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Trends and Prospects in Soviet Maritime
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TRENDS AND PROSPECTS IN SOVIET MARITIME ACTIVITIES

THE PROBLEM

To examine the nature and extent of the changes which have occurred in Soviet maritime activities, military and non-military, over the past several years; to consider what changes in policy or objectives, if any, these activities signify; and to estimate future trends in Soviet maritime policy and action.

CONCLUSIONS¹

A. In the quest for military power, political influence, economic strength, and status as a great power coequal with the US, the USSR has pressed forward with a number of maritime programs and has emerged as one of the major maritime nations.

B. Since 1945, the USSR has devoted to its navy the lion's share of the resources available for maritime development. The navy's missions have been progressively extended beyond coastal defense, support of theater forces, and anti-shipping operations; in recent years emphasis has been given to defense against US naval surface and submarine forces and to strengthening the Soviet strategic strike capability. Although the capabilities of the Soviet Navy will continue to improve with the introduction of new classes of ships and better gear, we believe that its missions will not change appreciably during the 1970's.

C. In recent years, the Soviets have made increasing use of naval forces for political ends, most notably in the Mediterranean. With its growing capabilities for long-range operations, the Soviet Navy in the future will probably be more in evidence around the world in support of specific political objectives, as a demonstration of the USSR's

¹ For the dissenting view of Rear Adm. Frederick J. Harlfinger, II, the Assistant Chief of Naval Operations (Intelligence), Department of the Navy, see the footnote on page 2 following the Conclusions.

great power status, and as a counter to US forces. We think it unlikely, however, that the USSR will develop any significant capability for distant military action against substantial opposition. Nevertheless, Soviet policy will derive considerable support from the capacity to establish a military presence in some areas, sometimes in circumstances which could have a deterrent effect on the will of others, including the US, to attempt intervention.

D. The Soviet merchant marine has trebled its tonnage since 1959 and now ranks seventh among the world's merchant fleets with four percent of the world's total tonnage. It will continue to expand, though at a moderate rate because of limited Soviet shipbuilding capacity and self-imposed restrictions on buying ships in the West. Moreover, because most of the Soviet fleet will be needed to carry Soviet trade, we believe that the USSR will not make serious inroads into world seaborne trade.

E. The Soviet fishing fleet is one of the world's largest and ranks third in fish catch. It has been built up rapidly in recent years to satisfy the USSR's need for animal protein foods. We believe the size of the fleet is probably close to the planned objective, but since their present catch is less than stated goals, the Soviets may be expected to increase the fishing fleet's efficiency and to investigate new areas for exploitation.

F. The USSR has a large oceanographic fleet, comparable to that of the US, but its research activities fall behind Western work in some qualitative aspects. Over the past several years, much effort has been devoted to activity related to undersea warfare and the development of fisheries. In the future, the Soviets will in addition probably devote increasing attention to exploring the mineral resources of the sea.

¹ Rear Adm. Frederick J. Harlfinger, II, Assistant Chief of Naval Operations (Intelligence), Department of the Navy, believes that the conclusions and text fail to give adequate consideration to the effect that continuing nuclear deterrence and progressive Western disengagement from overseas commitments are likely to have on the direction of Soviet maritime programs over the coming decade. It is his opinion that in this situation the Soviets will see increased opportunities for the employment of maritime power in its several forms as an instrument of Soviet foreign policy and will shape their maritime forces to capitalize on these opportunities. He thus anticipates that the expansion in Soviet maritime activity witnessed over the past decade will continue at an intensity greater than that foreseen in the estimate, particularly as related to the emerging nations and the uncommitted world.

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DISCUSSION

I. CURRENT POSTURE AND ACTIVITIES

1. Soviet maritime activities over the past several years have grown substantially, both in volume and in geographical scope. In total tonnage, the Soviet Navy is now second only to that of the US, and its merchant marine ranks seventh in the world in deadweight tonnage (DWT).² Both its fishing fleet and its oceanographic fleet are among the world's largest.

