

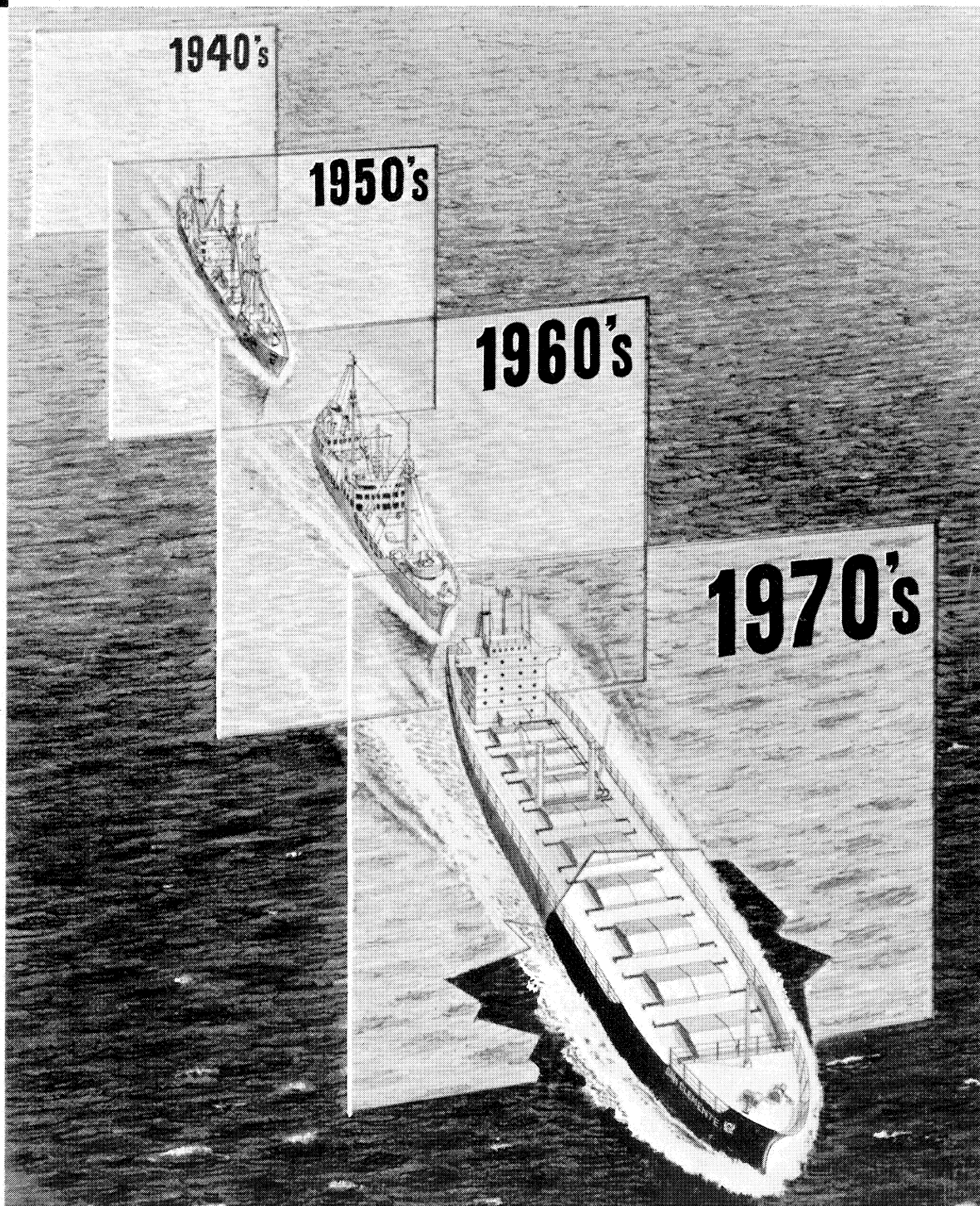
A UNITED STATES  
DEPARTMENT OF  
COMMERCE  
PUBLICATION



240  
Full Copy

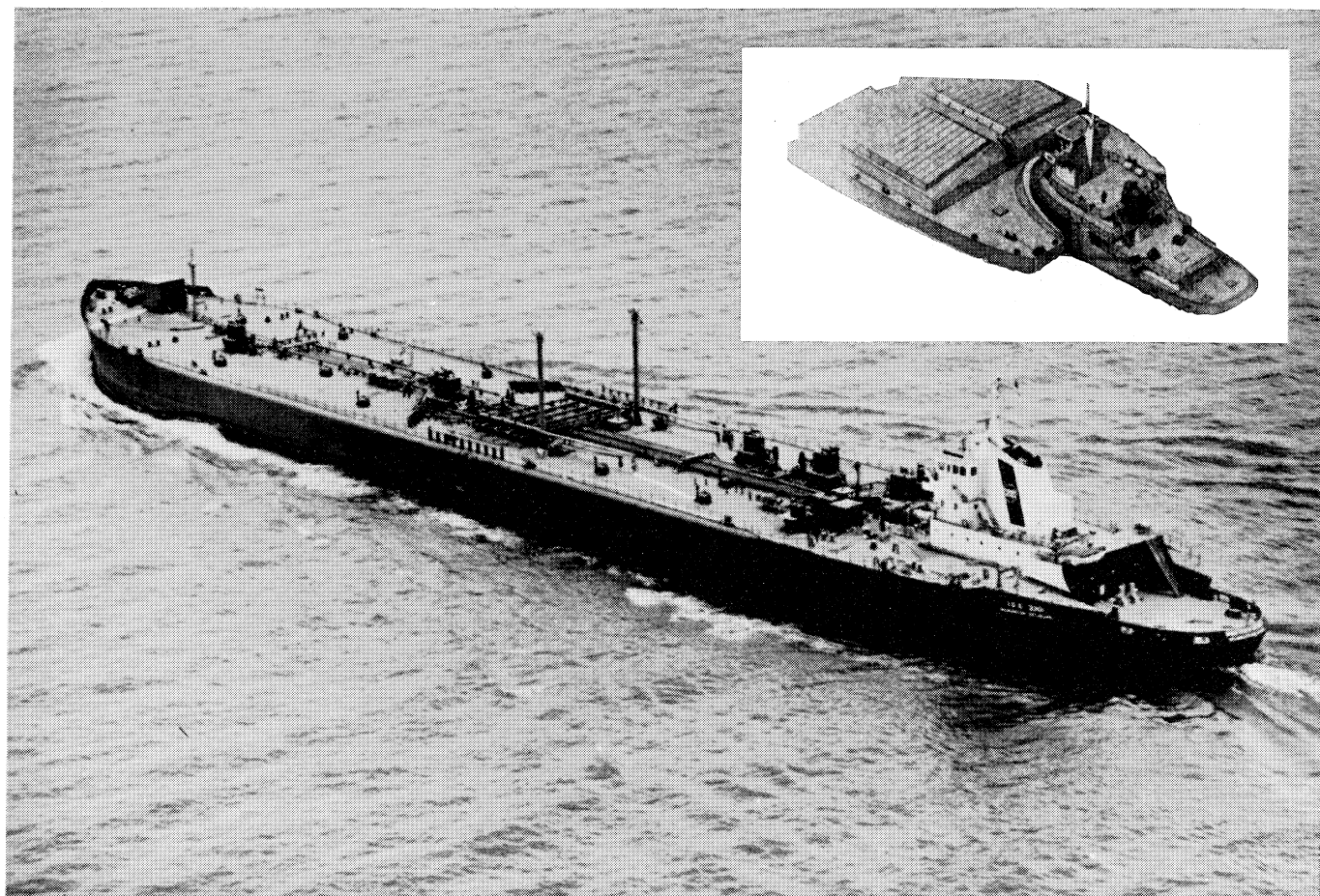
MARAD 1971

# Year of Breakthrough



U.S.  
DEPARTMENT  
OF  
COMMERCE  
Maritime  
Administration

*The tug MV MARTHA R. INGRAM and the barge I.O.S. 3301 were commissioned on June 7, 1971 - the first fully operational integrated tug-barge combination. To expand the utilization of such systems, the Maritime Administration is engaged in research projects to further the development of the operational capability of oceangoing tug-barges.*



# MARAD 1971

# Year of Breakthrough

**The Annual Report of the  
Maritime Administration  
for Fiscal Year 1971**



1971

**U.S. DEPARTMENT OF COMMERCE**  
Maurice H. Stans, Secretary  
James T. Lynn, Under Secretary  
**Maritime Administration**  
A. E. Gibson, Assistant Secretary  
for Maritime Affairs

---

For sale by the Superintendent of Documents, U.S. Government Printing Office,  
Washington, D.C., 20402.

# CONTENTS

	Page		Page
<b>Letter of Transmittal by Secretary Stans</b>	iv	<b>MARITIME AIDS</b>	24
<b>Introduction and Summary—</b>		Subsidy Administration .....	24
<b>A Year of Breakthrough</b>	1	Operating-Differential Subsidy .....	24
<b>OPERATIONS</b>	10	Trade Routes .....	26
Ship Construction .....	10	Construction-Differential Subsidy .....	26
Ships Under Construction .....	10	Federal Ship Mortgage Insurance .....	27
Small Vessels .....	10	Reserve Funds .....	27
Contract Awards .....	10	Market Development .....	30
Deliveries .....	12	Guideline Rates .....	30
Trial and Guarantee Survey .....	12	National Maritime Council .....	30
Design and Development .....	12	Maritime Manpower .....	32
Pollution Abatement .....	12	Seamen Training .....	32
Ship Operations .....	15	Labor Data .....	32
The Viet Nam Sealift .....	15	Labor-Management Relations .....	32
Repair and Maintenance .....	15	United Seamen's Service .....	33
Ship Sales .....	15	Merchant Marine Awards .....	33
Foreign Transfers .....	16	U. S. Merchant Marine Academy .....	35
National Defense Reserve Fleet .....	16	<b>MARITIME SUBSIDY BOARD</b>	37
Warehouse Operations .....	16	<b>ADMINISTRATION</b>	39
Great Lakes Navigation Season .....	16	Management .....	39
MarAd Advisory Bulletin .....	17	Internal Management .....	39
Ports and Intermodal Systems .....	17	Audits .....	41
Intermodal Transport .....	17	Personnel .....	41
Port Development .....	19	Employment .....	41
Domestic Shipping .....	20	Equal Employment Opportunity .....	41
<b>INTERNATIONAL AFFAIRS</b>	21	Training .....	41
		Awards .....	44
		Position Classification .....	44
		Facilities Management .....	44
		Material Control .....	44
		Real Property .....	44
		Safety .....	45

	<b>Page</b>		<b>Page</b>
Finance .....	45	Employment .....	32
Accounting .....	45	9. Marine and War Risk Insurance Claims .....	46
Contract Auditing .....	45	10. Marine and War Risk Insurance .....	
Title XII Insurance .....	46	Approved .....	47
Other Insurance Activities .....	46	11. Suits and Non-Litigated Claims .....	60
<b>CIVIL RIGHTS</b> .....	<b>48</b>	<b>CHARTS</b> .....	
Affirmative Action Plans .....	48	I Intermodal Transportation: Summary .....	
Statistical Trends .....	48	Existing and Proposed U. S. Con-	
Training .....	49	tainer Terminals .....	18
<b>POLICY AND PLANS</b> .....	<b>50</b>	II Maritime Subsidy Expenditures .....	25
Program Planning .....	50	III Federal Ship Mortgage and Loan .....	
Economic and Analytic Studies .....	50	Insurance Program (Title XI) .....	28
Emergency Readiness .....	52	IV Regional and Area Market Develop-	
<b>RESEARCH AND DEVELOPMENT</b> .....	<b>53</b>	ment Offices .....	31
Shipbuilding Improvement Program .....	54	V Maritime Administration Regional .....	
Competitive Nuclear Propulsion System ....	54	Organization .....	40
Advanced Marine Transmissions .....	54	VI Maritime Administration Organization .....	
Automated Shipping Systems .....	54	Chart .....	42
Tug-barge Systems .....	55	<b>APPENDIXES</b> .....	
Offshore Terminals .....	55	I Merchant Fleets of the World Decem-	
Pollution Abatement Research .....	57	ber 31, 1970 .....	62
National Maritime Research Center .....	57	II Employment of U. S. Flag Oceangoing .....	
Ships-of-Opportunity Program .....	57	Merchant Vessels December 31,	
Transit Through Ice Fields .....	57	1970 .....	64
N. S. SAVANNAH .....	57	III Ships Under Construction June 30,	
<b>GENERAL COUNSEL</b> .....	<b>58</b>	1971 .....	65
Division of Construction Contracts .....	58	IV Ships Deliveries for Calendar Year .....	
Division of Operating Subsidy Contracts ...	58	1970 .....	66
Division of Mortgage and Marine Insurance .	59	V Approvals for Transfer Foreign .....	68
Division of Legislation .....	59	VI National Defense Reserve Fleet .....	69
Division of Litigation .....	59	VII Construction Reserve Funds June 30,	
Other Legal Activities .....	59	1971 .....	69
<b>SHIPPING STUDIES AND REPORTS</b> .....	<b>61</b>	VIII Capital and Special Reserve Funds .....	
<b>TABLES</b> .....		June 30, 1971 .....	70
1. Ships Under Construction/Conversion .....	10	IX U. S. Subsidized Shipping Operators—	
2. CDS Contracts Awarded in FY 1971 .....	11	ODS Contracts June 30, 1971 .....	71
3. Ship Deliveries .....	12	X Operating-Differential Subsidies—By .....	
4. Ships in Reserve Fleets as of June 30,		Year and By Line .....	73
1971 .....	16	XI U. S. Oceanborne Foreign Trade:	
5. Mortgage Insurance Applications .....		Commercial Cargo Carried .....	
Approved .....	29	(Tonnage) .....	75
6. Title XI Mortgages Committed in .....		XII U. S. Oceanborne Foreign Trade:	
Previous Fiscal Years .....	29	Commercial Cargo Carried (Dollar .....	
7. U.S. Flag Carriage of Government Spon-		Value) .....	76
sored Cargoes in Calendar Year 1970 .....	30	XIII Maritime Legislation June 30, 1971 .....	77
8. Maritime Manpower Daily Average .....		XIV Subsidized and Unsubsidized .....	
		Operators—Combined Condensed .....	
		Balance Sheets December 31, 1970 .....	79
		<b>FINANCIAL STATEMENTS</b> .....	<b>82</b>

## LETTER OF TRANSMITTAL

THE PRESIDENT  
THE HONORABLE PRESIDENT OF THE SENATE  
THE HONORABLE SPEAKER OF THE HOUSE OF REPRESENTATIVES

Sirs:

It is with great pleasure that I transmit to the Congress this report on the Maritime Administration's activities during fiscal year 1971.

The year was highlighted by the President's enactment of the Merchant Marine Act of 1970, which embodies his program for the revitalization of the American Merchant Marine. This legislation represents the first major updating of our national maritime policy in three decades, and could not have come about without the assistance and cooperation of the Congress.

During the year, the Maritime Administration's activities were almost wholly devoted to implementing the new law and initiating the new ship construction program the President proposed. New regulations, procedures, and policies were established to carry out the intent of the program, particularly with regard to the development of new construction and operating subsidy contract forms, the promulgation of regulations and interim agreement forms for the Capital Construction Fund program, and the administration of the Cargo Preference program.

The ship construction program was initiated with nearly \$400 million in subsidized shipbuilding contracts being awarded during the year. These contracts set a record for the agency's shipbuilding program, and all fell well within the subsidy guidelines prescribed by the new law.

The Agency was reorganized during the year to focus greater attention and effort on new and expanded programs to aid the maritime industry. An office of International Affairs was created to assure that proper consideration is given to the Agency's views in developing the United States' position for various international conferences and meetings concerning maritime affairs. At the close of the fiscal year, the creation of an Office of Domestic Shipping to assist that long-neglected segment of the industry was imminent.

I believe that this report demonstrates that the Maritime Administration made steady progress during the year toward the goal of achieving the strong and competitive American Merchant Marine envisioned by the President and the Congress.

A handwritten signature in dark ink, reading "Maurice H. Stans". The signature is written in a cursive, flowing style with a large initial "M".

Secretary of Commerce

# INTRODUCTION AND SUMMARY

**By A. E. Gibson**

Assistant Secretary of Commerce  
for Maritime Affairs

Fiscal year 1971 marked a monumental breakthrough for the American Merchant Marine. President Richard M. Nixon on October 21, 1970 signed into law the Merchant Marine Act of 1970—the most important and far reaching maritime legislation enacted in more than three decades.

The 1970 Act (Public Law 91-469) incorporates all of the major maritime policy recommendations that the President transmitted to the Congress 12 months earlier. It restructured and redirected the Nation's maritime policies to deal effectively with the many cumulative problems and deficiencies afflicting the American shipping and shipbuilding industries, and provides an innovative and constructive program to restore the United States to the rank of a first-class maritime power.

Significantly, when the enabling legislation came before the Senate and House of Representatives a total of only two dissenting votes were cast—attesting to the overwhelming support of the Congress for the President's program to modernize the merchant marine.

The new program is intended to halt and reverse the steady erosion of the Nation's maritime strength that has been underway for more than 20 years. In June 1950 the active American-flag fleet totaled 1,145 vessels virtually all of which were only a few years old. At the close of fiscal year 1971 the active fleet numbered fewer than 700 ships, more than two-thirds of which were in or approaching the 25-year age bracket and are likely candidates for scrapping within the next few years. A further indicator of the fleet's decline is that in 1950 42 percent of this Nation's waterborne foreign trade was carried in American-flag ships, as contrasted to the 1970 total of only 5.6 percent.

President Nixon's maritime program is predicated on transforming the U. S. merchant marine into one of the most modern and efficient in the world by the end of this decade—a fleet that can be built and operated with reduced levels of Federal support. In transmitting his program to the Congress, he said:

"Our program is one of challenge and opportunity. We will challenge the American shipbuilding industry to show that it can rebuild our Merchant Marine at reasonable expense. We will challenge American ship operators and seamen to move toward less dependence on government subsidy. And, through a substantially revised and better administered government program, we will create the opportunity to meet that challenge."

The general objectives of the new maritime policy and program are several: To develop a modern and efficient American merchant marine capable of carrying a substantial portion of this Nation's international trade and providing military shipping support in times of national emergencies. It also is intended to improve the productivity and competitiveness of the shipping and shipbuilding industries by providing incentives to encourage the application of advanced technology, innovative management and aggressive marketing programs. And by eliminating the uncertainties that in the past have clouded the future of these industries, the program seeks to provide a firm foundation for industry growth and stability.

## Program Elements

The specific elements of the program are as follows:

- **Ship Construction**

The equivalent of 300 highly productive merchant ships of advanced designs will be built with Federal assistance over a 10-year period. In addition to general cargo carriers, such as containerships and lighter/barge carrying vessels, tankers and combination oil/bulk/ore ships for the first time will be included in the shipbuilding program. Each of the ships to be built will be the equivalent of three to five of the older conventional ships they will replace.

Emphasis will be placed on ships of standardized designs and series construction which contribute to lower unit costs. The shipyards are encouraged to develop such designs and eliminate unnecessary cost additive features prior to construction. In a major departure from past practices, negotiated contracts are permitted. Additionally, multi-year procurement, whereby the Government's share of the cost is funded over the term of the construction period, rather than appropriated in full in a single year, will be utilized.

- **Construction-Differential Subsidy (CDS)**

This form of assistance, heretofore made available only to ship operators receiving operating subsidy, has been broadened to extend eligibility to all foreign trade operators, including those engaged in the dry and liquid bulk trades.

CDS will continue to be based upon the difference between U. S. and foreign shipbuilding price levels, but now is paid directly to the shipyards rather than to the shipowner. The new program also prescribed a descending scale of CDS guidelines. With the enactment of the program the CDS level for fiscal year 1971 was established at 45 percent of the domestic price. Further reductions of 2

percent annually are targeted until the CDS level is stabilized at 35 percent in fiscal year 1976. The 1970 Act established a seven-member Presidential Commission on American Shipbuilding to monitor the progress of the shipyards in meeting the CDS goals and to recommend alternatives if their price levels exceed the goals.

- **Operating-Differential Subsidy (ODS)**

Payments of ODS will be based upon the difference between U. S. and foreign costs, as adjusted for escalation of U. S. labor costs by the application of a national industrial wage-index system. By the use of this index only those escalated seafaring costs which are consistent with the general labor trend will be subsidizable.

The 1970 Act for the first time extends ODS to bulk carriers engaged in foreign trade, reflecting the fact that bulk cargoes now constitute approximately 90 percent of the Nation's foreign trade tonnage. The recapture provision in the Merchant Marine Act of 1936—whereby the government could recapture one half of the capital they employed—has been repealed. Present corporate taxes accomplish the intended purpose of the recapture clause.

- **Federal Ship Mortgage Insurance (Title XI)**

Under the new law the government is authorized to guarantee commercially placed ship construction and mortgage loans aggregating \$3 billion in unpaid principal. Previously the ceiling was \$1 billion. This additional authority will assist the ship operators to obtain the private investment capital needed to undertake the expanded ship construction programs which will be generated by the 1970 Act.

- **Construction Reserve Funds**

Eligibility to establish these tax-deferred funds, which heretofore was restricted to shipping companies receiving operating subsidies, has been broadened to include all American-flag lines engaged in foreign trade, the domestic Great Lakes and noncontiguous trades, and the fishing industry. Eligible operators with approved construction plans are permitted to deposit earnings, proceeds from the loss or sale of vessels and depreciation into the funds, but the reserves must be limited to a level reasonably necessary for orderly ship replacement or acquisition.

- **Research and Development**

The Maritime Administration's R&D programs and activities will be expanded and reoriented to place priorities on near-term projects to improve the competitiveness of the shipping and shipbuilding industries. Emphasis will be placed on the translation of current technological advancements into practical applications. Joint government/industry cooperative and cost-shared programs are encouraged.

- **Labor Relations**

The new program by providing the industry with a climate which will foster its growth and stability, is expected to usher in an era of more cooperative and responsible labor-management relations which are prerequisite to the desired

expansion and modernization of the American Merchant Marine. If the industry fails to provide uninterrupted American-flag service it will discourage the heavy private investments needed to finance ship replacements and will be unable to obtain the shipper patronage which is needed to operate the ships profitably.

- **Port Development**

Concurrent with development of high-technology ships, the Maritime Administration will take a more active role in promoting and coordinating the development of port facilities and intermodal transportation systems to effectively utilize these advanced ships.

- **Equal Employment Opportunities**

The Secretaries of Commerce and Transportation are directed to work with industry and labor organizations to ensure that the employment opportunities generated by the new maritime program are equally available to all citizens.

## Agency Geared For Implementation

During fiscal year 1971, both prior to and after enactment of the Merchant Marine Act of 1970, the Maritime Administration was heavily engaged in realigning and strengthening its organizational structure and activities to make it more responsive to the expanded scope and new directions of the Nation's maritime policies and programs.

One of the major tasks involved the clarification of the statutory language of the Act, and the development of the administrative ground rules and procedures for implementing the program. Because of the many innovative policy changes, and the broadened eligibility for participation in the financial assistance programs, the Agency had to formulate and analyze in depth the implications of various administrative alternatives before determining the approach to be used. Significantly, well in advance of the end of fiscal year 1971 all immediate administrative impediments to ship operators and shipbuilders seeking to participate in the new program had been eliminated.

In those program areas, involving the increased eligibility for the establishment of tax-deferred construction reserve funds, and the operating subsidy formula to be applied to bulk carriers, where final regulations or determinations had not been developed, interim rules and agreements were formulated to enable interested ship operators to apply for the program benefits even though the final determinations had not been made.

At the same time, the Maritime Administration made a concerted effort to further streamline its operations and better utilize its resources. All programs and activities are now under periodic review to determine their essentiality in terms of fulfilling the Agency's missions, to measure their effectiveness and to reevaluate the manpower and funding priorities that have been assigned to their operations.

As a result, some long-standing programs were found to be of marginal value and were phased out to make room for some wholly new programs and the expansion of several existing programs that are vital to the advancement of the new maritime policy objectives.

## Highlights And Accomplishments

Following are some of the highlights and accomplishments resulting from the Agency's restructured activities during fiscal year 1971:

1. The Office of Market Development, established late in fiscal year 1970 to assist U. S. shipping lines to improve and strengthen their marketing capabilities, and thereby increase the amount of foreign trade cargoes handled by American-flag ships, became fully operational during fiscal year 1971. In addition to the Washington, D. C. headquarters, seven field offices were opened on the East, Gulf and West Coasts, as well as on the Great Lakes to promote shipper patronage of the fleet.

To assist the shipping lines to identify and exploit marketing opportunities, the Office of Market Development provides on a continuing basis to American-flag carriers detailed data on foreign trade movements. These data reveal where low levels of U. S.-flag participation exist and lead to direct contact with the shippers to determine what must be done to correct the imbalance.

2. Office of Research and Development—During the year a major expansion of this office's activities was accomplished. Fifteen key programs in support of the objectives of the new maritime program were initiated. These encompass three principal areas of advanced ship development, ship operations and maritime technology. Particular emphasis has been placed on near-term projects to improve the productivity and competitive positions of the shipping and shipbuilding industries. Significantly, a number of these involve cost-sharing contracts with industry.

3. Office of Ports and Intermodal Systems—When President Nixon transmitted his maritime program to the Congress, he directed that efforts be made to improve the Nation's port facilities and encourage greater use of intermodal transportation systems concurrently with the development of high-technology ships. As a result of this mandate, this office during fiscal year 1971 stepped up its efforts to provide leadership and initiative to advance these objectives. Special attention was focused on the coordination and integration of the domestic surfaces modes (rail, highway and inland water transportation) with ocean shipping, and economic and technological studies concerned with the development of deepdraft offshore transfer terminals for large bulk carriers.

4. Office of International Activities—The Maritime Administration provided representatives to, and participated in, a number of international maritime meetings during the year. The Assistant Secretary of Commerce served as Chairman of the U. S. Delegation to a Plenary Session of the United Nations-affiliated International Labor Organization at Geneva in October 1970, which formulated revised standards for wages and working conditions of seafarers. Agency representatives also served on various committees of the Intergovernmental Maritime Consultative Organization dealing with such topics as marine pollution, safety, ship design and legal affairs.

In view of the increasing importance of these international conferences and to ensure that U. S. positions are well-founded and effectively presented, the Maritime Administration in June 1970 established the Office of International Activities to coordinate the Agency's and industry's input to these conferences.

5. Office of Civil Rights—During this year, this office made significant gains in fulfilling the Agency's responsibility to monitor and ensure equal-opportunity compliance by all coastal firms engaged in shipping, shipyard or stevedoring operations. Far reaching affirmative action plans were negotiated with major shipyards which correct the present effects of past discrimination against minority employees. Despite declining employment levels in both shipbuilding and shipping industries minority employment rose in both categories.

6. U. S. Merchant Marine Academy—An expanded curriculum was adopted to prepare the graduates for a broader range of careers in the maritime industry. At the same time, faculty upgrading continued to improve the quality of instruction. Nearly three-fourths of the faculty now hold Masters Degrees or higher, and a fifth have earned Doctoral Degrees.

7. Other Activities—During the year the Maritime Administration made substantial progress in a number of other areas:

- \* In response to the growing concern over ship-generated oil pollution, the Agency completed several design studies of improved tanker configurations and segregated ballast systems aimed at the development of safeguards to prevent accidental or intentional discharge of oil into the sea.

- \* The Office of Policy and Plans initiated major studies concerned with military sealift procurement, computerized forecasts of the U. S.-flag fleet, manpower and collective bargaining factors, and another separate computerized projection of U. S. seaborne trade through the year 1990.

- \* Close coordination was developed with the Department of Defense and the U. S. Navy by the assignment of a senior naval officer to the Agency and the initiation of a number of studies relating to the development of an effective maritime mobilization base to be available in the event of a national emergency.

- \* A National Maritime Research Center was established at the U. S. Merchant Marine Academy which will undertake a wide range of R&D projects concerned with ship operations and productivity. This is the first facility of its type in this country devoted specifically to commercial shipping operations.

- \* The Agency devoted increasing attention to domestic shipping problems and developments, including the extension of the Great Lakes navigation season and major engineering research on rigidly linked tug-barge systems.

## Program Implementation And Cost Reductions

During fiscal year 1971 subsidized contracts for the construction of 12 high-productivity merchant ships and the conversion of 11 conventional cargo vessels to containerships were awarded.

The aggregate contract value of these ships exceeded \$390 million—a record high. Of this amount, \$171 million will be borne by the Government, the largest

construction-differential subsidy (CDS) commitment made in any single year since the inception of the subsidized program in 1936.

All of the new construction contracts fell within the 45 percent CDS guideline established for fiscal year 1971 by the Merchant Marine Act of 1970. The conversion contracts carried CDS rates ranging from a low of 36 percent to 41.5 percent. Collectively, the new construction and conversion CDS rates averaged 43.7 percent, as compared to 45.8 percent and 53.4 percent in fiscal years 1970 and 1969, respectively.

The new construction contracts comprised three containerships, seven of the innovative Lighter-Aboard-Ship (LASH) vessels, and two of the oil/bulk/ore (OBO) ships. The latter two are the first ships of this type ever ordered for effective upon the delivery of the ships in 1973 and 1974. Additionally, the first time made liquid and dry bulk carriers eligible for subsidy assistance, is expected to generate the construction of a sizeable fleet of such vessels for American-flag operations.

During the year, the Agency developed new contract forms governing subsidized construction and, in addition, proposed regulations for determining CDS rates and procedures for review and approval of negotiated shipbuilding prices now permitted under the 1970 Act.

### • Operating-Differential Subsidy (ODS) Program

Under the expanded eligibility provided by the new law the first ODS agreement covering the two aforementioned oil/bulk/ore ships was executed, to be effective upon the delivery of the ships in 1973 and 1974. Additionally, the first new ODS agreement with a liner operator under the new law was executed.

During the year payment of ODS on a fully containerized service on the U. S. Atlantic-Far East trade route was terminated. This action further validated a basic premise of President Nixon's maritime program, that efficient, high-technology American-flag ships can compete effectively against lower-cost foreign competition without subsidy on many trade routes. During the prior fiscal year, two long-standing subsidized operators on the U. S. North Atlantic-Europe trade route relinquished subsidy on their fully containerized services. These actions, collectively, result in annual savings of nearly \$26 million to the Government.

An additional \$1.6 million savings was realized in fiscal year 1971 by another provision of the new law which terminated subsistence for cargo ships.

Significant progress was made in implementing the wage index system instituted by the 1970 Act. This provision authorizes subsidy to be paid for escalation of seafaring wages only to the extent that the increases are fair and reasonable, as measured against the gains achieved by a broad cross section of American labor.

The Agency also continued to institute reduced manning scales for new and modernized vessels of subsidized operators. These reductions, affecting 86 ships, offer long-term savings of more than \$110 million to the Government over the economic lives of the vessels.

### • Ship Mortgage Insurance

During fiscal year 1971 applications were approved for Federal Ship Mortgage and Loan Insurance (Title XI) totaling \$280.7 million. These covered 116 vessels and 160 lighters. At year's end Title XI contracts in force covered 279 vessels and 520 lighters and aggregated nearly \$1.2 billion in outstanding balance of principal and interest.

- **Capital Construction Funds**

Pending final promulgation of the regulations governing the broadened eligibility of vessel operators to establish such funds provided by the 1970 Act, the Maritime Administration developed an Interim Capital Construction Agreement to enable interested operators to establish such funds subject to the final regulations that will be developed by the Maritime Administration and the Department of the Treasury.

