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American Merchant Shipping—A Recurring National Dilemma

Rufus C. Porter
U.S. Navy

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A RECURRING NATIONAL DILEMMA

A Research Paper written by

Captain Rufus Clemens Porter, U.S. Navy

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INTRODUCTION

A NATO survey taken some six years ago revealed that, at noon on a day chosen at random, there were more than 3,000 merchant ships underway on just one of the world's seas, the North Atlantic. The magnitude of sea transportation, occasionally documented as in the case of this survey, often comes as a revelation to many otherwise well-informed observers of the world scene. By the same token, many responsible individuals often fail to understand or appreciate fully the important role sea transport plays in the well-being and security of nations. Nowhere is this lack of awareness more apparent than in the United States, where public discussion centers about the country's strength in nuclear weapons, missiles, and the like—while giving little or no attention to the national requirement for sea lift.

In his third annual message to Congress in May of 1915, Woodrow Wilson had this to say:

> If other nations go to war or seek to hamper each other's commerce, our merchants, it seems, are at their mercy to do with as they please. We must use their ships, and use them as they determine. We cannot handle our own commerce on the sea. Our independence is provincial, and is only on land and within our own borders.

Merchant shipping has developed, and exists at present, in an environment colored by the influences of many factors. This paper concerns itself with an identification and study of those factors as they relate to the development of the American merchant fleet, and as they apply to the status of that fleet today.

AMERICAN MERCHANT SHIPPING
A RECURRING NATIONAL DILEMMA

CHAPTER 1 - EARLY SHIPPING STRENGTH

The early history of shipping in America is the warp and woof of the larger story depicting the birth and growth of the nation. The original English-speaking colonies were founded and developed on the extreme fringe of a vast, hostile and unknown continent. The sea at their backs was both a real and symbolic source of strength for the colonists. It provided a secure and easy means of internal communication through its coastal waters; it was their one physical link with, and in an emergency, escape to, the civilization and safety of England; and, most importantly, it was a major source of livelihood. In New England especially, seaborne commerce and fishing provided jobs to most and wealth to many. That wealth, in turn, was plowed back into the sea in the form of ships--the one means of access to the trade rontes and fishing grounds which represented still more riches.

Between 1674 and 1714, New England built a staggering total of 1,332 ocean-going ships, some 240 of which were sold abroad. In the eight years from 1712 to 1720, no fewer than 700 vessels were launched; and English shipbuilders began to fear the beginning of a trend which might end in all British ships being built in the New World.[1] The best shipwrights were leaving England for the colonies, where live oak was plentiful and cheap; and the shipbuilding trade flourished from an abundance of both talent and timber. By 1770, one-third of all British-owned shipping had been constructed in the colonies.[2]

In Colonial America, shipbuilding prospered because the sea was a way of life. As trade and shipping doubled and redoubled, one driving force motivated the colonists from the sprawling plantations of Georgia to the creaking wharves of Massachusetts--profit. It was the lure of handsome profit that sent colonial ships into the major ports of Europe with tobacco from Virginia and the Carolinas, whale oil and naval stores from New England, and legitimate and illegitimate cargoes from the Caribbean and the coast of Africa. In 1770, Rhode Island had 150 slavers at work and Nantucket cleared 125 whalers.

Laws which impinged on that profit, imposed on the two million colonists by seven and a half million En glishmen 3,000 miles across the Atlantic, became less and less popular. In time, the original issue of unjust taxation on seaborne commerce, augmented by derivatives of that

basic issue, touched off a rebellion which was to give birth to a brand new nation.

The great naval historian, Alfred Thayer Mahan, has pointed out that the Revolution could not have succeeded without the sea power brought to bear against the British fleet through the alliance with France and Spain. Complementing that predominantly French naval power, was the American merchant fleet whose expansion of commerce 'had come to be the wonder of the statesmen of the mother country. When the war broke out, it was as great as that of England herself at the beginning of the century.'[3] In addition to its role in supplying the sinews of war from the arsenals of Europe, the American merchant marine provided fast-sailing privateers for commerce raiding against the supply lines of the enemy, a type of warfare for which the seamanship and enterprise of the Americans well fitted them. When Cornwallis surrendered in October of 1781, there were 449 privateers at sea. Mahan says that English historians credit them with taking nearly a thousand merchantmen valued at two million pounds. Other reference works indicate a capture of 3,000 or more British ships, as well as the capture of 12,000 British seamen.[4]

The ships which had turned so handsome a profit before the war could not have been expected to stand up to the might of the British fleet; however, on the outbreak of war they were a tremendous in-being resource in the hands of the colonists, and their capabilities were exploited to the utmost. Many were lost to the well-armed and well-supported cruisers which sought them out in many of the world's seas, but they served a critical need at a critical time.

The Golden Age. The War of Independence was hardly over before the decimated merchant marine in America began rebuilding and returning to its peacetime pursuits. Capitalizing on its shipbuilding capacity and the buoyant surface and world-wide expanse of the sea, American shipping turned again to the profits to be had in moving goods 'from where they are to where they ought to be.' Its resurgence was so strong that England, in 1784, passed navigation laws prohibiting British merchants from buying American-built ships, and levying fantastic import duties on competitive products entering the British Isles in foreign bottoms. One example of these charges was the duty on whale oil, aimed directly at the United States. If the oil were imported in an American ship, the cost to the importer was exactly 18 pounds per barrel more than if brought in by a British vessel.[5] These import duties served to divert American shipping from traditional ports in Britain, but proved to be a blessing in disguise in that they forced the United States to seek new markets. The most significant of these was the rich and trade-ripe China coast. The size of this China trade is indicated by the fact that, as early as 1789, there

were often as many as 15 American merchantmen in Canton Roads at the same time.[6]

That same year, the Congress, recognizing the need for protecting the new country's merchant marine against the cutthroat competition stemming from discriminatory laws abroad, passed the Custom Act of 1789. It gave United States ships a ten perceut discount on import tariff rates, and stated that tea imported in foreign bottoms was to be taxed at double the rate of that brought in by American ships. Later the same year, additional legislation was passed permitting vessels built and owned in the United States to enter United States ports on payment of tounage duties of six cents per ton, as opposed to the 50 cents per ton charged foreign vessels. The young natiou was learning fast in the rough and tumble game of international commerce.

Governmental support gave shipping confidence in its future, and the result was a marked increase in shipbuilding. In the Winter of 1789 there was a total of 124,000 tons registered for foreign trade. A year later there were 346,000 tons on the books, and the end of the expausion was nowhere in sight.[7] Shipbuilding begot trade and trade begot more shipbuilding. The United States was entering the 40 to 50 years generally regarded as the most glorious period in American maritime history. In the building of ships there was no competing with the imaginative designers, skilled craftsmen, and abundant and easily accessible timber of America. In 1791, Tench Coxe wrote that the best double-decked American ship could be built for about $34 per ton, while such a vessel could uot be purchased in Great Britain, France or Holland for less than $55 to $60 per ton.[8]

By 1805 as the Napoleonic Wars rocked Europe, American shipping did business with both sides, and Yankee traders were in their heyday. They developed a thriving triangular trade between the East Coast, South America and Europe; they exploited the rich fur supply of the Pacific Northwest; and they opened up rich markets in Scandinavia and northern Europe. At the end of the first decade of the nineteenth century, there were 200 American ships trading with Russia alone.[9] However, as the war increased in scope and fury, the near-monopoly of the neutral United States merchant fleet began to have repercussions.

Orders of Council by the British, and increasingly stringent Decrees by Bonaparte, were directed at the shipping in and out of belligerent-controlled ports, and the money-making Americans found themselves in the middle. Ships were intercepted on the high seas, and seized without warning in foreign ports. Further, Britain became more and more arbitrary in enforcing her version of the neutrality laws, and in her high-handed impressment of American seamen. At one time, in 1809, the State

Department had evidence that as many as 6,000 American seamen were serving unwillingly in the British navy.[10]

Realizing the nation's weakness, and the great danger in gambling its newly won independence by becoming involved in the holocaust raging in Europe, President Jefferson tried to protect American shipping against the arbitrary actions of England and France by imposing restrictions at home. But all this was to no avail. In 1812 the situation at sea had become intolerable and the United States declared war on Great Britain with the motto, *FREE TRADE AND SAILORS RIGHTS.* No longer would the United States flag submit to any foreign-imposed restrictions on the high seas, or fail to protect those who sailed under that flag.

The War of 1812 was a sea war. Once again the maritime strength of America paid off. Complementing successful naval action against a too-extended British fleet, 526 lightly armed privateers captured 1,344 enemy ships.[11] The war ended when England, bled white by years of continual warfare, found to her surprise that her colonies of three decades ago had become a power to reckon with on the sea.

With the end of what was to prove the last war with England, and finding herself safely established as a nation, the United States pulled all the stops in a program of maritime expansion. Whalers from New Bedford and Nantucket cleared home ports on three-year cruises which took them from Japan to Antarctica; and by 1820 there were as many as 50 ships on the 'offshore grounds' alone.[12] In 1846 there were 735 ships registered in the United States whaling fleet, and it was not exceptional to realize a return of double the original investment in ship and equipment within a period of two years.[13] These ships were slow, sturdy, and functional in design. They were money-makers, but they were not in the class of their cousins in the cargo and passenger trade.

An Englishman wrote in 1824 that:

> At the Liverpool docks a man will see the American ships, long, sharp-built, beautifully painted and rigged, and remarkable for their appearance and white canvas. He will see the English vessels, short, round, and dirty, resembling great black tubs.[14]

In those days investment money in ships and shipping brought handsome returns. The money was there to be made, and the lion's share went to the man who outstripped the competition. The successful ship designs were those which achieved the delicate balance between speed and cargo capacity for which shippers clamored. The ultimate in that design was the famous Clipper which ran from New York to San Francisco and in the tea trade to China.