A. Naval Forces³

2. Since the end of World War II, the Soviet Navy has developed in several fairly distinct phases. The late 1940's and early 1950's saw the resumption and partial accomplishment of Stalin's ambitious prewar naval construction program. But the original plans for capital ships and carriers, intended to be the heart of a Soviet high seas fleet, and huge numbers of submarines, were not achieved. The Soviets did build an impressive surface force with a nucleus of 14 Sverdlov class cruisers, numerous coastal patrol ships and minesweepers, as well as nearly 240 W-class submarines, within 10 years. But the navy that resulted was suited only for World War II-type operations, short-range defense of the maritime approaches to the USSR, and interdiction of merchant shipping in the northeast Atlantic and western Pacific. With its surface units lacking air cover at sea, and weak in anti-aircraft (AA) armament, anti-submarine warfare (ASW) sensors and weapons, afloat logistics, and amphibious forces, this navy could not support the USSR's aspirations to status as a great seapower. In particular, it was incapable of countering Western carrier strike fleets.

3. With Khrushchev's ascent to power in the mid-1950's, the Soviet Navy undertook to develop new capabilities to meet the threat posed by the carrier strike fleets. The course adopted was to develop anti-ship cruise-missile systems for surface ships, submarines, and aircraft, and to institute long-range surveillance of US aircraft carrier movements at sea. Khrushchev also fostered the development of a strategic strike capability and nuclear propulsion of Soviet submarines. Steps were taken to provide new shipyard capacity and capabilities. For defense-in-depth of the USSR's maritime approaches, coastal defense forces seaborne and ashore were also to be equipped with missile systems. By about 1960 the Soviet Navy had developed capabilities to counter the carrier strike

² Deadweight (DWT) and gross register tonnages (GRT) are standard measures of size for non-naval ships. DWT is a measure of the weight of cargo, fuel, and stores that can be carried, and is generally used for cargo ships and tankers. GRT is a measure of the volume of the enclosed spaces, and is generally used for fishing and research ships.

³ For a more detailed discussion of the mission, composition, and capabilities of the Soviet Navy and its future prospects, see the current editions of NIE 11-8 and NIE 11-14.

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fleets, defend the maritime approaches to the USSR, and supplement the emerging strategic strike capability of the newly-formed Soviet Strategic Rocket Troops.

4. In the early 1960's, two developments provided new impetus for Soviet naval programs. The Cuban crisis highlighted Soviet naval inferiority, and the US Polaris fleet began to pose an increasing threat to the USSR. Soviet naval forces began to emphasize out-of-area operations of surface units. A high priority was assigned to open ocean ASW, and the strategic offensive role of the Soviet submarine ballistic missile force, which for a time was in doubt, was reaffirmed.

5. Prior to 1962, Soviet ballistic missile submarines were equipped with a small number of tubes and were capable only of firing from the surface. From 1962 to 1964, emphasis was on the conversion of some of these earlier submarines for submerged firing and on the production of cruise-missile equipped classes. By 1964, the keel of the first new 16-tube Y-class ballistic missile submarine was laid, and the program has proceeded under an obviously high priority. Beginning in 1967, a number of new classes of other types of submarines have appeared.

6. Surface ship construction since about 1962 reflects an emphasis on multi-purpose warships designed for long-range operations, including improvements in ASW systems and air defenses, including SAMs. The Moskva class guided missile helicopter ship, called an ASW cruiser by the Soviets, is one example of this new direction. The Soviets are not building aircraft carriers, but newly constructed or converted major surface ships have been equipped with SAMs. There has been a small but continuing program for the construction and acquisition of landing ships, especially since the revitalization of the naval infantry in 1964. Naval auxiliary construction has emphasized submarine support ships, with no equivalent effort on surface support ships. For surface support the Soviets continue to rely on the merchant fleet.

7. In 1960 the Soviet Navy lost all its shore-based fighters. Since then the range of naval air reconnaissance and strike capability has been greatly increased by the assignment of heavy and medium bombers, many of the latter equipped with air-to-surface missiles (ASMs). Soviet Naval Aviation also includes shore-based fixed-wing ASW aircraft, and ship-borne or shore-based ASW helicopters.

