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MARITIME STRENGTH OF CHINA,

A GREAT POTENTIAL (U)

by

Fred J. Metz
Commander, U.S. Navy

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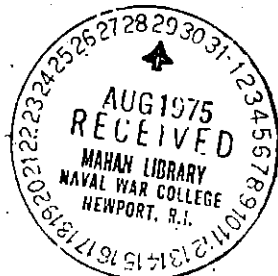
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Abstract of

MARITIME STRENGTH OF CHINA, A GREAT POTENTIAL



The Chinese are engaged in an active Maritime building program. They already possess the worlds largest fleet of light forces and are presently moving fast into the field of missile-armed destroyers and frigates, giving them an offensive naval capability not previously known. Their merchant fleet starting from nothing in 1949 has grown steadily and the Chinese are rapidly becoming a merchant power. Their steady growth in maritime affairs has given them the viable ingredients necessary to be considered a regional Maritime Power. This growth should continue and with the maritime potential that China possess, Maritime greatness is inevitable.

TABLE OF CONTENTS

CHAPTER	PAGE
ABSTRACT	ii
LIST OF FIGURES AND TABLES	iv
I INTRODUCTION	1
The need for Free World Nations to realize the Maritime Potential of Communist China.	
II SEA AS A TRADITION	6
Tracing the Chinese Sea Traditions from the age of the Warring States (453-221 BC), through the height of the Ming's, to the complete decline of sea power in the late 19th century, to the recognition by Peking of the need of a naval force.	
III ECONOMICS AND TRADE	11
With increased World Trade, the necessity of a maritime force is essential.	
IV MERCHANT FLEET	16
Almost non-existent in 1949, the growth of the Merchant Fleet shows a definite potential in China's shipbuilding industry.	
V FISHING	24
China's fishing industry ranks in the top four in the world, with a great potential to increase their capabilities.	
VI NAVAL FORCE	27
A naval building program in progress, which is giving their navy an offensive capability for the first time.	
VII CONCLUSION	34
China is a Regional Maritime Power and has the essential elements to become a world power in Maritime Affairs.	

LIST OF FIGURES AND TABLES

FIGURES		PAGE
III-I	China Trade Trends	14
IV-I	Merchant Fleet Expansion	18
IV-2	Principle Merchant Fleets	22
VI-I	Strength of Chinese Fleet	32
TABLES		
I	Steamship and Motorships	44
2	Oil Tankers	45

Maritime Strength of China, A Great Potential

Chapter 1

Introduction

Today we would find very few people who would refute the statement that 'The Peoples Republic of China is purely a land power'. Experts on China feel that since their take over, the Communist have turned inward, away from the sea and China should be considered a landlocked country. A noted analyst of China's Foreign Policy, John K. Fairbank stated in 'Foreign Affairs':

"That China is trying to reduce the prominence of the greatest ex-treaty port, Shanghai, and cut down China's dependence on maritime trade with the West. . . and has concentrated her present-day concern for her land frontier. . . History suggest that China has her own continental realm, a big one; that Chinese power is still inveterately land based and bureaucratic, not maritime and commercial."¹

I feel Mr. Fairbank, like many authorities, has failed to recognize that China has already realized the importance of the sea and has started to become a maritime power.

There is a tendency to judge a countries maritime strength by the number of supertankers, tonage of merchant ships or the number of modern warships that they have in their inventory. I agree that using these standards today, China would be down the list of world maritime powers. It would be a mistake to let large numbers or modern

equipment entirely influence the criteria for a maritime power. In the case of China it is essential that the entire maritime spectrum be analyzed. When considering this spectrum, the rapid growth that China has demonstrated in all maritime areas is impressive and must be considered. They have demonstrated that they have the ability, desire and above all, the potential to become a Maritime Power.

The Chinese have realized that maritime strength is a complimentary mixture of all aspects of a nations ability to project and protect itself at sea, regionally and world wide. There are many distinct elements that make a maritime system; the ability to project by commercial means, which includes a merchant fleet and fishing industry, and the ability to protect by the use of a naval force. Another essential element is the nations geographical position from which they can project their maritime strength. China possess the basic elements and are definitely able to project and protect their maritime interests regionally at this time. They are missing two elements that they must possess to be considered a world maritime power. They need a strong navy that is capable of protecting their maritime interests world wide. They also need a large merchant fleet that is capable of competing with the world's merchant powers. These elements are missing at this time, but China has the potential and I think the need to become a leader in both areas.

Chinese maritime development is motivated by their

national strategic needs. China has been referred to as being 'the heart of the Orient', but because of the physical configuration of the Chinese land frontier they face unfavorable conditions for overland expansion or aggression. China is handicapped as well as protected on three sides by natural barriers such as barren deserts, high mountains and tropical jungles. In contrast, the sea on the eastern side has, in modern times, been a vulnerable frontier of the Chinese mainland. In recent years the lack of maritime power has denied China the strategic mobility to exercise an alternative to infiltration, economic and political subversion.

During January 1974, China gave notice to the rest of the world that they realized the importance of a maritime force as a instrument of national policy. The Chinese Navy successfully conducted a 'gunboat war' against South Vietnam and occupied the Paracel (Hsisha) Islands. Besides the Paracels there are other South East Asian island groups that China claims sovereignty over; Tunsgsha, Chungsha, Spratly, and Senkaku, also the Tsengmu Reef off East Malaysia.² For strategic reasons these islands are very important to China. With military bases on the islands the Chinese would control the entire South China Sea from the Gulf of Thailand to the Southern region of the East China Sea. The island groups also possess economic potential; geological reports indicate a strong likelihood of rich oil deposits in these areas. It has become apparent that

China is un-willing to compromise over ownership of these islands and has demonstrated that they have the necessary military power to maintain effective occupation. Without a regional maritime force this would be impossible.*

I feel that China has realized the need to become a Maritime power and the expansion into the Paracels is just the beginning of its projected Maritime dominance in Asia.

Another important reason that China is turning to the sea is, they see themselves as the leader of the Third World against the domination of the two super-powers. Since 1953 China has had an extensive aid-program and between 1953 and the end of 1971 they committed more than \$4,600 million in economic aid to communist and non-communist Third World nations.³ Besides the economic ties with the 'have nots' China is building cooperative relationships with these nations. To develop and ensure that this cooperation continues China must, and has, realized the need to be able to project its influence and cooperation through a Maritime force.

*China realized the imbalance between their military capabilities and the superpowers; however, they must have concluded that their military action would not provoke unacceptable responses from either the United States or the Soviet Union.