The master-builder of clippers was Donald McKay of New York. His ships were characterized by great length relative to breadth of beam, an enormous sail area, and long concave bows ending in a graceful, curved cutwater. His *Lightening* posted a record speed of 18½ knots over a 24-hour period.[15] Naturally, these clippers were the envy of the world and were copied extensively. When the *Oriental* appeared at London, 97 days ont of Hong Kong, the Admiralty sent designers and engineers to take off her lines in drydock; and the London *Times* challenged British shipbuilders to set their 'long practised skill, steady indnstry and dogged determination' against the 'youth, ingenuity and ardour' of the United States.[16]

The youth, ingenuity and ardor of the Americans raised the foreign trade registries of the United States from 683,000 tons in 1837 to 1,047,000 tons in 1847.[17] Trade with Europe, South America and China was booming; and in a small war which featured soldiers and horses rather than sailors and ships, the United States relieved Mexico of several million square miles of real estate, opening np important Pacific markets for the shrewd East Coast merchants. In the Navy Department, a lame naval officer named Matthew Fontaine Maury made a major contribntion to the continued growth of shipping by publishing pilot charts on the winds and cnrrents of the oceans. On the run from New York to San Francisco, jndicious use of Maury's sailing directions redneed the time for the average merchantman from 180 to 133 days. In a period of staff competition and fat profits in the carrying trade, this contribution by Manry was of no mean significance.

In the decade from 1847 to 1857, United States registries in foreign commerce donbled to a figure of 2,268,000 tons.[18] It looked as though the golden age would never end. Graceful ships were sliding down the building ways at an unprecedented rate; the United States flag fluttered in all the seaports of the world; and at home shipping interests were making money hand over fist. Only a few of the most far-sighted could see the ominous clouds building up on the horizon.

CHAPTER II - LOSS OF A LEGACY

In the mid-nineteenth century, there were forces at work destined soon to make many of America's shipping practices anachronisms. In England, where shipbuilding had never before been able to compete with its counterpart across the Atlantic, the American inventions of the screw propeller and steam engine were being combined with the iron ship, and fully exploited, thanks in part to England's running head start in the Industrial Revolution. Further, the British Government, recognizing the inevitable dominance of steam on the world's trade routes, was providing heavy subsidies in steamship construction and operation. The unbeatable combination of talent, facilities, raw materials, and subsidization was destined to ensure British pre-eminence in this new dimension of shipping. Her progress was facilitated by her adoption of a Free Trade policy in 1849, after a succession of navigation acts and restrictive tariffs dating back to the seventeenth century.

In the United States, other forces came into play. New fields for investment appeared in the form of railroads, and mines; and as the country expanded inland and away from the coast, the ship-owner/merchant concept gave way to a dichotomy of shippers and shipping services. There were some infrequent, short-lived and inadequate mail contracts granted shipping lines, but the nation had a natural abhorrence of any governmental interference in free enterprise and the development and exploitation of steamships was left largely to private initiative. On 31 March 1860, one could have read in the *Scientific American:*

> Three years ago we directed attention to the great increase of foreign screw steamers, and showed clearly how they were rapidly taking away the trade that has been formerly carried by American ships . . .. Today nearly all the mail and passengers, besides a great deal of the goods traffic, is carried by foreign ships, *the great majority of which are iron screw steamers* . . .. We have not a single new Atlantic steamship on the stocks, while in Great Britain there are 16,000 tons of new iron steamers building for the American trade.[19]

The observation was well made, but a growing friction between the states was turning the American mind to other things.

The decline of the American merchant marine which had been foreshadowed by events and conditions immediately prior to the Civil War, became violently and grossly accelerated by the war itself. Strangely enough, the cause was the activity of no more than eight commerce raiders flying

the Stars and Bars of the Confederacy. Although these ships destroyed some 200 Union vessels and millions of dollars worth of property, the primary effect of the raiders was to generate fear in the shipowners, shippers, and marine underwriters of the North, and thereby skyrocket war premiums on insnrance covering ships and cargoes. This caused a catastrophic depletion of the nation's merchant marine. When insurance rates became prohibitive in relation to profit involved, owners scurried to the protection of neutral flags. Ships were placed under foreign registry, or sold outright to foreigners at bargain rates. More than half of the total merchant marine was irretrievably lost to the flag during the war. The Confederacy sank 110,000 tons and 800,000 tons went to foreign interests. In general, the ships remaining under United States registry were the ones for which there was no market abroad—old, obsolete, and nearly worthless vessels.[20]

The merchant fleet might have been rebuilt after the war, but such was not to be the case. American capital preferred other fields for investment, and America was becoming less and less marine-minded. Labor deserted the sea for industry and the fortunes of the West, and it became harder and harder to recruit American citizens for service in American ships. In fact, it became almost impossible to sign on seamen who could speak English, even in the Navy. Twenty years after the war, naval vessels were manned with crews of which no more than half spoke English. To make matters worse, the United States adopted a policy of high protective tariffs which tended to stifle trade, irrespective of the nationality of the shipping. By 1885 American ships were carrying a piddling 15 percent of the country's foreign trade, and only 15 percent of the ships so registered were steamers.[21] At this time steamships made up about 75 percent of the British merchant fleet.

At the end of the century, the United States went to war with Spain and discovered all of a sudden that the merchant marine was inadequate to support the war effort. The Government found itself combing the ports of the world, bnying merchant ships of all descriptions, at inflated prices, to ensure the nation's survival on the sea. It was a small war against a weak country and the crash buying program sufficed. What the results would have been under conditions of a long war with a major power can only be surmised.

In 1901, when foreign ships were carrying 91.8 percent of America's foreign commerce, a man of action and a disciple of Mahan was sworn in as President of the United States. Theodore Roosevelt was 100 percent for a big navy, a modern merchant marine, and a Panama Canal. In recommending, on 7 December 1903, that the Congress form a commission to investigate the condition of the merchant marine and report on legislation

necessary for its development, Roosevelt said: 'To the spread of our trade in peace and the defense of our flag in war a great and prosperous merchant marine is indispensable.' [22]

The bill proposed by the committee two years later was a panacea for all the ills of the merchant service. It was designed to promote national defense, increase foreign commerce, and revitalize the merchant marine by providing subsidies for foreign trade ships and deep-sea fishing craft. Additionally, it included a provision for ten new overseas mail routes to be serviced by ships subsidized by mail contracts.

The legislation so proposed in 1905 was a noble effort, but ahead of the times, and over the heads of too many Congressmen. In 1906, despite strong Presidential endorsement, this bill was defeated in the Senate. In consequence, merchant shipping in America continued to wither away for lack of nourishment, and on the eve of another major war in Europe the United States continued to be dependent on foreign ships for over 90 percent of its overseas trade.

World War and Aftermath. Outbreak of war in Europe in 1914 caught the United States totally unprepared to cope with the situation which developed immediately in ocean shipping. As belligerents pulled their freighters, tankers and transports off the trade routes for service in support of the military, America awoke to the obvious fact that *there were not enough American ships to carry the nation's commerce.*[23] American ships which had been carrying an infinitesimal 9.7 percent of the country's trade could not absorb the other 90.3 percent. By executive order, President Wilson lifted restrictions on the registry of foreign vessels, and some 80 ships sought the protection of a neutral United States flag; however this was only a stop-gap measure. Legislative action was a clear necessity; and a bill was introduced for the creation of a federal shipping board with authority to buy and operate ships. However, this socialistic gambit of government ownership was a little too radical for the times, and the bill was defeated in the Fall of 1914. Finally, after almost two years of half-way measures, the seriousness of the situation overshadowed the traditional worship of free enterprise and the strong isolationist sentiment, and the Shipping Act of 1916 became law.

The new act authorized a shipping board empowered to build, buy, and charter merchant ships. This critical legislation was destined to mean the difference between an absolute poverty of sea lift and millions of tons of transports and freighters when they were most needed. The shipping board was far from perfect,[24] but it eventually got results. With the Emergency Fleet Corporation, a subsidiary agency created in 1917 to manage the shipbuilding effort, it bought, seized, chartered, requisitioned and

contracted for ships on a gigantic scale. Initially the Board bought 223 foreign ships, took 87 Dutch ships by Right of Angary, seized 97 enemy ships (including the *Leviathan,* capable of carrying 12,000 troops per trip), chartered 331 other foreign vessels, and requisitioned every ship in the United States suitable for wartime use—including those under construction for United States or foreign account.[25] The E.F.C. began letting contracts in 1917, and the finished ships commenced coming off the ways the following year. This all-ont shipbuilding effort was like nothing ever before seen in the United States. The whole country was involved in an industrial campaign whipped to a frenzy by the ship losses in the Atlantic, and publicized by such slogans as *Ships Will Win the War* and *Bridge of Ships to Europe.*

The campaign paid off. In the Fourth of July 'splash' of 1918, the *New York Tribune* reported that, over a 12-hour period, steel and wooden ships hit the water at the rate of one every seven minutes. In a speech given that same day, Secretary of the Navy, Josephus Daniels, reported the following statistics:

Total American tonnage lost prior to entry into the war	67,815
Total lost since entry into the war	284,408
Total	352,223
Total tonnage built since beginning of war in Europe	2,722,563
Total built since entry into the war	1,736,664
Total	4,459,227

The above figures did not include the 400,000 tons launched that day.[26] During the war United States shipbuilding capacity increased from 500,000 to 1,500,000 tons per year, and at one time there were 650,000 employees in the nation's shipyards. However, the gigantic effort which was exerted was none too large and none too early. The London *Economist* predicted a need for 4,000,000 tons per year to support the American army, and events bore the editorial out.

Half a million soldiers crossed the Atlantic in the first 13 months of the war, and a *million* and a half the last six months. In spite of the million tons of new shipping turned over to the military by the Emergency Fleet Corporation, and the many German ships seized for transport purposes, *and* the appropriation and utilization of Great Lakes Steamers, the necessary shipping was secured to *augment* that provided by the Allies. Not commonly known is the vital contribution that the Allies made to American troop movements. Of every 100 men transported across the

Atlantic, 49 went in British ships, 45 in American ships, 3 in Italian, 2 in French, and 1 in Russian shipping under British control.[27]

Most of the cargo ships used in transporting the American army overseas were United States flag vessels. In terms of cargo lifted, about one-half was food and clothing. On the other hand, the nature of the other supplies and equipment put a very heavy demand on cargo space. Some of the items were: 1,791 locomotives of 200 tons each; 27,000 freight cars; 47,000 trucks; and 70,000 horses and mules.[28] In retrospect it appears that the ability of the United States to swing the balance of power in favor of the Allies was attributable primarily to her capability to *project* her power overseas in a timely fashion. That capability in turn derived from a fortunate and last-minute piece of shipping legislation, a prodigious national 'bootstrap' effort in acquiring a merchant fleet, and the luck of being associated with at least one ally who had for decades understood the strategic importance of maintaining a merchant marine inbeing. The absence of any one of these factors could have spelled disaster, and ultimate loss of the war by the Allies.