- **Cargo Preference**

The 1970 Act clarified and strengthened the Maritime Administration's role in overseeing and regulating Government-impelled preference cargoes. To assist it in carrying out this mandate, the Agency issued two rules during the year dealing with such shipments. One established a reporting requirement for all shipper agencies of the Government to provide timely and detailed data on the shipments they handle. This became effective July 1, 1971. The second rule interprets the statutory language "fair and reasonable participation" by U. S.-flag carriers to mean that ships of American registry must receive at least 50 percent of the ocean freight revenues generated, as well as at least 50 percent of the gross tonnage.

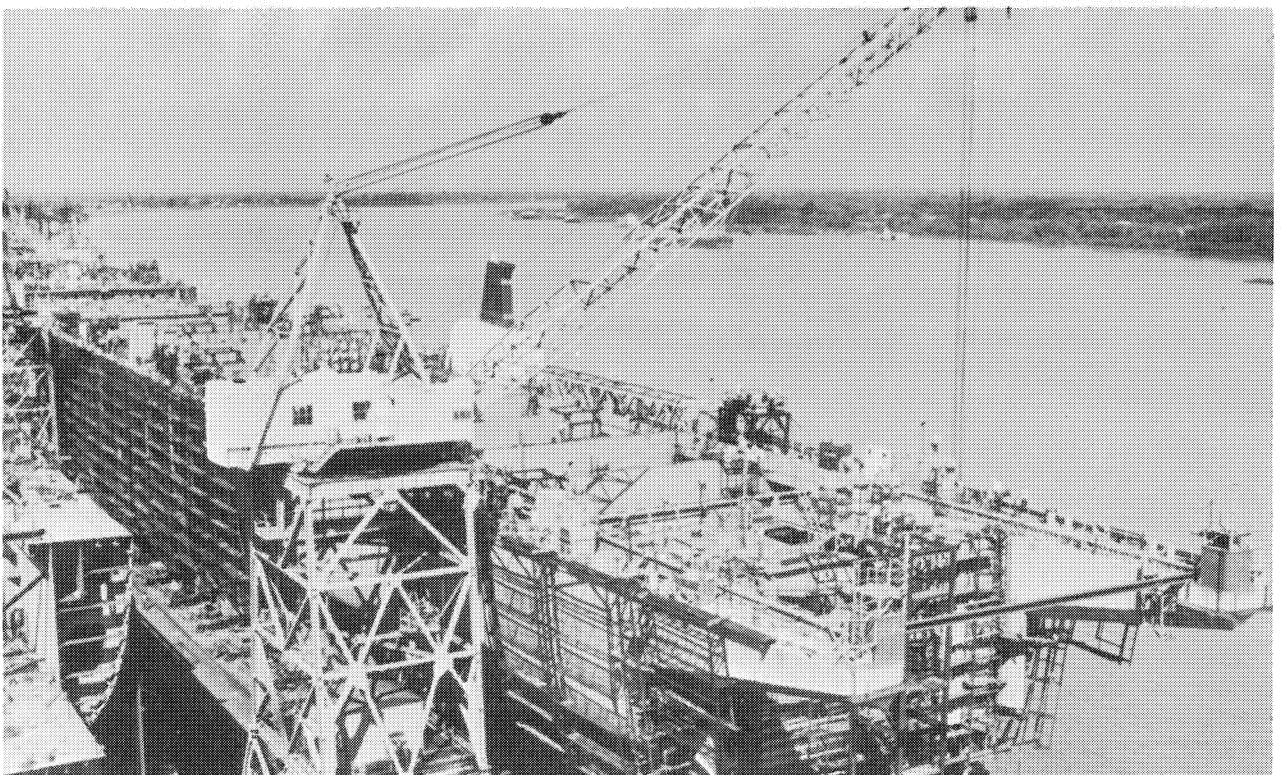
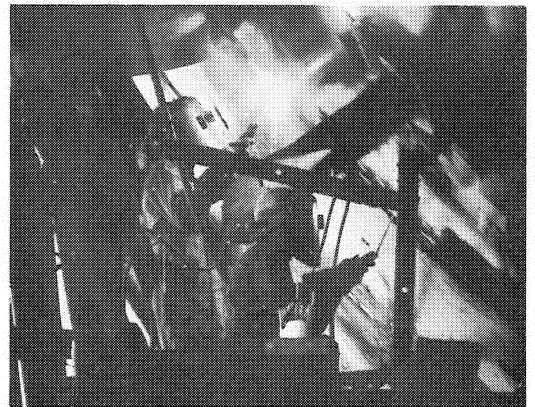
- **Conclusion**

We believe that the Maritime Administration effectively carried out its responsibilities during fiscal year 1971. The implementation of the Merchant Marine Act of 1970 was measurably advanced during the year and a firm foundation for the revitalization of the American Merchant Marine in the years ahead was established.

Further details of the Agency's activities during fiscal year 1971 are provided in subsequent sections of this report.



*Huge cranes move keel piece into position at General Dynamics Quincy Shipbuilding Division. Laying of the 120-ton unit marked construction of the second Seabee for Lykes Bros. Steamship Co., the ALMERIA LYKES.*



*One of the LASH type vessels under construction at Avondale Shipyards, Inc. for Pacific Far East Lines, Inc.*

# OPERATIONS

## Ship Construction

### • Ships Under Construction

The total number of large merchant ships under construction or conversion in private U.S. shipyards, on which the Maritime Administration had information, increased from 74 on July 1, 1970, to 79 on June 30, 1971 (See Table No. 1). These included both new ships built with subsidy and private ventures.

**TABLE 1—Ships Under Construction/Conversion**

	Number of Ships		
	Total	New	Conversions
Under Contract July 1, 1970---	74	53	21
Contracts Awarded During			
FY '71-----	32	17	15
Sub Total-----	106	70	36
Completed During FY '71-----	27	13	14
Under Contract June 30, 1971--	79	57	22

The 79 ships under contract at year's end had a contract value of approximately \$1.4 billion. Of these, 51 with a contract value of approximately \$0.9 billion were being built or converted with subsidy. The remaining 28 were being financed privately, or with Title XI mortgage and loan insurance.

Ships under conversion at the end of the year included 18 subsidized cargo ships being modified to carry containers. In addition there were four private tankers being jumboized.

### • Small Vessels

Diminished activity in the construction of small vessels compared to previous years is indicative of the planned phasing out of the program under the U.S. Fishing Vessel Improvement Act which expires June 30, 1972. One trawler was delivered during the year while contracts were awarded for two new fishing vessels. There was one invitation to bid outstanding at the end of the fiscal year.

### • Contract Awards

Contracts were awarded for construction of 12 new ships to be built with subsidy (See Table No. 2). In addition, contracts were awarded for the construction of two ore carriers at American Shipbuilding Company, Lorain, Ohio; one ore carrier at Manitowoc Shipbuilding Inc., Sturgeon Bay, Wis.; one ore carrier at Erie Marine Division of Litton Industries, Erie, Pa.; and one roll-on/roll-off ship at Sun Shipbuilding and Dry Dock Company, Chester, Pa. Contracts for 11 subsidized conversions (See Table No. 2) and 4 non-subsidized private conversions were awarded during the year.

TABLE 2—CDS Contracts Awarded in FY 1971

Owner	Shipbuilder	Type of ship	No. of ships	Total gross tonnage	Estimated completion date	Total estimated cost (1)	Estimated Govt. cost of construction—differential subsidy	Estimated Govt. cost of National Defense Features
American Export Isbrandtsen Lines, Inc.	Bath Iron Works Corp	C5-S-73b	3	53,706	2-19-73	\$50,979,999	\$21,249,999	\$-----
Delta Steamship Lines, Inc	Avondale Shipyards, Inc	C9-S-81d	3	91,200	9-30-73	85,593,000	37,805,586	60,000
Waterman Steamship Corporation	Avondale Shipyards, Inc	C9-S-81d	3	91,200	5-15-74	83,787,000	37,007,334	60,000
Central Gulf Steamship Corporation	Avondale Shipyards, Inc	C9-S-81d	1	30,400	7-30-74	27,502,000	12,147,044	20,000
Aries Marine Shipping Company	National Steel & Shipbuilding Co.	OB8-S-90a	2	49,140	1-30-74	60,092,000	27,000,000	92,000
American Mail Line, Ltd	Bethlehem Steel Corp.	C6-S-1x	2*	23,400	11-23-71	16,808,000	6,056,000	12,000
American Mail Line, Ltd	Bethlehem Steel Corp.	C6-S-1x	1*	11,700	2-23-72	8,748,000	3,378,000	-----
American President Lines, Ltd	Todd Shipyards Corp.	C6-S-69c	5*	88,320	7-31-72	32,536,139	13,514,021	15,900
American President Lines, Ltd	Todd Shipyards Corp.	C6-S-1qc	3*	37,500	1-9-73	20,240,919	8,399,982	-----
Total CDS Contracts Awarded in Fiscal Year 1971	-----	-----	23	476,566	-----	\$386,287,057	\$166,557,966	\$259,900

(1) Total contract cost including CDS and National Defense Features, but excluding engineering and change orders.

\*Reconstruction.

## • Deliveries

On July 1, 1970 there were 26 new merchant ships being built with Maritime Subsidy Board CDS Contracts. Of these, 5 were delivered during the fiscal year. In addition new non-subsidized deliveries included: one containership, two chemical tankers, one roll-on/roll-off and four oil tankers, making a total of 13 ship deliveries (See Table No. 3). In addition 14 conversions were completed of which 10 were subsidized and four were privately financed.

**TABLE 3—Ship Deliveries**

Owner	Builder	Design	De- livered
<b>SUBSIDIZED</b>			
U.S. Lines.....	Sun S/B & D/D Co.	C7-S-68e	2
U.S. Lines.....	Beth. Key- Hwy.	C6-S-1w	2*
U.S. Lines.....	Alabama S/B & D/D	C6-S-1w	2*
U.S. Lines.....	Todd-Galv. & Brkln.	C6-S-1w	3*
U.S. Lines.....	Norfolk S/B & D/D	C6-S-1w	1*
Lykes Bros.....	Todd-Galves- ton	C5-S-37e	2*
Prud.-Grace.....	Avondale Shyds.	C8-S-81b	3
Total Subsidized Deliveries.....			15
<b>NONSUBSIDIZED</b>			
Matson Nav.....	Beth. Sparrows Pt.	Container- ship	1
Keystone Shipping..	Beth. Sparrows Pt.	Tanker	1
Overseas Bulk tank..	Beth. Sparrows Pt.	Tanker	1
Intercontinental....	Beth. Sparrows Pt.	Tanker	1
Ocean Transport....	Beth. Sparrows Pt.	Tanker	1*
Mathieson Tkrs....	Sun S/B & D/D Co.	Tanker	1
T. T. T. Corp.....	Sun S/B & D/D Co.	Ro/Ro	1
Matson Nav.....	Willamette Iron	Bulk	1*
Falcon Tankers.....	Ingalls Nuclear	Tanker	1
Cities Service.....	Beth. Beau- mont	Tanker	1*
Hudson Waterways..	Maryland S/B & D/D	Container- ship	1*
Marine Transport...	Ingalls Nuclear	Chem. Tanker	1
Total Nonsubsidized Deliveries.....			12
Total Deliveries.....			27

\*Conversions

## • Trial and Guarantee Survey

Sea trials and acceptance surveys were conducted on 14 subsidized ships. In addition, the Trial and Guarantee Survey Board observed sea trials on five ships, two towboats and one hopper dredge, which were constructed under the Title XI mortgage insurance program. Final guarantee surveys were conducted on eight subsidized ships and one government owned survey ship.

## • Design and Development

The Maritime Administration continued feasibility studies on shipboard mechanization and automation and completed a design for an unattended engine room. A technical paper was prepared which concluded that the design is feasible and within the engineering state of the art.

An engineering project was undertaken to monitor and evaluate shipboard equipment performance. This project, currently in progress, will utilize a general-purpose computer to monitor operating parameters, compare these values to acceptable norms, and automatically advise operating personnel on developing problems.

The Maritime Administration contributed to the development of technical publications, such as the major revision of the Society of Naval Architects and Marine Engineers' authoritative textbook on *Marine Engineering*.

A study of contra-rotating propellers, which was initiated last fiscal year, was completed by the Maritime Administration and the Department of the Navy (Naval Ship Research Development Center) under a Maritime Administration contract for the proposed installation on a large twin-screw containership.

The Agency participated in the "International Convention on Tonnage Measurement of Ships—1969" and developed the basis for Department of Commerce support of this new convention. Also, staff members participated in the planning and sponsorship of the Third International Congress on Marine Corrosion and Fouling which will be held in the United States in October 1972.

Assistance was provided in the preparation of a curriculum for the Masters, Mates, and Pilots Association to upgrade ships officers in the stability aspect of operating container and barge-carrying ships.

## • Pollution Abatement

During fiscal year 1971, the Maritime Administration expanded its efforts to limit pollution at sea and in port. Spurred by the President's Message to Congress of May 20, 1970, an action plan was

initiated which will require the study of the technical and economic problems associated with:

1. The promulgation of design criteria and standards of design and construction for tankers to minimize or eliminate the need for oily ballast and/or other oily wastes to be discharged into the sea. Such standards and criteria are intended to form the basis of proposals for adoption by domestic enforcement agencies and intergovernmental maritime safety groups;
2. Shoreside facilities for the reception and treatment of oily ballast and bilge water; and
3. Intensification of pollution abatement activities and more rigid requirements with respect to ships built with Government assistance.

In furtherance of these objectives, the Maritime Administration produced several design studies of novel tanker configurations for increasing the degree of protection against oil spills. These studies were directed at identifying the significant economic factors for tank vessels constructed and operated both domestically and abroad. The Agency will also investigate alternative tanker design configurations of varying amounts of segregated ballast capacity and their cost effectiveness in reducing oil spills resulting from collisions and stranding casualties. All tanker design data has been reviewed by tanker owners and regulatory agencies including those concerned with environmental protection, in preparation for the development of the United States position paper to be presented to the Intergovernmental Maritime Consultative Organization (IMCO), the United Nations agency concerned with maritime matters.

In collaboration with the Council on Environmental Quality (CEQ), the U.S. Coast Guard and the Environmental Protection Agency (EPA), a joint study was initiated to identify the probable environmental effects of the introduction of very large supertankers into the maritime commerce of this country with specific regard to the alternative means of accommodating these ships in our ports, harbors and offshore terminals.

A new specification has been established covering the control of all ship-generated pollutants including

oil, sewage, garbage and smoke. These pollution abatement standards are being required for all vessels built under the new Government-assisted ship construction program.

Port facilities to handle oily wastes from ships are essential to the White House objective of complete elimination of intentional discharges by the mid-1970's. The President's Message to Congress of May 20, 1970, placed with the Department of Commerce responsibility for coordinating the national effort to construct the required port oily waste reception facilities. The primary thrust in this area is the development of an assessment of the requirements for, and the economics of port facilities for the reception and disposal of oily wastes from ships. As a result of coordinated efforts by the Maritime Administration, U.S. Coast Guard and the Environmental Protection Agency (EPA), a statement of work on Collection and Separation Facilities for oily waste was completed and was to be sent to prospective bidders on July 14, 1971, with the project to be completed in approximately one year.

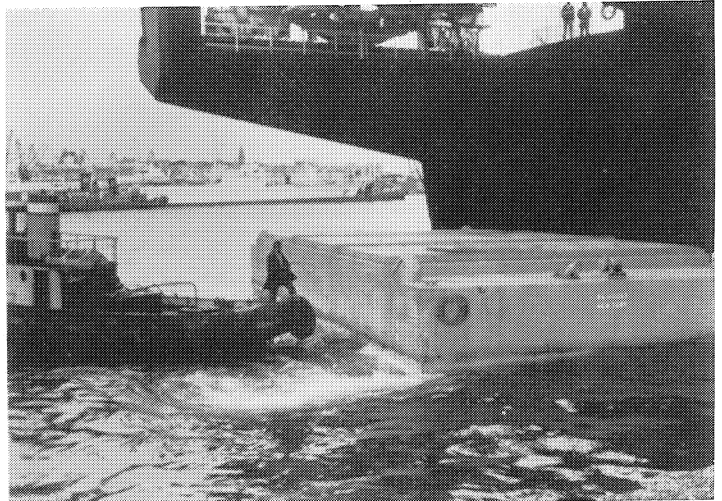
The Maritime Administration and the National Oceanic and Atmospheric Administration (NOAA) held joint discussions to develop common grounds for a research program on the fate and behavior of oil in the oceans. The program will determine the maximum permissible level of oil considered to be harmless to marine life, a determination which will permit regulatory agencies, such as EPA and Coast Guard, to establish reasonable purity standards for ships' discharges into the sea. A combined scope of work will be drafted by both agencies taking into account Maritime Administration requirements and NOAA expertise and capabilities in basic marine research.

The research studies will also provide input to the joint CEQ, Maritime Administration, Coast Guard and EPA study on the environmental effect of the introduction of supertankers into the foreign commerce of the United States and will be used to decide whether the country should develop deep harbors or offshore terminals to accommodate tankers of this size.



*The LASH ITALIA is the type of vessel which because of its high productivity will be built under the Merchant Marine Act of 1970.*

*A loaded and sealed lighter is being maneuvered into the stern elevator of the LASH ITALIA.*



# Ship Operations

## • The Viet Nam Sealift

In July 1965, at the request of the Military Sealift Command, the Maritime Administration activated ships from the National Defense Reserve Fleet for the Viet Nam sealift. At the peak of the operation, 172 of these ships were carrying 34 percent of the military shipments to Southeast Asia.

To promote a strong merchant marine by using commercial shipping to the fullest possible extent for military cargoes, this operation ended when the last ship was redelivered to the Government on November 16, 1970, and laid up in the Suisun Bay Reserve Fleet. One hundred and twenty-three of the Victory ships engaged in the program have been returned to the National Defense Reserve Fleet in permanent lay-up status, available for future use.

The military cargoes previously carried by Marad-owned ships, in support of the Viet Nam sealift, are now transported by private U.S.-flag steamship operators.

The Maritime Administration offices in Manila and Yokohama, which gave operational and administrative support to General Agents and their respective ships during the Viet Nam operation, were phased out in fiscal year 1971.

## • Repair and Maintenance

The deactivation of General Agency ships and final lay-up costs were held to a minimum by holding the returned ships in the reserve fleet, instead of at commercial piers, while awaiting deactivation and selective scheduling, and group contracting for "mothballing."

The permanent lay-up of General Agency ships amounted to \$3,038,380 in maintenance and repair contracts placed in the United States.

Federal surveillance over the maintenance and repair activities of subsidized ship operators was evaluated during fiscal year 1970. This evaluation resulted in a more efficient operation by elimination of many reports, reduction of excessive controls and the number of costly inspections and surveys, and the simplification of the procedure for assuring that maintenance and repair costs are "fair and reasonable" in qualifying for federal subsidy support. Presently, operators send their invoices to the Maritime Administration where costs among different ships and lines

are compared by computer. Comparison of print-outs insures that the costs are "fair and reasonable."

In addition, the Maritime Administration survey staff checks each vessel's condition in conjunction with the regular American Bureau of Shipping inspection performed every five years and occasional supplemental spot checks. Adoption of this new procedure is expected to achieve a savings of \$200,000 annually.

On-site repair and maintenance inspections are now performed only for off/on subsidy surveys, Title XI surveys, and five-year conditional surveys, consistent with General Order 20, 3rd Revision.

Approximately 1,350 surveys, including classification, Title XI mortgage requirements, operating-differential subsidy applications and other inspections and estimates were made to assure compliance with various contractual commitments.

Maintenance and Repair expenditures for the five state Maritime Academy school ships totalled \$956,480.

The total maintenance and repair expenditures generated approximately 50,000 man-days of work throughout the marine industry and its supporting services.

## • Ship Sales

One hundred fifty-one Liberties and 68 other ships from National Defense Reserve Fleet anchorages were sold for scrap or nontransportation use during the year for an aggregate return of \$16,169,233 to the Government.

Additionally, seven other ship types, including three T2 tankers previously used as floating power barges in Viet Nam, were sold for scrapping, providing a return of \$1,817,985 during fiscal year 1971. From 1958 through 1971, a total of 1,649 ships were sold for scrap or nontransportation use yielding a total return of \$104,273,012.

On those ships which were sold to U.S. citizens and foreign nationals under the Ship Sales Act of 1946, no outstanding principal balances are due on mortgages.

During the fiscal year, \$75,853 in principal and \$3,655 in interest was collected from Banco Do Brazil under its agreement with the Maritime Administration, dated June 1, 1965, whereby Banco assumed the payment of 11 outstanding Brazilian mortgages,

executed under the 1946 Act, with total balances of \$379,270. On June 30, 1971 the principal balance outstanding under this agreement was \$56,890.

A total of \$115,422,575 in interest has been collected from U.S. and foreign ships sales under the 1946 Act.

### • Foreign Transfers

Approval was granted to transfer foreign 173 ships of 1,000 gross tons and over. Over 45 percent of these vessels were sold for scrapping abroad. Twenty of the 173 ships were undocumented or registered under foreign flag though owned by a U.S. citizen (See Appendix V).

Charters of U.S.-owned ships to aliens were approved on 19 ships of 1,000 gross tons and over.

Applications for transfer foreign of 483 vessels of less than 1,000 gross tons (313 commercial and 170 pleasure craft) were approved, and charters of 41 ships to aliens were approved.

All of the 14 violations involving the sale of privately-owned ships, without prior approval of the Maritime Administration were mitigated or settled.

### • National Defense Reserve Fleet

On June 30, 1971, 860 ships were moored in the five locations of the National Defense Reserve Fleet (NDRF), excluding 13 ships sold but not delivered. (See Table No. 4). This total represents a decrease of 1,063 ships in the past 10 years. Because of advanced obsolescence, inferior operating characteristics and excessive reactivation costs only 381 of these vessels are considered suitable for reactivation to meet national shipping emergencies. Of the remaining 479 vessels, 470 are candidates for scrapping and nine are special projects of the Department of the Navy.

**TABLE 4—Ships in Reserve Fleets  
as of June 30, 1971**

Fleets	Reten- tion	Scrap and Canni- balized	SP <sup>1</sup>	Total
James River, Va.....	137	172	2	311
Mobile, Ala.....		92	2	94
Beaumont, Texas.....	60	55	1	116
Suisun Bay, Calif.....	167	117	1	285
Olympia, Wash.....	17	34	3	54
Total.....	381	470	9	860*

\*Excludes 13 ships sold for scrap but not delivered.

<sup>1</sup> Special Projects

Consistent with the Agency's objective of utilizing scrap candidate ships for nontransportation use, two tankers will be used for the storage of oil and five cargo ships sold for the following uses: one to store equipment, one to become a floating warehouse, one as a possible stationary cannery and two with undesignated uses. Community or civic uses of such ships are also being evaluated.

During the year 139 ships were placed in the fleets and 307 ships were withdrawn.

The Hudson River facility was phased out during the fiscal year. The phasing out of the Olympia Reserve Fleet and the Mobile Reserve Fleet are progressing on schedule and should be completed in 1972 and 1973, respectively.

A summary of the number of ships in the Reserve Fleet since 1945 is presented in Appendix VI.

### • Warehouse Operations

During 1971, sale of obsolete ship stock items amounted to \$5 million. In conjunction with disposition of the stock, the New Orleans, La., and San Francisco, Calif., warehouses were eliminated.

All retainable stock at the Kearny, N.J., warehouse will be transferred to the James River Reserve Fleet in Va., as the cost of such item transfers economically balances the benefits that will be derived.

### • Great Lakes Navigation Season

The Merchant Marine Act of 1970 provides a number of provisions beneficial to Great Lakes interests. Of greatest importance are the eligibility to establish tax-deferred construction reserve funds, expansion of the Ship Mortgage Insurance program to \$3 billion, and the official designation of the Great Lakes as the "fourth seacoast."

The Commandant of the U.S. Coast Guard was requested to provide additional icebreaker support to the Great Lakes by adding two "Wind" class ships to the fleet.

The Maritime Administration also participated in the bubbler system project in Duluth-Superior Harbor in conjunction with other interested agencies to determine the feasibility of this system for ice-freeing harbors.

In response to Section 107(c) of Public Law 91-611, a study was conducted of the ways and means to provide reasonable insurance rates for shippers and vessels engaged in waterborne commerce on the Great Lakes and St. Lawrence Seaway beyond the present navigation season. The resulting report

was under review by the Executive Branch as of June 30, 1971.

Of special interest during the year was "Operation Taconite," which ended with the last ore carrier delivering a cargo of taconite pellets from Duluth-Superior to South Chicago on January 31, 1971. This was the first time a ten-month navigation season for ore carriers on the Great Lakes was achieved, and was made possible by the cooperation of the U.S. Coast Guard and Army Corps of Engineers.

### • Marad Advisory Bulletin

During the year a *MarAd Advisory Bulletin* was developed for dissemination of pertinent information to U.S.-flag steamship operators.

The bulletin is published and distributed as frequently as items of importance occur. It alerts U.S.-flag operators to such matters as new or revised U.S. and foreign customs regulations, immigration requirements, and entrance and procedures which assist the operators to avoid vessel delays and penalties.

## Ports And Intermodal Systems

### • Intermodal Transport

The Maritime Administration has continued to work effectively with other Government agencies and private industry representatives in successful joint efforts to promote international intermodal transport. Procedures which permit containers to move unhindered from one mode to another and traverse international borders with minimum effort are advantageous for all concerned. The Agency has consistently endeavored to diminish national or international restrictions which could curtail the growth of an international intermodal transport system.

Much of a shipper's or carrier's uncertainty and fear about investing in innovative intermodal systems often stems from a lack of technical or traffic information. In carrying out its maritime developmental responsibilities, the Maritime Administration is attempting to provide the inland modes of transportation—railroads, trucking lines and barge operators—with relevant technical studies and management control and systems data to encourage them to match the commitment of ocean carriers in advancing the United States intermodal capabilities.

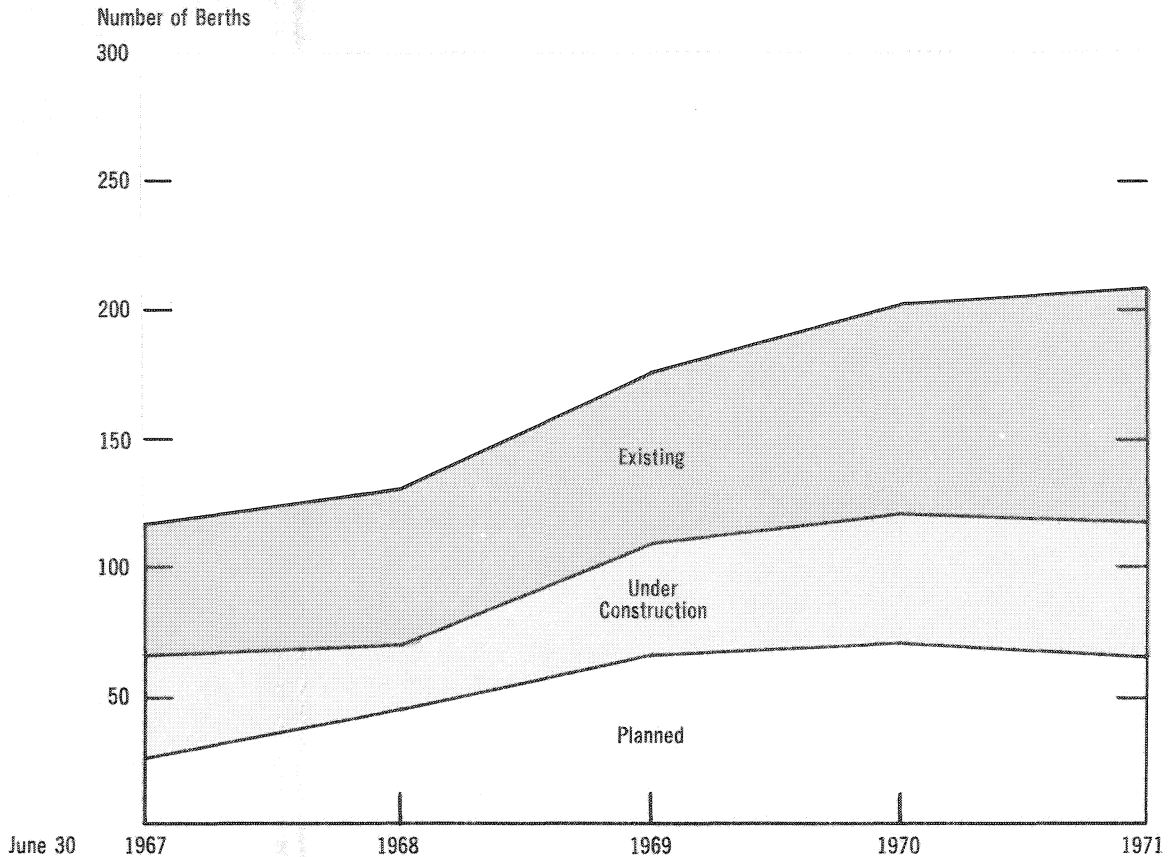
The expanding number of containers in the maritime industry, which surpassed an estimated 200,000 20-foot equivalents during fiscal year 1971, has brought about a dramatic need for identification and control of company-owned and leased equipment. The control and efficient employment that an operator can exercise over these containers is directly proportional to his ability to know at all times where they are located and their actual or scheduled de-

ployment. To accomplish this, the Maritime Administration is involved jointly with industry in the development and evaluation of a pilot project in which the benefits of the Automatic Container Identification system, employing optical scanning equipment and computer controls, are utilized in automating a marine terminal control system. A project of this type can increase the efficiency of the marine terminal and also greatly enhance the possibilities of achieving the interchange of management and traffic information and control on an intermodal basis. With data input from other transportation modes, the development of a complete intermodal management information system with all the potential benefits of automating cargo documentation can be realized.

Today's high-speed movement of cargoes in the linehaul often comes to a virtual halt at interchange points because the manual systems used to prepare, check, process and move documents cannot provide the necessary hard copy flow of information, and oftentimes results in delaying the shipments. The Maritime Administration is examining such problems to determine what contributions it can make to an integrated data-processing and transmission system.

At the request of the Departments of State and Labor, the Agency sponsored a seminar on the Modernization of Freight Handling for foreign maritime labor leaders from more than 20 developing countries. The seminar's objective was to introduce the foreign conferees to modern techniques employed in the field of intermodal transport and technological developments in the American maritime industry.

# Chart I. INTERMODAL TRANSPORTATION: SUMMARY OF EXISTING/AND PROPOSED U.S. CONTAINER TERMINALS



Date	6/30/67	6/30/68	6/30/69	6/30/70	6/30/71
Full Container Berths:	<u>117</u>	<u>132</u>	<u>178</u>	<u>202</u>	<u>207</u>
Existing	50	62	69	81	90
Under Construction	40	24	41	49	51
Planned	27	46	68	72	66

As of June 30, 1971

Type Berth	Number of Berths			
	Existing	Under Construction	Planned	Total
Full Container:	<u>90</u>	<u>51</u>	<u>66</u>	<u>207</u>
Atlantic Coast	37	33	31	101
Pacific Coast	35	12	22	69
Gulf Coast	4	4	9	17
Great Lakes	—	—	—	—
Alaska	4	—	—	4
Hawaii	3	—	2	5
Puerto Rico	7	2	2	11

## • Port Development

In keeping with technological advances in ocean transportation and in support of the new maritime program, increased efforts were made to provide leadership and initiative within the Federal Government for the continuing promotion of port development on a national basis within the framework of an integrated transportation system. Special attention was focused upon the promotion of improved port and terminal operations; the reduction of vessel turnaround time in port through more efficient cargo handling concepts; planning and development of new marine terminal systems; promotion of adequate port capacity and improved intermodal transportation management and operations; and initiation of port-related research and development projects.

