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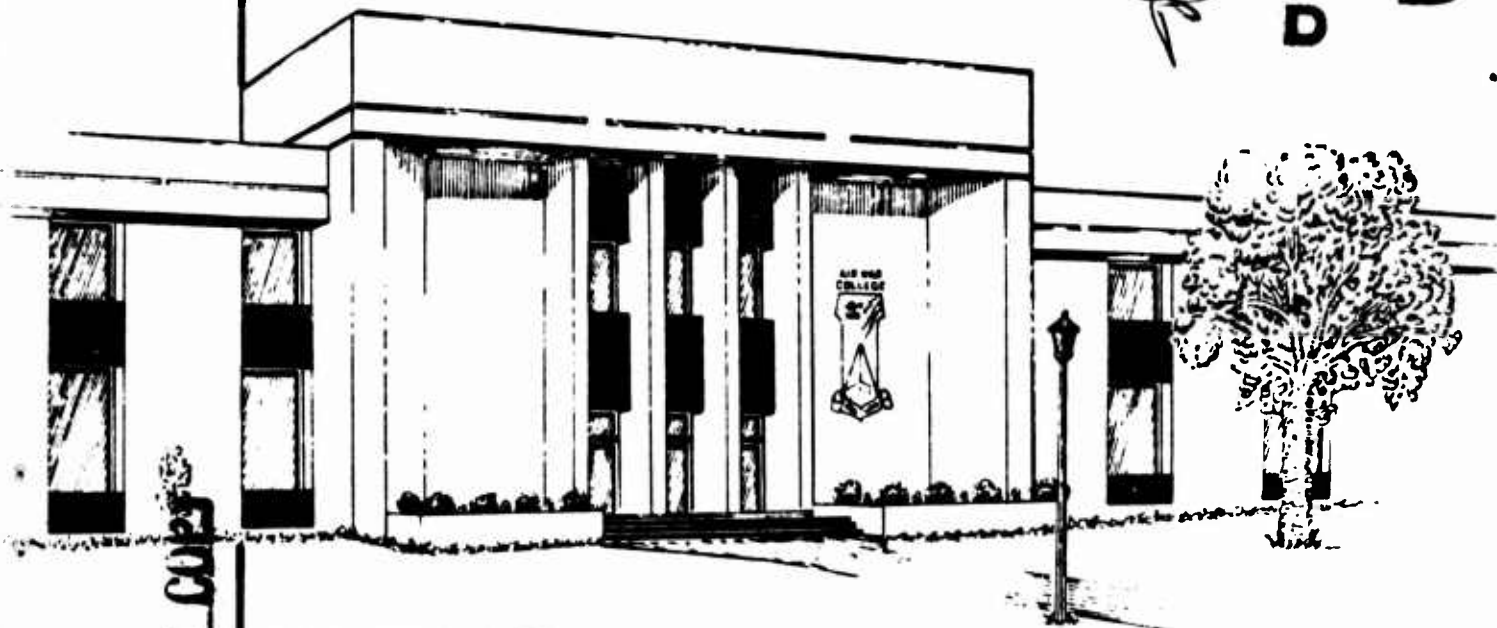
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THE UNITED STATES MERCHANT MARINE: VITAL COMPONENT OF
AMERICAN SEA POWER AND THE NATIONAL DEFENSE

By COLONEL ANDREW J. MCINTYRE, JR.

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MAXWELL AIR FORCE BASE, ALABAMA

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AMERICAN SEA POWER AND THE NATIONAL DEFENSE

by

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Colonel, USAF

A RESEARCH REPORT SUBMITTED TO THE FACULTY
IN
FULFILLMENT OF THE RESEARCH
REQUIREMENT

Research Advisor: Captain Albert O. Howard, USN

MAXWELL AIR FORCE BASE, ALABAMA

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AIR WAR COLLEGE RESEARCH REPORT ABSTRACT

TITLE: The United States Merchant Marine: A Vital Component Of American Sea Power And The National Defense

AUTHOR: Andrew J. McIntyre, Jr., Colonel, USAF

Merchant shipping and shipbuilding have been of vital importance to Americans since their colonial beginnings. Today, the United States depends on sealift, along with airlift, to project and sustain U.S. military overseas. The U.S. merchant marine is of pivotal importance to America's sealift capability.