With final victory, would the nation see the need for taking steps to ensure against such a near thing in the future? Or would the lesson go unheeded, as did that of the Spanish-American War? The answer was not long in coming. By the end of the war, American shipbuilding was at an all-time high. Naturally these facilities were full of new construction when the war ended, and, in the absence of a better plan, E.F.C. ships on the ways were completed and delivered. As a consequence the Government continued to acquire ships, reaching a total of 1,792 in 1921. However, any bright vision of a great postwar merchant marine that Americans may have had, quickly faded in the half-light of the Twenties and Thirties. Intelligent legislation was passed at the outset of the postwar period, but it proved inadequate under the circumstances prevailing.

As the depression of 1920-1921 plunged freight rates to 30 percent of the 1919 levels, the Merchant Marine Act of 1920 embodied the first definitive statement of Government policy under which aid could be given to the privately owned merchant marine.[29] This was a radical departure for a government that had largely ignored its commercial sea power since before the Civil War.

The Act of 1920 was well-intentioned but it didn't go far enough. Shipping was in a slump. The government price for war surplus ships was not so attractive as to be too good to turn down; and the popularity of the construction loan fund can be deduced from the fact that not a single ocean-going ship was built in the United States between 1922 and 1928. Had the government more or less written off the cost of those ships as

part of the expense of the war, and sold them to private interests at a sacrificial price, the results of the Merchant Marine Act of 1920 might have been of long-range benefit both to shipping and to the nation. However, it wasn't until 1928 that the failure of the first postwar measure became assured, and it became evident that further measures were required.

The Merchant Marine Act of 1928 reiterrated the policy set forth eight years earlier, and at the same time included more realistic provisions for the rejuvenation of American shipping. For one thing, the construction loan was put on a revolving basis, increased to 250 million dollars, and closely tied to the payment of mail contract subsidies, of which 46 were granted to 31 companies. Under the Act, bids for mail contracts were on a competitive basis, and strict requirements as to vessel specifications and percentage of United States citizens making up crews were prerequisites. As stated above, mail contracts were often tied in with the construction loan fund through stipulations that old tonnage be replaced and fleets be expanded to provide the service indicated. While the Act of 1928 was in force, 31 new ships were built and 41 others reconditioned or reconstructed.

The 1928 legislation slowed but did not stop the postwar decline of the merchant service, for many reasons. First, operating costs in American ships were high and largely inflexible as a result of the fixed wages legislated in the Act of 1920. Second, higher labor and material charges caused United States-built ships to cost about 30 percent more than British-built vessels, for example. Third, those United States ships which did get export cargo often returned in ballast as a result of being unable to find foreign cargoes not already committed to their own national or traditional shipping on a preferential basis. Fourth, a policy of high protective tariffs inhibited import trade. Finally, the most basic reason of all was the public apathy, accurately reflected in Congress, to the plight faced by the nation's shipping. In spite of the Acts of 1920 and 1928, the merchant marine plummeted from 17 million tons in 1921 to 13½ million in 1932.[30]

CHAPTER III - REBIRTH

In 1932, another Roosevelt who understood the importance of the sea and how to use it in the national interest, took office as President of the United States. One of the first pieces of 'New Deal' legislation was the National Industrial Recovery Act by which large sums of money were to be put into circulation through 'public welfare' projects, with much of the spending being controlled by the President. Roosevelt chose to consider a big navy one of the items of public welfare and, in 1933, allocated $238,000,000 of N.I.R.A. appropriations to improve and increase the navy. Thirty-two warships were constructed with that N.I.R.A. money, and therein lies the nub of a story.

In the preceding lean years the Navy had designed and tested the principle of high-pressure, superheated steam for ship propulsion. However, when the lean years ended and money was once again available for ship construction, the shipyards balked at retooling for the manufacture of high-pressure machinery. Breaking with tradition, the Navy turned for the first time to inland manufacturers for procurement. This marked a turning point in the traditional concept of shipbuilding, and shipyards became the hull construction and assembly point for machinery and equipment built elsewhere. From the aspect of merchant shipping this decentralization and potential capacity increase in the shipbuilding industry came at a time when the need for ships was soon to mount logarithmically.

On March 4, 1935, Franklin Roosevelt sent a message to Congress in which he said:

> In many instances in our history Congress has provided for various kinds of disguised subsidies to American shipping . . .. I propose that we end this subterfuge. If the Congress decides that it will maintain a reasonably adequate American Merchant Marine I believe that it can well afford honestly to call a subsidy by its right name. Approached in this way a subsidy amounts to a comparatively simple thing. It must be based upon providing for American shipping government aid to make up the differential between American and foreign shipping costs.

Just as the Merchant Marine Act of 1920 had first expressed recognition of the importance of the merchant marine, this statement by FDR marked the first acknowledgment that it was important enough to warrant undisguised aid. The result was the Merchant Marine Act of 1936, the first of modern legislation aimed at the problem of merchant shipping. 31

Some of the modern features incorporated into the 1936 act were: creation of a new federal regulatory agency, called in those days the Maritime Commission; outright grant of construction-differential subsidies for vessels built in the United States (to meet the competition of lower-cost foreign yards); equally outright grant of operation-differential subsidies (for overcoming cheaper labor and maintenance costs in foreign ships); low interest, long-term government loans for construction; trade-in allowances in ship replacement programs; payment by the government for national defense features built into new ships; construction by the Maritime Commission of ships for charter to private operators; benefits to American seamen employed in American ships under subsidy; training of personnel for service in the Merchant Marine; granting of *additional* subsidies, when required to compensate for shipping subsidies granted by foreign governments; and authority for the government to requisition or purchase any United States-owned vessel when needed for national defense or in a national emergency. The policy and the philosophy reflected in the provisions of this Act had been needed since about 1845. In the intervening years the American merchant marine had operated under conditions which at times threatened to drive the flag from the seas. Now, at last, there was a public awakening to the realities of the problem. The country needed a strong merchant fleet, and it could not be obtained through unaided private enterprise.

In implementing the Act of 1936, the Maritime Commission came up with a long-range plan for construction of 500 vessels over a ten-year period, assuming of course that private capital would foot the bill under the generous provisions of the new law. However, investment money was still shaken by the memory of a depression which still was not completely over. By 1938 it became apparent that if the country was to have a modern merchant marine, the government would have to build it. In that year, in the face of aggressive militarism world-wide, there were only 20 C-2 cargo ships under construction, and only 38 ships in the entire merchant fleet less than ten years old; and Roosevelt was trying to rearm and assist friendly nations in a constant din of wails from the isolationists and pacifists. Believing, with FDR, that time was of the essence, Admiral Emory S. Land, of the Maritime Commission, ordered 150 freighters to be built within three years for Government account. Again, this was in 1938 and would prove a timely decision indeed.

Another War Threatens. When Germany invaded Poland, Britain and France suddenly lost their neutral status and found themselves unable to take delivery on previously ordered American arms and munitions. The embargo features of the United States Neutrality Act had, in effect, placed the United States on the side of the Axis powers. Finally in November of 1939 the embargo was repealed, but new sections to the original act were

passed which prohibited American ships from being armed or entering belligerent ports, and stipulated that American citizens were not to enter combat zones–the definition of these zonal boundaries serving to underline the loss of freedom of the seas. The United States was buying time with honor.

The program of 150 ships in three years was accelerated soon after the invasion of Poland. By October of 1940, 47 of these were completed, and two months later there were 176 on the ways. In November, cumulative losses at sea began to exceed the replacement rate from British shipyards, and Britain contracted for two shipyards and 60 cargo ships to be built in the United States.[32] The situation in December of 1940 is best described in the prose of Winston Churchill who, in a letter to President Roosevelt, said:

> It is therefore in shipping and in the power to transport across the oceans, particularly the Atlantic Ocean, that in 1941 the crunch of the whole war will be found . . . We ask that in 1941 the United States should make available to us every ton of merchant shipping surplus to its own requirements, which it possesses or controls.[33]

In his 'ships, planes, tanks, guns' State of the Union message in January of 1941, Roosevelt called for 200 Liberty ships as part of the 'Arsenal of Democracy' contribution to friendly nations fighting for freedom. Three months later British losses in the Atlantic had become so heavy that the President ordered 112 more Liberties, and 100 other ships for the British. In May of 1941 when Roosevelt (in recognition of Britain's desperate straits) declared an unlimited state of national emergency, private shipyards had contracted for a total of 890 vessels, and some 260 rustic relics of the World War I merchant fleet had been turned over to Britain to fill essential gaps until new construction could be launched in greater numbers.[34] Isolationism and pacifism faded a little as America began to understand that aid to England, especially in the form of ocean shipping which was taking such a beating on the North Atlantic, was in the long run aid to the United States and therefore in the nation's interest.

As 1941 wore on, war at sea became a battle of life and death, and the 'neutrality patrol' of the United States Atlantic Fleet took on the aspect of out-and-out war operations. By the end of October, in addition to three United States destroyers and one oiler sunk, ten United States merchantmen had been lost. The country began to sense that the Marquess of Queensberry Rules did not apply, and in November Congress repealed those sections of the Neutrality Act which had prohibited the arming of merchantmen, and their carrying of cargoes to belligerent ports. After

many months of tenuous existence on the trade routes of the world, the 1,375 American ships were to be able to fight back when attacked; and their freedom to enter the ports of fighting friends released a tide of Lend-Lease material at one of the most critical times of the war. The United States had returned to its traditional concept of freedom of the seas.

As the threat of war became more and more pronounced in America, Army and Navy shipping requirements became critical. Commercial shipping was needed for expanding and reinforcing overseas bases, but every available commercial ship was committed to the Atlantic life line. It was good to have ships on the ways—but ships on the ways were not ships on the seas. The transition took time, and time had run out.