A major program currently underway aims at making possible the use of larger, more efficient tankers and bulk carriers through the development of offshore transfer facilities in areas where the costs of multiple channel deepening would be prohibitive. A one-year research and development study has been undertaken to explore more economical ways to enable United States ports and ship operators to overcome existing bulk vessel size constraints imposed by channel depth limitations with a minimization of pollution hazards and giving maximum consideration to the employment of advanced concepts for offshore terminal construction.

Activities have been undertaken pursuant to Section 7 of the President's Pollution Abatement Message of May 20, 1970, which urges cooperation between private industry and port authorities to develop additional facilities, stationary or mobile, to

receive oil discharge from vessels upon their arrival in port—provided amendments to the 1954 Oil Pollution Convention are adopted and permissible oil discharges at sea are further reduced. The Maritime Administration, working jointly with the American Association of Port Authorities, American Institute of Merchant Shipping, Environmental Protection Agency, American Petroleum Institute, and the United States Coast Guard, has drafted and issued a "request for proposals" designed to investigate alternatives to discharging at sea by employment of shoreside systems to receive and recycle oily waste, and dispose of the remainder by some method which would preclude environmental degradation.

Under the auspices of the Water Resources Council and in conjunction with the United States Army Corps of Engineers, the Department of Transportation and other government agencies, the Maritime Administration is actively participating in multi-agency river basin and regional bay studies. Significant contributions were made in preparing the shipping and port development elements of comprehensive river basin studies on the Great Lakes and the lower Mississippi River. Major areas of anticipated inputs have now been delineated in the South East New England River Basin Study, the Chesapeake Bay Study and the San Francisco Bay In-Depth Study.

Acting as port consultants to the Economic Development Administration (EDA), the Maritime Administration reviewed and processed EDA grant and loan requests by state and local authorities for port-related Public Works assistance and furnished comments with regard to the feasibility of the proposed improvement projects.



# Domestic Shipping

**I**n carrying out its mission of promoting the American Merchant Marine, the Maritime Administration is responsible for developing adequate shipping capabilities in the domestic waterborne trades as well as the foreign trade segment of the fleet.

Until recently, the domestic trades have commanded only a small fraction of the Agency's efforts, yet it possesses a great potential for future growth and development. The anticipated inability of land-based transportation modes to meet the increasing transportation demands of the next decade, combined with developments in transportation technology, offer water carriers an opportunity for greater participation in the domestic trade than ever before.

As part of the new maritime program, concerted efforts are being made to expand domestic waterborne transportation capability. To achieve this objective, an Office of Domestic Shipping is being organized within the Office of Ship Operations of the Maritime Administration. The new office will formulate and implement national policies and programs for the development and promotion of domestic waterborne commerce with the ultimate objectives of improving the competitive position and increasing the utilization of the domestic waterborne transportation industry. Specific areas of concentration will be the Great Lakes, the inland waterways, and the non-contiguous, coastwise and intercoastal trades.

*Over 550 million tons of cargo move on the inland waterways of the United States annually. Pictured below is a tow of 15 barges carrying 21,000 tons of coal on the river system.*



# INTERNATIONAL AFFAIRS

The Maritime Administration, in carrying out its mission of revitalizing the American Merchant Marine, recognizes that international organizations and foreign bodies concerned with shipping matters must be effectively coordinated. Until recently, this responsibility was fragmented among various operating units within the Agency. As a result of the redirection represented by the new maritime program, a concentrated effort is being made to work with the industry and other agencies of Government, to exert a stronger influence in all international activities which have a bearing on the well-being of the U.S. Merchant Marine. To accomplish this objective an Office of International Activities has been established to serve as a coordinating arm in indentifying all international activities of interest to the Agency and industry, to keep abreast of developments including anticipated problems, develop Agency positions in these areas, and insure effective presentation of these positions to the appropriate forums.

During fiscal year 1971 the Maritime Administration participated in the following international conferences:

1. The Assistant Secretary for Maritime Affairs represented the United States at the 55th Maritime Conference of the International Labor Organization held in Geneva, Switzerland, October 14-31, 1970. The Conference was preceded by considerable study by the Maritime Administration, union and industry groups and other government agencies, of minimum living and safety standards for seamen.

2. The Deputy Assistant Secretary for Maritime Affairs headed the U.S. delegation to the 23rd

plenary meeting of the NATO Planning Board for Ocean Shipping (PBOS) in London, England, April 20-22, 1971. During the year, the Maritime Administration represented the United States on PBOS working groups which convened to deal with plans for organization and operation of the NATO wartime shipping agency; the emergency bunkering of allied ships; analysis of the impact of the container-ships on war plans for ocean transportation; and the allocation of tanker tonnage under emergency conditions.

3. The Oil Spills Conference of NATO's Committee on Challenge of Modern Society (CCMS) was held in Brussels, Belgium, November 2-6, 1970, and was attended by a Maritime Administration representative. Extensive agency studies on pollution of the sea by oil preceded the CCMS Conference.

4. The Agency participated in meetings of the Intergovernmental Maritime Consultative Organization (IMCO) sub-committees on Subdivision and Stability, Ship Design and Equipment and Marine Pollution, all of which were conducted in London, England. Agency representatives also attended the 23rd session of the Maritime Safety Committee in London, and a joint IMCO/International Atomic Energy Agency Symposium on Nuclear Ships in Hamburg. Maritime Administration representatives participated in meetings of the U.S. Interagency Shipping Coordinating Committee and its sub-bodies, for the purpose of formulating coordinated national positions prior to IMCO sessions.

5. The Maritime Administration represented the United States at the Seventh Inter-American Port and Harbor Conference; the Organization of American States (OAS) Permanent Technical Committee on Ports in Bogota, Columbia; and the meeting of the OAS Group of Government Exports on Maritime Transport in Washington.

6. The Maritime Administration participated in the fifth session of the Shipping Committee of the U.N. Conference on Trade and Development (UNCTAD) in Geneva, Switzerland; a conference on marine pollution sponsored by the Food and Agriculture Organization (FAO) in Rome, Italy; a meeting of the International

Standardization Organization (ISO) in Geneva, Switzerland, on standardization requirements for containers; and a meeting of the Organization for Economic Cooperation and Development (OECD) in Paris, France, on the issue of third party liability for nuclear ships.

7. Representatives of the agency participated in the 1971 NATO Shipping Working Group Meeting, sponsored by the Supreme Allied Commander, Atlantic, at Norfolk, Va. The meeting was convened to review current policies and plans and to examine problems and new proposals concerned with wartime shipping operations.



*The largest dry cargo ship in the world is the SS DOCTOR LYKES. The 875-foot long carrier and two sister ships are being built for Lykes Bros. Steamship Co., Inc., by the Quincy Shipbuilding Division of General Dynamics.*



*The stern view of the DOCTOR LYKES during its launching shows the elevator to which barges are floated and then raised to the section of the ship in which they will be carried. This type of vessel can lower the elevator offshore and discharge floatable barges thus decreasing costly port time of the vessel.*

# MARITIME AIDS

## Subsidy Administration

### • Operating-Differential Subsidy

**T**welve steamship companies were participating in the operating-differential subsidy (ODS) program at the end of the fiscal year. In operation under these contracts were a total of 206 ships. Payments during the year on operating subsidy due for 1971 and for prior years totaled \$268,021,097. (See Chart II).

Operating-differential subsidy, accrued from January 1, 1937, to June 30, 1971, totaled \$3,551 million; recapture amounted to \$241 million; net payable as of June 30, 1971, was \$3,310 million, of which \$3,185 million had been paid out, leaving an estimated unpaid balance of \$125 million at the end of the fiscal year.

During fiscal year 1971, American Export Isbrandtsen Lines, Inc. (AEIL) purchased four roll-on/roll-off containerships from Moore-McCormack Lines, Inc. for operation in AEIL's North Atlantic/Mediterranean freight service. The roll-on/roll-off ships were delivered to Moore-McCormack Lines in 1969 and 1970.

Passenger services continued to decline with the SS SANTA PAULA and SS SANTA ROSA of Prudential-Grace Lines, Inc. being withdrawn from service during the fiscal year. As a result, there were a total of eight passenger ships in lay-up status on the U.S. Atlantic Coast at the end of the year. AEIL had previously withdrawn its three passenger ships from subsidized service, the SS INDEPENDENCE, the SS CONSTITUTION and the SS ATLANTIC, the lat-

ter of which was sold foreign on July 2, 1971. Moore-McCormack Lines' SS ARGENTINA and SS BRASIL and the SS UNITED STATES of United States Lines, Inc. remained inactive. Prudential-Grace Lines also discontinued passenger service on its four M-class combination ships during the year but continued operation of the ships as freighters. Passenger service was continued from the U.S. Pacific ports by ships operated by American President Lines, Ltd. and Pacific Far East Line, Inc.

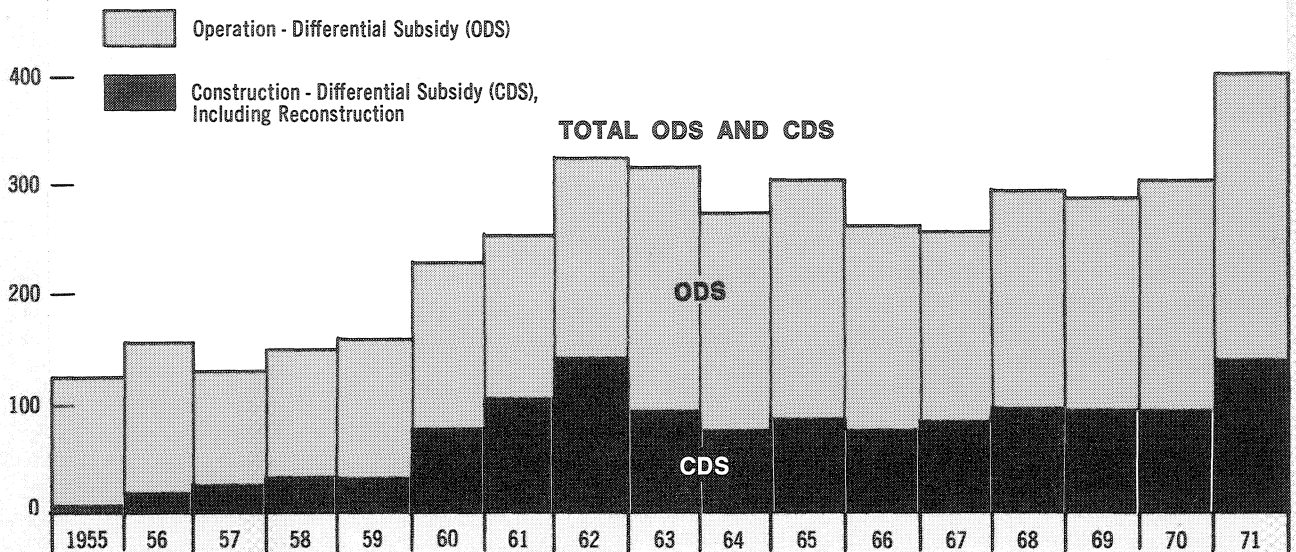
Five applications for operating-differential subsidy were pending at the end of fiscal year 1971. Waterman Steamship Corp's subsidy requests involved Trade Routes Nos. 12 and 22 (U.S. Atlantic and Gulf/Far East), and Trade Route No. 21 (U.S. Gulf/Western Europe). Isthmian Lines, Inc. applications cover two services (U.S. Atlantic and Gulf/India, Pakistan, Ceylon, and U.S. Atlantic and Gulf/Persian Gulf, Red Sea) primarily on Trade Route No. 18. Trinidad Corp.'s application covered tanker operations between the Caribbean and U.S. East Coast ports.

In June 1971 new 20-year operating-differential subsidy agreements were awarded to Waterman Steamship Corp. and the Aries Marine Shipping Co. under the provisions of the Merchant Marine Act, 1936, as amended, including amendments under the Merchant Marine Act of 1970. The Waterman contract calls for operating subsidy for the six C3's and two C4's built in 1944 and 1945, on Trade Route No. 18 (U.S. Atlantic and Gulf/India, Pakistan). The C3's are to be replaced with LASH-type ships

## Chart II. MARITIME SUBSIDY EXPENDITURES

Millions of Dollars

500



FISCAL YEAR	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
TOTAL ODS & CDS	120.7	151.3	128.6	147.4	156.4	226.7	253.5	323.0	315.4	282.0	301.0	260.0	258.2	297.8	290.2	302.5	404.7
ODS	115.4	135.3	108.3	120.0	127.7	152.8	150.1	181.9	220.7	203.0	213.3	186.6	175.6	200.1	194.7	205.7	268.0
CDS (incl. Reconst.)	5.4	16.0	20.3	27.3	28.7	74.0	103.3	141.0	94.7	78.9	87.7	73.4	82.5	97.7	95.5	96.7	136.7

Fiscal Year	Construction Differential Subsidy <sup>1</sup>	Reconstruction - Differential Subsidy <sup>1</sup>	Total Construction and Reconstruction Subsidy (CDS) <sup>1</sup>	Operating - Differential Subsidy (ODS) <sup>2</sup>	Total ODS and CDS
1936					
1937					
1938					
1939	\$ 131,571,571				
1940	(Reflects CDS adjustments covering World War II period)				
1941	plus			\$ 16,601,213	
1942					
1943					
1944					
1945	\$ 105,852,291	\$ 3,286,888	\$ 246,249,167		\$ 471,968,043
1946	(Equivalent to CDS—allowances made in connection with Mariner ship construction program)				
1947					
1948					
1949					
1950				\$ 5,784,595	
1951				14,018,284	
1952				41,437,567	
1953				62,838,704	
1954	\$ 5,538,417			85,038,513	
1955	5,358,663	0	\$ 5,358,663	115,391,111	\$ 120,749,774
1956	1,613,737	\$ 14,368,688	15,982,405	135,342,146	151,324,551
1957	16,379,076	3,909,695	20,288,771	108,292,274	128,580,545
1958	22,637,540	4,709,383	27,346,923	120,031,522	147,378,445
1959	21,679,547	7,065,416	28,744,963	127,693,052	156,438,015
1960	69,156,794	4,828,227	73,985,021	152,756,154	226,741,175
1961	102,118,519	1,215,432	103,333,951	150,142,575	253,476,526
1962	136,858,263	4,160,591	141,018,854	181,918,753	322,937,607
1963	90,514,302	4,181,314	94,695,616	220,676,685	315,372,301
1964	77,234,458	1,665,087	78,899,545	203,036,847	281,936,392
1965	87,649,008	38,138	87,687,146	213,334,409	301,021,555
1966	70,810,939	2,571,566	73,382,505	186,628,357	260,010,862
1967	81,592,502	932,114	82,524,616	175,631,860	258,156,476
1968	97,610,561	96,707	97,707,268	200,129,670	297,836,938
1969	95,460,092	57,329	95,517,421	194,702,569	290,219,990
1970	74,999,309	21,723,343	96,722,652	205,731,711	302,454,363
1971	109,250,401	27,450,968	136,701,369	268,021,097	404,722,466
Total all FY	\$1,403,885,990	\$102,260,366	\$1,506,146,356	\$3,185,179,668	\$4,691,326,024

<sup>1</sup> Data for construction and reconstruction subsidies are stated on an accrued expenditure basis and do not include any refunds of CDS made for operation of CDS ships in domestic trades.

<sup>2</sup> Data for operating differential subsidy are stated on basis of vouchers approved for payment.

also contracted for in June 1971. On the other hand, Aries will not receive operating subsidy until such time as its new oil/bulk/ore carriers enter service in 1973 and 1974.

American President Lines was the first of the existing subsidized operators to accept and incorporate provisions of the Merchant Marine Act of 1970 into its long-term operating-differential subsidy contract as of June 17, 1971.

Applications were received during fiscal year 1971 from Farrell Lines, Inc. and AEIL, requesting that their operating subsidy contracts be so amended.

Two subsidized operators, United States Lines and The Oceanic Steamship Co., terminated their operating subsidy contracts during fiscal year 1971. United States Lines' short-term contract terminated on August 16, 1970, and Oceanic's contract was terminated March 8, 1971, upon the sale and transfer of the last of its two freight ships and the passenger ships, MARIPOSA and MONTEREY, to Pacific Far East Line for operation in the Australian subsidized service. Besides the transfer of the four ships, shoreside property and equipment, Pacific Far East Line also purchased Oceanic's interest in contracts for two C7 containerships now under construction.

Enactment of Public Law 91-469, Merchant Marine Act of 1970, October 21, 1970, requires the application of a wage-index system which will substantially eliminate the need for detailed review by the Agency of each collective bargaining agreement and amendments thereof, including changes in work rules, rates of pay, fringe benefits, contributions to special funds, etc., to determine whether employment costs are "fair and reasonable." The rate of change in an appropriate index, to be compiled annually by the Bureau of Labor Statistics, will be deemed the measure of change in "fair and reasonable" employment costs after an initial determination has been made. The Maritime Administration has been implementing the new law with appropriate regulations which, with some modifications, are expected to apply as well to bulk-carrying vessels which will be subsidized for the first time.

With respect to a number of subsidy disallowances which had been made within the time period permitted by Public Law 91-469, relating to the size of crew complement and certain benefit contributions agreed to by the operators and respective unions which the Maritime Subsidy Board found not to be eligible for subsidy payment, several such disallowances have been successfully appealed to the Secretary of Commerce. As to the remaining disallowance issues, one (severance payments) is being contested in court and the others have either been accepted by the operators or the operators have exhausted their

administrative remedies, though not necessarily their judicial ones.

All operating-differential subsidy rates through calendar year 1968 have been computed for and accepted by all operators. This permits the staff to commence immediately the calculation of new operating-differential subsidy rates effective from January 1, 1969.

## • Trade Routes

The Merchant Marine Act of 1970 amended Section 211 of the Merchant Marine Act, 1936, to require a determination of the bulk-cargo services needed for the promotion, development, expansion and maintenance of the foreign commerce of the United States for national defense or other national requirements. To implement the new legislation, proposed regulations were published for determining essential bulk-carrying services that should be provided by U.S.-flag vessels whether or not operating on particular services, routes, or lines. Under these proposals operation of a bulk vessel for purposes of eligibility for operating-differential subsidy participation, pursuant to Section 601(a) of the Act, will be deemed to satisfy the provisions of Section 211(b) of the Act if in each year the vessel derives the least 30 percent of its total carriage from the export and import foreign commerce of the United States as determined on either a ton-mile or gross-revenue basis, whichever the operator elects.

Reviews of several trade routes and bulk-cargo trades (liquid and dry) were made in connection with applications for operating-differential subsidy, mortgage insurance, and construction-differential subsidy on new ships or the conversion of old ones.

Liner freight service between U.S. Pacific Coast ports (Washington-California, inclusive) and ports in the Mediterranean Sea and Black Sea, Portugal, Spain south of Portugal, and Morocco was found to be essential to the foreign commerce of the United States.

## • Construction-Differential Subsidy

At the end of the fiscal year 1971 there were under contract or construction, with construction-differential subsidy aid, 33 modern design ships. This figure consists of 15 LASH (lighter-aboard-ship) vessels, 13 containerships, three seabarge carriers and two oil/bulk/ore carriers. Twelve of the 33 ships were contracted for during fiscal year 1971 at a total cost of approximately \$308 million, of which the Government's share is about \$136 million. The two

oil/bulk/ore carriers are the first ships of this type to be built with CDS. (See Appendix No. III).

As of June 30, 1971, 18 ships were undergoing conversion to containerships or to partially containerized ships for three subsidized operators. Contracts for 11 of these conversions were executed during fiscal year 1971 at a total cost of approximately \$79 million, of which the Government subsidy is about \$32 million. (See Table No. 2).

During fiscal year 1971 two new containerships were delivered to United States Lines, Inc., and three new LASH vessels were delivered to Prudential-Grace Lines, Inc. Eight United States Lines Mariners, which were converted to full containerships, were delivered during the fiscal year.

### • Federal Ship Mortgage Insurance

During fiscal year 1971 applications were approved for Federal Ship Mortgage and/or Loan Insurance totaling \$280,762,120 covering 116\* vessels and 160 lighters. (See Table No. 5). In addition, mortgage insurance contracts aggregating \$17 million were placed on nine vessels and 331 lighters based on commitments made in earlier fiscal years. (See Table No. 6).

At year's end, Title XI applications approved and contracts in force covered a total of 279 vessels and 520 lighters for a total outstanding balance of principal and interest of \$1,166,802,817. (See Chart No. III).

At the same time pending applications for loan and/or mortgage insurance encompassed construction or reconstruction of 25 freighters, four tankers, 256 tugs, barges or miscellaneous types, and 1,255 lighters and barges to be carried onboard ship, at a total estimated cost to the applicants of \$601,876,914 of which \$488,578,812 is the estimated amount to be covered by Title XI insurance.

The Federal Ship Mortgage Insurance Fund received \$5.2 million in net income during the year, making the retained income of the fund \$30.35 million.

Two Title XI Mortgages were terminated during the fiscal year. American Mail Line Ltd. terminated the mortgage on the AMERICAN MAIL and the Oceanic Steamship Co. terminated the MARIPOSA/MONTEREY mortgage.

\* Includes 2nd mortgages on five American President Lines vessels already having Title XI 1st mortgages.

### • Reserve Funds

On June 30, 1971, balances in six construction reserve funds of operators totaled \$2,077,025, compared with \$2,354,687 in five funds at the beginning of the fiscal year, a decrease of \$277,662. Four funds were established during fiscal year 1971, and three were closed. (See Appendix VII).

At year's end, statutory reserve funds of subsidized operators totaled \$120,626,276 consisting of \$87,462,039 capital and \$33,164,237 special reserve funds, as compared with \$95,161,343 at the beginning of the fiscal year, an increase of \$25,464,933. (See Appendix VIII).

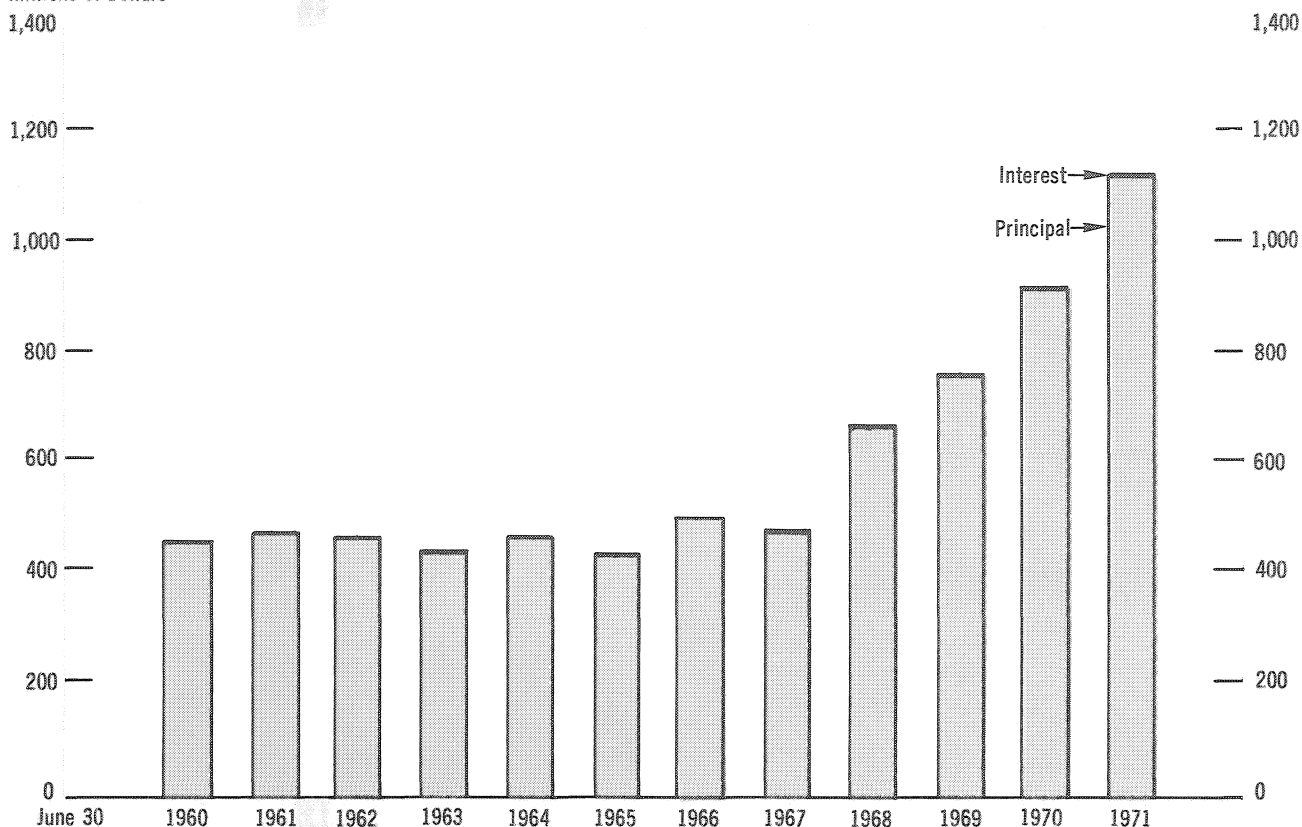
In addition to the mandatory deposits in special and capital reserve funds, two subsidized operators were authorized to make voluntary deposits aggregating \$4,167,750.

*The MV FALCON LADY, built under the Title XI program, was the first large vessel built with a diesel propulsion system in a U. S. shipyard.*



# Chart III. FEDERAL SHIP MORTGAGE AND LOAN INSURANCE PROGRAM (Title XI)

Millions of Dollars



DATE	6-30-60	6-30-61	6-30-62	6-30-63	6-30-64	6-65	6-66	6-67	6-68	6-69	6-70	6-71
Total Applications Approved & Contracts in Force (Thousands of \$)	448,900	464,119	458,847	431,169	454,467	421,584	485,184	526,096	651,552	751,555	919,418	1,166,803
Principal	447,157	461,723	455,809	427,895	451,015	418,638	481,777	558,094	654,548	754,679	911,591	1,154,156
Interest	1,833	2,896	3,038	3,274	3,452	2,946	3,407	4,002	6,004	5,876	7,827	12,647
Vessels	53	64	67	70	82	79	98	113	129	144	171	279
Lighters										360	360	520

Current Status 6/30/71				
Vessel Type	In Force		Pending	
Freighters	137	610,617,693	25	137,019,414
Cargo/Pass.	9	28,312,000		
Tankers	40	394,204,961	4	75,269,625
Misc.	93	107,731,582	256	237,851,467
Total Ships	279	1,140,866,236	285	450,140,506
Lighters	520	14,639,850	1,255	38,438,306

— VESSELS SINCE INCEPTION —		RECAP	
Freighters	139	In Force	279
Pass./Cargo	14	Defaults	8
Tankers	53	Canceled	1
Misc.	103	Vol. Term.	21
	309		309
Lighters	520	Lighters	520

**TABLE 5—Mortgage Insurance Applications Approved in FY '70**

No. of Ships	Name or Type	Company	Date	Amount
1	President Johnson.....	American President Lines.....	7/ 6/70	\$ 10,485,000
3	American Racer.....	United States Lines.....	9/17/70	11,000,000
	American Ranger			
	American Reliance			
17	9 Pride Class.....	Lykes Bros. S.S. Co.....	12/15/70	50,000,000
	8 Clipper Class			
1	Ocean Star.....	General Marine, Inc.....	1/ 9/71	945,300
3	Washington Mail.....	American Mail Line.....	1/ 5/71	9,750,000
	Oregon Mail			
	Canada Mail			
1	Sohio Intrepid.....	652 Leasing Co.....	10/23/70	17,800,000
1	Eric Holzer.....	650 Leasing Co.....	1/15/71	21,000,000
1	Sohio Resolute.....	653 Leasing Co.....	2/ 3/71	17,800,000
1	Towboat.....			
71	Barges } 72 vessels.....	Mid-South Towing Co.....	4/ 1/71	6,711,000
5	President Van Buren.....	American President Lines.....	5/ 3/71	3,080,000
	President Grant.....			3,080,000
	President Taft.....			3,080,000
	President McKinley.....			3,080,000
	President Fillmore.....			3,080,000
2	IOS 3302.....	Ingram Ocean Systems Inc.....		6,333,000
	Carole G. Ingram.....			3,544,000
2	Ore Carriers.....	Kinsman Marine Transit Co.....	5/21/71	22,400,000
3	LASH Vessels.....	Waterman Carriers Inc.....	6/ 4/71	38,327,820
1	Myra Eckstein.....	Wisconsin Barge Line.....	6/14/71	1,336,000
1	LASH Vessel.....	Central Gulf Steamship Corp.....	6/ 9/71	11,500,000
2	OBO Vessels.....	Aires Marine Shipping Co.....	6/30/71	27,390,000
0		Farrel Lines Inc.....		4,000,000 <sup>1</sup>
116				\$275,722,120
160	LASH Lighters.....	Central Gulf.....	6/ 9/71	5,040,000
276				\$280,762,120

<sup>1</sup> Supplemental borrowings

**TABLE 6—Title XI Mortgages Committed in Previous Fiscal Years**

No. of Ships	Name or Type	Company	Date	Amount
8	Barge No. 3200	Asphalt Barge Corp.	12/26/70	\$197,000
	NATIONAL EAGLE		"	326,000
	NATIONAL VENTURE		"	323,000
	Barge No. 3204	Intercity Barge Co.	"	179,000
	Barge No. 3205	"	"	179,000
	Barge No. 3201	NMS Chemical Corp.	"	197,000
	Barge No. 3202	"	"	199,000
	Barge No. 3203	"	"	200,000
1	OVERSEAS ALEUTIAN	Ocean Transportation Company	3/25/71	6,414,000
331	LASH Lighters	Prudential Grace Lines, Inc.	11/23/70	8,785,000
			1/21/71	
			2/11/71	
			3/30/71	
			4/28/71	
				\$16,999,000

# Market Development

Recognizing that cargoes are the key to the future of American Merchant Marine, the Maritime Administration in May 1970 established a new Office of Market Development. During fiscal year 1971 this office launched a nationwide effort aimed at strengthening the marketing capabilities of U.S.-flag steamship companies and generating greater shipper patronage of their services.

Attesting to the high priorities assigned to these efforts, Regional Market Development Offices were opened during the year in seven major cities to maintain close liaison with the carriers and shippers. (See Chart IV). Through the cooperation of the Bureau of the Census, statistical data on cargo flow movements, noting U.S. and foreign flag carriage of cargoes by commodity and tonnage on specific trade routes, is now supplied to U.S.-flag operators on a continuing and current basis. This data measurably enhances the marketing efforts of the individual lines.

In addition to the promotion of commercial cargoes for the American-flag fleet, the Maritime Administration under the Merchant Marine Act of 1970 was assigned strengthened authority to monitor and regulate the administration of government impelled cargoes, and is required to report annually to the Congress on the extent of U.S.-flag participation in such movements.