Over the past several years, America's privately owned merchant fleet has declined in numbers and in ships which are considered by the Navy to be useful to the military. America's private shipbuilding industry has also declined, particularly in regard to the construction of merchant ships. This treatise provides a brief history of the U.S. maritime industry, an overview of recent trends, and recommends a general direction for future U.S. maritime policy. The importance of competition, technological application, and creative government policy is stressed.

See
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BIOGRAPHICAL SKETCH

Colonel Andrew J. McIntyre, Jr. was graduated from the University of Maryland with a BS and an MBA in transportation (1965 and 1966, respectively).

Commissioned through Officer Training School in 1967, he served in various transportation capacities in the Military Airlift Command until 1972 when he joined the Air Force Study to Automate Logistics at the Base Level (STALOG). In 1974, he was assigned to Headquarters, Air Force Postal and Courier Service and two years later to the Directorate of Transportation, Headquarters, United States Air Force. In 1978, while attending the Army Command and General Staff College, he earned a Masters of Arts from Central Michigan University in public administration. He was subsequently assigned to the Directorate of Logistics, Organization of the Joint Chiefs of Staff as a Strategic Plans Officer. In 1982, he assumed command of the 50th Transportation Squadron, Hahn AB, Germany. Colonel McIntyre is a graduate of the Air War College, class of 1986.

CHAPTER I

INTRODUCTION

This treatise addresses the ~~United States~~ (U.S.) merchant marine and its importance to American sea power and the national defense. It provides a brief history of the U.S. maritime industry, an overview of recent trends, and recommends a general direction for future U.S. maritime policy. The importance of competition, technological application, and creative government policy is stressed.

CHAPTER 11

IMPORTANCE

U.S. military strategy is to deter war through a strong forward defense and, if necessary, to engage aggressors in geographic areas other than the U.S. (3:8; 11:17; 18:15; 7:65) The oceans are perceived as barriers for potential enemies and as avenues for extending American influence abroad. (7:65) This strategy requires a combination of equipment pre-positioned in forward areas, forces deployed overseas, the capability for rapid deployment of forces from the U.S., and the capability to sustain forces once deployed. (11:17)

Airlift can quickly deliver troops and high priority equipment and material. Sealift can deliver large quantities of equipment, supplies, and ammunition to sustain military operations. (11:17) During a protracted conflict, sealift has historically transported approximately 95 percent of the equipment and supplies needed in an objective area. (20:12) Because of the unique advantages offered by airlift and sealift, in most instances, each is complementary to the other. (11:17)

The U.S. merchant marine has long been considered the primary source of ships to meet national defense requirements. (18:17) However, the number of militarily useful ships under U.S. flag has declined and is expected to further decrease. (19:21) This has caused a reassessment of military sealift programs and the expenditure of taxpayer dollars to improve U.S. sealift capabilities. (19:20; 20:14)

A recent statement by the Secretary of the Navy, the Honorable John Lehman, summarizes the U.S. Navy's views:

"Our nation has been, is now, and always will be a maritime nation. It is paradoxical to even consider a maritime nation without a strong maritime consisting of both naval and merchant ships. History tells us that our Continental Navy started with merchant ships. We are on our way to rebuilding our Naval Forces; we must find ways to strengthen our merchant marine that must be counted on to carry out our National Maritime Strategy of a forward deployment and forward engagement if required....While programs like the Ready Reserve Force provide a quick-fix solution to current shipping shortfalls, there is no substitute for a strong merchant marine."
(11:23)

In 1985, sealift was added to sea control and power projection as the third primary function of the U.S. Navy. (18:16)

CHAPTER III

HISTORICAL PERSPECTIVES

Merchant shipping and shipbuilding have been of major importance to Americans since their colonial beginnings. Colonial businessmen and legislators linked economic prosperity to the production and ocean transportation of commodities. (12:1) Within the British mercantile system, colonial governments and Parliament actively promoted the colonial shipping industry. (12:1,5) By the American Revolution, colonial shipbuilding accounted for one third of all British merchant shipping. Colonial shipping supplied the Royal Navy with a pool of skilled seamen. (12:18)

Privateering was an accepted practice during America's colonial period. The political climate and the basic state of naval technology permitted the easy conversion of colonial merchant ships into private vessels of war. Parliament encouraged this practice and colonial governors were empowered to issue letters of marque. The military contribution to British sea control was significant. (12:15) Many of the American officers and seamen who gained privateer experience in the Anglo-French wars later manned the Continental

Navies and privateers of the American Revolution.