CHAPTER IV - THE IMPACT OF SHIPPING ON WORLD WAR II

Entry of the United States into the war clarified the situation in the North Atlantic overnight. For the German U-boat commander all shipping had become enemy shipping, and escort forces were only slightly stronger than before. In the first year (1942) the Allies lost over 12 million dead-weight tons of shipping, more than one million tons per month. In terms of a 10,000-ton notional ship, (and the average ship was not so large) this was the equivalent of over 100 ships sunk each month. These figures are significant when compared with the loss rate of about half a million tons, or 50 Allied ships per month, over the previous 28 months. The merchant ship losses in 1942 exceeded merchant ship construction by 1.5 million tons and totaled more than one-fourth of all Allied shipping originally available at the beginning of the year.[35] This accomplishment by Germany was achieved with an average of only 57 submarines on station at sea during the first eight months of 1942.

In spite of the heavy toll being taken by the U-boats, it was essential that ships be sailed, and sailed they were regardless of the risk. In addition to the daily overseas requirements, the need for emergency supply operations was frequent. In the Summer of 1942, for example, 300 tanks, 150 tank destroyers and 13,000 tons of ammunition were rushed by special convoy to the Red Sea, via the Cape of Good Hope, to help the British Army check the advance of the *Afrika Korps* toward Suez and the Middle East. One ship was sunk, but replacement cargo was hurriedly loaded aboard the fast *Seatrain Texas* and delivered with the rest of the shipment.[36]

Again, on 30 December 1942 there was an urgent call by General Eisenhower for tanks to reach the British Eighth Army by 1 February 1943, a short month away. In the United States, repairs were expedited on two ships, a convoy sailing was slipped a few days to accommodate them, and on 13 January 242 tanks plus extra engines, spares, ammunition, *and* 96 self-propelled guns were on their way.[37] Luckily neither of these two ships was sunk en route. Had they been, it would have been only one of many such cases of desperate gambles which failed to pay off in those critical days.

Ships were beginning to slide down the ways in increasing numbers as 1942 gave way to 1943, but at times it looked to some as though the war would be lost before enough of them could be built to focus America's combat power and industrial might at the scene of conflict. Indeed, for military planners it was vital that the strength of deployed forces not exceed the amount of shipping available for their support.[38]

In April of 1942, General Marshall carried a plan to London, for British approval, which envisaged a major build-up of forces and other necessary preparations for a cross-Channel invasion of Europe in the Spring of 1943. Forces required were to include 30 United States divisions and some 5,800 combat aircraft. This was to necessitate a build-up of one million men in the United Kingdom by April of 1943. Using the rough logistic planning factors indicated previously, it is apparent that the initial logistic effort for that build-up would have amounted to some five million measurement tons, followed by a good 800,000 tons per month thereafter. Translated into notional ships of 10,000-ton capacity, it can be seen that the plan required the arrival of 500 cargo ships in the United Kingdom over the 12-month build-up period and some 80 each month thereafter, *not* counting the shipping needed to transport the troops themselves.

The target date for *Bolero,* as this over-all plan came to be known, eventually had to be delayed for over a year. There were many cogent reasons for such delay. One was the deteriorating tactical situation in North Africa, and the consequent decision to conduct the American landing there in October of 1942; however, a major factor in abandoning the idea of a European invasion in 1943 was the lack of adequate shipping. In 1943 the United States had combat troops, equipment, and supplies, but they were on the wrong side of the Atlantic. The only means of getting them to the other side was with ships, and enough ships simply were not available.

In addition to the requirements for military sea lift, which were astronomical, were those in support of the civilian economies of the Allies. Two examples serve to illustrate this point. In 1943 alone, United States *imports* totaled over 50 million short tons, roughly 5,000 shiploads, valued at almost three and one-half billions of dollars.[39] In Britain the yearly requirement was about 25 million tons or some 2,500 shiploads.[40] Not to be forgotten either was the shipping requirement generated by the gigantic Lend-Lease program, which often took priority over all other aspects of the war effort.

The critical shipping problem was overcome in two separate but parallel ways: (1) the defeat of the submarine menace through airborne radar surveillance and attack, and adequate surface escorts; and (2) the miracle of shipbuilding in the United States. Both of these reached fruition in late 1943 and from that turning point onward, the war which once seemed destined to be lost through lack of ships suddenly, through an increasing sea lift capability, seemed sure to end in victory.

Much has been written about the achievements of the United States shipbuilding industry during this war. Not only did it produce the merchant ships vital to the projection of American power overseas, but it also, and at the same time, created a 'seven ocean' navy which made the employment of such merchant ships possible. Accordingly, much of the credit for the strictly naval defeat of the U-boat, as well as the credit for the supply of adequate sea lift, belongs to United States shipbuilding.

During the five-year period 1941-1945, well over 54 million deadweight tons of ocean-going merchant ships were delivered. This was almost four times the 15 million tons delivered during the equivalent period 1917-1921. Under the emergency shipbuilding program of the Maritime Commission some 5,777 merchant ships were built. At the same time, 10,735 new ships plus about 98,000 small craft were delivered to the Navy, and 13,900 small vessels were completed for the Army. The magnitude of shipyard expansion is indicated by the fact that from January of 1941, when some expansion had already occurred, to the peak of the shipbuilding effort, shipyards increased in number from 19 to 40, and building ways capable of building 400 foot vessels went from 75 to 313. Shipyard workers increased from 47,000 to about 600,000.[41]

The functional Liberty ship has been mentioned briefly earlier. By the end of the war, 2,708 of these unglamorous but vital workhorses, totaling over 29 million deadweight tons, were built. The first one was scheduled for completion in 210 days, and required 244 days to build. However, this construction time was steadily reduced to an average of 42 days in late 1943.[42] In addition to the Liberties, United States shipyards produced 541 standard cargo ships, 414 victory ships, 705 tankers, 682 military types, and 727 minor classes. The estimated shipbuilding costs throughout the war were about 13 billions of dollars for Maritime Commission ships and some 18 billions for Naval vessels.[43] In the inflated wartime economy, Liberties ran almost two million, tankers about three million, and attack transports well over four million each. Of course these figures were small indeed when compared with combatant types.

The shipbuilding miracle did not overcome the shipping deficit (based on tonnage available to the Allies and Neutrals in 1939) until October of 1943, almost two years after America entered the war. In those years this industry flourished in a secure environment, was relatively well supplied with labor and materials (including raw materials imported by sea), and, above all else, was blessed with time. That time was bought with the irreplaceable lives of thousands of sailors, marines, airmen, and merchant seamen, as well as with millions of tons of vital shipping and cargo, eventually replaceable but at the expense of sorely needed materials, labor and, again, time.

The 'Desert Fox,' Field Marshal Rommel, reportedly once said that the entry of America and her industrial might into the war would have no appreciable effect on the course or outcome of the war if the U-boats could control the seas and confine America's power at home. In 1943 they lost that control, along with 237 of their number, and that power was unleashed.[44] It flowed eastward in large self-propelled containers independent of prepared roadways and the lift or friction penalties of most methods of transport. The average rate of flow was less than 12 miles per hour. Whereas the Army embarked some 955,000 troops in 1942, almost 1,900,000 sailed in 1943, and over 3,000,000 in 1944.[45] In the five months from January to May of 1944 the number of troops in the United Kingdom doubled from 774,000 to 1,527,000, and over 2,000 long tons of cargo were landed.[46] Between August of 1944 and February of 1945, 36 divisions were lifted to Europe from the two ports of Boston and New York. Twenty-five of these were infantry divisions, nine were armored, and two were airborne, for a total of 458,416 troops and over one and one-half million measurement tons of equipment. One hundred and twenty-six troopships and two hundred and sixty cargo ships were required. Between December of 1941 and December of 1945 the Army embarked a total of 7,600,000 personnel.[47] As for cargo, less than 12 million measurement tons were shipped in 1942. This figure climbed to over 28 million in 1943, and over 48 million in 1944. Between December of 1941 and December of 1945, 132,119,533 tons were shipped.[48]

These tonnages call attention to the difference in the shipping requirements of World Wars I and II. Between June of 1917 and November of 1918, a total of less than nine million MT were shipped from the United States. In fact, it is a matter of record that during World War I approximately 50 percent of the material required by the A.E.F. was obtained in Europe. In World War II all war material came from the United States. It was generally heavier and more bulky than its 1917-1918 counterpart, there were more shipping routes, the average distances were far greater, and many ports and facilities were much less developed.[49]

Between January, 1942 and July, 1945, the following were some of the war materials transported overseas by ship: 47,851 aircraft, including 1,664 light bombers, 29,146 fighters, 8,748 gliders, and 8,295 transports and miscellaneous types; over 1,500,000 motor vehicles (one for every five men deployed on the average); 5,730 locomotives, including 3,700 for Lend-Lease; 7,800 mules, plus another 3,500 for Lend-Lease; 3,000 horses; and 1,900 war dogs. In the Spring of 1945, mail alone accounted for some 65,000 measurement tons of shipping space per month; and during the Christmas period of 1944, mail took the entire cargo capacity of 21 ships. Finally, almost 12 million short tons, or 300,000 railway carloads, of ammunition was hauled by ship from the United States to the overseas theaters of operations.[50]

Success on the high seas ensured success in the crucial land battles without which the enemy could not have been defeated. Germany, unable to prevent American power from crossing the Atlantic, sued for peace in April of 1945; and Japan, whose merchant fleet and access to vital overseas supplies had almost disappeared, collapsed the following August. In due course most of the nation's military and naval units returned for a well-deserved hero's welcome. Hardly anyone gave a second thought to the dirty freighters and rusty tankers swinging wearily around their hooks in the world's ports.

CHAPTER V - THE POSTWAR DECLINE

The din of victory celebrations had barely subsided when the hue and cry of 'bring the boys home' mounted like a ground swell, and 546 merchant ships, as well as many naval vessels, were committed to the task. Overseas, war-devastated countries clamored for American goods of all kinds. Outright aid to these countries, and the law of supply and demand, touched off a rebirth of ocean trade world-wide. America, with a majority of the world's shipping, experienced very little foreign competition. In December of 1945 alone there were over 1,200 sailings, an average of some 40 per day, and more than in any month of the war. The ocean shipping picture looked rosy indeed.