With respect to its increased responsibilities, the Agency issued two rules in fiscal year 1971 dealing with cargo preference administration. One rule established a reporting requirement for each agency of the Government to submit timely and detailed data on all cargo preference shipments it handles. The second rule interprets the statutory phrase "fair and reasonable participation" by U.S.-flag vessels in the

carriage of preference cargoes to mean that ships of American registry must receive at least 50 percent of the ocean freight revenues generated as well as at least 50 percent of the gross tonnage.

A tabulation of the total freight revenues earned or tonnage carried by American-flag vessels in calendar year 1970 in conjunction with Government-sponsored cargoes is shown in Table 7.

## • Guideline Rates

The guideline ocean freight rate system remained in suspension during fiscal year 1971. U.S.-flag tramp activities, however, continued to be monitored by the Agency and rate guidelines were calculated to provide rate advice upon request to the shipper agencies.

## • National Maritime Council

A National Maritime Council was formed at the end of fiscal year 1971 to promote cargoes for U.S.-flag ships. The Council is a joint industry-labor-Government organization that is designed to amplify and coordinate the promotional efforts of labor, industry and the Maritime Administration.

The Council will undertake national and regional programs directed toward importers, exporters and freight forwarders and the general public to generate greater levels of shipper support of American-flag shipping services.

It is projected that in fiscal year 1972 the Council's programs will become defined and operational.

**TABLE 7—U. S. Flag Carriage of Government Sponsored Cargoes in Calendar Year 1970**

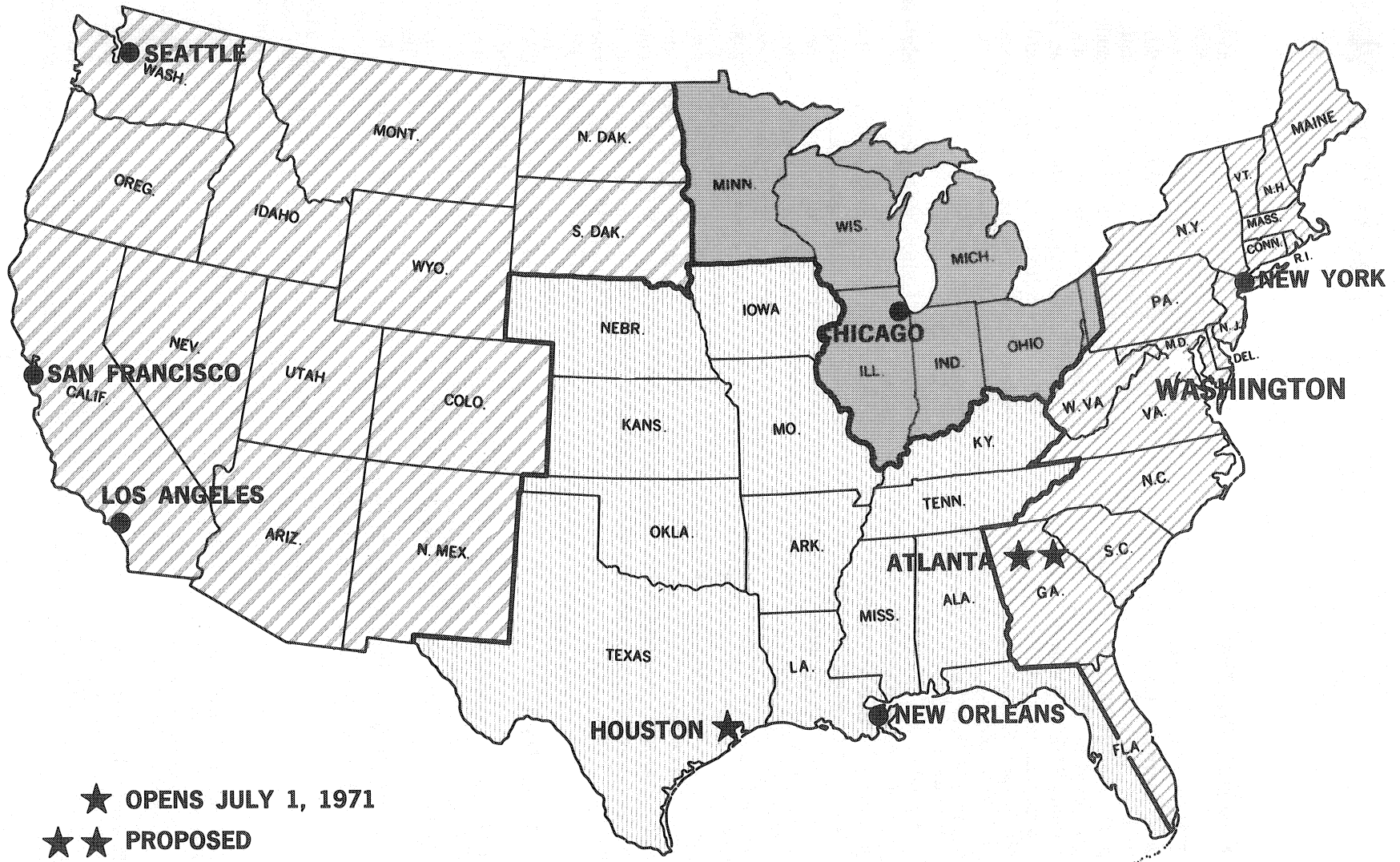
Program	Total Tonnage or Freight Revenue	U.S. Flag	Percent U.S.
Public Law 480	7,866,000 tons	3,970,000	50.5%
A.I.D.	4,662,000 tons	2,817,000	60.4%
Export-Import Bank	\$79,773,119	\$69,030,506	86.5%
Inter-American Development Bank	7,783 tons	3,860	43.2%

Chart IV.

# REGIONAL AND AREA MARKET DEVELOPMENT OFFICES

U.S. DEPARTMENT OF COMMERCE

Maritime Administration



# Maritime Manpower

## • Seamen Training

During the fiscal year, 875 seamen completed the Maritime Administration's radar, gyro and loran training programs. A total of 1,486 men completed the fire fighting and damage control courses sponsored by the Maritime Administration and the Military Sealift Command.

One hundred and twenty-six deck and engineering officers and 32 purser-pharmacist mates were graduated from various seafaring union schools. Upgrading programs sponsored by several of the maritime unions were continued.

A total of 201 third mates and 224 third-assistant engineers were graduated from the five maritime academies located at Vallejo, Calif.; Castine, Me.; Buzzard's Bay, Mass.; Fort Schuyler, N.Y. and Galveston, Tex. All who qualified received commissions as ensigns in the U.S. Naval Reserve.

The state schools, including the Great Lakes Maritime Academy established in fiscal year 1970, had a combined enrollment of 1,784 cadets during the year, most of whom received a government allowance of \$600 toward the cost of uniforms, textbooks and subsistence. Each of the maritime schools received an annual lump sum grant of \$75,000 for general school support.

## • Labor Data

Seafaring employment declined approximately 19 percent as compared to the 1970 normal monthly average. (See Table No. 8.) A sizeable portion of

the decrease was caused by the layup of two passenger ships, the SANTA ROSA and the SANTA PAULA, and the change in four other ships SANTA'S MAGDALENA, MARIA, MARIANA and MERCEDES, from combination cargo/passenger ships to cargo ships. Additionally, some 120 ships, mostly of World War II vintage, were withdrawn from the active merchant fleet. The total workforce in selected commercial shipyards experienced a decline of 4.6 percent. The longshore labor force experienced a decline of less than 1 percent.

## • Labor-Management Relations

Seafaring unions were involved in a number of short work stoppages during fiscal year 1971 involving specific companies or ships. There were four such work stoppages on the East Coast:

1. Members of the Marine Engineers Beneficial Association (MEBA) engaged in a one-day work stoppage against the American Export Isbrandtsen Lines, Inc. (AEIL) fleet to obtain assurances from AEIL that representation rights of MEBA would be continued in relation to four vessels transferred from Moore-McCormack Lines to AEIL ownership.

2. The Masters, Mates and Pilots (MM&P) and MEBA, supported by the International Longshoremen's Association (ILA), idled a total of 59 ships operated by United States Lines, Inc. (USL) and Sea-Land Service, Inc. for a period of three days because of the proposed acquisition of United States Lines by Reynolds Industries, parent corporation of Sea-Land.

3. The introduction of the first lighter-aboard-ship (LASH) vessel in United States foreign commerce, the SS LASH ITALIA, provoked intermittent work stoppages totaling eight days over a four-week period when deck officers took issue with the prescribed manning and anticipated workload.

4. The National Maritime Union (NMU), representing unlicensed seamen, initiated a three-day informational picketing campaign urging increased cargo preference for U.S.-flag merchant ships. Two foreign flag vessels were delayed in loading grain cargoes.

On the West Coast there was only one such work stoppage during the fiscal year when the MM&P en-

**TABLE 8—Maritime Manpower  
Daily Average Employment**

Type	Normal	Daily	Average
	1970		1971
Seafaring (Shipboard jobs).....	41,731		33,790
Shipyards (Commercial yards able to construct ocean- going ships 475 by 68 feet)			
Production Employees.....	61,731		59,485
Total force including manage- ment and clerical staffs.....	77,766		74,211
Longshoremen.....	66,120		65,530

gaged in a four-day work stoppage against Pacific Coast tanker operators because of delayed contract negotiations. MM&P deck officers refused to sail when the Pacific Maritime Association, representing employers, revealed plans to reduce employers' contributions to the MM&P pension fund.

Unrest in the longshore industry stemmed from several jurisdictional disputes involving the Pacific Coast International Longshoremen's and Warehousemen's Union (ILWU) and the International Brotherhood of Teamsters (IBT). A dispute between the two unions closed five piers in San Francisco, Calif., for six days while the parties sought to settle an issue regarding forklift operators. The Port of Stockton, Calif., suffered a 10-day work stoppage when the two unions again disputed the employment of IBT members by a building supply firm operating from leased waterfront facilities. The longshoremen's union accused management of delay in implementing an agreed upon Container Freight Station accord whereby employment of longshoremen would reverse the trend of continuing encroachment by IBT members in performing longshore work. The three-day work stoppage idled six United States and two foreign flag ships until the parties agreed to establishment of a fact-finding panel for resolving the issue.

Another five-day longshore strike erupted, closing the Port of San Francisco, when ILWU equipment operators objected to employers' direct hiring of selected workers allegedly skilled in new cargo handling equipment. Such direct hiring, in lieu of rotational hiring from the union hall, was claimed to cause reduced employment opportunities and resulted in the wildcat action. The Pacific Maritime Association suspended all further longshore hiring until the wildcat action was controlled. Shipowners diverted their vessels to Southern California ports creating considerable port congestion in that area. On the Atlantic Coast, the maiden voyage of the SS LASH ITALIA was delayed for five weeks due to the absence of a longshore accord on the cargo operations inherent in the new barge concept.

As fiscal year 1971 ended it also brought to conclusion the five-year longshore contract covering all Pacific Coast ports ushering in an anticipated lengthy work stoppage.

Shipyard labor relations fared better than in the previous year due to the absence of the numerous contract expirations that had prevailed in fiscal year 1970. A work stoppage of 22 days occurred when the International Association of Bridge, Structural and Ornamental Iron Workers' contract expired at National Steel & Shipbuilding Company idling the production workforce of 1,800 men. A five-year contract accord concluded the negotiations. The Ingalls Shipbuilding facilities at Pascagoula, Miss., were sub-

jected to a two-day wildcat strike after management discharged several operating engineers who initiated job action in support of a crane operator discharged for violation of safety regulations.

## • United Seamen's Service

The United Seamen's Service (USS), after 28 years of operation, having been originally created by the War Shipping Administration and sponsored by its successor agency, the Maritime Commission, is continuing to provide direct service to thousands of American seamen who have registered in the 15 centers throughout the world.

On December 31, 1970, President Nixon signed Public Law 91-603, an Act to promote the welfare of United States merchant seamen through cooperation with the United Seamen's Service. The passage of PL 91-603 is the result of interested organizations and agencies working jointly to provide facilities and benefits for merchant seamen away from home. Congressional hearings were held and the Maritime Administration testified in support of the bill.

The Act reestablishes direct Federal recognition of essential needs for overseas seamen's facilities, especially in defense logistics service.

Work is now in progress to establish a new center in Newport-Saigon, Viet Nam in response to a request by the Department of Defense. The center is scheduled to open in the latter part of November 1971.

## • Merchant Marine Awards

The Secretary of Commerce is authorized by The Merchant Marine Medals Act of 1956 to grant medals and service ribbons, under certain conditions, to seamen for meritorious actions or participation in national defense efforts. The following decorations are currently authorized: Gallant Ship Award; Distinguished Service Medal; Meritorious Service Medal; Korea Service Ribbon; and Viet Nam Service Ribbon.

The following awards were made during fiscal year 1971 under this authority:

The Gallant Ship Award was presented to the SS PRESIDENT JACKSON in recognition of the heroic efforts displayed by the vessel's crew during their rescue of the crew of the Schooner TINA MARIA DONCINE when it became disabled in heavy seas off the coast of Bermuda on January 14, 1970. The Master of the PRESIDENT JACKSON, Captain Eugene A. Olsen was awarded the Merchant Ma-

rine Meritorious Service Medal and each member of the crew was also presented with Gallant Ship Unit Citations.

A Merchant Marine Meritorious Service Medal was awarded to Captain Forest J. Adams, Master of the PARIS THERIOT, in recognition of his heroic actions and outstanding seamanship displayed in the rescue of passengers and crew of the British M/V WESTSHORE during a severe winter storm in the North Sea on January 7, 1971.

Captain John J. Pucci and Chief Engineer Herman L. Rodener, were awarded Merchant Marine Meritorious Service Medals and 17 other crew members of the SS MADAKET received letters of commendation in recognition of their efforts in averting what might have been a major disaster to their ship, cargo, and adjacent shoreside facilities when their ship caught fire while in the process of discharging a

cargo of fire bombs in Viet Nam on April 9, 1971.

Merchant Marine Meritorious Service Medals were awarded to Captain Chris A. Rieder, Master of the McGRATH II and Captain Douglas J. Grubbs, Master of the CAPPY BISSO in recognition of their heroic rescue efforts following the collision of the SS UNION FAITH and Barge 10C No. 7 in the Mississippi River, April 6, 1969.

Merchant Marine Distinguished Service Medals were awarded to Captain Walter H. Harris, First Officer George DeFlon, Third Officer Frank C. Rodway, Chief Engineer John Gonzales and First Assistant Engineer Edward Brady, all officers of the AMOCO LOUISIANA, in recognition of their heroic rescue efforts displayed following an explosion and fire aboard the Barge DEAN REINAUER at South Portland, Me., December 10, 1969.

*President Richard M. Nixon presents the 1971 American Merchant Marine Seamanship Trophy posthumously to Richard D. Hughes. Attending the presentation were: (l. to r.) Joseph Curan, President, NMU; Jennifer Hughes; Mrs. Richard D. Hughes; Andrew E. Gibson, Asst. Sec. of Commerce; Robert B. Stone, President, States Marine Lines.*



A Merchant Marine Distinguished Service Medal was awarded to Second Mate James McCarthy and the Merchant Marine Meritorious Service Medal was awarded to Captain Adorian W. Schodde, Second Assistant Engineer Raymond F. Tocci, Third Mate Nicholas Metkovic, Able Seaman Lauro Cisternino and Fireman/Watertender Patrick McLaughlin. Letters of Commendation were presented to Chief Engineer Herbert V. Woodger, Third Assistant Engineer Robert J. Redfern and Assistant Pantryman Raymond Purnell, all crew members of the AFRICAN STAR, in recognition of their heroic actions following a collision between their vessel and a barge under the tow of the tug MIDWEST CITIES on the Mississippi River, March 16, 1968.

The MS KHIAN STAR was awarded the Gallant Ship Award and each of its crew members was presented with Gallant Ship Unit Citations in recognition of their actions in saving human lives when the SS BADGER STATE, carrying a cargo of fire bombs, suffered an explosion and fire at sea December 26, 1969.

There were 300 authorizations for the Viet Nam Service Ribbons completed during the year.

In addition to the Merchant Marine Awards authorized by the Merchant Marine Medals Act of 1956, the Maritime Administration acts as the Secretariat of the American Merchant Marine Seamanship

Trophy Committee. Comprised of Maritime Administration, U.S. Coast Guard, labor and industry management officials, the Committee determines the recipient of this award.

During fiscal year 1971, two presentations were made of the Seamanship Trophy to honor distinguished seamen. President Nixon on August 13, 1970, presented Mrs. Richard D. Hughes with the 1970 American Merchant Marine Seamanship Trophy in recognition of her late husband's efforts to save the SS BADGER STATE, an American freighter which sank in the Pacific after an explosion and fire aboard. Richard D. Hughes was boatswain aboard the BADGER STATE carrying munitions to Viet Nam in December, 1969. During heavy seas in the mid-Pacific, the cargo of 2,000-pound bombs broke loose. Mr. Hughes led the efforts to open the hatches and secure the shifting explosives. Despite a severe back injury and exhaustion, he directed working parties for two days. When the order was given to abandon ship, Mr. Hughes, in a weakened condition slipped into the sea during rescue operations and was lost. This was the first time the Trophy has been presented posthumously.

Captain E. A. Olsen, former Master of the SS PRESIDENT JACKSON in addition to having received the Merchant Marine Meritorious Service Medal was also awarded the 1971 Seamanship Trophy on May 20, 1971, for masterful seamanship in rescuing seven men from the sinking schooner TINA MARIA DONCINE during a North Atlantic storm. All seven men reached safety and there were no personal injuries to the crew of the SS PRESIDENT JACKSON.

## U. S. Merchant Marine Academy

The U.S. Merchant Marine Academy was created by the Merchant Marine Act of 1936, to provide not only merchant marine officers but also future leadership for the maritime industry.

Consequently, in the 1970-71 academic year, an expanded curriculum was adopted to provide midshipmen with an increased number of elective courses and course sequences in the areas of Oceanography, Mathematics, Chemistry, Management, Transportation, Administration, Computer Science, Nuclear Engineering, Mechanical Engineering, English, Comparative Literature, History and Civiliza-

tion. The year spent at sea by the student was re-scheduled to two separate sea assignments within the four-year curriculum in order to provide the midshipmen with maximum opportunity to utilize classroom instruction.

The disciplinary system was re-evaluated and the Regimental Department reorganized. Under the direction of the Commandant, the structure of the regiment places emphasis on self-management by the midshipmen with general guidance provided by officer personnel.

As a result of the self-upgrading program for faculty members, 72 percent now have Masters degrees and 20 percent have earned a Doctorate.

The Academy has continued a positive action plan for minority recruitment of students and faculty. The Classes of 1974 and 1975 included 22 and 18 minority students, respectively. The professional staff now includes six minority members and six women. The percentage of black students at Kings Point is 3.6 percent.

A total of 83 third mates, 109 third-assistant engineers and 15 with dual training for third officers, deck/engine, were graduated in 1971. The 15 graduates with dual training were the third class to com-

plete this curriculum. In addition to their licenses, all graduates received a bachelor of science degree and, if qualified, a commission as ensign in the U.S. Naval Reserve. During the year the Federal Academy had an average of 950 students.

Under the Academy modernization program in fiscal year 1971, the Student Activities Building was completely renovated and the midshipmen dormitories are presently being renovated. Repair on Mallory Pier, necessary to prevent shore line erosion and preclude damage to building foundations, is substantially underway. Upgrading of several classrooms and laboratory facilities was also accomplished.

# MARITIME SUBSIDY BOARD

The Maritime Subsidy Board, by delegation from the Secretary of Commerce, exercises the authority vested in him to award, amend and terminate subsidy contracts for the operation and construction of vessels. The Board's functions are implemented through fact-finding investigations, compilation of domestic and foreign trade and cost data and public hearings. Decisions, opinions, orders, rulings or reports of the Maritime Subsidy Board are final unless the Secretary of Commerce on his own motion or pursuant to a petition filed by an interested party undertakes review of its action. Final action by the Secretary may be appealed to the Federal Courts.

The Assistant Secretary for Maritime Affairs, as *ex officio* Maritime Administrator, is Chairman of the three-member Maritime Subsidy Board, which includes the Deputy Assistant Secretary and the General Counsel of the Maritime Administration. During fiscal year 1971, the Deputy Maritime Administrator for Program Implementation and the Secretary of the Maritime Administration acted as Alternate Members.

In fiscal year 1971, the Board convened 44 formal meetings in which it acted on some 394 official items, including the issuance of 20 formal opinions, rulings and orders. It also published 43 notices in the *Federal Register* pertaining mainly to subsidy applications subject to required statutory hearings and the development and adoption of rules and regulations proposed by the Board with requests for views from all sectors of the maritime industry toward implementation of the Merchant Marine Act of 1970.

Of the 20 formal opinions and orders served during fiscal year 1971, two were of particular significance:

The Board ruled in October 1970, that nothing in the Merchant Marine Act, 1936, as amended, prohibits charters of two- and three-year duration to the Military Sealift Command of vessels built with construction-differential subsidy (CDS). The Board reasoned that the use of such vessels by the Military Sealift Command did not violate the intent of the Act to provide construction-differential subsidy for vessels to be operated in foreign commerce in competition with foreign-flag vessels.

The second significant decision involved the announced intention of United States Lines, Inc. to commence a new "tri-continent service" to be operated with Lancer-type containerships, built with construction-differential subsidy. The vessels would operate from East Coast ports intercoastal to the West Coast and then to the Far East with stops at Hawaii.

Objections were raised to the proposed service on the allegation that such service with vessels built with CDS was unauthorized without the Board's written consent, as required under Section 506 of the Act in connection with an agreed repayment of subsidy for use of vessels in the domestic trade. The Maritime Subsidy Board rendered a decision in April 1971 in this case which is identified as Docket No. A-46. The Board concluded that United States Lines' CDS contracts included the agreements contemplated by Section 506 and that the proposed use and operation of the Lancer ships was consistent with those agree-

ments. It also found that there was no statutory restriction against the use of the vessels in a service other than the one for which they were originally constructed.

Highlights of the notices published in the *Federal Register* dealt with: the intent under Section 502(b) of the Act to compute estimated foreign costs for lighter-aboard-ship (LASH) vessels, oil/bulk/ore (OBO's) and 225,000 DWT tankers; the "Statement of General Policy" relative to the criteria to be applied in selecting the operators and shipyards

to participate in the new maritime program; procedures for the determination of operating-differential subsidy (ODS) for wages of officers and crews; the granting of subsidy for the world-wide operation of OBO type vessels; a method to be used for the determination of CDS by type of vessel; regulation of the operation of bulk-cargo vessels built with CDS in foreign commerce; and regulations providing for the payment of ODS for bulk-cargo carrying vessels engaged in essential services.



*The Maritime Administration and the Maritime Subsidy Board entered into a contract with Aries Marine Shipping Co. and the National Steel & Shipbuilding Co. for the construction and operation of two 80,500 dwt Ore/Bulk/Oil (OBO) vessels on June 30, 1971. Above, Captain Leon Burger, President of Aries; A. E. Gibson, Assistant Secretary of Commerce; and John Banks, Vice President of National Steel examine a model of the OBO.*

# ADMINISTRATION

**D**uring the year, restructuring of the Maritime Administration headquarters organization continued toward the goals of making it more responsive to program needs, increasing emphasis on certain priority activities, and providing more effective coordination and direction of related functions. (See Chart VI). The areas of responsibility of field offices are shown in Chart V.

A number of actions were taken to insure the efficiency, economy and effectiveness of Agency operations. A program was carried out to improve and streamline professional auditing practices within the Maritime Administration, and to eliminate a chronic backlog of approximately 41 man-years of audit effort. This was done principally by increasing the use of selective audit reviews and limiting audit activities

to those areas representing potential losses to the Government's interest.

As a result 18 fewer audit positions will be required to carry out the current audit program under the streamlined procedures. Through these measures, estimated savings of 59 man-years of work or \$1,041,000 have been achieved.

As part of the Presidentially directed Federal Reports Study, an annual saving of \$51,000 was achieved through elimination and simplification of internal reporting requirements.

During fiscal year 1971 an overall staff reduction of 321 positions was achieved by eliminating or curtailing lower priority programs and maintaining strict controls on manpower.

## Management

### • Internal Management

**A**ctions under the Managers' Improvement Program to reduce costs of operations resulted in savings of \$3,220,000. Principal actions were: (1)

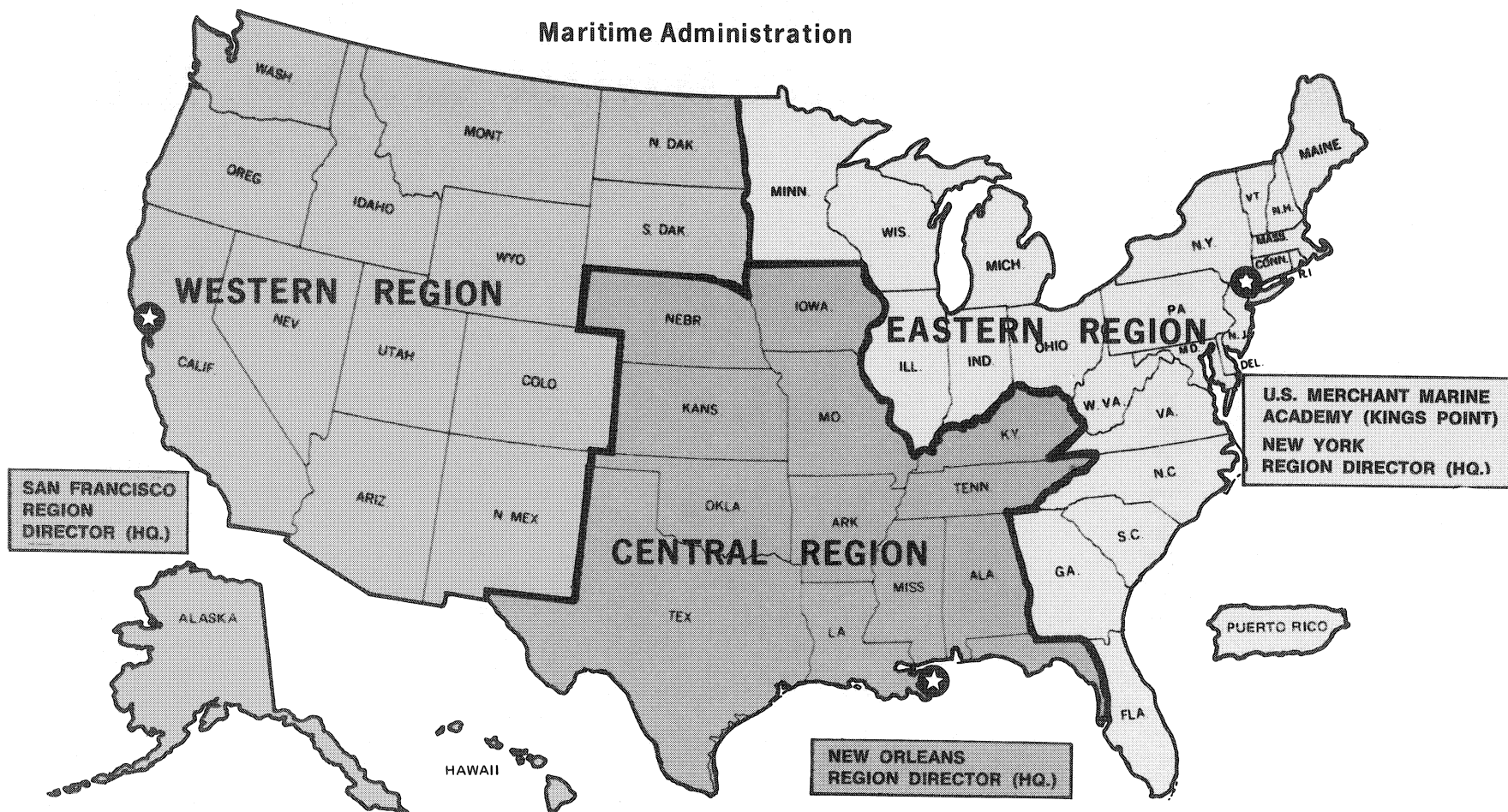
use of improved and streamlined external audit practices; (2) phasing out of the three warehouses located at New Orleans, La.; San Francisco, Calif.; and Kearny, N.J.; (3) elimination of low priority activities and positions through organization and staffing

Chart V.

# FIELD ORGANIZATION

U. S. DEPARTMENT OF COMMERCE

Maritime Administration



surveys of nine major organization components; (4) phasing out of the Olympia, Wash., Reserve Fleet; and (5) a 23 percent reduction in the cost of internal reporting requirements.

As a result of these and other actions, the Maritime Administration's permanent employment was substantially reduced.

A new Office of International Activities was established to strengthen the role of the Maritime Administration in all international activities which will have a bearing on the well being of the U.S. Merchant Marine. In addition, a new National Maritime Research Center was established at the U.S. Merchant Marine Academy, Kings Point, N.Y.

### • Audits

**O**n the basis of findings of the General Accounting Office in a survey of certain Agency accounting processes and controls, the Maritime Administra-

tion has undertaken an intensive effort to strengthen its controls over accrual processes. The General Accounting Office made a "Review of Procurement Policies and Practices," June 1970, and action was taken to provide more careful documentation and preparation of solicitation documents, as recommended in the report.

Internal audits during the past year covered a wide range of functions and activities. These included: (1) the activities of the three Maritime regional offices; (2) rental of ADP equipment; (3) budget estimates for the operating-differential subsidy program; (4) outlay estimates for the ship construction subsidy program; (5) recording of administrative expense obligations; and (6) the National Defense Reserve Fleet. These audits have assisted in highlighting actual or potential problem areas.

## Personnel

### • Employment

**E**ffective December 8, 1970, Andrew E. Gibson, Maritime Administrator, pursuant to Public Law 91-469, was appointed Assistant Secretary of Commerce for Maritime Affairs, and *ex officio* Maritime Administrator. He also serves as Chairman of the Maritime Subsidy Board. Effective May 19, 1971, Robert J. Blackwell, Deputy Maritime Administrator, was reassigned to the new position of Deputy Assistant Secretary of Commerce for Maritime Affairs.

During the year, the number of personnel employed by the Maritime Administration decreased by 321—from 2,131 to 1,810. This was the result of voluntary constraints imposed and an intensive re-evaluation of programs which could be eliminated or curtailed.

### • Equal Employment Opportunity

**A**pproximately 24.2 percent of the Agency's work force consisted of minority group employees. Minority employment in GS-12 and above increased

by approximately 50 percent over the previous year for a total of 6.6 percent.

An EEO Symposium for Maritime Administration executives was developed and held to promote awareness and knowledge of problems and programs in this area. Noted leaders from Government, industry and the community participated.