China has the people* and the geographic position** which along with the following ingredients give them a Maritime Potential; Tradition, Economic and Trade Resources, Growing Merchant Fleet, Fishing Industry, and Naval Force. I will briefly analyze the preceeding ingredients and will definitely show that China cannot be considered a purely land power and it could be a tragedy for the Free Nations of the world not to pay close attention to China's Maritime Strength. China has the need and the potential, the realization of the importance of maritime power is a reality and the re-birth of China as a great "Maritime Power" is at hand.

*China has a population of approximately 850,000,000 with accurate population figures being unavailable. They have a labor force of approximately 350,000,000.⁴

**The coastline of China is over 7,500 miles and there are 3,500 large and small islands along the coast, with many fine natural harbors.⁵

Chapter 11

Sea as a Tradition

Although much has been written about China and her people, very little has been said about one of her most important assets, that tradition dealing with the sea. A fact that most Westerners tend to forget is that China is a foremost seafaring nation, with more ships (albeit junks), seamen, and fishermen than the rest of the world combined.¹ This should not be a surprise when it is realized that China possesses a very long and proud tradition built around the sea. The Chinese of old were the world's pioneers in the development of big ships. Their junks sailed the seas and furthered the interests of peaceful international communications at a time when many Western nations were groping to establish themselves. In respect to antiquity, the junks of China are almost the equals of the ancient Egyptian vessels.

The Chinese tradition can be traced back to the age of the Warring States, (453-221 B.C.) where it was recorded that the Army of the State of Yueh was transported by ships to invade the State of Wu through the coastal waters. Again, shortly after unifying China in 221 B.C., the first universal Emperor, Shih Huang Ti, launched a wide expedition to the Pacific Islands, perhaps including Japan, to search for the elixir of life. This may be regarded as the first large-scale maritime exploration made by Chinese people.

In the dynasty of the Han Emperor Wu (140-88 B.C.), the navy became a regular part of the military establishment; however, the navy was viewed as a subordinate of the army and maritime fleets, under central control, were only mobilized for temporary service in special campaigns.²

In 1127 a permanent national seagoing navy was established, and the central fleet remained an instrument of national policy until the 1430's.³ A tremendous feat was accomplished in 1281 when the army of Kublai Khan invaded Japan. The 150,000 man army was transported by an armada of 4,500 ships, although 4,000 ships were destroyed by a typhoon, the accomplishment of transporting such a large force was not soon to be duplicated.⁴

Another spectacular feat was the famous "Seven South Seas Expeditions" in the periods 1405-1433. These were led by Cheng Ho, the so-called "Three Treasures Eunuch", a favorite of the Ming Emperor Yung-Lo (1403-1424). With the purpose of showing the flag and promoting trade relations, Cheng Ho had a force of 27,800 men and 60 ships. Each expedition lasted about two years and altogether operated in 35 countries. The first three operations reached as far as the Indo-China Peninsula, the Malay Peninsula, Java and Ceylon, but the last four covered areas stretching to the Persian Gulf, Red Sea and to Madagascar.⁵ These voyages occurred during the time when our forebears, were for the most part, still content with short voyages from one known point to another. Without charts of any kind, with carrier

pigeons serving as wireless, a bit of iron for a compass, and the stars to direct their course, the Chinese ships made these long voyages in search of trade and anchored in harbors thousands of miles from their home ports.

Generations of experiments and improvements enabled the Chinese to manufacture ships that were among the most seaworthy the world had yet seen. Some of the vessels used in Cheng Ho's first voyage, for instance, had length of 44 'chang' (c. 517 feet), and a width of 18 'chang' (c. 212 feet), built with four decks and watertight compartments. With favorable winds they could make as fast as six knots. The compass which had been used for centuries to locate proper burial places for the dead, was now an indispensable instrument in navigation.⁶

China reached its highest level of maritime strength during the reign of the Ming dynasty. At its height the central fleet at Naking consisted of four hundred ships, a coastal defense fleet of twenty-eight hundred ships, a maritime transport fleet of three thousand ships and the pride of the Ming navy, a fleet of over two hundred and fifty "treasure ships", each with a capacity for five hundred men.⁷

It was during this time that the hub of the country moved seaward, the leaders lost their preoccupation with internal affairs and the northwest frontiers. Urbanized industry outgrew domestic markets. Foreign commerce and industrial development eclipsed the traditional emphasis on agriculture. It was during this era that China realized that it was possible to develop seapower, either needed or desired, because it had a base of maritime technology and experience from which to draw and expand. Maritime

experience and overseas commerce were truly the fore-runners of seapower.

After the Ming period there was a steady decline in Chinese seapower. There was a reorientation of the nation inward, to the north, west, and a preoccupation with non-maritime interests. Great frustrations came during the declining period of the Manchu Empire, when the modern weapons of Western sea power were superior to those of the Chinese and the sea was no longer a protective wall, but it became a convenient avenue for Western penetration. (Until the latter period of the 19th century, the sea had been the safest frontier for the Chinese nation; as the invasion of barbarians had usually come from the north; however, after 1840 (Opium War) the new route for invasion became the sea.) In the 1880's and early 1890's the Chinese navy attempted to maintain the front line of defense against foreign aggressions, but with the collapse of the imperial order we also see the decline and collapse of their Naval Power. (During the nineteenth century naval power was the chief index of great power status.)⁸

After a century of defeats and humiliation, a strong Chinese Empire was again established on the Asian continent. Based on the hard experiences of the previous century, the need for a substantial power had been quickly recognized by the Peking regime. As early as September 1949 the Common Programme of the Chinese Peoples Political Consultative Conference, resolved to create a modern navy to ensure an adequate defense.⁹

A deceptive part of the Chinese Maritime force, is the Chinese junk. The design of the junk's that are used in China today can be traced back to the early 16th century. There are many critics of the junk in our technically orientated world, and we tend to over-look their immense capabilities. The junk became a doughty opponent of the U.S. sea power both in Korea and in South East Asia. In October 1950, a U.S. task force with a Marine division aboard was stopped three weeks outside Wonsan on the east coast of Korea by a minefield laid by junks.¹⁰ In Korea, the U.S. discovered that, because of their watertight compartmentation and soft-wood construction, junks are difficult to sink with naval guns. Another lesson learned by the U.S. was the ability of the supposedly harmless junk to successfully lend logistic support to the forces fighting in South Vietnam.*

*Three excellent books on the Chinese junk and their uses; Sail and Sweep in China, by G.R.C. Worcester, Chinese Junks and Other Native Craft, by Ivan A. Donnelly and The Junks and Sampans of the Yangtze, by G.R.C. Worcester.