8. As Soviet naval capabilities have grown, out-of-area operations have expanded greatly both in scope and in number of ships deployed; between 1965 and 1968, the number of "ship days" out-of-area increased from about 5,500 to 17,500. The area of most notable increase has been the Mediterranean, where the Soviet naval presence has been continuous and increasing since the introduction of major surface combatants in 1964. The Soviet Mediterranean Squadron now normally comprises some 30-40 units. Along with the increase in the number and duration of deployments of individual units, the Soviets have improved the combat capability of the force by assigning newer and more effective ships on an almost regular basis—including nuclear-powered torpedo attack and cruise-missile submarines, missile-equipped ASW ships, and landing ships with some

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naval infantry aboard. The Soviets employ naval auxiliaries and merchant ships to support the Mediterranean Squadron, and access to shore facilities in Egypt, and to a lesser extent Syria, has facilitated extended cruises in the area. In addition, the stationing of Soviet reconnaissance-configured Badgers and ASW-equipped Mail aircraft at Egyptian bases has considerably enhanced the capability of the Squadron. In the Atlantic and Pacific, submarines have accounted for most of the out-of-area activity; since 1962 submarine patrols have increased annually in number, range, and duration. By contrast, deployment of surface ships in the Atlantic and Pacific has been sporadic and limited, although last year's operations in the Norwegian Sea suggest more regular, sustained operations by surface ships in the future. In addition, recent deployments to the Indian Ocean may signal the beginning of increased activities in that area.

9. Although the Soviet Navy has attained impressive size, the present force has certain limitations. Only about half of the Soviet submarines have long-range capabilities. The submarine force has a formidable anti-shipping capability, but ballistic missile submarines comparable to Polaris and submarines with improved ASW capabilities have only recently begun to enter service. Of about 210 major surface combatants, about 40 have modern missile armament (SAMs and/or SSMs) or modern ASW weapons. The small number of modern, long-range ships will continue to limit Soviet capabilities for some time to come. Without access to overseas shore support facilities, any major increase in long-range operations would require additional afloat support. This would mean oilers and cargo ships from the merchant fleet, and perhaps naval ships designed to provide specialized technical support, particularly maintenance and repair.

10. Geographic and climatic factors operate to limit Soviet access to the open oceans and prevent rapid reinforcement and resupply between the four widely dispersed fleet areas (Northern, Baltic, Black, and Pacific). The major submarine bases are concentrated in the Northern and Pacific Fleet areas. Because of transit distances, several submarines are required to maintain one continuously on station off the US. Deployment of balanced forces of the type being maintained in the Mediterranean requires support from all three western fleets. Even given the use of Mediterranean ports, this requires considerable logistic support from the USSR.

B. Merchant Marine

11. The Soviet merchant fleet has tripled in size since 1959; about 80 percent of the current fleet was built in the last 10 years. In mid-1968, this fleet ranked seventh in world tonnage and consisted of about 1,200 cargo ships and tankers totaling about 10 million DWT.⁴ The Soviet fleet amounts to 4 percent of total world tonnage and about 7 percent of total units. Of the tonnage added since

⁴ Passenger ships, sea-river cargo ships and ships of the Caspian merchant fleet are not included in these figures.

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1959, about one-third came from Soviet yards, 40 percent from other Communist countries, and the remainder from non-Communist countries.

COUNTRY OF REGISTRY *	MILLION DWT AS OF 30 JUNE 1968	PERCENTAGE OF WORLD TOTAL
Liberia	42	16
Norway	30	12
UK	28	11
Japan	27	10
USA	26 ^b	10
Greece	11	4
USSR	10	4
Other	87	33

* This tabulation does not reflect the ownership of merchant ships registered under foreign flags, a phenomenon that explains the size of Liberia's merchant fleet. US companies have more than 16 million DWT registered under Liberian and other flags of convenience; the USSR has none. Greek shipowners also make extensive use of foreign flags of convenience.

^b Seventeen million tons active, the remainder in the aging reserve fleet.

12. Recent shipbuilding for the Soviet merchant fleet has stressed construction of cargo ships in the 3,000 to 16,000 DWT category with speeds of less than 20 knots. The most notable type within this group is the large-hatch ship (i.e., with at least one hatch over 50 feet in length), of which the USSR now has about 135. These ships also feature 60-ton capacity booms and cranes and can transport large pieces of cargo below deck. Production of large-hatch ships now is being phased out. All the tankers built since 1959 have been less than 50,000 DWT, although the Soviets say that supertankers of 80,000 to 100,000 DWT are in the design stage.