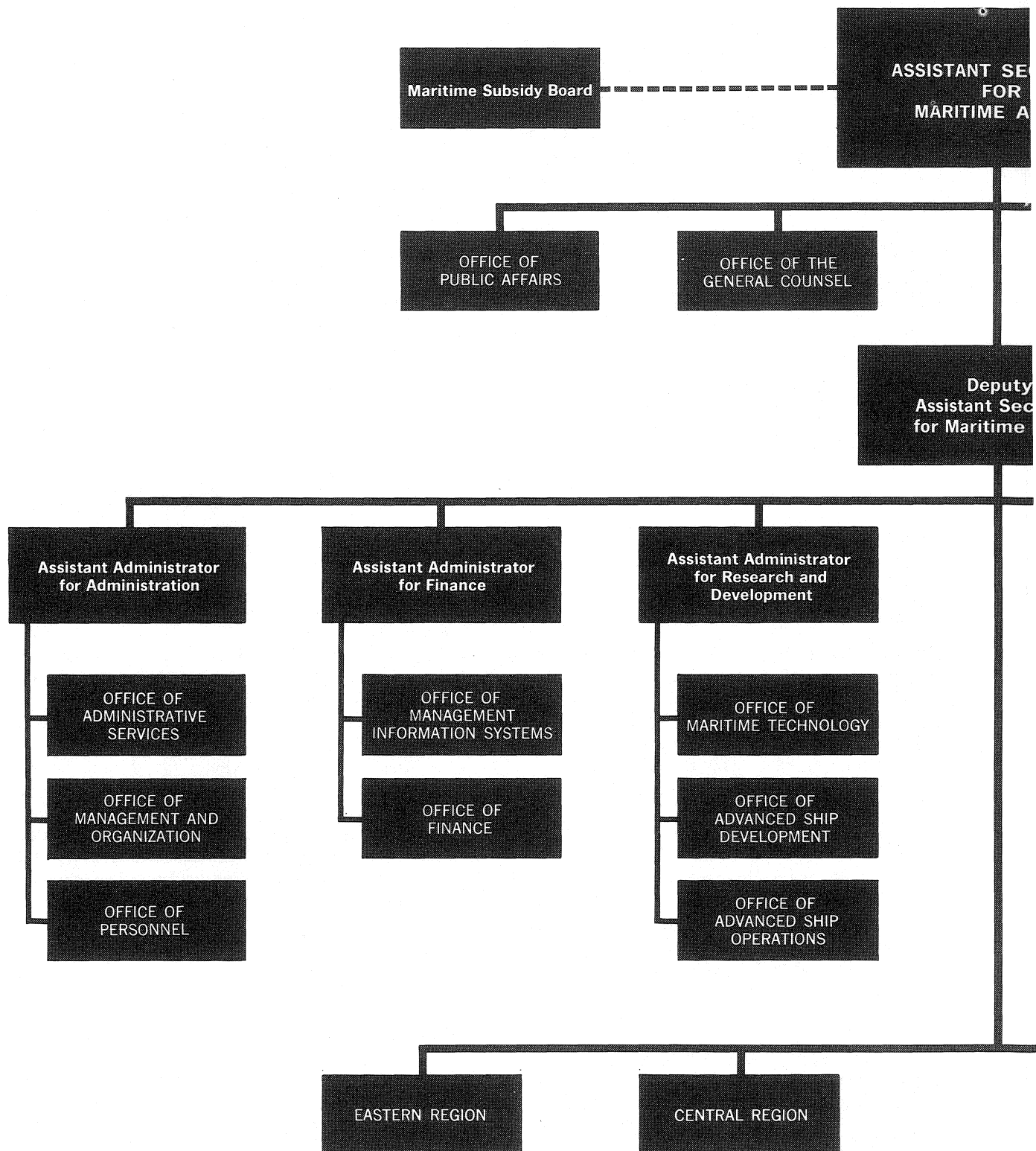
In-house equal employment opportunity audits were conducted of the various organizational segments to determine the Maritime Administration's equal employment opportunity posture. The in-house audit has in most cases precluded formal complaints of discrimination from being filed and has enhanced the Maritime Administration's equal employment opportunity initiatives.

### • Training

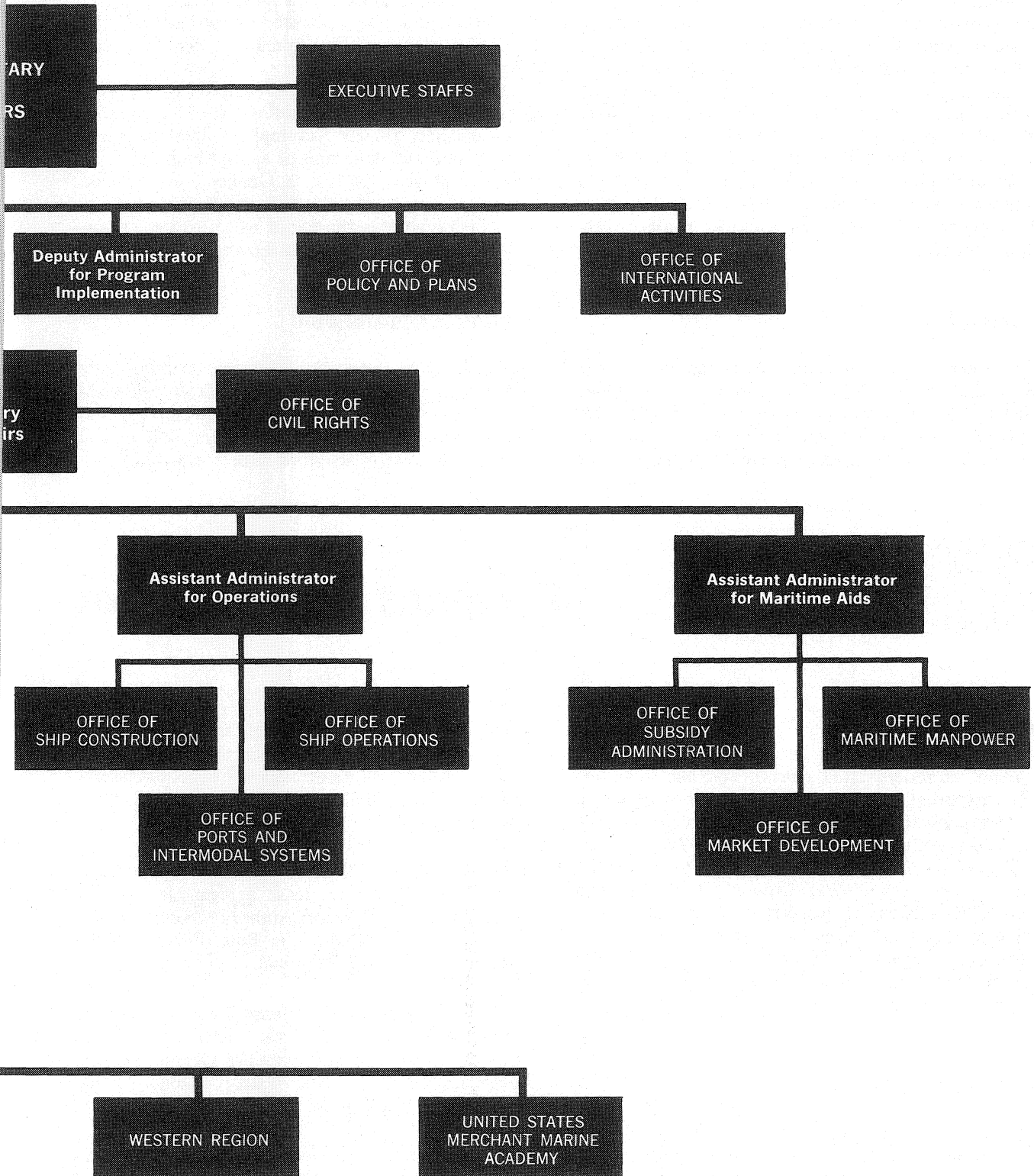
**A** total of 543 employees received training through Government and non-government sources, including professional, scientific and engineering, supervisory and management, and technical instruction.

Chart VI.

U.S. DEPARTMENT OF COMMERCE  
Maritime Administration



COMMERCE  
ration



Management of all levels participated in training programs. A Special Executive Development Seminar was conducted by the Harvard Graduate School of Business Administration. A new program of monthly meetings between the Assistant Secretary and middle management was initiated to keep the managers apprised of Agency policies, programs and missions as well as providing feedback to the Assistant Secretary.

Four employees received a year of graduate study under various Agency programs. Five employees were selected to participate in a 12–18 month training program to aid in making the transition from subprofessional to professional positions. In addition, eight employees were enrolled in the General Education Development Program (high school equivalency certificate program).

### • Awards

**T**hirteen employees received outstanding awards including three Department of Commerce Gold Medals, the highest recognition given by the Department; three Department Silver Medals, the second highest award given by the Department; and

seven Bronze Medals, the Maritime Administration's top honor.

During the year, 30 suggestions were adopted. One suggestion submitted by a Region employee resulted in an estimated first year savings of over \$150,000 and has been adopted by the United States Coast Guard, American Bureau of Shipping and other bodies.

One hundred and fifty-two employees received Outstanding Performance ratings for performance which not only exceeded normal requirements in all respects but was deserving of special mention. Forty-one employees received a Quality Step Increase—a salary step in addition to a regular pay increase—for high quality performance which exceeded normal requirements in all major aspects.

### • Position Classification

**A**ll necessary classification actions resulting from assignment changes, reorganizations, establishment of new offices, conversion of wage employees to the Coordinated Federal Wage System, and regular maintenance review activities were completed.

## Facilities Management

### • Material Control

**R**ental of mobilization reserve machine tools and equipment to commercial concerns working on defense contracts or in support of merchant marine programs produced a revenue of \$163,979.

Excess personal property having an acquisition value of \$9,252,298 was disposed of during fiscal year 1971, including property with an acquisition value of \$6,104,886 donated or transferred to other Government agencies. Property valued at \$16,937 was destroyed or abandoned, and property with an acquisition value of \$3,130,475 was sold for \$560,443.

### • Real Property

**A**t year's end the Maritime Administration's real property included the former reserve shipyard at Wilmington, N.C.; a warehouse at Kearny, N.J.,

and Fort Mason, San Francisco, Calif.; a terminal at Hoboken, N.J.; the U.S. Merchant Marine Academy at Kings Point, N.Y.; and National Defense Reserve Fleet sites at Lee Hall, Va.; Mobile, Ala.; Beaumont, Tex.; Benicia, Calif.; and Olympia, Wash.

The Wilmington, N.C., shipyard was under lease-purchase and long-term lease agreements with the North Carolina State Ports Authority. Another long-term agreement included the Port of New York's lease of the Hoboken Terminal.

The former National Defense Reserve Fleet anchorage at Astoria, Ore., was under lease to the Ports of Astoria and Portland. The General Services Administration is disposing of the remaining acreage of the former Wilmington, N.C., fleet anchorage.

Rents from the lease of real property to private interests during the year amounted to \$4,500.

**A**s a result of on-the-job training, having pertinent safety material available and endeavoring to maintain a safety attitude and awareness of a safe working environment for all employees, the Maritime Administration met the President's "Mission Safety '70" goal of a 30 percent improvement in the Injury Frequency Rate over the base year rate of 1963. Each year from 1965 an improvement has been re-

flected and the program was completed with a 70.3 percent improvement.

The Maritime Administration received the Secretary of Commerce "Safety Merit Award" for high achievement in promoting safety in fiscal year 1971.

As a follow-up to "Mission Safety '70," the President initiated a new Federal Safety Campaign for 1971-1972, "Zero in on Federal Safety."

## Finance

### • Accounting

**T**he accounts of the Maritime Administration were maintained on an accrual basis and in conformity with the principles, standards and related requirements prescribed by the Comptroller General.

Net cost of combined operations of the Maritime Administration for the year totaled \$338.4 million. The cost included \$297.9 million for operating-and construction-differential subsidies, \$10.7 million for depreciation on reserve fleet vessels and other assets, \$8.3 million for research and development, and \$16.6 million for administrative expenses. The equity of the government at June 30, 1971, totaled \$1,444 million, an increase of \$140 million from June 30, 1970. The increase included the net cost of combined operations of \$338.4 million and the return of \$28.9 million in collections and unobligated balances to the Treasury, offset by \$512.9 million appropriated by Congress and \$2.5 million in property and vessel transfers. See Exhibits 1-4 for detailed year end financial statements of MarAd.

A fully automated payroll system became operational in January 1971. Work continues on implementation of fully automated accounting, cost accounting, and financial information systems.

### • Contract Auditing

**M**aritime auditors review the operators' annual subsidy accounting, which have been certified by independent public accountants, before payment of the final 5 percent of operating-differential subsidy. They also audit expenses eligible for subsidy to permit payment to the operators of up to 95 percent of the accrued operating-differential subsidy for such expenses.

Audits to permit final payments were completed for ten operators generally covering the periods from 1960 through 1968. Most of the audits of expenses eligible for subsidy of the 13 subsidized operators were completed through calendar year 1968. Wage expenses of two of the operators were audited through calendar year 1970.

Audits were made to determine the actual operating costs of the N.S. SAVANNAH under its charter agreement. Other audits included those of General Agency Agreements, contracts for ship construction and repair, research and development, and related contracts.

Audits completed during the fiscal year resulted in reduced billings of about \$11 million to the Government.

## • Title XII Insurance

During the fiscal year, the Maritime Administration continued to administer war risk and certain marine and liability insurance programs authorized by Title XII, Merchant Marine Act, 1936, as amended.

War risk insurance binders, covering shipowners from the time commercial risk insurance terminates until 30 days after the outbreak of war involving the major powers, outstanding on June 30, 1971, were: 1,225 for war risk hull insurance, 1,164 for war risk protection and indemnity insurance, and 948 for war risk insurance of crew life and personal effects. From the inception of the binder program in 1952 to June 30, 1971, binder fees totaled \$1,057,312, and expenses totaled \$760,578, of which \$383,874 was paid as fees and expenses to the underwriting agent appointed by Maritime to process the binders.

War risk builder's risk insurance for the pre-launching construction period was written on 158 ships from the inception of the program in 1953 through June 30, 1971. Premiums totaled \$3,196,753. From October 1962 through June 30, 1971, 52 policies were issued for war risk builder's risk insurance for the postlaunching construction period, each with a service fee of \$75, and each subject to attachment and premium assessment upon the automatic termination of commercial insurance resulting from outbreak of hostilities.

A standby war risk cargo insurance program was continued, which becomes effective when the Assistant Secretary of Commerce for Maritime Affairs finds that insurance adequate for the needs of U.S. waterborne commerce cannot be obtained on reasonable terms and conditions from companies authorized to do an insurance business in a State of the United States. Commercial underwriting agents will be employed to write this insurance, and as of June 30, 1971, 38 were under contract.

At the request of the Navy, war risk insurance was provided, without premium charge but on a reimbursable basis for losses incurred, as authorized under Section 1205, Merchant Marine Act, 1936, as amended. During the fiscal year, insurance coverage in effect was as follows:

1. Second Seamen's war risk insurance was provided for the crews of 18 Government-owned tankers operated for the account of the Military Sealift Command (MSC).
2. War risk hull and Second Seamen's war risk insurance were provided on one privately-owned U.S.-flag vessel and its crew while under bareboat charter to MSC.
3. Second Seamen's war risk insurance was provided for the crews of 113 privately-owned

U.S.-flag tankers and dry cargo vessels chartered to MSC. The coverage provided is limited to the "Viet Nam Combat Zone," referred to by commercial underwriters as an additional premium trading area.

Net premium savings to the Department of the Navy under programs Nos. 1 and 2 above, from inception in 1954 and 1964, respectively, to June 30, 1971, was estimated at \$1,211,212, after deducting claim payments of \$110,740. Net premium savings to the Navy under program No. 3 above, from inception on July 15, 1968, to June 30, 1971, was estimated at \$3,649,640, after deducting claim payments of \$40,160 and pending estimates of \$1,500.

Under section 1208(a) of the 1936 Merchant Marine Act, money in the war risk insurance revolving fund may be invested in securities of the United States or in securities on which the United States guarantees principal and interest. Since 1962, when the initial investment was made, through June 30, 1971, interest earned totaled \$1,479,969.

## • Other Insurance Activities

Maritime continued to self-insure Government-owned ships and with the lay-up on November 16, 1970, of its last ship operated by general agents, the purchase of marine protection and indemnity insurance was discontinued. Settlement of outstanding claims will be concluded by Maritime Administration personnel with commercial underwriters. By assuming the war risk hull and Second Seamen's war risk insurance, it is estimated that Maritime has effected for the MSC a net premium saving of \$6.66 million during the Viet Nam buildup from July 1965 through June 30, 1971.

**TABLE 9—Marine and War Risk Insurance Claims Fiscal Year 1971**

Kind of Insurance	Claims Reported	Number of claims settled <sup>1</sup>	Amount Settled
Marine protection and indemnity against the Government <sup>2</sup> .....	224	2,228	\$3,125,607
Marine Hull:			
In favor of the Government.....	1	28	29,066
Against the Government.....	0	0	0
Marine Builder's risk			
Against the Government .....	0	0	0
Second Seamen's war risk			
Against the Government .....	0	0	0

<sup>1</sup> Settlements include claims reported in prior years.

<sup>2</sup> Approximate.

Claims of a marine and war risk insurance nature assumed by the Government, and not recoverable from commercial insurance are shown in Table 9.

Mortgagee insurance providing coverage when marine policies are invalidated was renewed on April 1, 1971, at expiring premium rates on ships owned by unsubsidized operators who have mortgages insured under Title XI. Owners of 67 vessels were covered. Primary coverage was placed in the American market to the extent of 35.5 percent, the maximum available. The excess coverage over \$13 million per vessel was placed in the American market to the extent of 5 percent. The balance of both primary and excess coverage was placed in the British market. The mortgagor pays the insurance premium.

The Maritime Administration determines whether the insurance placed in commercial markets by mortgagors of ships on which the Government holds or insures mortgages, by charterers of Government-

**TABLE 10—Marine and War Risk Insurance Approved  
Fiscal Year 1971**

Kind of Insurance	Total Amount	Percentage	
		Ameri- can	Foreign
Marine Hull.....	\$2,389,506,000	64	36
Marine Protection and Indemnity.....	2,123,305,000	48	52
War Risk Hull.....	2,072,039,000	9	91
War Risk Protection and Indemnity.....	2,048,464,000	9	91

owned ships, and by subsidized operators of ships, complies with the contract requirements. See Table 10 for insurance amounts approved during fiscal year 1971.

# CIVIL RIGHTS

The Maritime Administration is charged with assuring equal employment opportunity in the shipping, shipbuilding, and ship repair industries located in coastal states. This jurisdiction includes subsidized and unsubsidized operators in the foreign trade, coastal and domestic operators, and stevedore firms, as well as all vessel construction and repair yards.

Concentrating on auditing the equal employment practices of the major firms in each category, the Agency has made significant progress in increasing minority representation in these fields, as well as opening previously closed job categories to minorities.

## • Affirmative Action Plans

In the auditing process, primary emphasis is placed on the development of realistic goals and timetables for increasing minority representation at all job levels through improved recruiting, placement, upgrading, and promotion policies. In the resulting affirmative action plans, where appropriate, provisions are included to relieve the present effects of past discrimination by allowing minority employees to shift to jobs in which there had previously been little or no minority representation, without loss of seniority or earnings.

While the prior fiscal year's efforts had been focused on the shipbuilding industry, the Agency's activities during fiscal year 1971 were broadened to

encompass more shipping lines. Action plans covering non-casual jobs were developed by 61 operators. These plans call for increasing minority representation to 12 percent by the end of calendar year 1972.

One debarment notice was issued during the year. Hearings on this case were in progress at the end of the fiscal year.

## • Statistical Trends

Minority representation in the major shipyards over the last two years has increased from 17 percent to 18.5 percent. The emphasis on placing minority workers in skilled jobs resulted in increasing the participation rate for minority employees in these jobs from 15.7 to 17.1 percent. Some of this improvement resulted from efforts to obtain relief for those suffering the present effects of past discrimination.

An increase of 2.3 percent was recorded in minority participation in white-collar shipyard jobs in the last two years.

Overall, minority employment ratios in the shipyards exceed the ratio of minority workers in the labor market, with the exception of Gulf Coast shipyards. Affirmative action commitments from Gulf Coast yards will remedy this deficiency.

The minority participation rate in white-collar jobs in the shipping industry rose in the same time period from 5.5 to 9 percent, with present affirmative action

plans indicating that the 12 percent mark will be achieved by the end of calendar year 1972.

### • Training

In the past two years, shipyards have received more than \$2 million to provide training for 1,850 hard-core unemployed and underemployed workers,

with \$932,000 of this total being furnished during the last fiscal year. An additional \$400,000 was allotted for shipyards to provide on-the-job training for 380 trainees under the Manpower Development Training Act. Two hundred of these trainees met the requirements of the Act and were placed in shipyards. At the end of the fiscal year, requests for the allocation of 1,500 training positions to shipyards were pending the approval of the Department of Labor.



*Because of on-the-job training provided by the Manpower Development Training Act, 200 trainees were placed in positions at U. S. shipyards.*

# POLICY AND PLANS

The Office of Policy and Plans provides capabilities for long-term and mid-term planning, program/budgeting, economics and operations analysis, program evaluation, and special studies in support of legislation and day-to-day management. Major study initiatives during fiscal year 1971 were in the areas of labor relations, NATO planning, and an analysis of military sealift procurement practices. A significant contribution was made to the revision and updating of NATO military plans for Navy control and protection of shipping in time of war. Studies have also been initiated in the areas of trade forecasting, balance of payments, collective bargaining information, tax incentives, military uses of merchant ships, and general development of marine resources.

## • Program Planning

More effective coordination of the Maritime Administration's planning, programming and budgeting systems was provided through the transfer of the Agency's budget function to the Office of Policy and Plans. Program Planning and Budgeting (PPB) teams were established, composed of program and budget analyses with responsibility for designated budget appropriations and PPB entity programs. The Division of Programs was reorganized to provide for coordination of overall program formulation through preparation of the Program Memorandum, a single consolidated detailed statement of agency objectives. Program evaluation was formally instituted through the establishment of a new maritime program prog-

ress analysis system. A Division of Budget and Controls was established to control and report on budget obligations and expenditures against pre-established program cost plans. This reorganization links together the planning of programs, allocation of resources, control of expenditures and analysis of program achievement.

During fiscal year 1971 a schedule of regular management reviews was instituted as an aid to improved control of the Agency's budget obligations and outlays. PPB teams prepare monthly status reports for their respective appropriations, which offer the Agency management a rapid and current overview of obligation and outlay performance against a plan.

## • Economic and Analytic Studies

Three major projects undertaken to assist the Maritime Administration in implementing the Merchant Marine Act of 1970 were: 1) Sealift Procurement Analysis and Review (SPAR); 2) Project #72 (Computerized forecasts of certain maritime data); and 3) U.S. Seaborne Trade 1970-1990.

### Sealift Procurement Analysis and Review (SPAR)

During fiscal year 1971, the Sealift Procurement Analysis and Review (SPAR) Study was undertaken to determine whether the rates paid for the transportation of military cargo in berth services had fallen to noncompensatory levels, and if so, whether this was attributable to the Department of Defense (DOD)

system of competitive negotiated procurement. The study was conducted by the Maritime Administration, jointly sponsored by the Federal Maritime Commission and participated in by the eleven steamship operators who carried the major portion of the less than full shipload lots of military cargo during fiscal years 1969 and 1970. It was expanded to examine the entire subject of military sealift procurement, including rate levels, alternative methods of procurement and projections of the U.S. Merchant

Marine capacity to meet future national security requirements. Preliminary results have indicated that military cargoes have been carried by U.S.-flag ships at a financial loss and that a shortfall exists in the area of emergency sealift capability. These findings have prompted further analysis of the entire area of military sealift procurement by DOD in conjunction with the Maritime Administration and other Government agencies.

*Military cargo being driven off a Roll-on/Roll-off American-flag vessel. This type of vessel expands military sealift capabilities by proving rapid loading and discharge of military cargoes.*



### **Project #72**

Project #72 consists of three independent computer programs which are designed to provide the Maritime Administration and maritime management and labor with data concerning the future composition of the U.S.-flag fleet, the costs of labor/management contract specifications, and the status of union pension funds.

The "Fleet Forecast" computer program enables the user to obtain information concerning the charac-

teristics of the U.S.-flag fleet under a variety of different policy assumptions concerning the age of vessels to be retired and the extent of building under the President's new maritime program. The effect of these planning assumptions upon seagoing manpower requirements, fleet capacity, subsidy expenditures, and wage costs may then be calculated, given this expected fleet composition.

The "Maritime Contract Impact System" program calculates the labor costs per voyage day for a single U.S.-flag merchant ship, employing the results of the

fleet forecast and hypothetical labor/management contract terms as input. This program will facilitate the calculation and evaluation of the costs of proposed labor contract provisions.

The third program, "UN-72," has been designed to evaluate the present or proposed pension funds of seagoing unions, as to expected liabilities for payments to beneficiaries and income required to meet such liabilities. The program describes each fund by: the entry, death, disability, and overall withdrawal rates of workers; the death rate of pensioners; the year-by-year forecast of man-days of work to be performed by the union membership; the long run forecast of years of service credit for calendar years in the work force; and other assumptions, such as return on investment, which may influence the future status of the pension fund.

#### U.S. Seaborne Trade 1970-1990

This project was initiated in response to the continuing need for a reliable tool with which to predict U.S. foreign trade. A data base has now been established which is composed of detailed U.S. foreign trade statistics and a computerized routine has been developed that will forecast U.S. foreign trade in a form which will be useful for maritime policy planning. To date the system has been used to project trade for the periods 1970-75, 1975-85, and 1985-90. This time span is particularly relevant in terms of ship construction planning and represents a departure from most current work which normally includes shorter term predictions.

#### • Emergency Readiness

Agency preparedness for continuity of operations under emergency conditions was improved. Personnel relocation plans were updated and a training program was instituted for specialized cadres. The readiness level of emergency operating facilities of the Maritime Administration was substantially upgraded in terms of furnishings and personnel subsistence items. An emergency records review pro-

gram was implemented to assure continuous availability of essential records at emergency operating centers. Guidelists of emergency measures were established for consideration and implementation as appropriate at various stages of emergency.

U.S. port entities continued to receive assistance in developing and upgrading port emergency plans and procedures. Special studies were undertaken and plans initiated to improve federal assistance and recovery plans for port areas stricken by hurricanes and other causes of natural disasters. Participation in interagency disaster assistance study groups continued at the national and local field levels.

The Maritime Administration participated in national and international exercises and tests of civil emergency plans which were conducted during the year. Substantial support was given those involving Government continuity, use of ocean shipping resources and the coordination of transportation systems. The post-exercise analysis of these activities provided a basis for strengthening internal plans and for improving those which interface with other agencies. New techniques and procedures were developed for rapid assessment of the U.S. merchant fleet and its cargo lift capacity following a nuclear attack.

The National Defense Executive Reserve unit was reorganized to provide a more effective capability for responding to the Agency's immediate needs in a national defense emergency. The overall complement was reduced from 360 to 200 positions and limited to operational units that would be activated during the early stages of an emergency situation. The Executive Reserve organization consists of private industry port and shipping officials who are recruited and trained to assume Federal assignments under mobilization conditions.

Maritime Administration representatives cooperated with the Department of the Navy and NATO naval commands in an extensive review and updating of military plans and related documents pertaining to the protection and control of merchant shipping in time of war and periods of rising international tension.

# RESEARCH AND DEVELOPMENT

The Maritime Administration's Research and Development (R&D) efforts offer significant opportunities to achieve greater productivity of the U.S. Merchant Marine. The objective is to formulate and manage a timely, far-reaching and technologically based program which will improve the competitive position of the U.S. Merchant Marine and lead to reduction to both construction and operating subsidies. The program projects are principally directed at improving U.S. shipbuilding efficiency and the development of advanced, more productive ships and shipping systems with lower life cycle costs.

Fiscal year 1971 was a year of program initiation with scope of its programs to be extended and broadened in fiscal year 1972. Fifteen key programs based on national objectives and priorities as expressed by maritime legislation and the President's messages have been established and a large number of projects under these programs are already being implemented through industrial contractors and within the Government.

Approximately 60 contracts ranging from systems analysis and requirements studies to development of major hardware and ship systems are underway in the three principal areas of advanced ship development, ship operations and maritime technology, including projects in preventing and controlling ocean pollution resulting from ship operations.

Advanced equipments are already being tested in 27 major seagoing vessels involving 14 separate operators.

Additionally, programs have been established with related marine-oriented agencies such as National

Oceanic and Atmospheric Administration, Department of Housing and Urban Development, Department of the Navy, National Aeronautics and Space Administration, Smithsonian Institute, and Coast Guard. Also, government/industry coordination has been achieved subsequent to the Woods Hole Conference through R&D councils with shipyards, operating shipping lines and universities.

Significant progress has been made in cost-sharing major contracts initiated in 1971 with industry, thus extending the R&D impact of Government expenditures and encouraging participation of the maritime industry in moving toward being more technologically based and innovative.

A broader national scope has been developed through establishment of R&D centers and laboratories, the initiation of a maritime R&D information service, and Ships-of-Opportunity Program.

Internally, a system of technical analysis and cost/benefit analysis was devised to evaluate programs and establish program priorities. The Agency's R&D Major Program Issue Study was favorably received by the Office of Management and Budget as a model for Government R&D program formulation.

Most of the R&D projects will result in practical applications in the near-term (three-five year) period. They are, therefore, programmed to be continued throughout fiscal year 1972 and fiscal year 1973 in a phased process through the research and development cycle. During fiscal year 1972 and 1973 many of the R&D projects will have passed through the concept development, feasibility studies and engineering development phases. Fiscal year 1973 em-

phasis will be on the hardware development and testing phase of the cycle and will bring to fruition a larger number of the programs started in the two previous years.

### • Shipbuilding Improvement Program

The Shipbuilding Improvement Program provides the near-term research support to the Maritime Administration's ship construction program for the 1970's. The objective of the program is to develop low cost, advanced techniques in the design and construction of ships.

Through participation of the shipbuilders in the formulation and planning of shipyard improvements, the program will provide the vehicle for implementing these improvements. Thus, the program will support the productivity gains required by shipyards to achieve the President's goal of reducing the construction-differential subsidy rate to 35 percent by 1976. Modifications in ship design practice and regulations as well as increased standardization and development of advanced, automated shipyard equipment are aimed towards a near-term objective of reducing the U.S. cost of building ships by 15 percent. A total reduction in U.S. ship costs of from \$1.5 million to \$2.5 million per ship can be expected.

### • Competitive Nuclear Propulsion Systems

The objectives of this program in fiscal year 1971 have been to define the role of nuclear propulsion in merchant shipping and to develop a detailed conceptual design of one or more standardized nuclear propulsion systems, adaptable to a variety of ship applications, which will afford superior economic performance relative to competing fossil fueled propulsion systems. The program draws heavily on design concepts and components developed and proven in the central station nuclear industry in the past decade, thus eliminating any need for a land-based prototype reactor program prior to introduction of nuclear propulsion in the commercial fleet. Primary emphasis has been placed on reduction of capital cost through standardization and value engineering of the basic design, followed by industrial engineering to identify additional cost reductions achievable in series production.

The fiscal year 1971 phase of this effort has indicated considerable promise for economic superiority of nuclear over fossil fueled steam turbine propulsion systems in the high power range, above 100,000 shaft horsepower (SHP), and has identified further improvements in the competitive position of nuclear

propulsion as the result of value engineering and industrial engineering. Large markets are expected in the size vessels using the high power levels for which nuclear propulsion has the advantage.

In fiscal year 1972 efforts will be directed toward completing the last nuclear plant engineering which remains to be accomplished in order to bring the nuclear propulsion system to the point where U.S. operators and shipyards could enter into a ship construction contract. This last phase will provide a fully engineered nuclear propulsion system design package with bid plans and specifications useful to industry, both for U.S. ship operators and possible foreign markets.

### • Advanced Marine Transmissions

The development of transmission that will be compatible with advanced marine power systems, in particular with marine gas turbines and contra-rotating propellers, is essential to the new maritime program. A contract was awarded to Curtiss Wright Corp. during the year to develop two efficient, lightweight and high power transmissions, utilizing planetary gears, a 40,000 SHP two-stage system and a 60,000 SHP contra-rotating system. Both transmissions will have reversing capability. This capability offers a very substantial pay-off for the ships that will be built in this decade. The four-year \$7 million contract will deliver two transmission units of each type ready for installation and testing at sea. The contractor is sharing \$3 million or 43 percent of the cost.