Chapter 111

A Brief Overview of Economics and Trade of China in the 1970's

Sea power in China in 1949 could draw on nothing more than tradition, and the Chinese Navy and Merchant marine were essentially nonexistent. Economically in 1949 China's industrial capability was not well adapted to the support or the development of maritime power.

It has become the aim of the Communist leaders to transform China from the poor, backward country which it was well into the 20th century, into a modern powerful nation. An important fact to remember ,

"Many Western observers have been quick to criticize the failures in Chinese economy, but they fail to pay due attention to an important political factor; the ability of a tightly organized and vigorously disciplined ruling apparatus. The present Communist Chinese leaders have spent the major part of their lives in guerilla warfare, and this must certainly have left its mark on their attitudes and thought pattern. They pin their faith on the principle of "where there is a will, there is a way." They talk and act as if the limitations of their material resources are completely irrelevant. They can do anything without the slightest consideration for the life or death of their "lao-pai-hsing" (old folks). Hence the difficulties confronting the Chinese Communists should never be over-estimated, even as their ability to overcome these difficulties must never be underestimated."¹

The Chinese have made marked economic improvements, but they are quick to point out, "progress has been made, but much has still to be done and several decades will have to pass before the country can, catch up with the industrialized countries, which have been expanding

continuously for the last twenty years."² Another point the Chinese stress is that everything accomplished so far is the product of a very few years, and that since the early 1960's, China has been entirely independent of foreign help. After seizure of power by the Communists in 1949, the Chinese received much aid from the Soviet Union. Aid given by the Soviet Union was of considerable help to the Chinese during their economic struggle in the 1950's. However, in the 1960's China renounced all foreign help and the trade debts to the Soviet Union were paid off in advance, in 1964.

In recent years China has become increasingly active as a donor of economic and technical aid to developing countries. In 1970 aid became a major instrument of China's foreign policy and China surpassed the Soviet Union in its offers of aid: the equivalent of U.S. \$700 million was offered by China and less than U.S. \$300 million by the Soviet Union.³

In the past six years China's foreign trade has undergone a dramatic change. The proportion of foreign trade to the national product is about five per cent for 1973.⁴ (This is not surprising for a major country that has a massive population, a large domestic market, and low per capita income.)

China can not be considered a major trading nation at this time, (in 1973 the total trade of the U.S. was 15 times that of China) however, the Chinese have increased

their trade over 100% since the 1950's. China's foreign trade in 1973 soared to U.S. 9.9 billion (see figure 1), an increase in dollar value of 67% over 1972.⁵ The variety of exportable products are; large, heavy products, such as iron ore, coal and salt, which find a market mainly in Japan; equipment machines and textiles are sold chiefly in South-East Asia and the 'Third World' countries; Europe imports from China non-ferrous minerals, metals, raw material and foodstuffs. Most important, China became a net exporter of petroleum in 1973.* In that year they earned about \$35 million from sales of crude oil and refined petroleum products and this year is expected to earn over \$350 million from petroleum exports.⁶

China imports enormous amounts of Western machinery and technology. They import whole plants mainly to produce chemical fertilizer, man made fibers and petroleum-based plastics. (Whole plant purchases well approach \$1 billion this year.)⁷ Other machinery imports include, transport equipment, machinery for mining and petroleum industries. China has increased the purchase of foreign constructed Merchant ships, and has purchased dredges for port im-

*Very little is known about the extent of oil that China possess. 'The Christian Science Monitor' reported in January 15, 1973, "Some Western experts believe China is sitting on massive oil reserves which it has only just began to discover, let alone exploit. One American oil-equipment representative was quoted as saying earlier this year that Chinese reserves could be the third largest in the world."

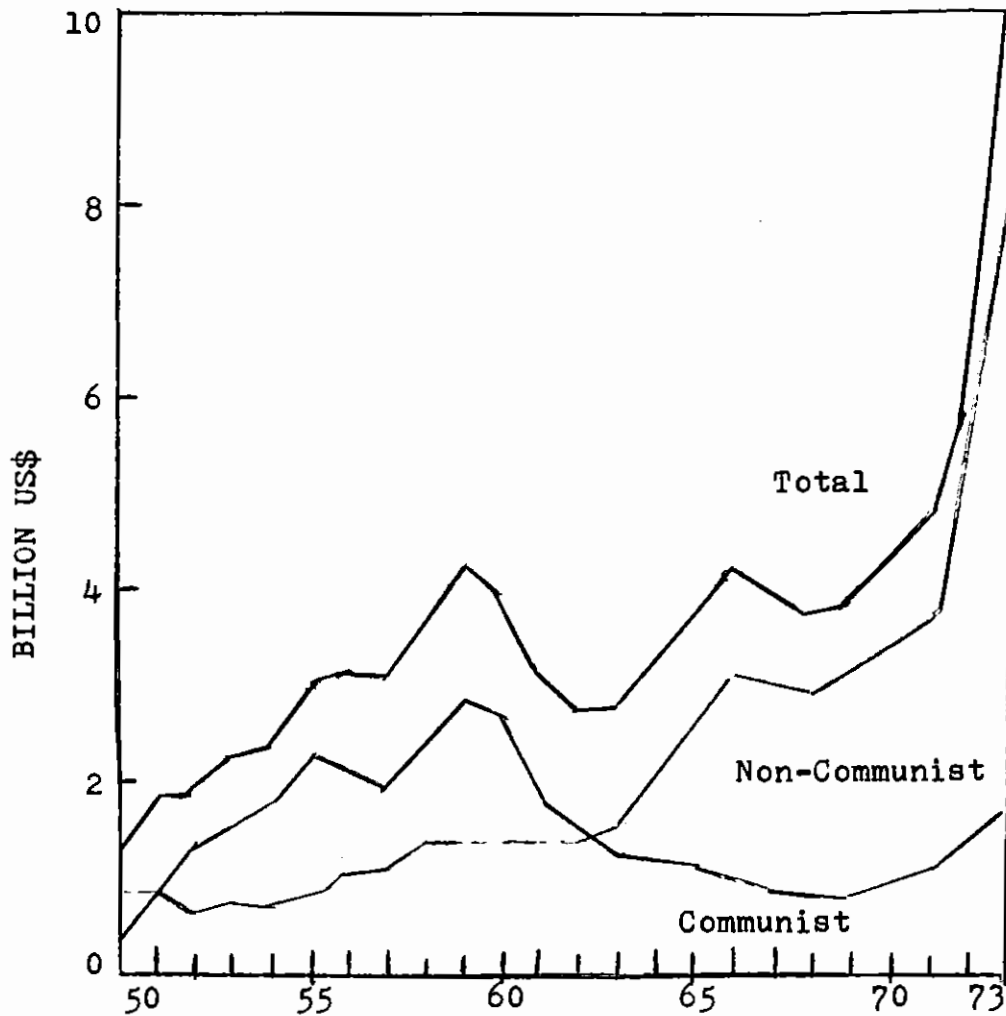


Figure III-I

CHINA TRADE TRENDS

Information taken from Central Intelligence Agency, International Trade Handbook of the Peoples Republic of China.

provement. A below-average harvest in 1972 led China to import huge amounts of agricultural products, grain, cotton, soybeans, vegetable oil, sugar and they contracted for even higher imports in 1974-1975.⁸ The United States, Canada, Australia, and Argentina are the main suppliers of these products.