13. In spite of its relative newness and a 50 percent increase in average DWT per ship since 1959, the fleet includes a high proportion of ships that are small by current world standards. The dry cargo fleet, which accounts for 60 percent of the tonnage, consists largely of general-purpose freighters averaging 6,500 DWT, compared with a world average of 7,900 DWT. Tankers, which account for the remaining tonnage, average 17,000 DWT compared with a world average of 29,000 DWT. There are no tankers over 50,000 DWT, bulk dry cargo ships over 23,000 DWT, or container ships. Ships in these categories are becoming increasingly common in other modern fleets, and their omission from the Soviet fleet limits its ability to compete. The lack of such ships stems from the need to tailor the fleet to the requirements of Soviet seaborne trade, in turn governed by the commodity composition of the trade and by the depths and other characteristics of the Soviet and foreign ports visited.

14. More than 90 percent of the ton-mileage of the Soviet merchant fleet is in international trade. The fleet carries slightly more than one-half of Soviet foreign trade cargoes, all cargoes in Soviet domestic seaborne trade, and a growing amount of cargo for foreign shippers. Currently, Soviet merchant ships visit

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some 800 ports in 100 countries. In 1967, 58 percent of the Soviet foreign trade cargoes carried by Soviet ships moved between the USSR and industrial countries of the West, 26 percent moved between the USSR and other Communist countries, and 16 percent between the Soviet Union and the less-developed countries.

15. Because of the large amount of Soviet trade with Cuba and the long distance between the two countries, the USSR devotes more of its merchant ship tonnage to the Cuban trade than to trade with any other country. Although Soviet seaborne commerce with North Vietnam is less than one million tons a year, a considerable amount of shipping is devoted to this trade, too. The ship tonnage required to move goods between Black Sea ports and Haiphong increased by about 50 percent after closure of the Suez Canal forced all vessels on this route to detour around the Cape of Good Hope. Virtually all Soviet petroleum deliveries to North Vietnam now originate from Soviet Far East ports instead of from the Black Sea.

16. The Soviet merchant marine supports the military establishment both directly and indirectly. Merchant ships have been used for sealift and as naval auxiliaries. They have carried troops and military equipment in amphibious exercises and have been used to provide logistic support for Soviet naval forces in all fleet areas, especially the Mediterranean. The merchant fleet plays an important role in delivering Soviet military aid cargoes, particularly to Cuba, India, and the Middle East.

C. Fishing Fleet

17. The USSR has sharply expanded its fishing activities on the high seas since World War II. By 1958, the Soviet fishing fleet had become one of the world's largest—about one million GRT. By early 1969 it had grown to 4.6 million GRT, and it now includes some 3,800 ships. Since the late 1950's, most of the effort to expand the fishing fleet has been devoted to construction of fish factory trawlers. Other types of ships which have been built for the fleet are whale factory ships, whale catchers, crab canning ships, medium trawlers, and transport and processing ships. About half the Soviet fishing fleet was built in foreign yards. Nearly all major Western shipbuilding countries, as well as Poland and East Germany, have built fishing ships for the USSR.

18. The rapid growth of the Soviet fishing fleet has probably been due in large part to the need for animal protein foods. The Soviets apparently concluded that increased fish production would be less expensive and quicker to achieve than increased meat production. Fishing, sealing, and whaling now provide about 15 percent of the total animal protein consumed in the USSR and also provide vitamins, medicines, furs, fish meal and fertilizer. The USSR has been exporting fish products since 1959, and in 1967 exported \$61 million more than it imported. The catch in 1968 was 6.7 million tons, more than double that of 1958. The Soviets probably now rank third in fish catch (behind Japan and Peru).

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19. The Soviet fishing fleet regularly operates in international waters of the Atlantic, Pacific, and Indian Oceans as well as the Caribbean Sea and African waters. In recent years, the activities of Soviet ships beyond their traditional fishing waters of the North Atlantic and North Pacific have been facilitated by agreements that the USSR has reached with 14 underdeveloped countries to develop their fishing industries. While providing for Soviet aid in establishing indigenous fishing fleets, ports, and canneries, these agreements also have provided facilities ashore for expanded Soviet fishing activity in nearby waters.

D. Oceanographic Research and Other Special Activities

20. The Soviet oceanographic fleet consists of an estimated 130 vessels, of which 39 are over 1,000 GRT. Since 1966, 12 large research ships have been built, and at least 7 more will be completed this year. Half the ships in the oceanographic fleet are subordinate to the navy and the remainder to the Academy of Sciences, the Hydrometeorological Services, and other civilian organizations. In addition, the Soviets regularly require other ships, including those of the fishing fleet, to collect and report oceanographic data in the course of their normal activities.