### • Automated Shipping Systems

Projects are already underway in developing advanced conning systems, satellite navigation/communications systems and competitive maintenance and repair.

The development of an integrated bridge control system incorporating standard and advanced technology components is the objective of the advanced conning system project. The basic design will utilize human factor engineering to simplify the conning function. The bridge console will include a Collision Avoidance System, automatic satellite position fixing and track plotting, Loran and Decca navigation systems and the steering station (helm). The required equipment has been ordered and fabrication of the consoles by Bath Iron Works is underway.

In satellite navigation/communications, various efforts have included evaluation by United States Lines/ITT of dual-channel receivers to be used in

conjunction with the Navy's "Transit" Satellite; development and demonstration by Applied Information Industries (AII) of advanced, computerized satellite communications hardware and techniques employing UHF transmission and the investigation of application of such a system to shore-based ship management and control. A second phase of this project is also in progress to implement a prototype shoreside control center which will lead to advanced low-cost ship terminals, improved traffic control and ship management.

In the area of advanced maintenance and repair, projects are now in progress to develop technology and systems to eliminate unscheduled ship downtime due to equipment failure. The Vibration Analysis and Deviation Concept (VIDEC) is the active project in this area. The VIDEC concept involves automatic monitoring of machinery vibration and power plant performance parameters which in turn are displayed to the operator in such a way as to indicate trends in equipment degradation. Initial studies have been completed and negotiation of hardware contracts is underway.

### • Tug-Barge Systems

The tug-barge concept for transocean capability has emerged as a very definite prospect for competitive world trade. However, technical problems must be solved before the practical application of the concept can be implemented. Projects presently underway are concerned with the linkage problems between the tug and the barge and hydrodynamic effects on the combination.

Ingram Ocean Systems, Inc. is conducting full scale structural tests by instrumenting an 11,000 HP tug and 33,000 DWT barge to determine the forces and motions that are encountered in open sea operation and to determine how these correspond with model test data. The information gained will provide guidance for future tug-barge model tests, and, eventually, for the design of future tug-barge systems.

### • Offshore Terminals

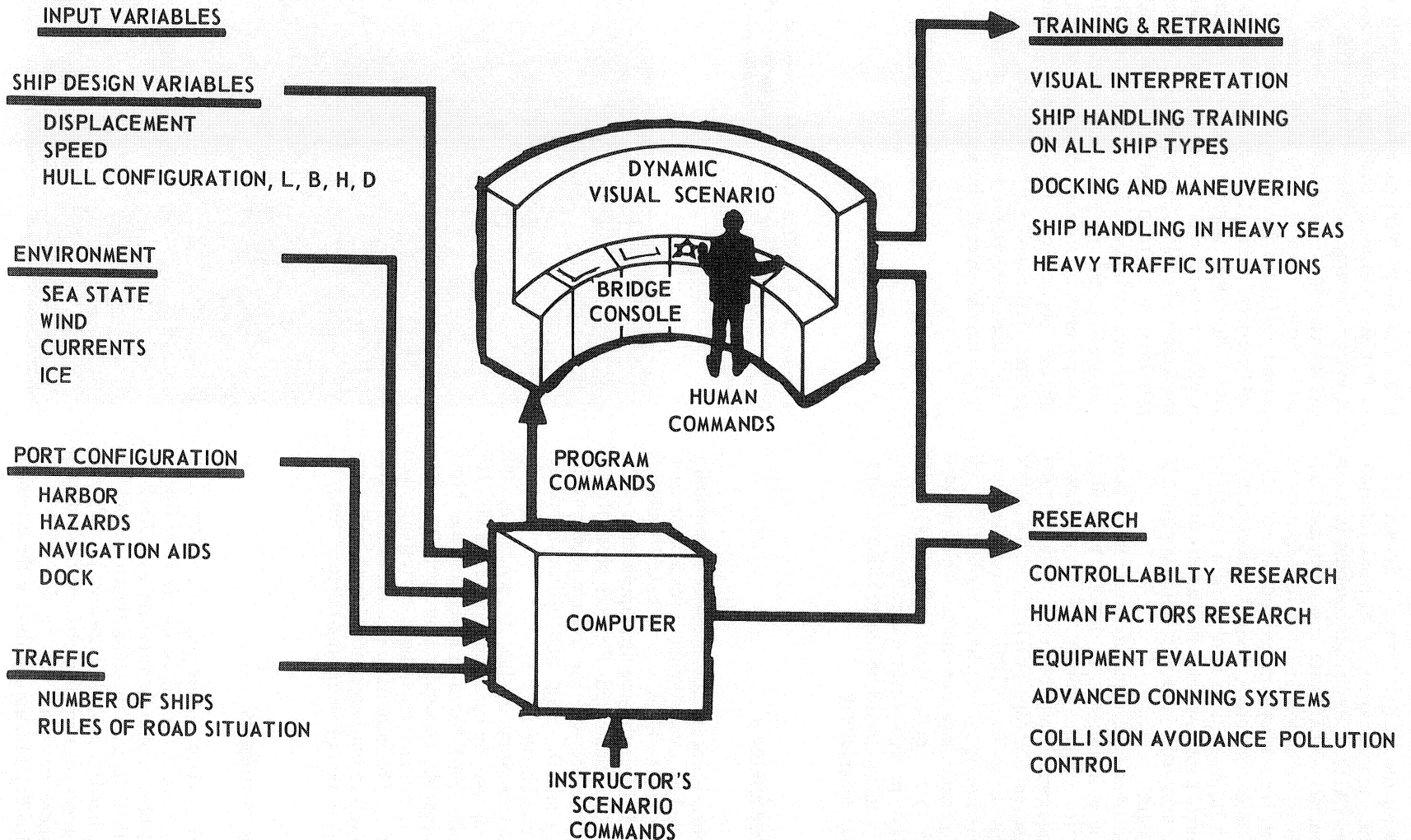
The growth of giant tankers and the problem of sea pollution have led to an examination of the potential of offshore terminals to satisfy such needs. It is believed that deep draft ships which cannot use present U.S. harbors can, nevertheless, provide economic advantages over smaller, shallow draft ships if suitable offshore terminals can be devised for discharge and loading of cargo. Although the economic

aspects of the problem have not been fully analyzed, such offshore terminals and large ships show promise of extremely large benefits. Today, U.S. industry is denied economics inherent in the use of supersize bulk carriers because such ships cannot enter U.S. ports fully loaded. For example, channel depths now hold carriers entering Delaware Bay to about 60,000 DWT. By 1980 approximately 70 percent of the world's tankers will exceed 200,000 DWT. The movement of cargoes in one of these supersized vessels from the Persian Gulf to Delaware Bay could result in a savings of 55 cents per barrel. The present emphasis in this program area is an evaluation of various offshore terminal concepts by industry. The ultimate objective, after Government funding of conceptual studies and system analyses, is to help private industry develop a prototype offshore oil terminal to handle supersize bulk carriers.

*The tug MV MARTHA INGRAM moves into position to couple with a 33,000 dwt. oceangoing barge. A rigid linking system makes this tug-barge system capable of ocean transport.*



SHIP CONTROL SIMULATOR  
AT THE NATIONAL MARITIME RESEARCH CENTER



## • Pollution Abatement

The research effort in the area of pollution abatement has been directed toward developing equipment to separate oil from ballast water and instrumentation to monitor the water as it is being discharged. Contracted projects underway in fiscal year 1971 include: (1) Aqua Chem oil water separator testing aboard SS GERFKING; (2) Esso Research and Engineering Pollution Control and Prevention Program; (3) Hydronautics oily water separator development; (4) shipboard separator test supervision and evaluation by USNSRDL, Annapolis; and (5) State-of-the-Art survey of ship sewage treatment systems by the National Academy of Sciences. Plans are being made to establish a pollution abatement equipment test laboratory at the new National Maritime Research Center at King's Point.

## • National Maritime Research Center (NMRC)

The National Maritime Research Center was dedicated on June 9, 1971, at King's Point. Its objective is to support and augment the Maritime Administration's R&D activities. Facilities presently identified for the Center include a ship control simulator and pollution control laboratory. Other activities include ship productivity studies and the Ships-of-Opportunity Program.

The ship control research and training simulator will aid in developing improved ship operations and traffic control. It will stress collision avoidance and human factor engineering through use of a computerized, dynamic, visual-display conning center, and will therefore contribute to ship safety, pollution control and crew training. A \$3.5 million contract was awarded which calls for design of the simulator to start in June 1971 with construction and equipping to follow approximately a year later.

The pollution control laboratory will be equipped to test equipment developed for shipboard pollution control.

## • Ships-of-Opportunity Program

The Ships-of-Opportunity program uses U.S. Merchant Marine Academy midshipmen on merchant ships to collect data on ship performance, ocean science and weather. Interagency cooperation with NOAA has enabled the Maritime Administration to equip six ships for such research in fiscal year 1971. It is anticipated that this program will be expanded in fiscal year 1972.

## • Transit Through Ice Fields

The objectives of this program are to study the feasibility of commercial ships operating in ice waters and thereby apply the knowledge gained to determine the benefits and costs of maintaining the Great Lakes open to commercial shipping year round. If the economic practicality can be established, ship systems for winter operation in the Great Lakes as well as Arctic regions will be developed, providing large dollar benefits to the Nation from economical, year round water transportation in these regions and providing increased exports and more stable employment. The fiscal year 1971 projects in this program were directed toward analysis of the environment and transportation requirements and basic hull-form model testing prior to the conceptual design development of ships, ports and terminals in subsequent years.

## • N.S. SAVANNAH

Having successfully completed the missions for which it was designed, built and operated, the decision was made to deactivate the Nuclear Ship SAVANNAH. The vessel was placed under General Agency Agreement with American Export Isbrandtsen Lines, Inc. as the General Agent, effective November 9, 1970. It was withdrawn from service as the GAA program terminated. The deactivation operation began in April 1971 and will be completed in January 1972. The N.S. SAVANNAH has, therefore, been eliminated from consideration for major new Maritime Administration R&D funding in fiscal year 1972 and beyond.

# GENERAL COUNSEL

**T**he Office of General Counsel provides services on all matters of a legal nature arising before the Agency, the Assistant Secretary for Maritime Affairs, the Maritime Subsidy Board, and Maritime Administration's various offices and divisions. The great majority of matters handled by the General Counsel's office relate to the Maritime Administration's construction-differential subsidy (CDS), operating-differential subsidy (ODS), capital-construction fund (CCF), and Title XI Mortgage and Loan Insurance programs and to the Maritime Administration's legislative and litigation activities. The General Counsel's Office is organized into five divisions: Construction Contracts, Operating Subsidy Contracts, Mortgage and Marine Insurance, Legislation and Litigation. Matters outside the purview of the five divisions are handled by the immediate office of the General Counsel.

## • Division of Construction Contracts

**D**uring fiscal year 1971, the Division of Construction Contracts became deeply involved in implementation of the Title V construction subsidy provisions of the new merchant marine program. A primary responsibility was the drafting of new CDS contracts to incorporate the new provisions of the program.

A second major responsibility of the Division was the development and drafting of a comprehensive set of regulations to implement the provisions of Title V of the Merchant Marine Act, 1936, as amended.

Particular attention was devoted to new procedures for determining CDS rates by vessel type, procedures for review and approval of the newly permitted negotiated prices, and regulations governing the trading restrictions imposed on vessels built with CDS by sections 506 and 905(a) of the amended Act.

Subsidy contracts for the construction of 12 new ships and 11 conversions to full or partial container-ships were executed during the fiscal year. In addition, legal services were provided as required in connection with CDS contracts executed in prior years and in connection with applications for permission to transfer obsolete American ships to foreign ownership for purposes of scrapping.

## • Division of Operating Subsidy Contracts

**T**he Division of Operating Subsidy Contracts was engaged extensively during the fiscal year in implementation of the provisions of the 1970 Act. New ODS contracts were drafted to conform with the provisions of Title VI of the amended Act. Assistance was provided in the preparation of a new manual for determination of ODS payments. Development of a comprehensive set of regulations under Title VI was begun with particular attention devoted to regulations governing restrictions on the ability of subsidized bulk carriers to engage in foreign-to-foreign trade. Efforts were directed toward implementation of the new Capital Construction Fund program, established by section 607 of the amended Act. An Interim Capital Construction Fund Agreement was

prepared and published in final form. Drafting of joint regulations dealing with tax matters in cooperation with the Treasury Department are underway.

Two new contracts for ODS were entered into during the year under the new program, and one existing contract was amended to incorporate the new provisions of the 1970 Act.

#### • Division of Mortgage and Marine Insurance

The Division of Mortgage and Marine Insurance provided legal services in connection with the approval of loan and mortgage insurance contracts in excess of \$297,000,000 during the fiscal year 1971, including negotiations to develop financial arrangements; preparation and review of the documentation required for loan and mortgage insurance contracts; and representation of the Agency at the financial closings. The activity under Title XI increased as a result of the increase from \$1 billion to \$3 billion in the Maritime Administration's authority to insure loans and mortgages.

Drafts of amendments to the Title XI legislation were prepared and will be submitted to the Congress during fiscal year 1972. The administration of more than \$1 billion of outstanding Title XI insurance commitments was also accomplished.

#### • Division of Legislation

The Division of Legislation assisted in the drafting of legislation and the preparation of testimony and reports to the Congress on the 1970 Act. The Division also prepared the Agency's annual legislative program as well as reports to various House and Senate Committees on proposed legislation in which the Maritime Administration had an interest. (See Appendix XIII). Bills of particular concern were

those which would authorize payment of CDS and ODS for the construction and operation of leased vessels, the bill to facilitate the transportation of cargo by barges specifically designed for carriage aboard a vessel, and the hearings conducted in reference to the future status of American-flag passenger ships.

#### • Division of Litigation

The Litigation Division was engaged in matters involving cargo preference laws and equal opportunity employment practices of companies which engage in business with the Maritime Administration. Suits for compliance in each of these areas were instituted during fiscal year 1971 and are presently pending action. (See Table 11).

Counsel was provided in administrative hearings before the Maritime Subsidy Board in which the Maritime Administration had financial interests.

#### • Other Legal Activities

The General Counsel's office participated in the Environmental Work Group of the Department of Commerce. The office was also represented on the Departmental Law of the Sea Committee which is preparing materials for the 1973 United Nations Conference directed at a broad spectrum of law of the sea matters.

In the international area, members of the office staff represented the Department of Commerce on the United States Delegation at the third session of legal experts meeting to study the Draft Convention of the Combined Transport Contract, jointly sponsored by the Intergovernmental Maritime Consultative Organization (IMCO) and the Economic Commission for Europe.

**TABLE 11—Suits and Non-Litigated Claims**

Case Load Activity					Amounts Pending		Amounts Closed			
	Pending 7/1/70	Opened	Closed	Pending 6/30/71	Claimed vs. U.S.	Claimed by U.S.	Claimed vs. U.S.	Recovered by Claimants	Claimed by U.S.	Recovered by U.S.
<b>ADMIRALTY LITIGATION</b>										
1. Seamen's and Shore- worker's Claims.	582	187	353	416	\$57,604,028.44	\$	\$29,852,591.07	\$1,793,650.55	\$	\$
2. Ship Collision & Property Loss Claims.										
a. Collision and Shore Damage.	6	2	2	6	210,935.00	128,553.46	2,167,916.55		5,100.00	
b. Exoneration or Limi- tation of Liability.	5	0	2	3	278,875.00		2,355,500.00			
c. Cargo Loss and Fire Damage	2	0	1	1		*			6,663.16	3,331.59
<b>CIVIL LITIGATION</b>										
1. Contract Claims										
a. Construction-differ- ential subsidy.	7	2	3	6	11,910,799.50		3,418,355.00	2,355.11		
b. Operating-differ- ential subsidy	7	6	3	10	*	*				
c. Ship repair or con- struction.	4	0	1	3	8,068,099.00	1,567,194.94			35,019.00	10,000.00
2. Secured Lien Trans- actions.										
a. Foreclosures and Bankruptcy.	8	1	1	8	22,006.00	29,528,672.17	115,220.00		59,653.00	59,299.62
b. Title XI	0	2	0	2	*					
3. Miscellaneous Litigated Actions.										
a. Uncollected Judg- ments.	1	0	0	1		5,794.88				
b. Grievances	4	0	0	4	*					
<b>TOTAL LITIGATED CASES</b>	<b>626</b>	<b>200</b>	<b>366</b>	<b>460</b>	<b>\$78,094,742.94</b>	<b>\$31,230,215.45</b>	<b>\$37,909,582.62</b>	<b>\$1,796,005.66</b>	<b>\$106,435.16</b>	<b>\$72,631.21</b>
4. Tort Claims										
a. Litigated	0	0	0	0						
b. Unlitigated	0	1	1	0						

\* Monetary value undetermined.

# Shipping Studies and Reports

*Where prices are not indicated, a limited number of copies are available from the Office of Public Affairs, Maritime Administration.*

## GENERAL

- "Annual Report of the Maritime Administration, 1970," 86 pp., \$1.50, GPO.
- "Containerships—Part I, U.S. and Foreign Containerships, Part II, U.S. & Foreign Flag Ships with partial capacities for Containers and/or Vehicles," 25 pp., Maritime Administration.
- "Index of Current Regulations of the Maritime Administration, Maritime Subsidy Board, National Shipping Authority (Revised as of January 1, 1971)," 38 pp., \$.50, GPO.
- "Intermodal Container Services Offered by U.S. Flag Operators," 12 pp., Maritime Administration.
- "A Report on the Marine Insurance Industry," 29 pp., Maritime Administration.
- "Vessel Inventory Report, as of June 30, 1970," 134 pp., Maritime Administration.

## STATISTICAL

- "Effective U.S. Control of Merchant Ships: A Statistical Analysis," 1970, 76 pp., \$1.00, GPO.
- "Employment Report, U.S. Flag Merchant Fleet, Oceangoing Vessels of 1,000 Gross Tons & Over," as of March 31, 1970, 6 pp., Maritime Administration.
- "Merchant Fleets of the World, as of December 31, 1969," 20 pp., \$.20, GPO.
- "Oceangoing Foreign Flag Merchant Type Ships of 1,000 Gross Tons and Over Owned by U.S. Parent Companies, as of December 31, 1969," 33 pp., Maritime Administration.
- "U.S. and Canadian Great Lakes Fleets, as of December 31, 1969," 16 pp., Maritime Administration.

## TECHNICAL

- "Computer Aided Prediction of Seakeeping Performance in Ship Design," Prepared by Massachusetts Institute of Technology, 268 pp., COM-71-00590.
- "Design and Development of a Pilot Terminal Control System (TCS) with Automatic Container Identification," Prepared by Computer Identities Corp., 110 pp., COM-71-00780.
- "An Evaluation of Alternative Railroad Terminal Container Handling Systems," Prepared by Robert Reebie & Associates, Inc., 72 pp., COM-71-00398.
- "Guidelines for Deck Stowage of Containers," Prepared by J. J. Henry Co., Volume I, 54 pp., COM-71-00022; Appendix, 64 pp., COM-71-00023.
- "The Impact of Containerization on the U.S. Economy," Prepared by Matson Research Corp., Volume I, 164 pp., COM-71-0050; Volume II, 93 pp., COM-71-00051.
- "N.S. SAVANNAH, Core I, Fuel Shuffle Report," Prepared by SAFE, Inc., 106 pp., COM-71-00352.
- "The Scandinavian Maritime Community," 53 pp., COM-71-00624.
- "Technical, Operational & Economic Report on the NS SAVANNAH Fifth Period of Experimental Commercial Operation 1969-1970," Prepared by the Office of Research & Development, Maritime Administration, 99 pp., COM-71-00400.
- "Transocean Tug-Barge Systems," Prepared by Matson Research Corp., Volume I, Executive Summary, 20 pp., PB 194-535; Volume II, The Analysis, 72 pp., PB 194-536; Volume III, Appendices, 206 pp., PB 194-537.
- "Utilization of Reserve Fleet Vessels in Production of Housing," Prepared by The Stanley Works, 135 pp., COM-71-00247.

*The above technical reports may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia, 22151, for \$3.00 each, or 65¢ in microfiche.*

# APPENDIX I

## MERCHANT FLEETS OF THE WORLD

*OCEANGOING STEAM AND MOTOR SHIPS OF 1,000 GROSS TONS AND OVER AS OF DECEMBER 31, 1970*  
(Excludes ships operating exclusively on the Great Lakes and inland waterways and special types such as channel ships, icebreakers, cable ships, etc., and merchant ships owned by and any military force.)

(Tonnage in Thousands)

Country of Registry	Type of Vessel																				
	Total			Combination Passenger and Cargo			Combination Passenger and Cargo Refrigerated			Freighters			Freighters Refrigerated			Bulk Carriers			Tankers (Including Whaling Tankers)		
	Number	Gross Tons	Dead-weight Tons	Number	Gross Tons	Dead-weight Tons	Number	Gross Tons	Dead-weight Tons	Number	Gross Tons	Dead-weight Tons	Number	Gross Tons	Dead-weight Tons	Number	Gross Tons	Dead-weight Tons	Number	Gross Tons	Dead-weight Tons
Total—All Countries	19,980	211,401	326,999	859	6,958	4,070	36	528	326	10,998	63,159	87,428	901	4,661	4,927	2,954	47,199	77,173	4,232	88,896	153,075
United States <sup>1</sup>	1,579	15,529	21,846	167	1,527	1,070	4	45	37	1,048	8,763	11,574	28	146	159	38	464	767	294	4,584	7,739
Privately-owned	793	9,780	14,406	15	230	133	4	45	37	472	4,692	6,094	3	17	18	37	457	756	262	4,339	7,368
Government-owned	786	5,749	6,940	152	1,297	937	—	—	—	576	4,071	5,480	25	129	141	1	7	11	32	245	371
Reserve Fleet	758	5,543	6,668	151	1,281	927	—	—	—	554	3,908	5,251	23	117	128	1	7	11	29	230	351
Other <sup>2</sup>	28	206	272	1	16	10	—	—	—	22	163	229	2	12	13	—	—	—	3	15	20
The British Commonwealth of Nations																					
United Kingdom	1,772	24,070	37,065	60	863	478	15	279	166	829	5,622	7,465	138	1,266	1,490	296	4,167	6,603	434	11,873	20,863
Australia	101	840	1,181	4	14	9	—	—	—	42	195	222	—	—	—	41	471	708	14	160	242
British Colonies	115	1,459	2,187	5	101	31	—	—	—	63	376	539	2	2	2	27	387	612	18	593	1,003
Canada	69	306	370	17	44	20	—	—	—	22	72	90	2	2	2	8	77	107	20	111	151
Cyprus	217	1,348	1,933	8	55	55	—	—	—	178	1,047	1,514	3	14	16	15	93	134	13	139	214
Ghana	16	118	154	—	—	—	—	—	—	16	118	154	—	—	—	—	—	—	—	—	—
India	242	2,409	3,709	11	63	60	—	—	—	180	1,251	1,792	1	9	13	37	786	1,334	13	300	510
Jamaica	2	12	9	—	—	—	—	—	—	—	—	—	2	12	9	—	—	—	—	—	—
Kenya	4	11	16	—	—	—	—	—	—	2	8	12	—	—	—	1	2	2	1	1	2
Malaysia	9	29	35	4	6	4	—	—	—	3	17	23	—	—	—	—	—	—	2	6	8
Malta	3	8	13	—	—	—	—	—	—	3	8	13	—	—	—	—	—	—	—	—	—
New Zealand	49	143	180	—	—	—	2	8	6	35	107	141	5	12	15	6	13	15	1	3	3
Nigeria	13	83	123	—	—	—	—	—	—	13	83	123	—	—	—	—	—	—	—	—	—
Pakistan	69	551	743	7	73	61	—	—	—	59	456	651	—	—	—	3	22	31	—	—	—
Singapore	90	463	608	14	76	75	—	—	—	61	278	371	1	3	3	3	22	32	11	84	127
Tanzania	2	14	22	—	—	—	—	—	—	2	14	22	—	—	—	—	—	—	—	—	—
Tonga	1	2	3	—	—	—	—	—	—	1	2	3	—	—	—	—	—	—	—	—	—
Trinidad-Tobago	4	9	7	2	6	3	—	—	—	1	1	2	—	—	—	—	—	—	1	2	2
Uganda	1	6	9	—	—	—	—	—	—	1	6	9	—	—	—	—	—	—	—	—	—
Zambia	1	6	9	—	—	—	—	—	—	1	6	9	—	—	—	—	—	—	—	—	—
*Albania	9	41	58	—	—	—	—	—	—	6	32	46	—	—	—	3	9	12	—	—	—
Algeria	7	28	37	—	—	—	—	—	—	5	22	29	—	—	—	1	1	2	1	5	6
Argentina	147	1,142	1,578	10	63	47	2	25	19	58	352	490	12	37	36	10	127	199	55	538	787
Austria	4	13	17	—	—	—	—	—	—	4	13	17	—	—	—	—	—	—	—	—	—
Belgium	73	991	1,476	1	11	9	—	—	—	38	337	437	7	37	36	14	310	518	13	296	476
Brazil	201	1,400	2,017	7	42	20	—	—	—	118	502	704	5	20	19	26	293	464	45	543	810
*Bulgaria	105	653	932	2	20	7	—	—	—	57	249	363	2	12	10	27	205	296	17	167	256
Burma	10	58	73	2	5	3	—	—	—	8	53	70	—	—	—	—	—	—	—	—	—
Chile	48	348	496	4	11	6	—	—	—	30	189	263	2	3	3	6	44	64	6	101	160
China (Taiwan)	143	1,129	1,655	2	12	14	1	18	12	104	637	891	12	43	45	11	165	262	13	254	431
*China (Communist)	221	1,087	1,459	20	67	41	2	17	10	155	801	1,126	1	1	2	19	64	83	24	137	197
Colombia	31	169	219	—	—	—	—	—	—	29	157	201	—	—	—	1	2	2	1	10	16
Congolese Republic	3	28	34	1	10	9	—	—	—	2	18	25	—	—	—	—	—	—	—	—	—
*Cuba	53	318	428	—	—	—	—	—	—	42	272	377	7	27	24	1	1	1	3	18	26
*Czechoslovakia	11	92	130	—	—	—	—	—	—	9	51	67	—	—	—	2	41	63	—	—	—
Denmark	285	2,912	4,629	11	32	20	1	3	1	170	990	1,365	24	100	125	26	476	781	53	1,311	2,337
Dominican Republic	3	6	9	—	—	—	—	—	—	2	5	7	1	1	2	—	—	—	—	—	—

<sup>2</sup> Comprised of vessels under general agency agreement, bareboat charter, and in the custody of the Departments of Defense, State and Interior.

<sup>3</sup> Includes the following U.S. Government-owned ships transferred to U.S.S.R. under lend-lease agreements, 48 of which are still under that registry; and 2 under North Korean registry.

[illegible]

# APPENDIX II

## EMPLOYMENT OF U. S. FLAG OCEANGOING MERCHANT FLEETS DECEMBER 31, 1970 (tonnage in thousands)

Status and Area of Employment	Vessel Type											
	Total			Combination Pass. & Cargo			Freighters			Tankers		
	Number	Gross Tons	Dead- weight tons	Number	Gross Tons	Dead- weight tons	Number	Gross Tons	Dead- weight tons	Number	Gross Tons	Dead- weight tons
GRAND TOTAL	1,579	15,529	21,346	171	1,572	1,107	1,114	9,373	12,500	294	4,584	7,739
Active Vessels.....	764	9,335	13,812	13	155	117	497	4,963	6,569	254	4,217	7,126
Foreign Trade.....	369	3,871	5,133	12	140	111	342	3,468	4,573	15	263	449
Nearby Foreign.....	15	181	272	2	23	17	7	57	74	6	101	181
Great Lakes-Seaway Foreign.....	—	—	—	—	—	—	—	—	—	—	—	—
Overseas Foreign.....	354	3,690	4,861	10	117	94	335	3,411	4,499	9	162	268
Foreign to Foreign.....	4	147	260	—	—	—	1	8	11	3	139	249
Domestic Trade.....	262	3,851	6,204	1	15	6	61	631	795	200	3,205	5,403
Coastwise.....	173	2,716	4,576	—	—	—	11	84	125	162	2,632	4,451
Intercoastal.....	22	257	395	—	—	—	15	159	231	7	98	164
Noncontiguous.....	67	879	1,234	1	15	6	35	388	439	31	476	789
Other U.S. Agency Operations.....	129	1,466	2,215	—	—	—	93	856	1,190	36	610	1,025
MSC Charter.....	110	1,336	2,039	—	—	—	77	741	1,034	33	595	1,005
Other (Custody) etc.....	19	130	176	—	—	—	16	115	156	3	15	20
Inactive Vessels.....	815	6,196	7,532	158	1,418	990	617	4,411	5,930	40	367	612
Temporarily Inactive.....	33	378	578	1	16	10	26	278	399	6	84	169
Merchant Types.....	33	378	578	1	16	10	26	278	399	6	84	169
Military Types.....	—	—	—	—	—	—	—	—	—	—	—	—
Laid-up (Privately- Owned).....	24	275	286	6	121	53	13	101	141	5	53	92
National Defense Reserve Fleet <sup>1</sup> .....	758	5,543	6,668	151	1,281	927	578	4,032	5,390	29	230	351
Merchant Types.....	465	3,288	4,711	—	—	—	456	3,196	4,566	9	92	145
Military Types.....	293	2,255	1,957	151	1,281	927	122	836	824	20	138	206

<sup>1</sup> Includes 435 ships to be sold for scrap. Excludes 48 ships sold, but remaining in the custody of the reserve fleet pending delivery and 154 non-merchant type ships (35 of which are to be sold for scrap) which are currently in the National Defense Reserve Fleet.

Note: 1. Tonnage figures may not be additive since the detailed figures have been rounded to the nearest thousand.

2. Nearby Foreign includes Canada, Central America, West Indies, North Coast of South America, and Mexico.

3. Excludes vessels operating exclusively on the Great Lakes, inland waterways and those owned by the United States Army and Navy and special types such as cable ships, tugs, etc.