Non-Communist countries have continued to increase their share of China's trade. The share of the socialist countries in China's foreign trade was 78 per cent in 1954; in 1959 it was 70 per cent and 1964 it had fallen to 35 per cent. Today we find that 80 per cent of China's trade is with non-Communist countries.⁹ (see Figure 1)

There is a definite need for Foreign Trade by China, because even with the great advancements since 1949, their industrial capabilities is still very limited. Following the withdraw of Soviet aid, many technical problems became difficult to solve. The accelerated development of nuclear weapons and their delivery systems has absorbed a large portion of industrial capacity. It has become evident, that with increased trade commitments the present Chinese maritime programme is expanding and the trade commitment alone has provided the impetus for this expansion.

Chapter IV

China's Expanding Merchant Fleet

China's merchant marine in 1949 was nonexistent. Until the coming of the Communist regime in late 1949, China possessed a vast sea coast and several of Asia's greatest ports such as Shanghai and Canton, but displayed incredible ineptitude where shipping was concerned. For the past hundred years they had allowed almost the entire shipping industry to be operated by foreign concerns. Apart from one or two small yards, pre-Communist China had no shipbuilding industry and meager, inefficient ship repair yards at Canton, Shanghai and Dairen. Although China possessed Asia's commercially busiest coastline (until the rise of Japan in the early twentieth century.), the merchant and naval fleets were controlled by the most impotent, and even most ludicrous departments of the old imperial system. The same problems existed when the Communist took control and it is very evident when in the Korean war, China was dependent upon a Polish transport system of 15 ships for the supply of war materials. This dependence upon a foreign flag vessel left a significant impact on the minds of planners, and the development of a merchant fleet has shown consistent increase in quality and size.¹

In China today, shipbuilding has become an important part of the Chinese growing industrial complex and China's

tiny shipping and shipbuilding industry has become an intergraded part of the 'Great Leapforward'. Starting from nothing in 1949; what had been the pre-1949 merchant fleet had either become part of the Chinese Nationalist fleet in Taiwan or had been sunk, beached or seized by the Japanese. By 1954 the fleet was still very small, and by 1961 Lloyd's Register of Shipping listed the Chinese merchant fleet of 402,417 gross tons.* By 1968 the fleet expanded to 247 ships, 772,125 gross tons, and the latest report for 1974 shows a fleet of 360 ships, 1,870,567 gross tons.** 1A

As figure 1 depicts, the increase of merchant ships in the past five years is very significant. This increase is amazing considering what the fleet consisted of in the 1950's. During this time the gaps in the fleet were filled by previously sunken vessels which were raised, repaired and modernized. Another source of much needed shipping during the 50's was the Chinese purchasing of used ships. During this time China started buying World War II, massed produced 'Liberties', mainly from British owners at a reduced price. It was also during this period that China started purchasing ships from Poland and other East European countries.²

*Lloyd's Register of Shipping states, records of ships registered in China is not complete.

**Two tonnage terms are commonly used for describing ships. Deadweight tons are the number of long tons- 2,240 pounds each-of cargo, fuel, et cetra, a ship can carry at maximum draft. Gross tons are a volume, not a weight. Each gross ton represents 100 cubic feet of enclosed space.

1,000
Ton
Gross

Year

Ton Gross

Number of Ships

61	402,417	201
62	472,677	212
63	522,481	219
64	502,038	215
65	535,427	216
66	555,143	213
67	669,299	231
68	772,125	247
69	765,545	239
70	791,893	237
71	867,994	274
72	1,478,992	323
73	1,870,567	360