(12:16)

America emerged from the Revolution with "...a moribund merchant marine..." and "...shattered trade ties..." (12:27) After a brief period of confederation, the newly formed federal government immediately set about to reconstruct the viability of American trade and shipping. (12:27,28) Early national legislation prohibited foreign-built vessels from American registry, enrollment, and license. (12:66) By 1795, American protective measures combined with the desire of European shippers to use neutral shipping to avoid the risk associated with almost continuous European conflict resulted in 92 percent of American imports and 86 percent of American exports being transported on American merchant ships. (12:28) Following the War of 1812, America's merchant marine was among the largest in the world. (12:59)

The U.S. merchant marine significantly declined during the American Civil War. Totally unprepared to fight at sea, the Union Navy requisitioned hundreds of privately owned ships. The loss of the cotton trade denied revenues to Northern ship owners. The success

of Confederate raiding vessels spurred skyrocketing marine insurance rates and the sale of Union registry vessels into foreign registry. (12:66) Restrictive legislation and shortages of shipbuilding materials were further impediments to the shipping industry. (12:67)

Following the Civil War, America's merchant marine capacity continued to decline. (12:65,101) By 1914, most U.S. vessels were engaged in coastal and Great Lakes trade. Less than 10 percent of America's exports were being carried in American ships, and only 2 percent of all the vessels in the world's oceanic trades were of American registry. (12:116)

The Shipping Act of 1916 authorized the creation of the Emergency Fleet Corporation for "...the purpose of purchasing, constructing, and operating government vessels in time of dire national need." (12:123) In August 1917, the U.S. government commandeered American shipyards and the 3 million tons of vessels being constructed within these yards. In October 1917, all American ships in excess of 2,500 tons were requisitioned. Confiscated German vessels were outfitted for American service and pressure was brought

to bear to bring neutral shipping into U.S. service.
(12:124) The United States Shipping Board contracted with Japan and China to build additional tonnage and began construction of three major shipyards. Although there was never sufficient shipping at any time during World War I, these actions shortened the war by providing shipping to deploy and sustain American forces overseas. (12:125)

The period between the world wars was characterized by the introduction of federal subsidies to promote American shipping and the enactment of several major pieces of federal maritime legislation. (12:149)

Despite vast destruction of shipping, World War I ended with the world's greatest surplus of merchant ships ever known. The U.S. government owned most of the surplus. In the summer of 1920, a world-wide shipping recession began. (12:140)

The Shipping Act of 1920 provided the first written expression of public policy concerning the U.S. merchant marine. (12:150) Section 1 provided:

"...That it is necessary for the national defense and for the proper growth of its

foreign and domestic commerce that the United States shall have a merchant marine of the best equipped and most suitable types of vessels sufficient to carry the greater portion of its commerce and serve as a naval or military auxiliary in time of war or national emergency, ultimately to be owned and operated privately by citizens of the United States; and it is hereby declared to be the policy of the United States to do whatever may be necessary to develop and encourage the maintenance of such a merchant marine..." (22:119)

The Jones-White Act or Merchant Marine Act of 1928 provided for overseas mail routes and low interest loans for up to three-quarters of the construction cost of a ship. The fundamental purpose of this act was to "...provide needed construction and operating subsidies in a politically viable guise." (12:160) Sixty-four ships were built and 61 ships were rebuilt under the provisions of this act which was criticized by many for its high cost to the American tax payer. (12:160,161)

The Bland-Copeland Act or Merchant Marine Act of 1936 created the forerunner of the present Maritime Administration (MARAD)- the Maritime Commission. The Commission was empowered to build ships if the private sector failed to do so and was tasked to improve the position of seamen aboard subsidized ships. (12:171)

The Act of 1936 provided for payment of any national defense features incorporated into new merchant ship construction as a result of U.S. Navy recommendation. The concept of parity, as to operating costs, with foreign competition was basic to the act. (12:171) The act changed the American objective of providing a fleet capable of carrying "the greater portion" of U.S. ocean commerce to a fleet capable of carrying "a substantial portion". (22:1,119) Section 902(a) provided:

"Whenever the President shall proclaim that the security of the national defense makes it advisable or during any national emergency declared by proclamation of the President, it shall be lawful for the Commission to requisition or purchase any vessel or other watercraft owned by citizens of the United States, or for any period during such emergency, to requisition or charter the use of any such property." (22:92)

In 1937, the newly created Maritime Commission's "Economic Survey of the American Merchant Marine" concluded that the American merchant marine was on the verge of obsolescence and probably could not meet wartime requirements should war occur. (12:175) The commission quickly undertook a long-range shipbuilding program of 50 ships over a 10 year period which was accelerated in August 1940 and expanded to 200 ships to

be delivered before July 1941. (12:175,176) In October 1940, the British requested and received U.S. assistance in building 66 ships. (12:176) This massive shipbuilding expansion combined with that of orders placed by the U.S. Navy saturated American shipyards. In January 1941, the Maritime Commission began construction of 9 new shipyards. (12:177) These important initial steps grew into one of the most successful shipbuilding programs in maritime history. (12:191)

World War II saw the introduction of new shipbuilding techniques and technology, systems for the efficient allocation of shipping space, the production of over 2,300 ships, new ship design, and new managerial methods. Merchant shipping proved critical to the fighting and winning of a global war by delivering Armies, equipment, and supplies to the battle. (12:210) America emerged from the war with a merchant marine larger than all other nations combined. (12:216)

The Act of 1946 provided for creation of the National Defense Reserve Fleet (NDRF) out of which grew the RRF. (22:116,117) The Merchant Ships Sales Act of

1946 also provided the impetus for world-wide recovery of the world's shipping industries. With recovery came competition from nationalized foreign operators and lower-cost private foreign companies. As in the past, many American shipping firms chose to register their ships under foreign flags to take advantage of lower operating and acquisition costs, greater operating flexibility, and tax advantages. (12:216)

CHAPTER IV

RECENT TRENDS

Over the past two decades, several trends have had a profound impact on America's maritime industries and military sealift capabilities. These include intensified international competition, elimination of U.S. ship construction and operating subsidies, increased reliance on allied shipping in wartime, expansion of government military sealift programs, and a decline in America's shipbuilding and repair industries.

Intensified International Competition

Over the past several years, the world shipping industry has experienced the worst recession in more than 50 years. (13:60; 18:16) Over 21 percent of the U.S. privately owned merchant fleet is laid up and probably destined for scrapping. (18:15; 19:22) Competition among the world's merchant fleets has created intense pressure for increased efficiency and productivity. (18:16) The result has been increased containerization, a revolution in mechanized cargo handling and marine technology, substantial reduction in crew sizes, development of economical slow-speed diesel ship propulsion systems, and the automation of

ship engineering, navigation, and auxiliary functions. (7:64,65) Shore facilities and equipment have become capital intense. Mechanized cargo handling equipment aboard ship and automated engineering plants have significantly reduced ship turn around times. Major economies in fuel cost and crew savings have resulted in significant savings in operating costs. The world's scheduled merchant fleets have changed from labor-intensive to capital-intensive. (7:65) Many ships built only a few years ago are now obsolete.

Impact on U.S. Military Sealift Capabilities:

Many ship types which are the most desirable for military operations are the least cost effective commercially. These include breakbulk, roll-on/roll-off (RO/RO), and self-sustaining container ships. As international competition has intensified, these ships have been the first laid up or offered for sale. In 1984, there were only 18 RO/RO vessels under U.S. flag, eight of which were under contract to the Military Sealift Command (MSC). (15:88)

Impact on America's Merchant Marine:

The U.S. merchant marine is clearly in need of modernization and in serious financial trouble. (15:88)

Thirty percent of U.S. flag merchant ships engaged in the liner trade are more than 20 years old compared with 3 percent of Japanese cargo ships and 1 percent of German ships. Less than 15 percent of U.S. cargo ships are equipped with modern low-speed diesels, compared with 97 percent of German and 99 percent of Japanese commercial ships. (7:65)

The number of U.S. merchant ships and U.S. flag shipping companies have declined. (7:64) U.S. rates are relatively high. (15:88) U.S. registry ship owners compete with other merchant fleets whose governments directly subsidize and reserve a share of both export and import cargoes for their national flag ships. In some sectors of international shipping, free enterprise has not worked for decades. (21:34) U.S. crew rates, insurance premiums, and taxes are substantially higher in comparison with those of foreign carriers. (9:9-F,10-F) Collectively, U.S. Coast Guard safety specifications drive up costs. (9:9-F)