# APPENDIX III

## SHIPS UNDER CONSTRUCTION JUNE 30, 1971

Owner	Shipbuilder	Type of ship	No. of ships	Total gross tonnage	Estimated completion date	Total estimated cost (1)	Estimated Govt. cost of construction—differential subsidy	Estimated Govt. cost of National Defense Features
Prudential—Grace Lines, Inc.....	Avondale Shipyards, Inc.....	C8-S-81b	2	52,800	8-26-72	\$42,652,000	\$21,279,816	\$26,000
Pacific Far East Line, Inc.....	Avondale Shipyards, Inc.....	C8-S-81b	6	158,400	11-2-72	127,956,000	63,762,432	78,000
Farrell Lines, Inc.....	Litton Systems, Inc.....	C6-S-85a	4	74,800	10-31-72	83,855,240	41,620,432	54,072
American President Lines, Ltd...	Litton Systems, Inc.....	C6-S-85b	4	74,800	9-21-73	89,001,537	42,516,805	54,072
Lykes Bros, Steamship Co., Inc...	General Dynamics Corporation...	C8-S-82a	3	55,260	7-15-72	97,887,999	53,581,815	430,518
Pacific Far East Line, Inc.....	Bethlehem Steel Corporation...	C7-S-88a	2	48,000	5-31-73	50,565,000	23,521,000	50,000
American Export Isbrandtsen Lines, Inc.....	Bath Iron Works Corporation...	C5-S-73b	3	53,706	2-19-73	50,979,999	21,249,999	-----
Delta Steamship Lines, Inc.....	Avondale Shipyards, Inc.....	C9-S-81d	3	91,200	9-30-73	85,593,000	37,805,586	60,000
Waterman Steamship Corp.....	Avondale Shipyards, Inc.....	C9-S-81d	3	91,200	5-15-74	83,787,000	37,007,334	60,000
Central Gulf Steamship Corp.....	Avondale Shipyards, Inc.....	C9-S-81d	1	30,400	7-30-74	27,502,000	12,147,044	20,000
Aries Marine Shipping.....	National Steel & Ship-building Co.....	OB8-S-90a	2	49,140	1-30-74	60,092,000	27,000,000	92,000
Lykes Bros, Steamship Co., Inc...	Todd Shipyards Corporation...	C5-S-37e	7*	81,900	6-23-72	23,831,206	10,832,206	-----
American Mail Line, Ltd.....	Bethlehem Steel Corporation...	C6-S-1x	2*	23,400	11-23-71	16,808,000	6,056,000	12,000
American Mail Line, Ltd.....	Bethlehem Steel Corporation...	C6-S-1x	1*	11,700	2-23-72	8,748,000	3,378,000	-----
American President Lines, Ltd...	Todd Shipyards Corporation...	C6-S-69c	5*	88,320	7-31-72	32,536,139	13,514,021	15,900
American President Lines, Ltd...	Todd Shipyards Corporation...	C6-S-1qc	3*	37,500	1-9-73	20,240,919	8,399,982	-----
Total Ships under Construction on June 30, 1971.....	-----	-----	51	1,022,526	-----	\$902,036,039	\$423,672,576	\$952,562

(1) Total contract cost including CDS and National Defense Features, but excluding engineering and change orders.

\*Reconstruction.

# APPENDIX IV

## SHIP DELIVERIES FOR CALENDAR YEAR 1970

### OCEANGOING STEAM AND MOTOR SHIPS OF 1,000 GROSS TONS AND OVER BY SHIP TYPE, COUNTRY IN WHICH BUILT AND FOR WHOM BUILT

(Excludes ships operating exclusively on the Great Lakes and inland waterways and special types such as tugs, ferries, cable ships, etc.)

(Tonnage in Thousands)

Country in Which Built

Registry for Which Built	Total		Japan		Sweden		Germany (West)		United Kingdom		France		Spain		Norway		Netherlands		Denmark		Italy		Yugoslavia		United States		All Others <sup>1</sup>	
	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons
SUMMARY—ALL TYPES																												
Total.....	1,086	35,178	440	17,602	38	3,401	105	2,205	71	1,881	27	1,363	53	1,300	33	1,152	29	1,047	18	984	18	843	22	628	13	611	219	2,161
United States.....	13	611																							13	611		
United Kingdom.....	92	4,993	13	1,877	4	578	2	210	55	1,444			5	141	2	27	6	427	1	255			1	26			3	8
Denmark.....	9	107															1	3	8	104								
France.....	18	913					1	13	2	30	12	816			2	41											1	13
Germany (West).....	113	1,975	1	215	1	2	76	1,051	1	21	1	18	4	217	9	280	7	20	1	41							12	110
Italy.....	17	842																			17	842						
Japan.....	241	6,013	241	6,013																								
Liberia.....	109	7,793	80	5,016	5	1,073	6	308	3	202	6	457	4	198	1	3			2	500							2	36
Norway.....	58	3,876	9	1,266	11	1,250	8	372	4	91					18	782	1	3	1	41			1	26			5	45
Sweden.....	16	454			8	329	1	2							1	19											6	104
U.S.S.R.*.....	134	1,061			7	71					8	72									1	1	9	168			109	749
All Others.....	266	6,540	96	3,215	2	98	11	249	6	93			40	744			14	594	5	43			11	408			81	1,096
FREIGHTERS																												
Total.....	861	14,907	367	7,494	18	775	97	1,462	55	1,141	20	222	42	641	18	279	21	120	12	214	7	204	15	415	6	184	183	1,756
United States.....	6	184																							6	184		
United Kingdom.....	63	1,324	5	168	2	123	1	4	41	841			4	117	2	27	4	10					1	26			3	8
Denmark.....	6	92															1	3	5	89								
France.....	14	218					1	13	2	30	8	121			2	41											1	13
Germany (West).....	100	1,157					72	876	1	21	1	18	2	22	6	54	5	15	1	41							12	110
Italy.....	7	204																			7	204						
Japan.....	216	3,650	216	3,650																								
Liberia.....	75	2,202	62	2,018			5	58	2	68	3	11	3	47														
Norway.....	36	1,754	6	514	6	535	8	372	4	91					7	138			1	41			1	26			3	37
Sweden.....	8	134			3	46									1	19											4	69
U.S.S.R.*.....	106	787			7	71					8	72											4	57			87	537
All Others.....	224	3,201	78	1,144			10	139	5	90			33	455			11	92	5	43			9	306			73	932

# APPENDIX IV—Continued

## Country in Which Built

Registry for Which Built	Total		Japan		Sweden		Germany (West)		United Kingdom		France		Spain		Norway		Netherlands		Denmark		Italy		Yugoslavia		United States		All Others <sup>1</sup>	
	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons	No.	Dead wt. Tons
TANKERS																												
Total.....	222	20,259	72	10,102	20	2,626	8	743	15	736	7	1,141	11	659	15	873	8	927	6	770	11	639	7	213	7	427	35	403
United States.....	7	427																							7	427		
United Kingdom.....	28	3,665	8	1,709	2	455	1	206	13	599			1	24			2	417	1	255								
Denmark.....	3	15																	3	15								
France.....	4	695									4	695																
Germany (West).....	13	818	1	215	1	2	4	175					2	195	3	226	2	5										
Italy.....	10	638																			10	638						
Japan.....	24	2,357	24	2,357																								
Liberia.....	34	5,591	18	2,998	5	1,073	1	250	1	134	3	446	1	151	1	3			2	500							2	36
Norway.....	21	2,120	3	752	5	715									11	644	1	3									1	6
Sweden.....	8	320			5	283	1	2																			2	35
U.S.S.R.*.....	28	274																			1	1	5	111			22	162
All Others.....	42	3,339	18	2,071	2	98	1	110	1	3			7	289			3	502					2	102			8	164
COMBINATION PASSENGER AND CARGO SHIPS																												
Total.....	3	12	1	6					1	4																	1	2
United States.....																												
United Kingdom.....	1	4							1	4																		
Denmark.....																												
France.....																												
Germany (West).....																												
Italy.....																												
Japan.....	1	6	1	6																								
Liberia.....																												
Norway.....	1	2																									1	2
Sweden.....																												
U.S.S.R.*.....																												
All Others.....																												

\*Source Material Limited.

<sup>1</sup> The U.S.S.R., with 57 ships of 896,000 Dwt. Tons, Ranked 14th as a shipbuilder on a deadweight tonnage basis. In addition to the countries listed above, she was preceded by Poland, with 27 ships of 407,000 Dwt. Tons.

# APPENDIX V

## APPROVAL FOR FOREIGN TRANSFERS

Approvals granted pursuant to Sections 9 and/or 37 of the Shipping Act, 1916, as amended of the Transfer to Foreign Ownership and/or Registry of Vessels of 1,000 Gross Tons and Over by Type, Number, Size, and Age for Period 7/1/70—6/30/71

	Pursuant to Sections 9 and 37			Pursuant to Section 37 (Only)			Combined Totals		
	(U.S. owned and U.S. documented)			(U.S. owned, not U.S. documented)					
	No. of Vessels	Gross Tons	Average Age	No. of Vessels	Gross Tons	Average Age	No. of Vessels	Gross Tons	Average Age
U.S. Privately Owned									
(a) Tankers-----	18	260083	24.9	5	155978	17.2	23	416061	23.5
(b) Cargo-----	115	871171	26.3	1	8292	26.0	116	879463	26.3
(c) Cargo/Passenger-----	—	—	—	—	—	—	—	—	—
(d) Miscellaneous-----	20	54808	15.5	14	61519	19.2	34	116327	16.2
TOTAL-----	153	1186062	24.7	20	225789	19.4	173	1411851	24.4
Departures from U.S. Port---	—	—	—	12	18670	27.8	12	18670	27.8
U.S. Government Owned									
Cargo (For Scrapping)-----	80	568607	27.0	8	57866	26.4	88	626473	26.9
Tankers (For Scrapping)-----	3	31793	26.3	1	11316	29.0	4	43109	27.0
TOTAL-----	83	600400	26.9	9	69182	26.7	92	669582	26.9

### Recapitulation (By Nationality 7/1/70—6/30/71)

U.S. Privately Owned	Sections 9 and 37		Section 37 (Only)		Combined Totals	
Nationality	Number	Gross Tons	Number	Gross Tons	Number	Gross Tons
Bahamian.....	—	—	1	1029	1	1029
British.....	1	1503	1	1500	2	3003
Germany.....	3	23529	—	—	3	23526
Greek.....	—	—	2	22726	2	22729
Japanese.....	2	2459	—	—	2	2459
Liberian.....	4	65780	2	121000	6	186780
Mexican.....	1	3812	1	4080	2	7892
Netherlands.....	8	62432	—	—	8	62432
Panamanian.....	50	434628	5	31329	55	465957
Surinam.....	—	—	1	1600	1	1600
Venezuelan.....	5	6063	—	—	5	6063
TOTAL.....	74	600206	13	183264	87	783470
Sale Alien TOTAL.....	79	585856	7	42525	86	628381
GRAND TOTAL.....	153	1186062	20	225789	173	1411851
Departure from U.S. Port....	—	—	12	18670	12	18670
U.S. Government Owned						
Cargo (Sale for Scrapping) ..	80	568607	8	57866	88	626473
Tankers (Sale for Scrapping) ..	3	31793	1	11316	4	43019
TOTAL.....	83	600400	9	69182	92	669582

## APPENDIX VI

### NATIONAL DEFENSE RESERVE FLEET

Dates (fiscal years)	Total ships in Fleets	Dates (fiscal years)	Total Ships in fleets
1945	5	1959	2060
1946	1421	1960	2000
1947	1204	1961	1923
1948	1675	1962	1862
1949	1934	1963	1819
1950	2277	1964	1739
1951	1767	1965	1594
1952	1853	1966	1327
1953	1932	1967	1152
1954	2067	1968	1062
1955	2068	1969	1017
1956	2061	1970	1027
1957	1889	1971	860*
1958	2074		

\* As of June 30, 1971.

The number of retention slips decreased from 432 to 381 during the year.

## APPENDIX VII

### CONSTRUCTION RESERVE FUNDS JUNE 30, 1971

Operator	Cash	Securities	Total
Central Gulf Steamship Corporation--	\$285,650	\$861	\$286,511
Commodity Chartering Corporation--	135,625	564,375	700,000
Penn Export Company, Inc.	26,450	250,000	276,450
Penn Naviga- tion Com- pany-----	499,000	0	499,000
Kathleen Turecamo, Inc.	686	131,696	132,382
Mary Ture- camo, Inc.---	182,682	0	182,682
Total June 30, 1971-----	\$1,130,093	\$946,932	\$2,077,025
Total June 30, 1970 -----	211,451	2,143,236	2,354,687
Net Decrease.	\$918,642	\$(1,196,304)	\$(277,662)

# APPENDIX VIII

## CAPITAL AND SPECIAL RESERVE FUNDS

Cash, Approved Interest Bearing Securities and Common Stocks Under Approved Common Stock Trusts on Deposit in the Statutory Capital and Special Reserve Funds of Subsidized Operators as of June 30, 1971.

Operator	Capital Reserve Fund			Special Reserve Fund			Combined Total	Common stocks included in Total *
	Cash	Securities	Total	Cash	Securities	Total		
American Export Isbandtsen Lines, Inc.....	\$6,362,588	\$500,000	\$6,862,588	\$1,920,892	\$346,656	\$2,267,548	\$9,130,136	28,939 (S)
American Mail Line Ltd.....	437,400	104,000	541,400	55,494	3,176,494	3,231,988	3,773,388	641,521 (S)
American President Lines, Ltd.....	11,240	373,661	384,901	18,460	1,373,209	1,391,669	1,776,570	656,272 (S)
Delta Steamship Lines, Inc.....	5,927	1,907,426	1,913,353	-0-	3,958,850	3,958,850	5,872,203	-0-
Farrell Lines Incorporated.....	435,223	-0-	435,223	-0-	-0-	-0-	435,223	-0-
Gulf & South American Steamship Co., Inc.....	104,691	4,724,056	4,828,747	150,945	2,052,863	2,203,808	7,032,555	1,004,209 (S)
Lykes Bros. Steamship Co., Inc.....	475,044	26,081,122	26,556,166	299,816	14,809,750	15,109,566	41,665,732	4,083,058 (C) 6,952,590 (S)
Moore-McCormack Lines, Incorporated.....	201,953	41,544,643	41,746,596	970	-0-	970	41,747,566	-0-
Pacific Far East Line, Inc.....	55,899	366,000	421,899	1,822,672	452,498	2,275,170	2,697,069	456,659 (S)
Prudential-Grace Lines, Inc.....	18,255	681,242	699,497	8,998	-0-	8,998	708,495	1,000 (S)
States Steamship Company.....	426,628	1,840,000	2,266,628	5,321	2,710,000	2,715,321	4,981,949	-0-
United States Lines, Inc.....	1,916	808,125	805,041	349	-0-	349	805,390	-0-
June 30, 1971.....	8,536,764	78,925,275	87,462,039	4,283,917	28,880,320	33,164,237	120,626,276	13,824,248
June 30, 1970.....	2,110,188	44,252,005	46,362,193	1,433,722	47,365,428	48,799,150	95,161,343	15,413,924
Increase (Decrease).....	6,426,576	34,673,270	41,099,846	2,850,195	(18,485,108)	(15,634,913)	25,464,933	(1,589,676)
<b>*Common Stock Trust Market</b>								
Value Reported by Trustees:								
June 30, 1971.....			4,393,947			10,744,425		15,138,372
June 30, 1970.....			4,439,551			8,037,080		12,476,631
Increase (Decrease).....			(45,604)			2,707,345		2,661,741

Note: Accrued Mandatory Deposits at June 30, 1971 are not included in the above; at December 31, 1970 the accrued Deposits amounted to \$81,855,059 comprised of \$71,829,032 applicable to the Capital Reserve Fund (depreciation) and \$10,026,027 applicable to the Special Reserve Fund (excess profits).

C = Capital Reserve Fund

S = Special Reserve Fund

On March 8, 1971 Oceanic was authorized to create an Interim Capital Construction Fund and was authorized to transfer the Capital Reserve Fund to the Interim Capital Construction Fund.

# APPENDIX IX

## U. S. SUBSIDIZED SHIPPING OPERATORS: ODS CONTRACTS JUNE 30, 1971

Operator	Operating-Differential Subsidy Agreement		Number of Subsidized Ships 6/30/71	Service on Essential U.S. Foreign Trade Routes	
	Contract No.	Contract Termination Date		Trade Route	Annual Sailings Min./Max.
American Export Isbrandtsen Lines, Inc.	FMB-87	12/31/79	28 <sup>1</sup>	U.S. North Atlantic/Mediterranean (T.R. 10) Passenger	24/31 <sup>2</sup>
				U.S. North Atlantic/Mediterranean (T.R. 10) Passenger	10/13 <sup>3</sup>
				U.S. North Atlantic/Mediterranean (T.R. 10) Freight.	76/102
				Great Lakes/Western Europe (T.R. 32)	6/9
				Great Lakes/Mediterranean (T.R. 34)	9/13
				U.S. North Atlantic/Western Europe (T.R. 5-7-8-9)	6/10
				U.S. North Atlantic/India Pakistan (T.R. 18)	24/29
				U.S. North Atlantic/Far East (T.R. 12)	24/30
American Mail Line Ltd.	FMB-76	12/31/78	10	U.S. Pacific/Far East (T.R. 29)	40/60
American President Lines, Ltd.	FMB-50	12/31/76	24	California/Far East (T.R. 29) Passenger-Freight	23/27
				California/Far East (T.R. 29) Freight	32/54
				Round-the-World (Westbound) (Comb. Min. 42)	32/36
				Atlantic Straits (T.R. 17)	12/28
Delta Steamship Lines, Inc.	FMB-63	12/31/77	12	U.S. Gulf/East Coast South America (T.R. 20)	43 Overall Max. not to exceed
				U.S. Gulf/West Africa (T.R. 14)	24 79
Farrell Lines Corporated	FMB-64	12/31/77	13	U.S. Atlantic/West Africa (T.R. 14)	20/30 Overall
				U.S. Atlantic/South & East Africa (T.R. 15A)	20 Max. not to exceed
				U.S. Atlantic & Gulf/Australasia (T.R. 16)	16 89
Gulf & South American Steamship Inc.	FMB-75	12/31/78	5	U.S. Gulf/West Coast South America (T.R. 31)	30/36

## Appendix IX—Continued

Operator	Operating-Differential Subsidy Agreement		Number of Subsidized Ships 6/30/71	Service on Essential U.S. Foreign Trade Routes	
	Contract No.	Contract Termination Date		Trade Route	Annual Sailings Min./Max.
Lykes Bros. Steamship Co., Inc.	FMB-59	12/31/77	47	Gulf/Mediterranean (T.R. 13) Gulf/South & East Africa (T.R. 15B) Gulf/U.K. Continent (T.R. 21) Gulf/Far East (T.R. 22)	42/48 90/110 48/60
Moore-McCormack Lines, Incorporated	FMB-48 (Rev.)	12/31/77	16	U.S. Atlantic/East Coast South America (T.R. 1) Combination <sup>4</sup> U.S. Atlantic/East Coast South America (T.R. 1) Freight U.S. Atlantic/South & East Africa (T.R. 15A) Freight	19/23 50/86 20/30
Pacific Far East Line, Inc.	FMB-81	12/31/78	13	California/Far East (T.R. 29) Freight Australian Service (T.R. 27) Freight Combination	48/63 8/13 12/16
Prudential-Grace Lines, Inc.	FMB-49	12/31/77	23	U.S. North Atlantic/Mediterranean (T.R. 10) U.S. Atlantic/West Coast South America (T.R. 2) Comb. & Freight U.S. Atlantic/Caribbean (T.R. 4) Pass./Comb. <sup>5</sup> Freight U.S. Pacific/East Coast America (T.R. 23, 24, 25) U.S. Pacific/Carib. & W. Coast Central America & Mexico (T.R. 23, 25)	34/43 96/106 48/53 24/50 25/42
States Steamship Company	FMB-62	12/31/77	13	Washington/Oregon/Far East (T.R. 29) Washington-Oregon-California/Far East (T.R. 29) California/Far East (T.R. 29)	10/16 20/30 22/28
Waterman Steam- ship Corporation	MA/ MSB-115	6/3/91	2	U.S. Atlantic/Gulf/India/Persian Gulf and Red Sea	20/26
TOTAL	12	206			1,123/1,513

## APPENDIX X

### OPERATING-DIFFERENTIAL SUBSIDIES

Expenditures for the Fiscal Year 1971 and Total Subsidies Payable and Expenditures for the Period January 1, 1937 to June 30, 1971.

Calendar Year	Accruals			Expenditures		
	Subsidies	Recapture	Net Payable	In Fiscal Year 1971	Cumulative through Fiscal Year 1971	Estimated Balance Payable
1937-46	\$ 48,725,478	\$ 32,695,537	\$ 16,029,941	\$	\$ 16,029,941	\$ —
1947	13,438,553	10,066,979	3,371,574	—	3,371,574	—
1948	28,077,303	13,794,768	14,282,535	—	14,282,535	—
1949	44,213,377	14,553,310	29,660,067	—	29,660,067	—
1950	57,874,056	9,265,433	48,608,623	—	48,608,623	—
1951	71,968,636	25,805,608	46,163,028	—	46,163,028	—
1952	89,861,880	26,108,608	63,253,272	—	63,253,272	—
1953	106,296,046	13,271,864	93,024,182	—	93,024,182	—
1954	107,357,156	1,069,909	106,287,247	—	106,287,247	—
1955	115,145,469	11,000,930	104,144,539	—	104,144,539	—
1956	128,189,900	25,483,596	102,706,304	—	102,706,304	—
1957	148,309,951	25,541,138	122,768,813	—	122,768,813	—
1958	147,008,266	6,336,805	140,671,461	—	140,671,461	—
1959	160,026,827	1,217,639	158,809,188	—	158,809,188	—
1960	167,895,154	5,176,231	162,718,923	44,884	162,718,923	—
1961	170,884,261	2,042,748	168,841,513	6,997	168,841,513	—
1962	179,748,676	4,988,626	174,760,050	3,684,540	173,891,816	868,234
1963	189,134,326	(1,417,677)	190,552,003	5,929,769	190,184,008	367,995
1964	205,129,251	674,506	204,454,745	8,030,856	203,840,145	614,600
1965	184,970,206	1,014,005	183,956,201	8,495,990	182,769,987	1,186,214
1966	202,464,241	3,211,462	199,252,779	11,824,721	198,302,472	950,307
1967	219,748,910	5,270,781	214,478,129	11,668,661	210,249,061	4,229,068
1968	221,582,326	3,764,042	217,818,284	12,977,968	209,790,949	8,027,335
1969	218,370,435	2,816,547	215,553,888	6,480,190	187,974,726	27,579,162
1970	214,530,062	(1,546,291)	216,076,353	135,595,603	183,554,875	32,521,978
1971	110,772,606	(778,081)	111,550,687	63,280,918	63,280,918	48,269,769
<b>TOTAL</b>	<b>\$3,551,223,352</b>	<b>\$241,429,023</b>	<b>\$3,309,794,329</b>	<b>\$268,021,097</b>	<b>\$3,185,179,667</b>	<b>\$124,614,662</b>

# APPENDIX X—Continued

## OPERATING-DIFFERENTIAL SUBSIDIES

Total Subsidy Accruals, Recapture Payments, and Balances Payable, by Lines for  
Period January 1, 1937 to June 30, 1971.

Lines	Accruals			Net Subsidies Paid	Estimated Balance Payable
	Subsidies	Recapture	Net Payable		
Amer. Banner Line <sup>1</sup>	\$ 2,626,512	\$ —	\$ 2,626,512	\$ 2,626,512	\$ —
Amer. Diamond Lines <sup>1</sup>	185,802	28,492	157,310	157,310	—
Amer. Export Isbrandt- sen Lines	499,176,675	10,700,587	488,476,088	472,014,616	16,461,472
Amer. Mail Line	117,609,202	7,900,274	109,708,928	103,873,953	5,834,975
Amer. President Lines	454,613,686	17,676,494	436,937,192	418,679,168	18,258,024
Atlantic & Carib. S/N Co. <sup>1</sup>	63,209	45,496	17,713	17,713	—
Baltimore Mail S/S Co. <sup>1</sup>	416,269	—	416,269	416,269	—
Bloomfield S/S Co. <sup>1</sup>	15,634,432	2,613,688	13,020,744	12,898,850	121,894
Delta S/S Lines	126,982,928	8,185,313	118,797,615	114,929,341	3,868,274
Farrell Lines	159,075,841	1,855,376	157,220,465	150,685,529	6,534,936
Prudential-Grace Lines, Inc.	343,311,773	24,223,564	319,088,209	305,688,789	13,399,420
Gulf & So. Amer. S/S Co.	30,890,295	5,283,678	25,606,617	24,135,368	1,471,249
Lykes Bros. S/S Co.	389,243,298	52,050,599	337,192,699	322,803,836	14,388,863
Moore-McCormack Lines	401,269,710	17,762,445	383,507,265	369,134,513	14,372,752
N.Y. & Cuba Mail S/S Co. <sup>1</sup>	8,090,107	1,207,331	6,882,776	6,882,776	—
Oceanic S/S Co.	111,705,150	1,171,756	110,533,394	103,086,943	7,446,451
Pacific Argen. Brazil Line <sup>1</sup>	7,963,939	270,701	7,693,238	7,693,238	—
Pacific Far East Line	118,124,401	25,694,972	92,429,429	88,413,732	4,015,697
Prudential-Steamship/ Company <sup>1</sup>	25,952,423	2,174,780	23,777,643	23,348,005	429,638
Seas Shipping Co. <sup>1</sup>	25,819,800	2,429,102	23,390,698	23,390,698	—
South Atlantic S/S Co. <sup>1</sup>	96,374	84,692	11,682	11,682	—
States S/S Co.	129,045,659	5,110,997	123,934,662	114,748,296	9,186,366
U.S. Lines <sup>2</sup>	583,325,867	54,958,686	528,367,181	519,542,530	8,824,651
<b>TOTAL</b>	<b>\$3,551,223,352</b>	<b>\$241,429,023</b>	<b>\$3,309,794,329</b>	<b>\$3,185,179,667</b>	<b>\$124,614,662</b>

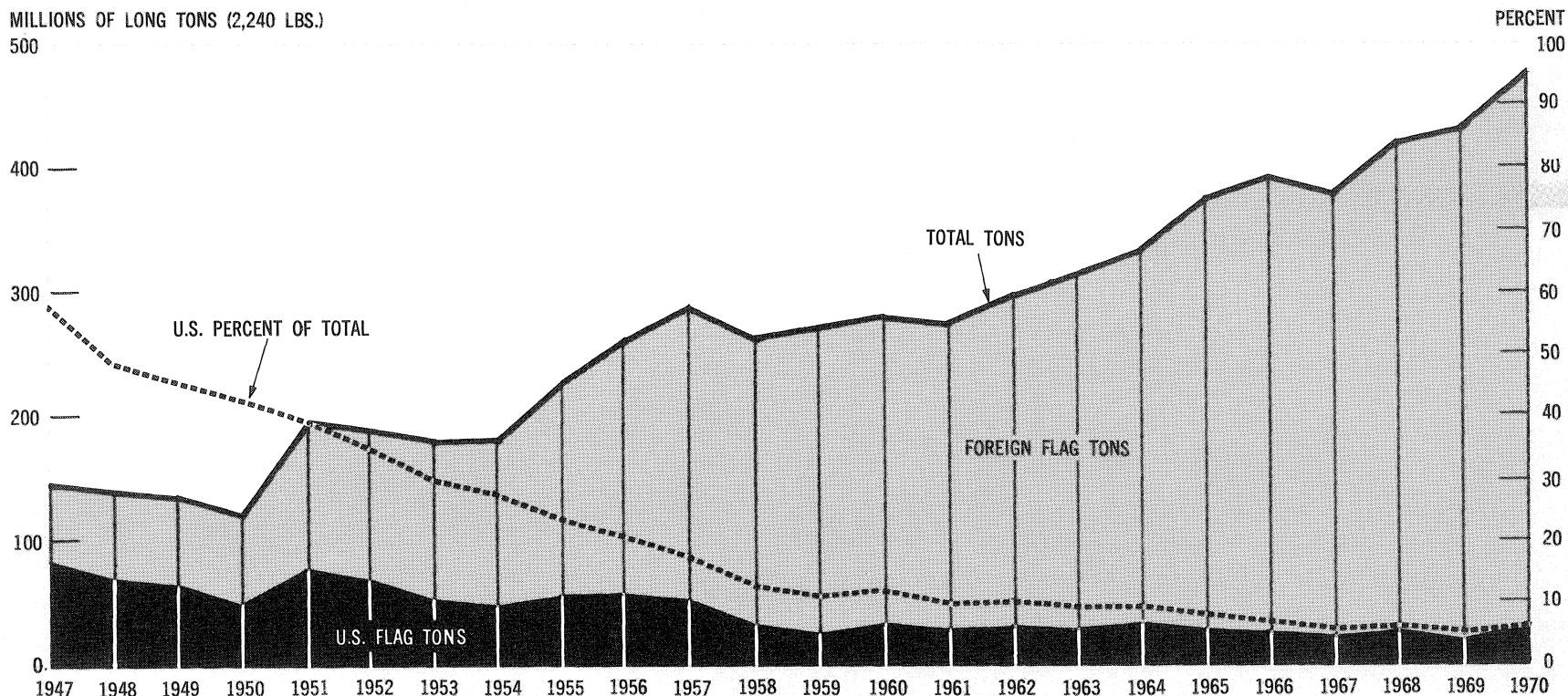
<sup>1</sup> No longer subsidized, or combined with other subsidized lines.

<sup>2</sup> Ceased to be a subsidized line November 6, 1970.

# Appendix XI. U.S. OCEANBORNE FOREIGN TRADE: COMMERCIAL CARGO CARRIED [TONNAGE]

MILLIONS OF LONG TONS (2,240 LBS.)