1,800
1,700
1,600
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400

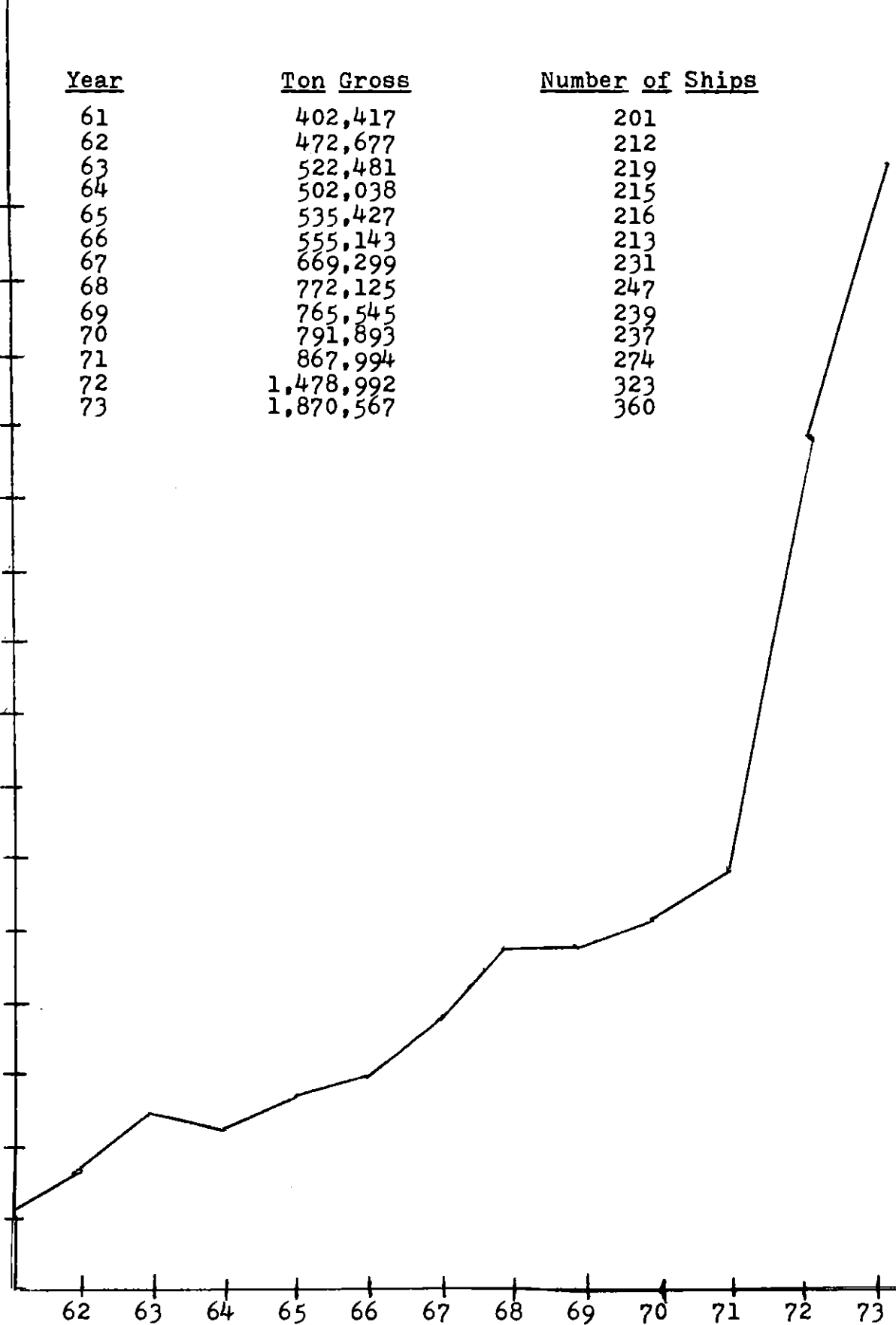


Figure IV-1
MERCHANT FLEET EXPANSION
Information taken from Lloyd's Registry of Shipping
1962-1974

With the announcement of the launching of the 22,100 DWT ship 'Leap Forward' at Dairen on 27 November 1958, China told the world of her arrival as a potential shipbuilding power of some consequence.^{3*} The shipyards at Dairen had been built with the aid of the Soviet Union and by 1958 the shipyard employed 13,500, using modernized equipment.⁴ Shipbuilding was also taking place at Shanghai, which before 1949 had no shipbuilding facilities. On 6 February 1959 the 5,875 deadweight ton freighter 'Peace 49' was launched at Shanghai, five weeks after her keel was laid.⁵ Shipbuilding continued on the rise in China, and there have been reported launching of the 'Gao Yang', a 10,000 ton freighter built in 1968 in 39 days; 'Taching no. 27', a 15,000 ton oil tanker built during 1969 in 32 days from keel laying to launching; the 'Trentsin', the first 10,000 ton freighter to be built at Tientsin-Hsinkang shipyard was completed in 1969.⁶ This new facility is a great addition to the shipbuilding industry and this yard along with the facilities at Dairen and Shanghai account for the majority of the merchant ship construction in China today. Information on China's ship construction is extremely difficult to obtain. It is almost impossible to assess the efficiency of any of China's shipyards, when there are no direct industrial contacts or mutual visits;

*A great loss to the merchant fleet occurred when the 'Leap Forward' sank during a typhoon in the Yellow Sea in 1963.

however, with all the acceleration that has taken place it is evident that China has the ability to integrate steel sources, ships components and machinery delivered to the yards, to meet deadlines. With this increase in emphasis on shipbuilding, it becomes evident that a annual shipbuilding capacity of 100,000 tons is possible. This compares favorably with the government's goal in the early 1960's for a total five year production of 54 ships of average deadweight tonnage of about 5,000 to 8,000 tons (about 70,000 tons annually.⁷)

Along with an active domestic ship construction program, China is supplementing this fleet by purchasing ships from European builders. In 1970 they signed a contract with the Rijeka Yard in Yugoslavia for the construction of four 15,000 ton freighters.⁸ In June of 1971 China agreed to purchase from Poland an unspecified tonnage of merchant vessels. The significance of these programs is that in the 1950's China was a big customer of the Eastern European nations for shipping; however, when the Sino-Soviet quarrel erupted, sales with other Eastern European nations stopped. China is also purchasing ships from Western Nations and in March of 1974 China purchased a 55,000 ton bulk carrier from Sweden.⁹ This is undoubtedly the largest dry-cargo vessel in their expanding fleet; however, the Chinese are known to be negotiating for several other dry cargo vessels in the 45,000 ton range and are believed to be discussing oil tankers in the 60,000

ton range.¹⁰ Purchasing these larger ships has presented a problem with port facilities. Until recently Chinese ports were not capable of handling a vessel with a draft greater than 37 feet. The Chinese are alleviating this problem and have begun an extensive program of dredging. They have bought several large dredging barges from Holland to assist in this program. Along with the dredging, extensive port modernization is in progress. These programs are expected to be completed in China's major ports in time to handle the newly acquired deeper draft vessels.¹¹

Even with the improvements of ship building and port facilities, China can not be considered a great merchant force. The Chinese 1,870,567 tons is very small compared to the Soviet Union's 18,176,489 tons, United States 14,429,198 tons, and Japan's 38,708,455 tons, and in World ranking they are now 23. (See figure 2) Though the tonnage may not be impressive, the momentum of the Chinese ship production is impressive.

China has further supplemented her fleet by chartering about 150 merchant ships flying foreign flags. By 1960, the Chinese had time chartered (for periods of about five to seven months per vessel) a million tons of cargo capacity, in mainly British, Scandinavian and West German ships.¹² In the mid-1960's the charter fleet was much larger but it was reduced by the uncertainties at Chinese ports during the "cultural revolution".