In early 1946, the United States merchant fleet, which in 1939 had numbered only 1,310 ships and made up a bare 14 percent of the world's tonnage, totaled 5,529 ships and 51 percent of that tonnage.[51] However, since the government could not operate a shipping business in peacetime, and in order to conserve the best of those ships for United States operators, Congress passed a Merchant Ship Sales Act in March of that year. Much more realistic than the sales feature of the Merchant Marine Act of 1920, this Act offered ships at a price and at terms favorable to the purchaser. The minimum price of Liberties was 31 percent of wartime cost. For other cargo types the figure was 35 percent, and for tankers 50 percent. First choice was reserved for American citizens, for whom the terms were 25 percent down and 20 years to pay, at an interest rate of 3½ percent.[52]

By July of 1946, the Maritime Commission had returned 750 large ships, requisitioned during the war, to private operators; and, by the beginning of 1947, a total of 818 ships had been sold under the Merchant Ship Sales Act. Two hundred and ninety-six of these, the majority of which were C-types, went to American operators. Of the 522 sold to foreign governments or nationals, only 46 were C-type hulls, and some 311 were Liberty ships.[53] Ships for which there was no demand were inactivated in the National Defense Reserve Fleet. Paradoxically, foreign sales of United States ships were the source of much of the early postwar competition, especially on the part of the Liberty ships, which were cheap to operate and ideally suited for the tramp operations in which there was no United States subsidy program.

The position of the United States as a maritime power was adversely affected in those crucial years following the war by high operating costs. In the field of ocean shipping a British ship could be operated for 41 percent of the cost of an American ship of the same type. Even in the area

of coastal trade where no foreign competition existed, the high-wage scales and other operating costs took their toll.[54] Much of this coastal trade was lost to the railroads and trucks which had strengthened their competitive positions during the 'boom' years of the war, when the civilian shipping industry was out of business.

As the postwar period lengthened, the decline in America's relative strength on the trade routes of the world, though gradual, was inexorable. Foreign competition became stiffer with each passing year; not merely through lower shipbuilding and operating costs (which theoretically could be met with construction and operating-differential subsidies), but also through the increasing use of newer, larger, and more efficient ships. As the initial overseas shortages were alleviated, and as foreign lines preempted more and more markets, the once-rosy ocean trade picture began to fade.

The operating-differential subsidy program, barely underway when war started and then suspended, was resumed in 1947 and subscriptions increased sharply in 1948. Under this program the government paid the excess in operating costs for a United States-flag vessel on liner operations serving essential foreign trade routes, over those for competing ships of foreign registry. In return the government required a long-range ship replacement program on the part of the operator holding the subsidy, and took one-half of all profits in excess of ten percent which the subsidized operator might make, up to an amount equalling the total amount of the subsidy. The program applied only to those operators and those foreign trade routes approved by the government. It was not applicable to domestic routes or to tanker operations. At the end of 1956, 295 out of 555 cargo ships were subsidized.[55] The relation between maritime labor and subsidization is discussed in Appendix A.

One finds it difficult at first to see why the subsidy program was not the answer to operators' prayers. On the surface it had the appearance of a 'cost-plus-fixed-fee' contract, under which there could be no loss. However, for the operators there were several factors to be considered in the postwar period. After the initial boom, trade experienced a recession and the long-term outlook was hard to forecast. Acceptance of subsidy meant acceptance of government control in several fields, such as routes and schedules. It also meant obligation to replace vessels when they reached 20 years of age, at highly inflated prices compared with the price of the original ship.[56] Finally, and most importantly, it meant a gamble that the political climate over many years would remain favorable to the continuation and complete support of the subsidy program. These factors served to mitigate the attractiveness of the subsidy program in the long-term plans of the hard-headed businessmen who operated the nation's merchant fleet.

To many, an alternate program looked to be a much better method of survival. It involved the by-passing of United States wage scales and other operating standards, as well as United States taxes, by shifting ships' registries to the flags of other countries.

The term 'flags of convenience' is of fairly recent origin, and today has been supplanted by the shipping operators with an even more modern and descriptive phrase from their point of view, 'flags of necessity.' However, regardless of the name, the practice is not new. In the Civil War, Yankee owners registered ships under the British flag to escape the Confederate raiders; and after the war many continued sailing under the red ensign for economic reasons. Later, in 1920, two United States cruise ships were shifted to Panamanian registry in order to serve liquor during prohibition. Limited use of foreign registries was initiated prior to World War II by large oil and steel companies which were dependent on a large and steady flow of raw materials (oil and ore). While interested in shipping only secondarily, these companies considered it mandatory that they own and control the means of ensuring the flow of raw materials. They therefore operated their own ships, often under foreign flags for reasons of economy.[57] In early 1947, about 100 ships were flying either Panamanian or Honduran flags. Most of these ships were tankers or ore carriers engaged in the expanding but competitive bulk cargo trade.

A latecomer in the field, but the nation offering the most attractive terms to 'flag of convenience' owners was Liberia. By the end of 1956 the 6.5 million gross tons of Liberian shipping was exceeded only by the 24.0 of the United States, 23.3 of the United Kingdom, and 7.7 of Norway. Panama trailed with a total of 4.0 gross tons.[58] As of July, 1959 there were 518 American ships flying 'flags of convenience'; they included 7 passenger-cargo types, 135 cargo ships, 81 bulk cargo, and 295 tankers.[59] A discussion of some of the current ramifications of foreign registries is contained in Appendix A.

Just as they turned to flags of convenience to meet competition afloat, many postwar operators patronized foreign shipyards as a means of holding down ship construction costs. For, just as the operating-differential subsidy did not always solve the operating problem, the construction-differential subsidy program was no panacea for overcoming the high cost of United States-built ships. Initially, the subsidy applied only to liners scheduled for use on 'essential' foreign trade routes; the design of the vessel had to meet certain Navy requirements not necessarily compatible with commercial efficiency; and completely accurate determination of the amount of the subsidy was an administrative impossibility. From a business point of view, foreign construction often was the better buy. As shipyards abroad achieved full production, following their postwar rebuilding effort,

they garnered an increasing percentage of world construction, including a sizable business with United States ship-owners. In 1955, United States yards were building two United States ships and no foreign ships; while in foreign yards there were 52 United States ships on the ways.[60]

As the postwar decline of United States-flag shipping was progressing against a background of murderous competition on most of the trade routes and wholesale defections to foreign flags and shipyards—despite a well-meaning governmental subsidy program—war broke out in Korea. Luckily, that war was relatively small in scope, and convenient in time as far as shipping availability was concerned; however, the country's readiness to conduct wartime shipping was another story. With plenty of civilian ships but no civilian organization ready or authorized to conduct wartime shipping operations, the government assigned responsibility for those operations to the new Military Sea Transportation Service (MSTS). At the time, it was the only agency with the necessary authority and facilities to meet the shipping requirements of the emergency.[61]

MSTS, which in June of 1950 had a fleet of 174 ships, including 50 transports, 48 tankers, and 25 cargo vessels, expanded rapidly. With some 400 additional ships chartered or reactivated, the MSTS fleet transported over 85 percent of the forces, equipment, and supplies employed in Korea. In totals, this ran to 54 million measurement tons of cargo, 5 million troops and passengers, and 22 million long tons of POL.[62] Hundreds of the ships which performed this service were the Liberties which had been too uncompetitive in design to attract buyers under the Sales Act of 1946, and had been relegated to the Reserve Fleet. Once again they provided a means of bringing United States power to bear halfway around the world.[63]

As the Korean War was entering its final phase in 1952, the *SS United States* entered service. The latter event restored the 'blue riband' to America, when the ship proved herself the fastest liner in the world. The *SS United States* was the third postwar passenger ship built under the construction-differential subsidy program. She, along with the two other luxury liners, *Constitution* and *Independence,* which preceded her by a few months, ended a dearth of United States passenger vessels in postwar commercial shipping.[64] They were, and are, invaluable assets, not only from the standpoint of national prestige, but as potential troopships.[65]

Transoceanic passenger traffic mushroomed after World War II, but as time went by more and more of that traffic gravitated toward the airlines. By 1957 sea and air passengers in and out of New York City were about equal in number; and, in 1961, transatlantic ship passengers totaled only 785,000 as opposed to 2,165,250 air travelers.[66] Nor was this public affinity for aircraft solely attributable to the lure of speed. The Cabin class

ship fare to Hawaii, for example, is about $300, as opposed to a cost of $65 by air.[67] By 1958, of the 53.7 million deadweight tons of shipping under construction world-wide, only 361,000 tons were passenger or passenger-cargo ships. In contrast, 16.9 million tons were cargo vessels, and 36.4 million tons were tankers.[68] The *United States* could well prove the last of a breed.

Another significant event marking the year 1952 was passage of the Long-Range Shipping Act. This legislation did much toward eliminating major weaknesses of the construction-differential subsidy provided in the Act of 1936. For one thing, it extended subsidy eligibility to all ships operated in the foreign trade of the United States, including liners on nonessential routes, tankers, and tramps. Another major feature was reduction of the maximum trade-in age of a vessel (to qualify for subsidized construction of a replacement) from 17 to 12 years, and a broadening of the availability of construction reserve funds. The major effect of the new law was to encourage the construction of new United States-built ships as replacements for those American vessels either obsolete or obsolescent. This was a sorely needed measure.[69] In 1954, 72.6 percent of United States cargo vessels and 58.6 percent of United States tankers were in the 10-15 year age group.[70] On 1 July 1959, 72 merchant ships were under construction in United States yards, and negotiations with subsidized operators had resulted in commitments to replace 282 ships over a period of approximately 15 years, ending in the early 1970's.[71]

The postwar period has witnessed for the most part 16 years of uphill battling by the country's merchant marine. With the help of a then fairly new Reserve Fleet component, it responded quickly and performed a vital service in the Korean War. Before and since that period it has declined steadily in the face of competition abroad and public apathy at home. It is supported today on a varied assortment of crutches provided by the Government. The more important of these are: operating and construction subsidies, for those who qualify; cargo preferences in the form of all military cargoes and half of all foreign aid cargoes being reserved for United States-flag ships; and cabotage restrictions against foreign flags in all coastal and noncontiguous (Puerto Rico, Alaska, Hawaii, etc.,) United States trade. However, these piecemeal measures have failed to hold up the crippled patient.