Shift to Flags Of Convenience:

American ship owners, currently having about 518 ships in "open registry", are the world's largest users of "flags of convenience". The total tonnage of these

ships is twice that of the entire U.S. merchant marine.
(19:23)

The Merchant Marine Act of 1936 authorizes the requisitioning of foreign registry ships owned by U.S. citizens in times of national emergency. The term "Effective U.S. Control (EUSC)" has evolved to categorize ships which may be reasonably counted upon should such a national emergency occur. Of the 518 ships in open registry, only approximately 399 qualify as EUSC, of which 79 ships are militarily useful.
(19:23) Despite concerns about the availability of officers and crews to man these ships in wartime, the Department of Transportation recently concluded that "... the U.S.-controlled fleet under foreign flag provides ample shipping capability." (16:76)

End Of Subsidies

To pressure the American maritime industry into being more competitive, the Reagan Administration has eliminated ship construction and operational subsidies and emphasized reliance on the forces of the free market system. (5:33; 21:34) Secretary Lehman, a strong spokesman for the Administration, believes that "...subsidies have been a narcotic addiction to the

maritime industry that has in no small measure helped along the decline..." and that the hidden subsidies, predatory financing, and neo-mercantilism which characterizes foreign competition are issues which require national attention. (6:11) He favors establishment of a maritime policy "...analogous to what the president is trying to do with trade policy, to get at that non-free market abroad, and to bring about a return to equal terms of competition." (6:11)

Proponents of the administration's approach note that U.S. shipping firms are emerging economically stronger and materially sounder. U.S. ship operators are transporting cargo in many trades more efficiently than any of their foreign competitors. U.S. shipping firms engaged in the liner trade are all in the process of capital intense modernization programs involving both the purchase of support equipment and cost effective ships. (7:71). The Ocean Shipping Act of 1984 will better enable U.S. flag ship owners to compete on a more equal basis with their foreign competitors by removing burdensome and restrictive trade regulations. (7:65,71)

Increased competition has magnified the differing interests and objectives between ship owners and

shipbuilders. With a sharpened eye toward profitability, U.S. flag ship owners are looking to foreign shipyards to provide lower cost quality vessels. (21:36) In fiscal years (FY) 1981 and 1982, MARAD authorized the overseas construction of American registered ships without penalty of being barred from access to government cargoes. During this period, MARAD approved applications for overseas construction of 36 new ships and reconstruction of 13 older ships. (21:33) American ship owners are seeking permanent authority to build overseas. (21:36)

Not all parties are enthusiastic about the current Administration's approach. Peter Luciano, executive director of the Transportation Institute, argues that increased competition is not the complete answer. (21:34) He strongly favors bilateral trade agreements between the U.S. and foreign governments as a means of insuring equal opportunity for American ship owners. (21:36) Larry French, president of National Steel and Shipbuilding Company of San Diego, argues for a nationally supported cargo preference program to preserve the American shipbuilding industry. (21:38) Others argue for U.S. ratification of the United Nations Conference on Trade and Development (UNCTAD)

Code of Conduct for Liner Conferences treaty which "...allows each of two signatory nations to carry 40 per cent of their imported and exported products in the vessels of each country." (21:34) Lee Rice, president of the Shipbuilders Council of America, predicts that ratification would generate up to 300 new ships orders over the next 15 years and allow the U.S. to plan with its North Atlantic Treaty Organization (NATO) allies the long-term use of merchant vessels against competition from the Soviet Union and Third World. (21:35) The U.S. refused to sign the UNCTAD code because of conflict with the principles of free trade. (21:34)

Foreign Dependency

The U.S. is becoming increasingly dependent on foreign shipping through bilateral and multilateral agreements to fulfill its national security objectives and obligations. In a war involving the Atlantic Alliance, America's NATO partners have agreed to provide upward of 600 militarily useful merchant ships for mutual support. (24:238) Similar agreements have been concluded with Japan and the Republic of Korea. All these nations are industrialized and have an

economic base, like the U.S., which requires imported raw or semi-finished materials.

A recent letter from the Secretary of Defense to the Secretary of Transportation summarized the Department of Defense's concerns.