PRINCIPAL MERCHANT FLEETS OF THE WORLD

(Compared with 1973)

Steamships and motorships of 100 tons gross and upwards

		thousand tons gross				thousand tons gross	
Liberia	...	55,322	(+ 5,417)	Singapore	...	2,878	(+ 874)
Japan	...	38,708	(+ 1,923)	Canada	...	2,460	(+ 37)
Great Britain and N. Ireland	...	31,566	(+ 1,406)	Brazil	...	2,429	(+ 326)
Norway	...	24,853	(+ 1,252)	Poland	...	2,292	(+ 219)
Greece	...	21,759	(+ 2,464)	Somali Republic	...	1,916	(+ 303)
Russia (U.S.S.R.)	...	18,176	(+ 779)	China, People's Rep. of	...	1,871	(+ 392)
*U.S.A.	...	14,429	(+ 483)	Yugoslavia	...	1,778	(+ 111)
Panama	...	11,003	(+ 1,434)	Finland	...	1,508	(+ 38)
Italy	...	9,322	(+ 455)	Taiwan	...	1,317	(+ 50)
France	...	8,835	(+ 546)	Argentina	...	1,308	(+ 47)
Germany, Fed. Rep. of	...	7,980	(+ 65)	Portugal	...	1,243	(+ 79)
Sweden	...	6,227	(+ 558)	Korea (South)	...	1,226	(+ 122)
Netherlands	...	5,501	(+ 472)	German Democratic Rep.	...	1,224	(+ 7)
Spain	...	4,919	(+ 116)	Belgium	...	1,215	(+ 53)
Denmark	...	4,460	(+ 353)	Australia	...	1,168	(+ 81)
India	...	3,485	(+ 598)	Benmuda	...	1,153	(+ 292)
Cyprus	...	3,395	(+ 459)				

*WORLD TOTAL ... 311,323,000 tons (+ 21,396)

Figure IV-2

Information taken from Lloyd's Resister of Shipping - Statistical Tables - 1974

The Chinese are depending less on foreign flag chartering and as more Chinese owned vessels come into service this figure will drop even more.* Looking into the future, the possibility exists that there will be an increase in the demand by foreign countries to purchase Chinese ships, and crew them with Chinese. John D. Hayes explains this phenomena:

The sea is a hard taskmaker, and men will not do it to make a living unless forced by economic circumstance. Americans quit going to sea as merchantmen in the late 1800's and today the young men of prosperous northern Europe are shunning the seafaring vocation. . . Over 100 agencies in Hong Kong are reported to be supplying Chinese seamen to ships flying many flags. One British shipping authority has sounded a warning. S. G. Sturmez, Professor of Economics at the University of Lancaster, England, predicts that Japan will soon take over maritime leadership but will lose it after the next 50 years when the present transport of oil and ore will be superseded by a mammoth sea movement of grain, rice and other cereals. Then, he claims other importers will have the advantages of low maritime costs and wage rates and that the successor of Japan will most likely be China.¹⁴

The potential is there, the projections are favorable for a major Chinese merchant fleet and shipbuilding industry, and increased demand for Chinese seamen.

One of the essential elements of maritime strength, the ability to be a leader in the commercial movement at sea, is an element that China is now capable of achieving.

*During the Vietnam War it was reported that 153 Free World ships had entered the port of Haiphong 201 times during the last half of 1964. The majority flew the British flag, but came from Hong Kong and were, no doubt, Chinese-owned.¹³

Chapter V

China A World Leader in Fishing

An extensive fishing industry provides China with the necessities for an increased role at sea. The United States has seen how the Soviet Union has become a serious threat to its domination of the oceans, not from their navy alone, but also from their efficient fishing fleet. China is one of the world leaders in fishing and like the Soviet Union, it has the potential of using this force in becoming a dominant maritime power.

Fishing statistics for China, although incomplete, show China having the world's largest fishing fleet and by far the largest yield from fish farming of any nation. Accurate, up to date statistics of the Chinese fishing industry have been unavailable since the middle 1960's; however, many reliable studies have been done to determine the output of the fishing industry in China. The best estimates for the production of China's fisheries for 1971 was between 7.5 and 8.5 million metric ton.^{1*} Despite the difficulty of ascertaining the exact amount of annual catch, it is clear from all indications that together with Peru, Japan and Russia; China ranks as one of the four

*Another study conducted in China in 1960, predicted the total catch would reach as high as 9.6 million tons per year by the 1970's. Another more extravagant estimate places the potential annual output at 30-40 million tons.²

major fishing nations in the world.*

The total area of coastal and offshore fishing grounds, to the depth of 200 meters, along the coasts of China is approximately 1 3/4 million square miles. This immense area comprises 24.7 per cent of the world total.⁴ The Chinese, until recently, have been content to stay within their coastal fishing grounds; however, China has started to extend its fishing area to the Yellow and East China Seas. Prior to 1970 the Japanese virtually monopolized these areas and the new Chinese interest has aroused the Japanese who feel the Chinese fishing fleet is intruding in the Japanese fishing area.

The Chinese Government, confronted with the task of feeding an exploding population, is making every effort to expand its fishing industry. They are expanding in the catches from fresh water as well as from the sea. The expansion in the areas of ocean fishing is essential and China is in the process of overcoming its tradition of near shore fishing. As the population increases and the demand for fish products continues to rise, the development of the long-range fishing industry is necessary.

*The four nations together catch approximately one-half of the total world catch. In 1971, Peru caught 10,610,000 tons, Japan 9,890,000 tons and Russia 7,330,000 tons.³

The latest statistics on the China fishing fleet:

1. 131,000 sailing junks used on coastal marine waters
2. 297,000 sampans used on inland waters
3. 6,600 powered junks ranging from five to 20 gross tons
4. 6,300 junks of over 20 gross tons

The powered fishing fleet numbered 507 vessels; 414 inshore trawlers; 1 fish factory ship 1,500 tons, two 375 ton trawlers, 64 conventional trawlers (including four 110 foot vessels displacing 260 gross tons, with carrying capacity of 65 to 90 metric tons of fish, with 19 to 23 men crew); 18 stern trawlers with 250-350 horsepower engines; eight seiners; and three whale catchers. Despite the powered fleet, 90 per cent of the marine catch was estimated caught by small craft. . . By 1959, over 3,000 of the larger sailing junks had been fitted with 80 horsepower engines and by 1964 more than 15,000 junks were expected to be so equipped. Most of China's powered fleet was based at Port Arthur (229), Tsingtao (117), Shanghai (70), and Hainan (47).⁵

China is in the process of expanding its fishing fleet to meet increased needs. They have the personnel and know-how available to meet these demands. As China begins to use distant fisheries on a grand scale, particularly in competition with its neighbors, Japan and the Soviet Union, the world will then realize that China is expanding in another essential element of Maritime Power.