In the face of a steadily increasing volume of United States foreign trade, (275 million tons in 1960 compared with 177 million in 1954), United States-flag shipping has carried a steadily decreasing percentage of that trade. In 1954, about 29 percent of United States foreign commerce moved under the Stars and Stripes. By 1957 the figure had dropped to 18 percent,

and in 1958 it was 12 percent.[72] The estimate for 1961 is about ten percent.

The imminent obsolescence of the majority of United States ships is a matter of serious concern. On 1 July 1959, only 206 of the 1,013 privately owned vessels were of postwar construction; of some 1,800 Government-owned ships (of which about 1,700 were inactivated), all were of World War II vintage; and of the 1,700 Reserve Fleet ships, approximately 1,000 were Liberty ships relegated to sale for scrap.[73]

The sinister nature of this picture of overage ships is highlighted in the report of the panel of the National Research Advisory Committee, of the National Academy of Sciences, which studied the shipping problem in the Summer of 1959: 'Projected construction plans show negligible promise of offsetting the rapidly approaching obsolescence of the vast majority of these 1,013 [privately owned] ships. The same is true of Government-owned shipping.'

Since 1959, little has happened to allay the panel's fears. Unofficial information from the Maritime Administration indicates that, from 1956 to the end of 1961, the ship replacement program for subsidized operators has produced contracts for 83 ships, 32 of which have been delivered. Seven more are expected to be contracted for this fiscal year. The long-range plan now calls for a total of 215 more to be budgeted, contracted for, and built; however, these are paper ships at present. Viewed in the light of the 5,300 ships of all flags which moved United States foreign commerce in 1960, none of these new ship figures is impressive.

Today, American shipping is deteriorating below the waterline, so to speak, and has reached a state of corrosion comparable to that existing at the turn of the century. The problem is recognized by the Government, the shipping industry, and maritime labor. As of February, 1962, the solution to that problem was still forthcoming.

CHAPTER VI - CONCLUSIONS

Today the health of American merchant shipping is failing fast. The recent decline dates from about 1948, although the causative disease has been present for a century. The sickness, which might be labeled 'uncompetitiveness,' has been brought on by many factors, and encompasses the two main areas of national economy and national security.

From the standpoint of the national economy a United States-flag merchant service is now, and has been for years, an anachronism. By developing a standard of living which has doubled and redoubled over the span of a few generations, the United States has priced herself out of the market in many economic fields—including those of shipbuilding and maritime labor, which largely determine the cost of building and operating United States ships. Economically, maintenance of an ocean carrier capability under the United States flag is insupportable. However, the economic area is not the governing consideration in this merchant marine problem.

Experience has shown that the country cannot conduct an overseas war without adequate merchant shipping. Massive sea lift is required both for support of the civilian economy, and for military operations. Obviously, that sea lift capability must either be on hand when war starts, or built during hostilities. There are, however, certain prerequisites to an effective shipbuilding effort during wartime. The major ones are (1) uninterrupted supply of essential materials, (2) relatively secure (from enemy-inflicted damage) shipbuilding facilities, (3) adequate shipbuilding capacity, and (4) time. These prerequisites, in turn, generate many supporting requirements. Some of these are: (1) control of the seas; (2) defense of the Continental United States against all forms of enemy attack; (3) access to strategic and essential materials overseas; (4) adequate holding action, either unilaterally or in concert with allies, to avoid defeat early in the war; and (5) a sufficiently large and active nucleus of shipbuilding talent and facilities to permit a rapid expansion on short notice.

Any one or several of the foregoing elements, essential to the creation of a merchant fleet during wartime, could be missing in a future war. To presume otherwise is to gamble the nation's security. Accordingly, as a matter of national survival, the country has no choice other than to maintain United States-flag shipping adequate for meeting the initial demands of an overseas war, and a shipbuilding capability adequate for meeting subsequent demands.

In peacetime, foreign competition, in the form of lower operating and shipbuilding costs, is a fact of life now and will remain so for the foreseeable future. On the other hand, it is a fallacy to assume that any foreign-flag

shipping, employed in United States overseas trade during peace, would necessarily be available to meet United States requirements in war.

'Flag of convenience' shipping, while not under the United States flag, is under effective United States control in the event of war or national emergency. It performs a vital function in supplying raw materials to the industrial complex of the United States; and, while less desirable than United States-flag shipping from the viewpoint of national interest, it is infinitely preferable to foreign flag shipping which serves the United States but is under the control of other nations. Prohibitive action, against the practice of foreign registries by United States operators would seem to serve no useful purpose at this time, and could well result in outright transfer of these vessels to foreign ownership. One possible maneuver by United States operators could be that of selling their ships to foreign interests under an agreement permitting further operations on a lease basis.

At the present time there seem to be too many 'strings' attached to Government subsidization of United States shipbuilding. If the primary objective of the subsidy program is a double-barreled one of (1) support to the shipbuilding industry against foreign competition, and (2) the build-up and maintenance of a modern fleet, it would appear desirable to provide a subsidy for construction in the United States of any United States ship meeting prescribed wartime specifications—regardless of whether she were scheduled to fly the Stars and Stripes in peacetime.

The cure for the 'uncompetitiveness' in American shipping requires these things at least: (1) Federal subsidies adequate to offset the dollar loss; (2) modern ships which are competitive in such ways as speed, loading and unloading time, cargo capacity and stowage, and application of automation; (3) a strong confidence factor among shipping operators and investment capital in the future of United States shipping, engendered by and based on strong long-term 'nonreversible' legislation in support of a viable merchant fleet; and (4) public awareness and public support of the nation's need for a merchant marine.

The solution to this critical problem facing the nation today involves maritime management and labor, the Executive and Legislative branches of the Government, and the public. With understanding and a determined, far-sighted and concerted effort by all, the problem can be solved. The time is late, and the solution is urgent.

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APPENDIX A

'FLAGS OF CONVENIENCE', SUBSIDIES, AND LABOR:

THE CURRENT STATUS, TRENDS AND INTERRELATIONSHIPS

As indicated in the main text of the paper, the problem facing merchant shipping today is intimately involved with the PanLibHon fleet, governmental subsidies, and maritime labor--among other things. As additional information on these aspects of the problem, this Appendix discusses the current status and trends in these areas, and their interrelation. Some of the information presented here is 'cumshaw' in that it was obtained late in February, 1962 and, though accurate, is not yet official and therefore could not properly be cited as to origin.

The significance of the PanLibHon fleet's contribution in the over-all foreign commerce of the United States cannot be stressed too heavily. During 1960, 540 PanLibHon ships were listed as being under 'effective United States control.'[74] Of that total number, 353 made one or more sailings to or from the United States, and the remaining 187 did not enter United States waters during the period.[75] The characteristics of that fleet emphasize the difference between it and the United States-flag fleet in both composition and employment. About 70 of the 174 dry cargo types were specialized bulk carriers ranging in size up to 60,000 deadweight tons, and most were of postwar design. However, some 60 percent of the freighters were Liberty ships. Of the 179 tankers, more than half were in the over-30,000 ton class.

Of the approximately 275 million tons of cargo lifted that year, the Maritime Administration reports that United States ships lifted about 27 million tons, while PanLibHon ships carried almost 64 million. The remainder of course was transported by foreign vessels. Interestingly enough, almost 42 million tons of the PanLibHon total was tanker cargo (as opposed to six million tons for United States ships), and another 16 million was industrial-type dry cargo (as opposed to 2.8 million for the United States-flag fleet). Of all the cargo lifted by the PanLibHon fleet, 94 percent was imports and of those imports 66 percent was liquid cargo and 34 percent was dry bulk.[76]

The foregoing statistics demonstrate clearly that this American-owned 'flag of convenience' fleet was created and exists solely for the purpose of supplying raw materials to the gigantic United States industrial complex. It is a manifestation of the intent of United States industry to control

the flow of its raw material imports, and to hold the cost of such imports to a level which will permit competitive pricing of finished products in the world market.

As of 30 September 1961, the portion of the PanLibHon fleet under effective United States control consisted of 269 tankers, 73 general cargo ships, 69 bulk cargo carriers, 6 combination cargo/passenger ships, and 15 other types.[77] Many of these 'flag of convenience,' 'flag of necessity,' or 'runaway flag' ships[78] are new, modern in design, and fast. They operate without subsidy, of course, and are highly competitive.

The question of whether or not these ships will revert to United States Government control in wartime, in accordance with Government-Operator agreements which permitted foreign registry in the first place, is not the real issue with respect to the PanLibHon fleet—although such is the cry of United States maritime labor. While they are largely manned by foreign crews, in each case these crews are carefully screened by the United States concern owning the ship—for purely selfish reasons, if no other—and all are nationals of NATO or other friendly countries. Standard Oil of California, for example, operates nine tankers under Liberian registry with Italian crews. Wages, working and living conditions, and benefits, are in accordance with standards prescribed by the Italian Government for its own merchant marine. These crew members have all been cleared with Italian police and maritime authorities prior to being hired, and must be cleared with the United States State Department prior to arrival at any United States port.[79] The probability is remote that Standard would lose control over these ships in any emergency.

The real problem regarding the PanLibHon fleet today is not the reliability of United States control in wartime, but rather the question of whether or not United States operators will be able to continue to own foreign flag ships as a means of survival in the nonsubsidized and highly competitive tanker and bulk cargo carrying trade. At the present time these 'flag of necessity' operators are under a drum-fire of criticism from super-patriots who do not understand the problem, from maritime labor which acknowledges only its stake in the problem, and from some European governments and nationals who are jockeying for competitive advantage.

The position of the United States operators is clear-cut. They contend, and correctly so, that a United States-flag ship operating under United States wage scales and tax laws cannot compete with low-cost foreign shipping. There is no mystery to this, it is a matter of simple arithmetic. For example, the average hourly industrial wage in Italy is 35 cents, as opposed to $2.20 in the United States; and there is a corresponding ratio in maritime labor.[80] Aside from other factors such as taxes, and higher

shipboard expenses, the labor aspect alone precludes competition against foreign ships.

These United States operators are stating therefore that, in the event they are denied these 'flags of necessity' (through labor boycotts, punitive measures abroad, or governmental action), their only recourse will be to sell their ships to foreign interests. They do not want to do that, since such a move would deprive them of an assured flow rate of vital raw materials. However, it would be infinitely preferable to the economic suicide of operating under the United States flag without subsidy.

