88.8	178	4.5	87.1	72	3.9	92.7
\$400-\$499	159	2.8	91.6	127	3.2	90.3	32	1.7	94.4
\$500-\$749	171	2.9	94.5	127	3.2	93.5	44	2.4	96.8
\$750-\$999	83	1.5	96.0	59	1.5	95.0	24	1.3	98.1
\$1,000-\$1,249	45	.7	96.7	36	.9	95.9	9	.5	98.6
\$1,250-\$1,499	26	.5	97.2	20	.5	96.4	6	.3	98.9
\$1,500-\$1,999	30	.5	97.7	24	.6	97.0	6	.3	99.2
\$2,000-\$2,499	30	.5	98.2	24	.6	97.6	6	.3	99.5
\$2,500-\$4,999	56	1.0	99.2	47	1.2	98.8	9	.5	100.0
\$5,000-\$7,499	24	.4	99.6	24	.6	99.4	0	.....	.....
\$7,500-\$9,999	8	.1	99.7	8	.2	99.6	0	.....	.....
\$10,000 and over	16	.3	100.0	16	.4	100.0	0	.....	.....
Total	5,812	100.0	.....	3,957	100.0	.....	1,855	100.0	.....

TABLE I.—Average Gross and Net Settlements in Reported Seamen's Disability Cases Occurring in 1938, by Extent and Method of Settlement

Extent of disability	All cases			Cases settled directly with seaman		Cases settled through attorney					
	Number	Average per case		Number	Average per case	Negotiated		Carried into court			
		Gross	Net			Number	Average per case		Number	Average per case	
							Gross	Net		Gross	Net
All extents	5,354	\$316.06	\$267.92	4,451	\$197.27	796	\$801.18	\$531.84	107	\$1,648.64	\$1,234.47
Injury cases	3,631	383.69	319.37	2,907	224.44	633	917.62	609.67	91	1,756.82	1,332.50
Disease cases	1,723	173.53	158.93	1,544	146.10	163	348.99	229.60	16	1,033.31	676.88
Fatal	112	2,067.67	1,761.09	87	1,414.13	24	4,439.58	3,040.04	1	2,000.00	1,252.00
Injury cases	57	3,739.56	3,160.82	38	2,867.45	18	5,677.33	3,886.22	1	2,000.00	1,252.00
Disease cases	55	334.98	310.45	49	287.06	6	726.33	501.50	0	0	0
Permanent total	18	5,061.00	3,645.72	6	1,829.16	10	6,476.10	4,311.70	2	7,726.00	5,265.50
Injury cases	8	7,987.75	5,311.88	1	300.00	6	9,183.67	6,040.83	1	8,500.00	5,950.00
Disease cases	10	2,728.60	2,212.80	5	2,135.00	4	2,364.75	1,718.00	1	6,952.00	4,581.00
Permanent partial	188	2,376.49	1,898.09	109	1,219.78	62	3,579.61	2,365.18	17	5,405.23	3,955.47
Injury cases	176	2,459.92	1,967.54	101	1,273.07	59	3,658.47	2,418.14	16	5,532.25	4,689.81
Disease cases	12	1,152.92	879.42	8	547.00	3	2,028.67	1,323.67	1	3,373.00	2,206.00
Temporary total	5,036	183.21	161.79	4,249	143.81	700	349.27	229.46	87	770.84	494.97
Injury cases	3,390	201.53	174.24	2,746	149.84	550	377.65	249.18	73	833.63	534.51
Disease cases	1,646	145.47	136.13	1,482	132.56	150	245.22	157.15	14	443.43	288.79