Chapter VI

Developing An Offensive Naval Force

When one speaks of the Chinese Navy, there is a tendency to think of sampans and small patrol boats. Although these small craft have their function on the China seas, the Chinese Navy is a more formidable force than is generally recognized. As early as 1961, the U.S. Chief of Naval Operations stated, "The Chinese Communist Navy is the largest wholly Asian naval force in the Far East. . . The Chinese Communist naval capabilities are primarily defensive, but the navy does have a limited offensive capability."¹

The Navy is considered by many to be the weakest of the armed forces; however, it must be remembered that when the Communist gained control of the mainland there was essentially no navy. There were no major ships and the personnel situation was even worse; since the Peoples Liberation Army contained no personnel with previous naval experience. The need for a navy was recognized, and in September 1949, the "Common Program" resolved to ensure that the navy was maintained at a adequate defense level. Despite the early recognition the navy did not really begin until 1954, it was at this time that Soviet aid was increased by the transfer of older Soviet destroyers and 13 submarines along with 50 old motor torpedo boats.² This was the start of the building of the naval force that

was also aided by the Soviets in the form of technical and material assistance. Twenty-two submarines were assembled between 1958 and 1964 with components from the Soviet Union. When Soviet aid was suspended the Chinese designed and constructed their own naval ships. The first warship of indigenous Chinese design and construction was the Shanghai type motor gunboat, 120 tons, 130 feet long which first appeared in 1959. This was followed in 1971, by the construction of a Chinese built version of the Soviet 'R' class submarine of 1,800 ton displacement. In 1972 a new class of Chinese destroyer was seen for the first time, a 3,750 ton surface to surface missile equipped ship, designated the 'Luta' class.³ Just recently it was reported that there are as many as 3 nuclear powered submarines under construction in Chinese ship yards.⁴

The Chinese Navy has grown from 200 vessels in 1949 to approximately 2,500 today - in sheer numbers the third largest navy in the world after the United States and the Soviet Union. The majority of these ships are patrol craft and short range ships that are strictly defensive in nature. In addition they possess a limited anti-submarine, minesweeper and amphibious force. The early efforts of naval ship construction was geared to the defense of their vast coast line; however, times are changing. In "Janes Fighting Ships", 1973-74 edition, the statement was made, "There is every likelihood that the next few years will see the Chinese Navy spreading its influence

abroad."⁵ This statement should be no surprise when the Chinese naval construction program is analyzed. Since 1966 the 'New Fleet' has undertaken a steady building program, in modernized Chinese Yards. They commenced an active submarine construction program and moved fast into the field of missile-armored destroyers and frigates, giving their present navy an offensive capability for the first time.

The beginning of this new capability can be traced back to the late 1960's when their offensive force was limited to twenty high (9,000 miles) radius-of-action submarines. Some of these submarines ('W' class) could be fitted for short-range (250-400 mile) missiles. The New York Times reported in 1966 that "Communist China had installed launchers for nuclear-tipped missiles on two of its largest submarines." The U.S. Navy had concrete evidence that three launching tubes, capable of launching missiles 380 miles had been built into each of these submarines.⁶ The Chinese completed at Dairen, a Ballistic missile submarine, similiar to the Soviet 'G' class, in 1968. This submarine has the capability of carrying three missiles of the 380 mile range.⁷ In 1969 through 1973 the main submarine construction program was the Chinese version of the Soviet 'R' class diesel-powered, medium range attack submarine. Presently the Chinese submarine construction program is actively involved in the building of 'Han' and 'Ming' class submarine.

The 'Han' is possibly nuclear propelled and if allied to Chinese knowledge of missiles their navy should have a nuclear-missile submarine in the near future.⁸

The Chinese have accelerated the construction of missile armed destroyers and frigates. The new 'Luta' class destroyer, of which China has 5 operational, is equipped with 2 twin SSN-2 type missile launchers.⁹ Along with 7 missile frigates, the Chinese have aquired a deep water (offensive) capability not previously known. Although limited, without this capability they could not have a viable naval power. Although China has a large coast line, geographically they have no free passage to the open sea. It is important that they have free, unimpeded access to the oceans, or their maritime strength could be restricted to strictly coastal shipping. With the submarine capability and their missile equipped ships the Chinese have elemented this problem.

The large fleet of Fast Attack Craft give the Chinese a tactical offensive power which could be used within close range of their bases. But the primary strategy of this force is that of mobile coastal patrol and mining. Patrolling is done by a force of 690 motor gunboats/motor torpedo boats. At least 49 major submarines are capable of carrying 20 torpedoes or 40 mines, and at least one class of larger surface ships has racks for 50 mines.¹⁰ The emphasis on mining is sound, since mining is normally done in shallow water, and China has one of the world's

broadest continental shelves. (Shallow coastal waters well suited for use of motor torpedo boats and fast gunboats; however, less than ideal for submarine operations.)

The Chinese Navy (see figure V1-1) is divided into three fleets, the North Sea Fleet, East Sea Fleet, and South Sea Fleet; and the deployment of ships among these fleets is thought to be as follows:

North Sea Fleet 210 vessels; 60,000 tons. It is organized into one escort squadron, one landing craft squadron, one submarine squadron, and two motor torpedo boat squadrons, plus minesweeper and auxiliary vessel units. The main bases are at Tsingtao and Lushun. Units are deployed along the coast from the mouth of the Yalu river in the north to Lien Yuen Kang in the south.

East Sea Fleet 600 vessels; 180,000 tons. This constitutes the major strength of the Chinese Navy in surface ships and is organized into one escort squadron, one submarine squadron, two landing ship squadrons, two minesweeper squadrons, and one squadron of auxiliary vessels. Bases are at Shanghai and Chou Shan. It is deployed along the coast from Lien Yuen Kang in the north to Chao An Wan in the south.

South Sea Fleet 260 vessels; 55,000 tons. It is organized into one escort squadron, one landing craft squadron, and one minesweeper squadron. Bases are at Whampoa and Tsamkong. It is deployed from Chao An Wan in the north to Hainan Island in the south.¹¹

The Chinese Navy is presently engaged in an active building and modernization program. In the last four years they have changed the emphasis from being a strictly defensive force to becoming a force that is able to project itself beyond its immediate shores. Although the Chinese Navy does not pose an immediate threat to the U.S. or the Soviet Union, the Chinese have succeeded in

STRENGTH OF THE CHINESE FLEET (1974)

Type	Active	Building (Estimated)
Destroyers (DDG)	5	2
Frigates	14 (7 with missiles)	1?
Corvettes	30	4
Fleet Submarines	1	?
Missile-Firing Submarines	1	--
Patrol Submarines	49	4
Fast Attack Craft (Missile)	80	15
Fast Attack Craft (Gun)	455	20?
Fast Attack Craft (Torpedo)	150	--
Minesweepers (Ocean)	16	--
Minesweepers (Coastal)	10	2?
Landing Ships LST	15	--
LSM's	18	2?
LSIL's	15	--
LCM's	15	--
LCT's	450	--
Survey & Research Ships	8	--
Range Instrumentation Ships	4	?
Supply Ships	8 (+ ?12)	--
Oilers (small)	8	--
Boom Defence Vessels	6	--
Escorts (old)	13	--
Coast Defence Vessels (old)	6	--
River Defence Vessels (old)	13	--
Repair Ship	1	--
Misc. Small Craft	375	--

170,000 officers and men

(Information taken from Jane's Fighting Ships 1974-75)

Figure VI

the field of nuclear weapons and a redirection of this industrial force is capable of making their Navy become a world naval power.