Maritime Administration statistics indicate that the approximately 275 million tons of United States foreign commerce was moved by some 5,300 ships of all types and flags. Of that total, about 4,400 were dry cargo freighters, 600 to 700 were tankers, and approximately 150 were cargo/passenger types. The most recent figures on United States-flag shipping are as of 30 September 1961. They indicate a total of 496 privately owned and 29 chartered Government-owned United States-flag vessels operating in foreign trade. Of this total of 525, 469 were dry cargo freighters, 28 were tankers, and 28 were combination types. Of the 469 freighters, 272 were in liner service on a subsidized basis, as were all of the 28 combination cargo/passenger types. There were 86 freighters in a nonsubsidized liner status, and 93 in tramp service. The remaining 18 were operating in an industrial/liner status carrying proprietary industry-owned cargo inbound and common carrier goods outbound. The 28 tankers were not eligible for subsidy, of course, as was the case of the tramps and industrial service types.

The foregoing statistics add up to the fact that 100 percent of the combination ships were operating under subsidy, and of the 358 freighters eligible for subsidy, 272, or a whopping 76 percent were in a subsidized status. Today, many of the owners who once chose to operate without subsidy, through the advantages of nonunion labor, preferred routes and cargoes, marginal profits, and other devices enabling them to meet foreign competition, are now joining the subsidized ranks as those advantages disappear or fail any longer to suffice. A total of 450 ships are expected to be operating under subsidy in fiscal 1963.[81] One of the primary reasons for this current subscription to the subsidy program is the growing strength and coverage of organized maritime labor.

The National Maritime Union (NMU) has had a near-monopoly on the subsidized fleet for years. More recently, the Seafarer's International Union (SIU) has organized the nonsubsidized fleet, thereby encouraging its decline, and is trying to organize the PanLibHon ships. As an example of the magnitude of the operating-differential subsidy from the labor

standpoint, for each of the 20,000 largely unskilled seamen in subsidized vessels, the Government must pay about $8,000 per year for wages, subsistence and fringe benefits.[82] This is one reason why blanket subsidization of the large PanLibHon fleet is not a practical solution to the current problem of its operators. The operating-differential subsidy for 1961 is estimated by the Conference of American Steamship Lines at $154,576,527.[83]

This maritime labor/subsidy combine has an insidious effect on the over-all health of United States shipping which is another factor 'below the waterline.' Since the subsidy covers excess operating costs over those paid by a foreign competitor, and since the major portion of that excess is directly attributable to labor, wage increases on subsidized ships are largely a Governmental expense rather than one of the operator. It is said that the Government pays 72 percent of any wage boost on a subsidized line.[84] By the same token, increases in other operating costs eventually are borne by the taxpayer, not the subsidized ship operator. A situation such as this does little to encourage keen business practices and a competitive outlook in subsidized operations. A former Maritime Administrator put his finger on the problem when he said that the subsidies breed managerial lethargy.[85] On the other hand, the operating-differential subsidy has meant the difference between life and death to many ship operators engaged in foreign trade over the past decade. Similarly, the construction-differential program has enabled many United States shipyards to compete in the world-wide, postwar shipbuilding effort. As of July, 1959 there were more than 54,000 workers employed in commercial shipbuilding and ship repair yards. In comparison, some 75,000 men are employed in United States Naval shipyards.[86]

The United States shipbuilding industry today is somewhat larger than the shipbuilding traffic demands, even with the long-range ship replacement program. This has produced a paradox in that rock-bottom competitive bidding for business resulting from the construction-differential subsidy is tending to kill the very prosperity the subsidy was created in part to produce. The head of one large shipbuilding company has stated that, while he doubts any company would go broke without the ship replacement program, some might do so as a *result* of the program.[87] Be that as it may, the subsidy is essential in the face of foreign shipbuilding competition, such as that existing in Japan where two ships of excellent quality can be built for the price of one built in the United States. Here again wage scales spell the difference. Over the decade of the 1960's, the construction-differential subsidy is expected to total nearly two billion dollars.[88]

APPENDIX B

A DEFINITIVE DIGEST OF UNITED STATES FOREIGN COMMERCE

The information which follows in this Appendix augments the main text of the paper and is furnished in order that the reader might have a feeling for the nature of the foreign commerce of the United States, and an understanding of some of the more important terms involved therein. As a source of this information the author is indebted to a not-yet-approved staff paper on merchant ship requirements prepared for the Maritime Evaluation Committee in January, 1962.

The Character of United States Foreign Commerce. The importance of international trade to the American economy can hardly be overestimated. Foreign markets provide an outlet for a significant portion of our production of movable goods, and much of the raw materials required for our production must be found in foreign sources. The industrial production of the United States and its allies in the massive political struggle with Communism is a key factor in the success of that struggle. It is highly dependent upon the flow of goods for health and growth.

The goods moving in the trade can be broadly categorized in terms of their physical nature. Manufactured items and finished products moving in transit are generally packaged in relatively small containers requiring individual handling. Raw materials, such as ores, food grains, and mineral fuels generally move unpackaged as a bnlk material.

These basic physical differences have led to the development of shipping services which are specialized to handle certain types of trade in the most efficient manner. Four major types of ships and three types of service have evolved. The ship types are the general dry cargo carrier, the bulk dry cargo carrier, the liquid bulk carrier, or tanker, and the passenger ship or transport. The three types of service are the liner, the industrial, and the tramp service.

Ship Types

General Cargo: A ship designed to carry general merchandise of relatively small individual size. This vessel possesses its own loading and discharge capability; is compartmented in such a way that small quantities of cargo can be loaded or discharged at a series of ports along a trade route. It is of moderate size (up to 14 or 15 thousand DWT) and in its modern versions tends to be quite fast (up to or over 20 knots). It may

possess deep tanks and/or refrigerated holds for small quantities of specialized cargo. It may also combine its cargo capabilities with a small amount of passenger space (50 to 100 berths). The general cargo ship has significant military support potential.

Dry Bulk: A ship constructed to lift dry materials in bulk form in shipload lots. It may or may not have self-loading gear; if so, such is of a special nature, e.g., grab bucket cranes, vac-u-vators. Its deadweight is larger than the general cargo ship, 20,000 tons and up. Its service speed is somewhat slower, probably 15-plus knots. Modern versions of this ship may have dual characteristics. A recent example is the *S. S. Mando Theodoracopulos* which can lift 28,000 tons of grain, coal or ore one way, and return with a full cargo of petroleum products of all grades (237,000 bbls.). It is of significant value in supplying raw materials to the industrial complex.

Tanker: A ship designed specifically to carry liquid bulk cargoes in tanks. It is a self-loader and requires the simplest of berthing facilities. The T-2, 14.5 knots at 16,700 DWT (141,000 bbls.) has been a standard. Recent design trends have resulted in much larger ships, up to 100,000 DWT with speeds ranging between 14 and 16 knots. It has significant military potential.

Transport: Designed specifically for the transportation of passengers. Has limited cargo space and gear. Large and fast, its main appeal as a method of transportation in the jet age lies in the luxury it affords. It has considerable value as a prestige factor in cold war efforts, and as a potential troopship in war.

Types of Service

Liner: Often referred to as berth or scheduled carriers, liner operators offer space which is more or less regularly scheduled on specific trade routes. They serve the shipping public in general and are therefore 'common carriers.' Primarily, they handle general cargo, usually packaged in relatively small lots and commanding higher revenues. They also on occasion lift parcels of bulk items such as grain or coal, and some liquids in deep tanks. Rates are published and are more or less stable in that they usually hold for 30 days or more.

Liner companies of various nationalities serving similar general trade areas have entered into mutually binding agreements for the purpose of eliminating 'rate wars' or other competitive practices which could be detrimental to all. These associations or conferences develop uniform codes of ethics and publish uniform rates to which all members adhere. American and foreign members move cargo at the same rates.

The liner service makes use of the general dry cargo ship and the passenger transport in its operations.

Industrial: These operators lift cargoes exclusively for the use of a domestic industry. They may be referred to as proprietary carriers, and are either owned as a subsidiary of the parent company which utilizes their cargoes, or are under a contract to perform services exclusively for a specific siugle or group of consumers. Their services are not available to the general shipping element.

Industrial cargoes are imports in character; there are no industrial exports. Some of these companies are engaged in the liner trades outbound and, as such, offer scheduled services.

The service generally employs the bulk carrier and the tanker, though specific industries may use the general cargo ship where the import is handled as break-bulk, such as bananas.

The industrial service is irregular in nature and is similar, from the standpoint of cargo movement, to the tramp service outlined below. The main difference lies in the fact that the cargo it lifts is 'captive' cargo and is uot on the market seeking space offerings from tramps. The distinction is not clean, however, and some tramp operators enter into long-term contracts with industrial consumers and in essence become industrial carriers.

Tramp: Popularly referred to as 'tramp' operators, this group offers irregular or unscheduled services to the shipping public. Generally, rates are established on an 'auction' basis related to supply and demand. Liftings are shipload quantities of bulk cargoes from one port to another. Only occasionally is more than a single lot lifted; seldom more than three.

Tramp operators are contract carriers. Service is offered to a shipper on a contract basis for a voyage, group of voyages, or a period of time.

Traditionally, the vessels utilized in tramp operations have been dry cargo types (freighters), usually with special fittings to facilitate the handling of bulk cargoes. There are some ships specifically designed for certain bulk cargoes, such as ore carriers or colliers.

In recent years, due primarily to oversupply of tank capacity in the liquid bulk cargo trades, tanker operators have moved into the dry cargo services. Their liftings are mostly grains and oil seeds which they can readily handle at competitively favorable rates. Under so-called 'normal' conditions, these cargoes would be carried by a ship of dry cargo characteristics in the traditional concept of the term.

Measurement of Cargo

Cargo moving in the foreign commerce has two significant physical characteristics important to its stowage. It has weight and it occupies space. Traditionally the long ton (2,240 lbs.) and the cubic ton (40 cu. ft.) have been used as units of measure. Ideally, one weight-ton would occupy one cubic ton of space. In other words, cargo meeting these conditions would have a density, so to speak, of one. Under these ideal conditions, cargo taking a ship down to her design waterline would also fill all usable design cargo space.