"The Decline of the U.S. maritime industries over the past several years has generated significant interest in the merchant marine's capability to support the President's national security objectives. ... The decline in U.S. flag commercial shipping capable of carrying military unit equipment is of particular concern to DOD. ... Even assuming that the entire U.S. merchant marine is made available to support military requirements, we may not be able to meet DOD's limited policy objectives....A merchant marine, even if it were capable of supporting military operations, may not be adequate to satisfy all of our national security requirements during a major conflict. I have not included the civil economy and industrial base in DOD's statement of maritime requirements." (7:69)

In those situations where the U.S. may have to proceed unilaterally to protect its national interest, the gap between sealift capability and requirements is potentially more acute. (1:21)

Expansion Of Government Sealift Programs

The rapid and continued decline in the number of militarily useful ships in the U.S. merchant marine has

forced the Department of Defense (DOD) to increase its expenditures on sealift. (17:12) MSC's budget for FY 1985 was approximately equal to that of FY 1984 which exceeded the sum of the budgets for FY 1981 through 1983. (23:28)

DOD Strategic sealift programs include both the charter, construction, conversion, and purchase of ships and the acquisition of related sealift support systems. (11:22) The most well known of these programs are the purchase and conversion of the eight large containerships into fast sealift ships, the creation of three Military Pre-positioning Ships (MPS) squadrons, and the addition of militarily useful ships to the RRF. (19:20; 4:46) Other programs include the conversion of two tankers to hospital ships, conversion of two RO/RO ships to aviation logistics support ships, construction of five T-5 tankers, twelve ocean surveillance ships, and 15 fleet oilers, and modification of merchant ships in commercial service to make them more militarily useful. (18:2; 8:12)

The purchase of less commercially efficient but militarily useful ships has provided an injection of funds into the merchant marine for modernization and

purchase of more competitive ships and into the shipbuilding and repair industries. In FY 1984 through FY 1986, this amounted to about \$31 million per year. (7:70) However, the enactment of the budget constraining Gramm-Rudman-Hollings legislation casts uncertainty on the future of many yet to be completed programs and again raises the question of how much sealift capability the government can afford to buy and maintain.

Shipbuilding And Repair

Current defense planning assumes that a geographically dispersed and capable shipbuilding industry, sufficient in size to supply the needs of the nation in time of crisis, will exist. However, the trend is toward concentration of the industry into a few large shipyards. In 1985, more than 80 percent of new ship construction, based on the value of the contracts, was performed in five shipyards. (16:76) There are currently 600 design, building and repair facilities still working in the U.S.; 90 are capable of repairing large vessels and 23 can build or repair ships in drydock facilities. (2:56)

The private shipbuilding and shipping industries operate in markets where both commercial enterprises and the government are the customers whose business must be available in amounts sufficient for the system to function properly and at lowest total cost to the taxpayer. (16:73) The Reagan Administration maintains that U.S. Navy programs, which have resulted in substantial work for U.S. shipyards, provide ample support for the shipbuilding industry. (16:76) However, the number of merchant ship orders has declined since 1975. [Attachment B] (16:73) Ships built in the U.S. are two and one half times as expensive as those built overseas. (9:9-F; 10:11-F) Labor is five times as expensive. (1:29)

Shipbuilding representatives have warned that if the decline in U.S. shipyard capability continues there will be no facilities or workers to launch the RRF, a force envisioned to number 100 ships. (2:56) A recent study by the U.S. Navy and MARAD concluded that "...further shrinkage in the commercial market could restrict D-day employment..." (2:54) The president of the Shipbuilder's Council of America, estimates it will take about 350 workers about 72 hours to make seaworthy each RRF ship. Few shipyards have a ready work force

of this size. Activation of the aged NDRF fleet presents even more of a problem in terms of spare parts and skilled labor familiar with the obsolete systems aboard these ships.

CHAPTER V

COMMENTS AND RECOMMENDATIONS

There is consensus that the U.S. merchant marine and shipbuilding industry are vital components of the national defense and important national economic resources. The issue is how to revitalize America's merchant marine and shipbuilding industry as economically viable competitors in an international setting characterized by intense competition, monopolistic practices, and governmental preference and subsidy. Although ship operators and shipbuilders often have competing interests, a national maritime strategy and policy based on competition, technological infusion, and tough, pragmatic bilateral negotiations may be the answer.

Competition:

Basic to America's fabric is the principle of free enterprise. The Reagan administration has consistently embraced this principle as a central theme for rejuvenation of America's economy to include the maritime industries. The most visible aspect of the application has been the elimination of direct shipbuilding and ship operating subsidies.