With the Chinese continual emphasis on offensive Naval power they have become an important element in the future balance of power in Asia and the entire area East of Suez. This new power has given them a chance to project and demonstrate their power abroad, if it suits their policy, - The Free World must not forget with their great resources and powerful national motivation today's Chinese fleet may well be only the forerunner of one of the world's great navies of the near future.*

*A warning given in Janes Fighting Ships, 1974-1975, very similar to the warning given concerning the Soviet Naval build up in the Mid-1960's.

Chapter VII

Conclusion

It is important to remember that Maritime Strength is the complimentary mixture of all aspects of a nations ability to project itself at sea, regionally and world wide. Considering the regional aspect of China's Maritime Strength, there should be little doubt that they now possess the viable ingredients necessary to be considered a regional Maritime Power. It is also apparent that China has the potential of becoming a world leader in maritime affairs. China possess the essential maritime elements and has demonstrated that they have the need, know how, means to project, and the means to protect a maritime force.

1. Need - The recent expansion of Chinese trade has given them the need to expand their Merchant Fleet. The increased demand on the fish production, has produced an increase need to expand off-shore fishing.

2. Know How - China has a tradition older than any order nation except the Greeks and Italians. Although lacking in modern experience the Chinese possess the basic maritime skills essential for a maritime power.

3. Means to Project - The Chinese possess a Merchant Fleet that gives them a capability to project its maritime influence. The marked increase of their fleet definitely shows that China has realized the importance of a strong merchant force.

4. Means to Protect - The Chinese Navy possess the worlds largest fleet of light force and they are now moving fast into the field of missile armed destroyers and frigates, giving them a deep water capability not previously known.

Within the past five years the growth of Chinese Maritime forces has been substantial. Dormant natural resourses and the desire to become a maritime power, for

a long time suspected of being non-existent, are now gradually being revealed in sufficient quantities to permit a steady climb upward. China possess the requisite foundations for the establishment of a great Maritime Power. They have the geographical advantage of a long, easily accessible sea coast, a nucleus of nautical experience from coastal and inland shipping and fishing, plus a rapidly expanding industrial capability and a national sense of urgency for modernization. Another important factor to consider, for the first time in many centuries, China has a growing naval force and merchant fleet centrally controlled by a strong government.

Political atmosphere in the whole of Asia is extremely unsettled. The recent developments in Southeast Asia are causing all the Asian nations to review their present political policies. As the situation continues to deteriorate in Southeast Asia, the possibility of the 'Domino Theory' becoming reality is of great concern to all Asian Nations. The present U.S. policy concerning Asia is unclear and all nations are forced to re-evaluate their positions related to the U.S. interests in the area. Regardless of the final outcome of the present crisis it is inevitable, the Asian nations will strive to depend less on the U.S. As a direct result of these decisions, I predict the present dominate maritime influence that the U.S now maintains in Asia will not continue to exist. The withdrawal of U.S. influence could cause a maritime 'vacuum' in Asia. There

is always the possibility of the Soviet Union attempting to move into the 'vacuum'; however, I feel that the World will be stunned at the speed in which the Chinese continue to re-direct their industrial capabilities toward the sea. There will be no 'vacuum', and China will become the dominate Maritime Power in Asia.

Although faced with problems, China has shown the world that they have a desire for world greatness and a demand for change, for revolution, for industrialization, and for recognition. China will be able to overcome whatever handicaps and shortages that may exist today, and the realization of their Maritime Power is now at hand.

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SIZE AND AGE OF ALL STEAMSHIPS AND MOTORSHIPS

DIVISIONS OF TONNAGE	DIVISIONS OF AGE										TOTAL					
	0-4 YEARS		5-9 YEARS		10-14 YEARS		15-19 YEARS		20-24 YEARS		25-29 YEARS		30 YEARS & OVER		No.	Tons Gross
	No.	Tons Gross	No.	Tons Gross	No.	Tons Gross	No.	Tons Gross	No.	Tons Gross	No.	Tons Gross				
CHINA, PEOPLES REPUBLIC OF																
100 — 499	8	2,912	12	4,281	3	1,095	2	721	...	...	4	1,084	20	6,267	49	16,360
500 — 999	6	5,194	1	990	1	889	6	3,823	...	...	8	6,203	24	17,432	46	34,531
1,000 — 1,999	4	5,673	2	2,562	2	3,272	1	1,219	...	...	4	6,805	14	19,928	27	39,459
2,000 — 3,999	3	8,838	12	32,224	3	7,000	26	76,002	4	11,732	2	6,589	9	29,063	59	171,448
4,000 — 5,999	2	8,800	6	33,320	2	9,650	7	34,812	1	5,659	2	10,041	5	25,260	25	127,542
6,000 — 6,999	...	...	3	20,456	9	56,654	6	38,283	2	13,600	...	...	5	32,614	25	161,697
7,000 — 7,999	...	...	5	37,561	2	14,458	1	7,993	...	...	2	14,362	14	100,478	24	174,852
8,000 — 9,999	21	202,065	6	54,988	13	119,974	13	119,001	1	9,505	1	8,272	2	18,325	57	532,130
10,000 — 14,999	10	106,730	4	43,725	13	158,121	9	103,078	4	43,635	...	...	1	14,216	41	469,505
15,000 — 19,999	...	...	1	16,987	1	15,719	...	...	...	...	...	...	...	...	2	32,706
20,000 — 29,999	...	...	1	22,488	4	87,849	...	...	...	...	...	...	...	...	5	110,337
30,000 — 39,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40,000 — 49,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50,000 — 59,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
60,000 — 69,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
70,000 — 79,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80,000 — 89,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
90,000 — 99,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
100,000 — 109,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
110,000 — 119,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
120,000 — 129,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
130,000 — 139,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
140,000 and above	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	54	340,212	53	269,582	53	474,681	71	384,932	12	84,221	23	53,356	94	263,583	360	1,870,567

Table I