However, cargo, particularly dry cargo, usually does not meet the ideal conditions. To the extent that a weight-ton occupies more than 40 cu. ft., a ship must sail at less than her DWT capacity. In normal peacetime commerce, deadweight tonnage utilization averages about 60 percent for break-bulk carriers, 70 percent for bulk carriers and 80 percent for tankers.

FOOTNOTES

CHAPTER I

[1]Samuel W. Bryant, *The Sea and the States,* (New York: 1947), p. 43.

[2]Carl McDowell and Helen Gibbs, *Ocean Transportation,* (New York: 1954), p. 21.

[3]Alfred T. Mahan, *The Influence of Sea Power Upon History,* (Boston: 1890), I, p. 344.

[4]William S. Benson, *The Merchant Marine,* (New York: 1923), p. 26.

[5]This protective legislation was later modified on a reciprocal basis with specific countries early in the nineteenth century, and abandoned completely in favor of a policy of free trade several decades later.

[6]Bryant, p. 105.

[7]Bureau of the Census, *Historical Statistics of the United States,* (Washington: 1960), p. 445.

[8]McDowell and Gibbs, p. 21.

[9]*Ibid.,* p. 23.

[10]Willis J. Abbot, *The Story of Our Merchant Marine,* (New York: 1919), p. 22.

[11]Bryant, p. 192.

[12]Some 1500 miles west of Peru.

[13]Benson, p. 51.

[14]S. E. Morison, *The Growth of the American Republic,* (New York: 1942), p. 499.

[15]Several knots faster than the average cargo ship of today.

[16]Morison, p. 616.

[17]*Historical Statistics,* p. 445.

CHAPTER I (cont'd)

[18]*Ibid.*

CHAPTER II

[19]As quoted in McDowell and Gibbs, p. 29.

[20]George W. Dalzell, *The Flight from the Flag,* (Chapel Hill: 1940), p. 247.

[21]American Bureau of Shipping, *The American Merchant Marine,* (Washington: 1933), p. 58.

[22]American Bureau of Shipping, p. 2.

[23]In August of 1914 the wheat harvest so jammed East Coast terminals that the railroads were forced to declare an embargo on further shipments.

[24] It wasted the entire Winter of 1916-1917 making largely theoretical studies and surveys of shipping lines and freight rates, until the losses to submarines finally demanded action, and even recommended once that the Government program be limited to wooden ships.

[25]Bryant, p. 414.

[26]'The Great Results of the War,' *Harpers Pictorial Library of the World War,* (New York: 1920), XII, p. 92.

[27]*Ibid.,* p. 95.

[28]*Ibid.*

[29]'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 part of its commerce and serve as a naval or military auxiliary in time of war or national emergency, . . . 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 . . ..'

[30]Bryant, p. 428

CHAPTER III

[31] McDowell and Gibbs, p. 257.

[32] These ships, of a standard 10,800 ton, 11-knot design, had been built for years by Joseph L. Thompson & Sons on the River Wear in England for use as tramp freighters. Later, with some design improvements, this type came to be known as the EC-2 or 'Liberty' ship which history often erroneously credits with being the product of American ingenuity and overnight innovation.

[33] Sir Winston S. Churchill, *Second World War,* II, p. 560, 564.

[34] Bryant, p. 455.

CHAPTER IV

[35] Chester Wardlow, *The Transportation Corps: Movements, Training, and Supply,* (Washington: 1956), p. 359.

[36] In a speech before the Congress in May of 1943, Winston Churchill stated that: 'These weapons played an appreciable part in the ruin of Rommel's army at the Battle of El Alamein and in the long retreat which chased him back to Tunisia.'

[37] Chester Wardlow, *The Transportation Corps: Movements, Training, and Supply,* (Washington: 1956), p. 359.

[38] To the uninitiated it is often surprising to learn that for initial deployment, five measurement tons of equipment and supply were required for *each* man sent overseas, and almost one ton was required each month to keep him there. The extent of shipping required to project and maintain a major force overseas staggers the imagination.

[39] Roland G. Ruppenthal, *Logistic Support of the Armies,* (Washington: 1953), I.

[40] Erwin C. Lessner, 'World War II,' *Encyclopedia Americana,* (New York: 1961), XXIX, p. 560.

[41] Wardlow, *The Transportation Corps: Responsibilities, Organization, and Operation,* p. 156.

[42] *Ibid.*

CHAPTER IV (cont'd)

[43] Frederic C. Lane, *Ships for Victory,* (Baltimore: 1951), p. 4.

[44] By way of contrast, only 85 submarines had been sunk the preceding year, and in 1941 the total was only 35. In 1944, 241 were sunk.

[45] Wardlow, *The Transportation Corps: Movements, Training, and Supply,* p. 100.

[46] Ruppenthal, p. 231.

[47] Wardlow, p. 83.

[48] *Ibid.,* p. 328.

[49] *Ibid.,* p. 148.

[50] *Ibid.,* p. 363.

CHAPTER V

[51] Bryant, p. 548.

[52] A significant redefinition of the nation's maritime policy, first set forth in the Merchant Marine Act of 1936, was included in this sales act of 1946. It called for a merchant marine adequate for the national 'security' rather than the national 'defense' referred to originally. A subtle change, but one which indicated a shift of concept away from that of passive preparedness.

[53] Testimony during the House Merchant Marine and Fisheries Committee hearings on the operations of the Federal Maritime Board and Maritime Administration in 1959, indicated that by the time the sales act expired in 1951, United States operators had purchased a total of 251 C-types, 227 Liberties, 70 Victories, and 265 Tankers. Foreign sales totaled some 1,113 ships including 56 C-types, 589 Liberties, 100 Victories, and 216 Tankers.

[54] In his article on the 'Merchant Marine' in the *Encyclopedia Americana,* R. G. Albion states that: Between 1948 and 1954 United States maritime wages doubled while those of other nations remained about stationary. In 1954 a mess attendant in a United States ship made almost $100 per month more than a Chief Officer of a Dutch ship, for example. That largely unskilled laborers' monthly pay was $242. Chief Officers of

CHAPTER V (cont'd)

British, Norwegian, and Dutch ships made $173, $170, and $155, respectively. Since 1954, United States wages have soared even higher through triennial contract renewals in 1955, 1958, and 1961.

[55]Wytze Gorter, *United States Shipping Policy,* (New York: 1956), p. 83.

[56]Regardless of a construction-differential, which merely compensated for the cost difference between United States and foreign shipyards.

[57]Maritime Research Advisory Committee, *The Role of the United States Merchant Marine in National Security,* report, (Washington: 1959), p. 55.

[58]Robert G. Albion, 'Merchant Marine,' *Encyclopedia Americana,* (New York: 1961), XVIII, p. 666a.

[59]Maritime Research Advisory Committee, p. 50.

[60]House Merchant Marine and Fisheries Committee, *Operations of the Federal Maritime Board and Maritime Administration,* hearings, (Washington: 1959), p. 25.

[61]McDowell & Gibbs, p. 459.

[62]VADM Roy S. Gano, USN, 'Military Sea Transportation Service,' Lecture, U.S. Naval War College, Newport, R.I., 22 January 1962.

[63]One of the most important of the unanswered questions relative to the Korean War is the inexplicable failure of the Communists to interfere with that thin supply line across the Pacific. Some strategists say there is no answer, but that the U.S.S.R. learned from that experience. Immediately thereafter she almost stopped building surface warships, and established a gigantic submarine program.

[64]Three combination passenger-cargo ships were contracted for by American President Lines but were taken over by the government during the Korean War and never replaced.

[65]The *United States* can carry a full division of 14,000 troops with their organic equipment to Europe in 90 hours, or transport the same lift 10,000 miles without additional supplies of food or water.

CHAPTER V (cont'd)

[66]Werner Bamberger, 'Two Million Flew Atlantic in 1961,' *New York Times,* 9 January 1962, p. 94:1.

[67]Merchant Marine and Fisheries Committee, *Defense Personnel Transportation Policy,* (Washington: 1960), p. 7.

[68]Albion, p. 666.

[69]Gorter, p. 17.

[70]In most instances, the statutory life of a ship is 20 years.

[71]Maritime Research Advisory Committee, p. 52.

[72]*Ibid.,* p. 50.

[73]*Ibid.,* p. 9.

APPENDIX A

[74]Subject to United States control in war or national emergency.

[75]I. M. Heine and M. W. Coe, *An Analysis of the Ships Under 'Effective United States Control,' and Their Employment in United States Foreign Trade During 1960,* report, (Washington: 1960).

[76]*Ibid.*

[77]Military Sea Transportation Service, *MSTS-P504,* (Washington: 1961).

[78]The labels usually applied by the Government, ship owners, and labor unions, respectively.

[79]Senate Commerce Committee, *Merchant Marine Legislation,* hearings, (Washiugton: 1961), p. 146.

[80]*Ibid.*

[81]Maritime Research Advisory Committee, p. 51.

APPENDIX A (cont'd)

[82]'Let's Give Ship Subsidies the Deep Six.' *Fortune,* October, 1961, p. 104.

[83]Senate Commerce Committee, p. 160.

[84]*Fortune.*

[85]*Ibid.*

[86]Maritime Research Advisory Committee, p. 51.

[87]*Fortune.*

[88]*Ibid.*

BIOGRAPHIC SKETCH

Captain Rufus C. Porter, U.S. Navy

EDUCATIONAL BACKGROUND:

U.S. Naval Academy
Naval War College, Command aud Staff Course

DUTY ASSIGNMENTS:

Staff, ComPhibRon 8	Chief Staff	1959-1961
Staff, CINCWESTLANT and CINCLANTFLT	Plans	1958-1959
USS Leary (DDR-879)	Command	1956-1958
NavWarCol	C&S Course	1955-1956
Office of CNO	ASW Training	1953-1955
Staff, COMDESLANT	Asst Readiness	1951-1953
USS J.W. Wilke (EDE-800)	Command	1949-1951
USNA	Navigation Instructor	1946-1949
USS William Wood (DD-715)	XO	1945-1946
USS Reid (DD-369)	Torpedo; Gunnery; Exec	1942-1945