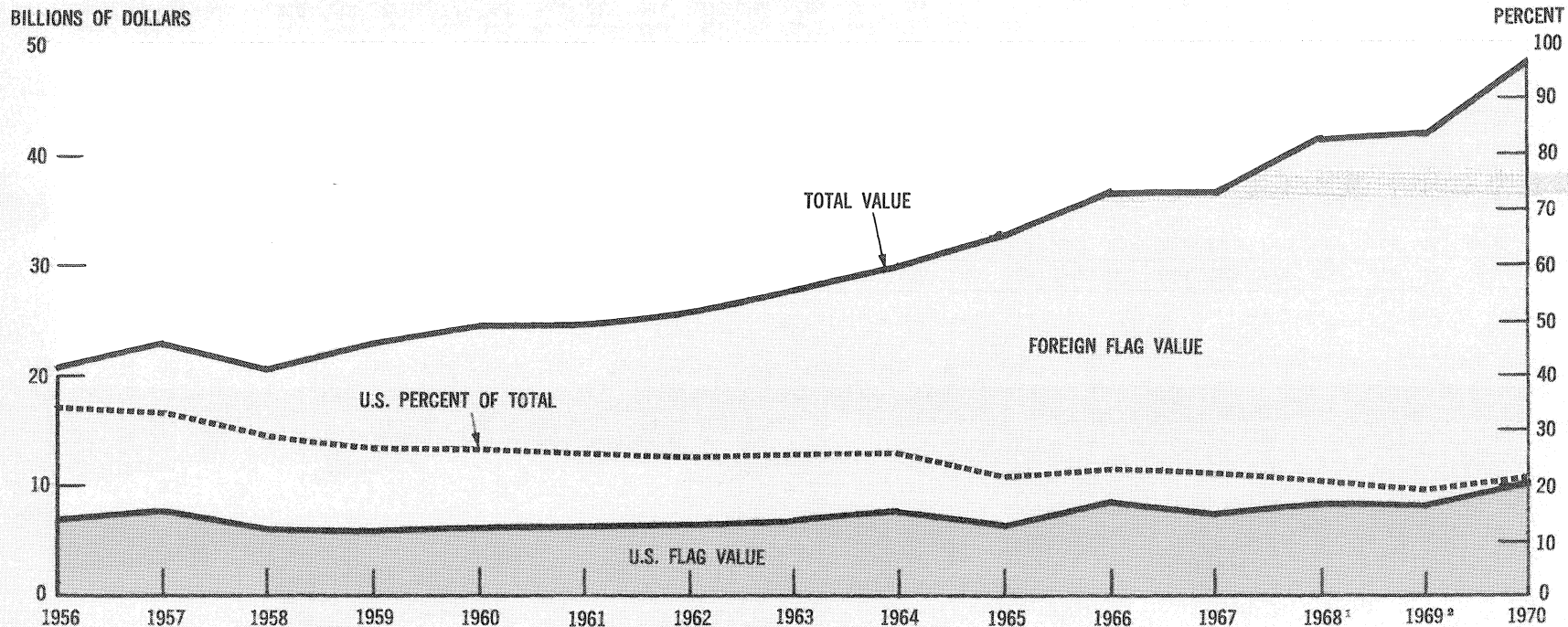
500



CALENDAR YEAR	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970 *
Total Tons (Millions)	142.2	139.0	133.2	117.5	193.1	187.9	178.0	177.0	226.2	260.1	289.3	253.3	267.0	277.9	272.4	296.8	311.6	332.8	371.3	392.3	387.6	418.6	426.1	472.5
U.S. Flag Tons	81.9	67.0	60.3	49.7	76.8	64.4	51.7	48.7	53.1	53.9	50.8	30.9	27.1	31.0	26.3	29.6	28.5	30.5	27.7	26.2	20.5	25.0	19.1	26.5
U.S. Percent of Total	57.6	48.2	45.2	42.3	39.8	34.3	29.1	27.5	23.5	20.7	17.6	12.2	10.2	11.1	9.7	10.0	9.2	9.2	7.5	6.7	5.3	6.0	4.5	5.6
Liner Total Tons	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	46.4	46.7	43.4	48.1	50.7	49.0	48.3	48.9	50.3	49.2	49.9	47.9	46.1	41.0	53.9
Liner U.S. Flag Tons	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	18.0	17.8	14.0	13.5	14.5	12.6	12.7	13.5	14.2	11.2	11.4	10.6	11.1	9.2	11.5
Liner U.S. Percent	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	38.7	38.0	32.3	28.1	28.6	25.8	26.2	27.7	28.1	22.8	22.9	22.2	24.0	22.6	21.4
Non-Liner Total Tons	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	116.0	135.1	105.1	106.9	109.0	106.7	125.2	136.2	161.4	171.6	189.5	190.4	209.5	211.6	236.6
Non-Liner U.S. Flag Tons	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	15.8	16.2	8.8	8.2	8.4	7.8	8.3	8.2	9.8	8.2	6.9	5.4	6.4	4.4	6.5
Non-Liner U.S. Percent	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	13.6	12.0	8.4	7.7	7.7	7.3	6.7	6.0	6.1	4.8	3.6	2.8	3.0	2.1	2.8
Tanker Total Tons	36.1	38.6	43.2	51.1	58.0	63.7	67.0	66.0	74.2	97.7	107.5	104.8	112.0	118.2	116.7	123.3	126.5	121.1	150.5	152.8	149.3	163.1	173.5	182.0
Tanker U.S. Flag Tons	22.6	24.3	27.7	27.4	26.7	24.4	22.1	19.9	17.8	20.1	16.8	8.0	5.4	8.1	5.9	8.5	6.8	6.6	8.2	7.9	4.5	7.5	5.5	8.5
Tanker U.S. Percent	62.8	63.1	64.0	53.6	46.0	38.3	32.9	30.2	23.1	20.6	15.7	7.6	4.8	6.9	5.1	6.9	5.4	5.4	5.5	5.2	3.0	4.6	3.2	4.7

\*Preliminary data subject to future revision.

## Appendix XII. U.S. OCEANBORNE FOREIGN TRADE: COMMERCIAL CARGO CARRIED [DOLLAR VALUE]



CALENDAR YEAR	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970 *
Total Value (\$ billions)	20.6	22.8	20.9	22.8	24.7	24.7	25.9	27.5	30.0	32.4	36.4	36.6	41.1	41.7	48.6
U.S. Flag Value (\$ billions)	7.0	7.3	6.0	6.0	6.5	6.3	6.5	6.9	7.7	6.9	8.2	7.9	8.5	8.0	10.0
U.S. Percent of Total	33.8	32.1	28.6	26.1	26.4	25.6	25.1	25.1	25.8	21.4	22.5	21.7	20.7	19.2	20.6
Liner Total Value	15.3	16.4	15.3	16.8	18.5	18.3	18.9	19.5	21.3	22.3	24.8	24.8	26.8	27.0	32.7
Liner U.S. Flag Value	6.1	6.4	5.4	5.5	5.9	5.7	5.8	6.2	7.0	6.2	7.5	7.4	7.8	7.4	9.4
Liner U.S. Percent	39.6	39.1	35.3	32.5	32.1	31.4	30.1	31.5	32.8	27.8	30.4	29.8	29.0	27.3	28.7
Non-Liner Total Value	3.3	4.0	3.4	3.7	3.6	3.7	4.3	5.2	5.9	6.6	8.2	8.6	10.8	11.0	11.8
Non-Liner U.S. Flag Value	.5	.5	.3	.3	.3	.4	.4	.5	.5	.4	.4	.4	.5	.4	.4
Non-Liner U.S. Percent	15.0	12.6	9.2	8.4	9.0	10.6	9.6	9.6	8.6	6.3	4.9	4.5	4.6	3.8	3.6
Tanker Total Value	2.0	2.4	2.2	2.3	2.6	2.7	2.7	2.8	2.8	3.5	3.4	3.2	3.4	3.6	4.0
Tanker U.S. Flag Value	.4	.4	.3	.2	.3	.2	.3	.2	.2	.3	.3	.2	.2	.2	.2
Tanker U.S. Percent	20.4	16.8	11.4	7.5	10.4	7.3	9.4	9.0	8.8	8.2	7.7	4.8	6.6	5.2	5.7

\*Preliminary data subject to future revision.

Note: Includes Government sponsored cargo; excludes Department of Defense cargo and U.S./Canada transatlantic cargo.

# APPENDIX XIII

## MARITIME LEGISLATION JUNE 30, 1971

Bill No.	Subject	M A Action	Status
91st Congress			
H.R. 17399	Proposed second supplemental appropriation for fiscal year 1970.	Marad testified favorably before Senate Committee on Appropriations.	Enacted as P.L. 91-305, July 6, 1970.
H.R. 17575	A bill making appropriations for the Departments of State, Justice, Commerce and Judiciary and related agencies for the fiscal year ending June 30, 1971.	Marad testified favorably before House and Senate Subcommittees on Commerce appropriations.	Enacted as P.L. 91-472, October 21, 1970.
H.R. 15549	Seamen's Service Act	Marad testified favorably before House Subcommittee on Merchant Marine and reported favorably to the Senate Committee on Commerce on Senate amendment which allows the payment of operating differential subsidy and construction differential subsidy on leased ships.	Enacted as P.L. 91-608, December 31, 1970.
H.R. 15424	To amend the Merchant Marine Act, 1936. (New maritime program).	Marad testified favorably before House and Senate Subcommittees on Merchant Marine.	Enacted as P.L. 91-469, October 21, 1970.
S. 3287	To amend the Merchant Marine Act, 1936. (New maritime program).	Marad testified favorably before Senate Committee on Commerce.	Companion bill enacted as P.L. 91-469, October 21, 1970.
H.R. 16498	To permit the sale of the passenger vessel, ATLANTIC, to an alien.	Marad testified favorably before House Subcommittee on Merchant Marine.	Enacted as Private Law 91-221, December 28, 1970.
-----			
92nd Congress			
H.R. 4724	To authorize appropriations for certain maritime programs of the Department of Commerce.	Marad testified favorably before House and Senate Subcommittees on Merchant Marine.	Passed House, April 20, 1971. Passed Senate, amended May 26, 1971, House agreed to Conference Report No. 92-237, June 29, 1971.
H.R. 5352	To amend the Act to authorize appropriations for the fiscal year 1971 for certain maritime programs of the Department of Commerce.	Marad testified favorably before House and Senate Subcommittees on Merchant Marine.	Enacted as Public Law 92-21, June 1, 1971.
	Maritime Study on Military procurement.	Marad testified before the House Subcommittee on Merchant Marine.	

# APPENDIX XIII—Continued

## Maritime Legislation June 30, 1971

Bill No.	Subject	M A Action	Status
S. 699	To require a radiotelephone on certain vessels while navigating upon specified waters of the U.S.	Marad reported favorably to House Committee on Merchant Marine and Fisheries.	Passed Senate as reported May 4, 1971.
	Oversight Hearings on President's Maritime Program.	Marad testified before the House Subcommittee on Merchant Marine.	
S. 981	To authorize appropriations for certain maritime programs of the Department of Commerce.	Marad testified before Senate Subcommittee on Merchant Marine.	Companion bill passed House, April 20, 1971. Passed Senate, amended May 26, 1971, House agreed to Conference Report No. 92-237, June 29, 1971.
S. 1220	To amend the Act to authorize appropriations for the fiscal year 1971 for certain maritime programs of the Department of Commerce.	Marad testified before Senate Subcommittee on Merchant Marine.	Companion bill enacted as Public Law 92-21, June 1, 1971.
H.R. 9272	A bill making appropriations for the Departments of State, Justice, Judiciary and related agencies for the fiscal year ending June 30, 1972.	Marad testified favorably before House Subcommittee on Appropriations.	Passed House, June 24, 1971.
H.R. 155, 705,5363.	To facilitate the transportation of cargo by barges specifically designed for carriage aboard a vessel.	Marad reported no objection to House Merchant Marine and Fisheries Committee.	Passed House, May 3, 1971.
	Passenger ships	Marad testified before House Merchant Marine and Fisheries Committee.	
H.R. 6239	To amend the maritime lien provision of The Ship Mortgage Act of 1920.	Reported no objection to House Merchant Marine and Fisheries Committee.	
H.R. 756	To require a radiotelephone on certain vessels while navigating on specified waters of the United States.	Marad reported favorably to House Committee on Merchant Marine and Fisheries.	
H.R. 6479	To provide for the licensing of personnel on certain vessels.	Marad reported favorably with amendment to House Merchant Marine and Fisheries Committee.	Passed House, April 29, 1971.

**APPENDIX XIV**  
**SUBSIDIZED AND UNSUBSIDIZED OPERATORS <sup>1</sup>**  
**COMBINED CONDENSED BALANCE SHEETS,**  
**DECEMBER 31, 1970. SEE NOTES.**

(Stated in thousand dollars)

		Unsubsidized	
	Subsidized	Tanker	Cargo
ASSETS			
Current Assets:			
Cash.....	\$ 24,668	\$ 40,836	\$ 17,462
Marketable securities.....	17,090	5,186	34,664
Accounts receivable.....	270,661	15,485	223,276
Other.....	39,375	5,579	8,468
Total current assets.....	351,794	67,086	283,870
Special funds and deposits.....	310,200 <sup>2</sup>	28,865	5,420
Investments.....	17,339	9,574	69,070
Deferred ODS receivable (see contra).....	38,055 <sup>3</sup>	—0—	—0—
Property and equipment—less depreciation			
Vessels.....	954,635	257,939	146,306
Other.....	219,789	19,010	215,018
Other assets.....	44,141	2,981	103,557
Total assets.....	\$1,935,953	\$385,455	\$823,241
LIABILITIES AND NET WORTH			
Liabilities:			
Current Liabilities:			
Accounts payable and accruals.....	\$ 223,009	\$ 19,508	\$193,292
Current long-term debt.....	16,073	15,581	43,137
Other.....	24,481	1,263	5,946
Total current liabilities.....	263,563	36,352	242,375
Voyages in progress—net.....	33,737	2,453	14,309
Long-term debt.....	639,133 <sup>2</sup>	216,838	216,868
Recapturable ODS (see contra).....	38,055 <sup>3</sup>	—0—	—0—
Operating reserves.....	53,266	950	20,657
Other liabilities.....	57,486	30,281	76,140
Total liabilities.....	1,085,240	286,874	570,349
Net worth:			
Capital stock.....	121,623	36,868	48,703
Surplus:			
Capital.....	371,268	30,994	24,861
Earned.....	357,822	30,719	179,328
Total surplus.....	729,090	61,713	204,189
Total net worth.....	850,713 <sup>4</sup>	98,581	252,892
Total liabilities and net worth.....	\$1,935,953	\$385,455	\$823,241

# APPENDIX XIV—Continued

## Subsidized and Unsubsidized Operators<sup>1</sup> Combined Condensed Income and Surplus Accounts, December 31, 1970. See Notes.

(Stated in thousand dollars)

	Subsidized	Unsubsidized	
		Tanker	Cargo
Shipping Operations:			
Revenue:			
Terminated voyages.....	\$ 909,427	\$117,717	\$727,281
Other shipping operations.....	16,855	—0—	22,385
Total revenue.....	926,282	117,717	749,666
Expense:			
Terminated voyage expense:			
Wages, payroll taxes, welfare contributions.....	310,094	27,340	119,049
Subsistence.....	16,452	1,353	5,796
Maintenance and repairs.....	45,589	5,254	24,382
Insurance (Hull and P and I).....	62,472	7,764	23,727
Total.....	434,607	41,711	172,954
Less: Operating-differential subsidy (ODS).....	228,634	—0—	—0—
Total.....	205,973	41,711	172,954
Other vessel expense.....	74,039	14,210	158,873
Voyage expense.....	426,218	8,758	145,912
Total terminated voyage expense.....	706,230	64,679	477,739
Other shipping operations expense:			
Overhead.....	115,853	2,832	78,729
Depreciation on shipping property.....	41,678	15,693	38,376
Other miscellaneous shipping expenses.....	48,765	1,344	119,210
Total expense.....	912,526	84,548	714,054
Gross profit (loss) from shipping operations.....	13,756	33,169	35,612
Interest and other income.....	17,074	3,192	16,841
Interest and other deductions.....	(35,012)	(12,518)	(32,644)
Net profit (loss) from shipping operations.....	(4,182)	23,843	19,809
Non-shipping operations—net profit (loss).....	45	457	75
Ordinary income (loss) before Federal income taxes.....	(4,137)	24,300	19,884
Provision for Federal income taxes.....	13,835	9,799	5,019
Ordinary income after taxes.....	(17,972)	14,501	14,865
Extraordinary and prior period items:			
Extraordinary items—net income (net expense).....	(11,703)	—0—	6,383
Prior period items—net income (net expense).....	(9,095)	133	621
Federal income taxes thereon (net expense).....	(5,185)	(118)	(2,298)
Total.....	(25,983)	15	4,706
Net income (loss) (carried forward).....	(43,955)	14,516	19,571

# APPENDIX XIV—Continued

## SUBSIDIZED AND UNSUBSIDIZED OPERATORS

### COMBINED CONDENSED INCOME AND SURPLUS ACCOUNTS, DECEMBER 31, 1970. SEE NOTES.

	Subsidized	Unsubsidized	
		Tanker	Cargo
Net income (loss) (brought forward) .....	(43,955)	14,516	19,571
Add: Surplus (capital and earned) beginning of year .....	787,194	48,071	183,830
Total surplus available .....	743,239	62,587	203,401
Surplus changes:			
Cash dividends .....	(14,149)	(800)	(45)
Other (net) .....	—0—	(74) <sup>5</sup>	833 <sup>5</sup>
Total .....	(14,149)	(874)	788
Surplus (capital and earned) end of year .....	<u>\$ 729,090</u>	<u>\$ 61,713</u>	<u>\$204,189</u>

<sup>1</sup> The data were obtained from Forms MA-172 filed (1) by all 13 subsidized operators for the calendar year 1970 and (2) by 15 cargo and 23 tanker unsubsidized operating companies for fiscal year July 1, 1970 through June 30, 1971, covering 295 subsidized vessels, and 32 unsubsidized tankers and 85 unsubsidized cargo vessels.

<sup>2</sup> Long-term debt includes \$16,501,443 of mortgage indebtedness due within one year and payable from special funds and deposits of subsidized operators.

<sup>3</sup> Represents Government's share of recapturable subsidy deducted from subsidy payments pending settlement of 10-year subsidy recapture periods. Of the amount shown \$24,505,872 applies to completed but unsettled subsidy recapture periods, and \$13,548,341 applies to current incomplete subsidy recapture periods. The corresponding amounts at December 31, 1969 were \$23,052,638 and \$18,886,392.

<sup>4</sup> Net worth of the 13 subsidized operators includes earnings of \$649,305,130 on which Federal income taxes have been deferred as of December 31, 1970, as compared with \$633,701,830 as of December 31, 1969, an increase of \$15,603,300.

<sup>5</sup> Other surplus changes: The other surplus changes for unsubsidized operators resulted from the acquisition of retained earnings of an acquired company, prior period tax adjustments, and premiums paid for stock purchases.

# FINANCIAL STATEMENTS

## EXHIBIT 1—Balance Sheet

June 30, 1971 and June 30, 1970 (Note 1)

Assets	June 30	
	1971	1970
CASH AND FUND BALANCES (note 2)-----	\$ 426,702,475	\$ 360,816,324
ADVANCES:		
U.S. Government agencies-----	693	7,677
Others-----	25,216	431,221
	25,909	438,898
NOTES AND ACCOUNTS RECEIVABLE:		
U.S. Government agencies-----	2,705,425	668,639
Domestic firms and individuals-----	4,291,374	6,570,538
Foreign governments and nationals-----	45,938	45,938
	7,042,737	7,285,115
Less allowance for losses-----	175,142	175,167
	6,867,595	7,109,948
ACCRUED INTEREST RECEIVABLE (note 3)-----	513,505	724,818
MATERIAL AND SUPPLIES (at cost or estimated cost)-----	663,444	712,979
INVESTMENTS—U.S. TREASURY SECURITIES-----	27,609,849	18,618,422
LOANS RECEIVABLE:		
Ship mortgage loans—domestic-----	63,293,920	72,733,194
Loan to foreign government-----	270,133	540,265
	63,564,053	73,273,459
Less allowance for losses-----	9,927,825	9,173,949
	53,636,228	64,099,510
VESSELS UNDER CONSTRUCTION-----	65,348,196	65,287,244
FIXED ASSETS USED IN OPERATIONS (at cost, estimated cost or assigned amounts) (note 8)-----	38,653,629	43,758,986
Less accumulated depreciation-----	19,306,072	20,161,597
	19,347,557	23,597,389
ASSETS HELD PRIMARILY FOR MOBILIZATION PURPOSES (at cost, estimated cost or assigned amounts):		
Vessels-----	1,995,584,563	2,284,251,949
Less accumulated depreciation-----	1,931,795,216	2,205,124,026
	63,789,347	79,127,923
Facilities and equipment (note 9)-----	38,186,256	34,391,342
Less accumulated depreciation-----	14,470,977	13,683,948
	23,715,279	20,707,394
Stand-by inventories-----	5,531,667	10,625,060
	93,036,293	110,460,377
OTHER ASSETS:		
Vessels held primarily for scrapping-----	243,780,436	381,218,624
Other vessel (HYDROFOIL)-----	150,000	
Less allowance for losses-----	235,235,277	368,225,292
	8,695,159	12,993,332
Deferred charges:		
Unamortized construction-differential subsidies-----	976,937,383	887,862,142
Other deferred charges and miscellaneous items-----	846,982	2,113,550
	977,784,365	889,975,692
Less allowance for losses-----	719,828	713,498
	977,064,537	889,262,194
	<u>\$1,679,510,747</u>	<u>\$1,554,121,435</u>

The Notes to Financial Statements are an integral part of this statement.

U. S. Department of Commerce  
Maritime Administration

June 30

Liabilities	June 30	
	1971	1970
<b>ACCOUNTS PAYABLE AND OTHER LIABILITIES (note 4)</b>		
U.S. Government agencies:		
Liability for vessels under construction.....	\$ 65,348,197	\$ 65,287,244
Advances and contributions.....	10,008,980	9,196,593
Accounts payable and accrued liabilities.....	211,583	479,283
	<hr/> 75,563,760	<hr/> 74,963,120
Other:		
Accrued operating-differential subsidies (note 5).....	125,012,186	141,219,418
Less estimated recapturable subsidies.....	397,524	1,003,530
	<hr/> 124,614,662	<hr/> 140,215,888
Amounts due shipbuilders for construction of vessels.....	17,726,354	20,391,548
Accrued annual leave.....	2,581,406	2,652,628
Accounts payable and accrued liabilities.....	9,271,638	8,659,862
Deposits by contractors and others.....	1,272,006	2,041,641
Withholding for purchase of savings bonds and payments of State and local taxes.....	101,290	286,278
Unearned insurance premiums.....	3,143,333	1,954,383
Other deferred credits.....	1,061,743	1,923,084
	<hr/> 159,772,432	<hr/> 178,125,312
	<hr/> 235,336,192	<hr/> 253,088,432
<b>EQUITY OF THE UNITED STATES GOVERNMENT (exhibit 2)</b>		
Maritime Regular.....	1,391,923,962	1,254,238,113
Vessel Operations Revolving Fund.....	16,930,601	16,930,601
Federal Ship Mortgage Insurance Revolving Fund.....	30,342,634	25,129,664
War Risk Insurance Revolving Fund.....	4,977,358	4,734,625
	<hr/> 1,444,174,555	<hr/> 1,301,033,003
	<hr/> \$1,679,510,747	<hr/> \$1,554,121,435

The Notes to Financial Statements are an integral part of this statement.

# FINANCIAL STATEMENTS—Continued

## EXHIBIT-2 Statement of Equity of the United States Government for the Years Ended June 30, 1971 and 1970 (Note 1)

	Year Ended June 30	
	1971	1970
BALANCE, BEGINNING OF FISCAL YEAR	\$1,301,033,003	\$1,348,959,580
ADDITIONS:		
Funds appropriated by the Congress	512,895,000	251,772,287
Vessels transferred from other Government agencies (net)		9,573,652
Property other than vessels transferred from others (net)		282,452
Contributions received for Chapel at United States Merchant Marine Academy, Kings Point, N.Y.	95,909	—0—
	\$1,814,023,912	\$1,610,587,971
DEDUCTIONS:		
Net cost of combined operations (exhibit 3)	338,443,785	289,457,687
Payments into General Fund of U.S. Treasury	28,595,152	19,919,532
Unobligated balance of appropriations transferred to U.S. Treasury	306,353	177,749
Property other than vessels transferred to others (net)	348,709	—
Vessels transferred to others—Government Agencies (net)	2,155,358	—
	\$ 369,849,357	\$ 309,554,968
BALANCE, CLOSE OF FISCAL YEAR (Exhibit 1)	\$1,444,174,555	\$1,301,033,003

The Notes to Financial Statements are an integral part of this statement.

# EXHIBIT-3      Statement of Operations for Years Ended June 30, 1971 and 1970 (Note 1)

	Year Ended June 30	
	1971	1970
<b>OPERATIONS OF MARITIME ADMINISTRATION:</b>		
Net costs of operating activities (note 6)		
Reserve fleet program:		
Depreciation of reserve fleet vessels	\$ 9,405,356	\$ 21,390,252
Maintenance and preservation	1,499,321	4,174,449
Estimated loss from scrapping of obsolete vessels	—0—	—0—
	10,904,677	25,564,701
Maritime training program	6,824,644	6,171,866
Maintenance of reserve shipyards	283,371	248,755
Operation of warehouses	196,537	198,511
	18,209,229	32,183,833
Direct subsidies and costs attributable to national defense:		
Estimated operating-differential subsidies (note 5)	252,419,871	193,917,463
Construction-differential subsidies	45,555,967	43,174,447
Cost of national defense features	1,613,048	1,470,405
	299,588,886	238,562,315
Administrative expense	16,642,935	15,145,232
Research and development (note 6)	8,298,317	6,497,980
Uncapitalized expense incidental to ship construction	1,950	14,313
Financial assistance to State marine schools	2,591,808	2,037,929
	27,535,010	23,695,454
Other costs (—income)		
Loss (—gain) on vessels sold	—7,054,000	—1,427,208
Depreciation on facilities and equipment not allocated to current programs	266,860	282,372
Increase (—decrease) in allowance for uncollectible accounts and notes receivable	—0—	—28,808
Adjustments applicable to prior years	276,691	—4,542
Loss on sale of surplus material and scrap	2,456,760	1,538,713
Loss (—gain) on sale of fixed assets other than vessels	963,442	44,788
Inventory and property adjustments	263,155	170,553
Interest earned	—1,701,307	—1,919,616
Miscellaneous (net)	3,094,762	2,000,477
	—1,433,637	656,729
Net cost of Maritime Administration operations	343,899,488	295,098,331
<b>OPERATIONS OF REVOLVING FUNDS (—net income or loss):</b>		
Vessel Operations Revolving Fund	—0—	22,280
War Risk Insurance Revolving Fund	—242,733	—384,874
Federal Ship Mortgage Insurance Revolving Fund	—5,212,970	—5,278,050
<b>NET COST OF COMBINED OPERATIONS (exhibits 2 and 4)</b>	<b>\$338,443,785</b>	<b>\$289,457,687</b>

The Notes to Financial Statements are an integral part of this statement.

# FINANCIAL STATEMENTS—Continued

## EXHIBIT—4 Statement of Sources and Application of Funds for the Year Ended June 30, 1971 (Note 1)

### SOURCES:

Funds appropriated by the Congress	\$512,895,000
Collections on mortgage loans receivable	9,709,406
Proceeds from sale of vessels	18,002,806
Proceeds from sale of non-current assets other than vessels	-1,672,766
Contributions received for construction of chapel	95,909
Total funds provided	539,030,355

### APPLICATION:

Net cost of combined operations (exhibit 2)	\$338,443,785	
Items considered in net cost of combined operations:		
Provision for depreciation	-10,742,127	
Amortization of construction-differential subsidies	-47,998,171	
Gain or (-loss) on disposal of non-current assets:		
Vessels	18,002,806	
Other	-14,933,126	
Property and other adjustments	-422,984	282,350,183
Unamortized construction-differential subsidy		137,073,412
Payments into the General Fund of U.S. Treasury		28,595,152
Increase in investments—U.S. Treasury Securities		9,045,000
Unobligated balance returned to U.S. Treasury		306,353
Acquisition of vessel (by foreclosure)		150,000
Total funds applied		457,520,100
Increase in working capital		\$ 81,510,255

### Summary of Changes in Working Capital Year Ended June 30, 1971

	June 30		Increase (—Decrease)
	1971	1970	
Assets:			
Cash	\$426,702,475	\$360,816,324	\$65,886,151
Advances	25,909	438,898	-412,989
Notes and accounts receivable	6,867,595	7,109,948	-242,353
Accrued interest receivable	513,505	724,818	-211,313
Materials and supplies	663,444	712,979	-49,535
Other deferred charges and miscellaneous items (net)	127,154	1,400,052	-1,272,898
Total	\$434,900,082	\$371,203,019	\$63,697,063
Liabilities:			
Accounts payable and other liabilities (note 7)	169,987,995	187,801,187	17,813,192
Working capital	\$264,912,087	\$183,401,832	\$81,510,255

The Notes to Financial Statements are an integral part of this statement.

## Notes to Financial Statements

### June 30, 1971 and 1970

1. The preceding financial statements include the assets, liabilities, income and expense of the Maritime Administration, the Vessel Operations Revolving Fund, the War Risk Insurance Revolving Fund, and the Federal Ship Mortgage Insurance Revolving Fund, and also accounts maintained by certain steamship companies for vessels operated for the Vessel Operations Revolving Fund under General Agency agreements.

2. Cash and fund balances consist of:

	1971	1970
Fund Balances with U.S. Treasury:		
Operating funds	\$415,918,928	\$348,159,395
Trust and deposit funds	1,373,296	2,327,919
Allocations from other agencies	9,217,429	9,515,131
Cash in Banks, on hand, and in transit	192,822	813,879
	<u>\$426,702,475</u>	<u>\$360,816,324</u>

3. Accrued interest receivable:

	1971	1970
On ship mortgage loans:		
Domestic firms and individuals	\$ 475,436	\$ 686,749
On other loans and investments	38,069	38,069
	<u>\$ 513,505</u>	<u>\$ 724,818</u>

4. The Maritime Administration was contingently liable under agreements insuring mortgages, construction loans and accrued interest payable to lending institutions totaling \$886,399,041 at June 30, 1971, and \$630,463,807 at June 30, 1970. Commitments to insure additional loans and/or mortgages amounted to \$280,403,776 at June 30, 1971, and \$288,954,196 at June 30, 1970. U.S. Government securities and cash of \$102,031,159 at June 30, 1971, and \$40,832,414 at June 30, 1970, were held in escrow by the Government in connection with insurance of loans and mortgages which were financed by the sale of bonds to the general public. There were also conditional liabilities for prelaunching War Risk Builder's Risk Insurance of \$17 million at June 30, 1971, and \$18 million at June 30, 1970. The Maritime Administration was also contingently liable for undetermined amounts in connection with settlements to be made under 134 claims against the Administration aggregating \$27,287,078 at June 30, 1971, and 64 claims aggregating \$24,793,904 at June 30, 1970. Based on previous experience, it is anticipated that settlements of these claims will be made for amounts substantially less than the gross amounts of the claims.

At June 30, 1971, and 1970 the U.S. Treasury held in safekeeping for the Maritime Administration \$40,000 and \$660,000, respectively, of U.S. Government securities which had been accepted from vessel charterers, subsidized operators, and other contractors as collateral for their performance under contracts.

5. Operating-differential subsidies are paid subject to final adjustments at the end of the operators' recapture periods which are established by contracts generally as ten-year terms. The Administration was contingently liable for subsidies in the amounts of \$8,988,245 and \$45,283,514 at June 30, 1971, June 30, 1970, respectively, which had not been paid because of estimated recapturable excess profits in the same amounts pending final accountings for applicable recapture periods.

# FINANCIAL STATEMENTS—Continued

## Notes—Continued

6. Costs on the Statement of Operations are shown after deductions for revenue and reimbursements and include depreciation on facilities and equipment used in operations and on reserve fleet vessels held primarily for mobilization purposes. Costs shown for the following programs include:

	Year Ended June 30			
	1971		1970	
	Depreciation	Revenue and Reimbursements	Depreciation	Revenue and Reimbursements
Maintenance and preservation of reserve fleet vessels	\$ 199,728	\$5,452,456	\$178,808	\$2,154,398
Maritime training program	370,396	458,073	322,808	261,469
Maintenance of reserve shipyards	286,828	3,457	252,216	3,461
Operation of warehouses	41,620	57,223	27,048	158,664
Administrative expense	70,416	3,469,844	72,104	5,580,909
Research and development	100,924	—	100,720	—
Total	\$1,069,912	\$9,441,053	\$953,204	\$8,158,901

7. Accounts payable and other liabilities shown on exhibit 4 exclude \$65,348,197 at June 30, 1971, and \$65,287,244 at June 30, 1970, which were offset against related costs for vessels under construction.

8. Fixed assets used in operations are as follows:

	June 30	
	1971	1970
Facilities and equipment	\$32,704,904	\$35,037,990
Land and land improvements	3,727,000	6,951,729
Construction progress	2,221,725	1,769,267
	\$38,653,629	\$43,758,986

Depreciation shown on Exhibit 1 applies to Facilities and Equipment only.

9. Facilities and equipment held primarily for mobilization purposes are as follows:

	June 30	
	1971	1970
Land and land improvements	\$31,430,504	\$30,860,319
Other facilities and equipment	6,755,752	3,531,023
	\$38,186,256	\$34,391,342

Depreciation shown on Exhibit 1 applies to Facilities and Equipment only.

## Acknowledgments

Avondale Shipyards, Inc.  
American Waterways Operators  
General Dynamics Corp., Quincy Shipbuilding  
Division  
Ingram Ocean Systems  
Ingall's Nuclear Shipbuilding Division,  
Litton Industries  
New York Port Authority  
Port of Baltimore  
Prudential-Grace Lines, Inc.  
Seatrain Shipbuilding Corp.