The reinfusion of competition into the American maritime industries through the elimination of direct subsidy will continue to force internal and external reassessments of business, labor, and governmental practices and policies, a closer look at operational costs, and a greater sensitivity to changing forces in international maritime markets. Opposition to this approach will continue because of its disruptive effects on the power relationships within and among the business, labor, and governmental communities. Carefully measured competition will, over time, make America's maritime industries more efficient, innovative, and internationally competitive.

Infusion of Technology:

Technological prowess is one of America's greatest assets. Successful shipping firms recognize the need to continuously improve their vessels and dock side material handling systems by incorporating the latest in technological innovations. However, technology is expensive and involves major capital outlays. It can rapidly change rendering ships and major support systems obsolete and cost prohibitive to operate. To remain competitive, capital must be available for reinvestment in the type and quantity of ships,

facilities, and equipment which allow U.S. ship owners and shipbuilders to be technologically competitive.

Rapid depreciation of plant and equipment is a way of infusing capital into an industry. Tax constraints requiring tax dollars saved to be reinvested into plant and equipment provide a means of insuring capital is applied in the corporate and national interests. Although this method of capital generation results in near term lost tax revenues, it avoids the disbursement of monies in the form of subsidies and the administrative costs associated with the maintenance of a government subsidized program. It also provides a greater degree of managerial flexibility regarding the timing of capital expenditure.

Government Maritime Strategy and Policy:

Competition and technological infusion alone will not be sufficient to rejuvenate America's merchant marine. In today's neo-mercantile environment, even the most efficient firms may be edged out of competition by foreign subsidies, cargo preference restrictions, and trade restrictions. The U.S. government has a responsibility to establish an environment in which American ship operators and

shipbuilders can compete for both American and foreign business. The federal government must have a well defined strategy which is understood and aggressively supported throughout the government bureaucracy. The Reagan Administration's philosophy of opening closed foreign markets and creating "equal terms of competition" through bilateral negotiations should be a key component of this strategy.

Many ship owners and shipbuilders express strong support for strengthened cargo preference legislation which would force American goods to be transported only on American ships. Although cargo preference is an internationally accepted method of indirect subsidy, it may add to the cost of American exports thereby pricing them out of foreign markets. Care must be taken to insure that the application of the concept of cargo preference is in the best overall interest of the U.S. as well as the American maritime industry.

Competitive pressures will continue to force private ship owners toward ship designs which are not considered useful for military operations. Programs to incorporate military useful features into the construction of future generations of American merchant

ships can be a cost effective alternative to an oversized RRF whose activation is dependent on a questionable shipyard capability. Ship operators must be provided incentive to initially incorporate these features into ship construction and to maintain these features once in commercial operations. The bottom line for a ship operator is profit. Those who fail to provide a reasonable return on invested capital over the long run will find themselves out of business.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The U.S. is a maritime nation. Its merchant marine and shipbuilding industries are important to its economy, sea power, and national defense. Today, the U.S. maritime industry is in serious trouble and requires national attention. The Reagan Administration's emphasis on competition to promote increased efficiency is a welcome change in the direction of government policy. The Shipping Act of 1984 was a step forward in removing some of the barriers which impede efficiency and profitability. However, the future will require equally imaginative policy innovations, adjustments in labor and management practices, and an aggressive effort by business and government to penetrate foreign markets closed to American competition.

ATTACHMENT A
SIZE OF THE U.S. PRIVATELY OWNED MERCHANT FLEET
(1965-1985)

Year	Total Ships	Ships Employed	Ships Unemployed	Percentage Unemployed
1965	983	904	79	8 %
1975	583	560	23	4 %
1985	502	394	108	21.5 %

Rowden, William H., Vice Adm., USN. "Strategic Sealift and the Merchant Marine," Defense 85, July 1985, p. 15.

ATTACHMENT B
 COMMERCIAL SHIPS UNDER CONSTRUCTION
 IN THE UNITED STATES
 (1973-1985)

Year	Ships Under Construction*
1973	86
1974	95
1975	96
1976	77
1977	71
1978	60
1979	70
1980	69
1981	49
1982	35
1983	21
1984	10
1985	6

* Construction of ships 1,000 gross tons and larger as of January of each year.

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