21. This fleet provides the Soviet Union with a large capacity in data collection for basic research and for application in undersea warfare. However, data collecting and processing instruments and equipment are, in general, less sophisticated than those of the US. Sealab type research and deep-submergence vehicle research are active but considerably behind related Western work. There also has been some evidence of Soviet interest in exploring the mineral resources of the sea.

22. During the past several years, the major research effort has been devoted to activity related to undersea warfare. Much of the work has been in ocean areas contiguous to the USSR, but as additional research vessels became available more extended surveys have been made. Areas of the South Atlantic were examined in 1967 in conjunction with submarine support operations near the Cape Verde Islands, and again in 1968. Surveys were begun in the Drake Passage off South America in 1963, followed in 1966 by the transit of two nuclear submarines, and two naval research ships spent five months in the area in 1968. In the Pacific, extensive surveys have been undertaken since 1964, some at locations that could serve as launch points for ballistic missile submarines. In the Mediterranean, the Sicilian Straits and recently the Straits of Gibraltar—key submarine transit points—have been heavily surveyed.

23. With the expansion of the Soviet missile and space programs, a requirement arose for the provision of tracking and support facilities beyond the boundaries of the Soviet Union. To meet these needs, the Soviets converted merchant ships to collect data and deployed them in the Pacific and Atlantic Oceans. Other ships were specially outfitted to recover spacecraft from the water. Only one such recovery has been made—Zond 5.

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24. The Soviet Navy has some 40 ships specially equipped for intelligence collection, which operate in this capacity on every deployment. In fact, all Soviet naval ships are potential intelligence collectors, and some operate as such from time to time. In addition, merchant ships and fishing vessels undoubtedly collect and report intelligence on targets of opportunity.

25. Soviet intelligence collection ships have been active throughout the world, particularly in areas of naval interest. They focus on US and UK submarine training areas and bases, US and NATO training exercises, US carrier operations, troubled areas of the world, and targets of opportunity. There are six stations normally maintained throughout the year—one each off Holy Loch, Rota, the US east coast, and Guam, and one each in the Gulf of Tonkin and in the Mediterranean. Periodically, units operate off the US west coast, Hawaii, and in the Yellow Sea.

E. Management and Control

26. Each major program—naval, merchant marine, fishing—is under the jurisdiction of a separate Ministry; we do not know how coordination of the various programs is achieved below the Council of Ministers. The Soviet Navy, subordinate to the Ministry of Defense, receives the highest priority among maritime programs. The Ministry of Shipbuilding is responsible for the design and construction of ships of all types—for the Soviet Navy as well as for the maritime and fishing fleets.

27. The merchant fleet is controlled by the Ministry of the Maritime Fleet and is administered through a system of directorates and state steamship companies. Each of the 15 state steamship companies owns and manages the assets of the maritime establishment within an assigned geographical area, in accordance with an annual cargo movement plan provided by the Ministry. Each has responsibility not only for the routine operation of its fleet of ships but also for the ship repair yards, port facilities, and maritime training schools located in its area. Control of the fishing fleets is similar to that for the merchant marine. Overall responsibility rests with the Ministry of the Fishing Industry, which delegates its responsibilities for fleet control and shore activities to the chief directorates of each region.

28. Oceanographic research is conducted by the Navy Hydrographic Service, the Soviet Academy of Sciences, the Main Administration of the Hydrometeorological Service (an organization somewhat comparable to our Environmental Science Services Administration) and the fisheries research institutes. Coordination of the program is carried out by the Scientific Council for the Utilization of the Resources of the Sea, which is subordinate to the State Committee for Science and Technology, and by a subcommittee of the Academy of Sciences. The individual agencies maintain close administrative control over their own activities and develop their own budgets.

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F. Maritime Infrastructure

29. The maritime infrastructure has expanded with the growth of the fleets. This expansion includes shipyards, port facilities, naval bases, test facilities, afloat support ships, training facilities, and communication facilities.

30. Soviet shipbuilding programs have been reinforced by a notable expansion of facilities and the introduction of modern shipbuilding technology. During the period 1960-1968, the USSR invested the equivalent of more than \$360 million in four shipyards for the production and servicing of nuclear submarines. Most of the new submarine facilities have been completed and are in use. Investment in facilities for naval surface and merchant ships now is growing to match the earlier Soviet effort for nuclear submarines. In the same period, the equivalent of more than \$320 million has been invested in some 35 shipyards; most of this investment occurred after 1964. Nearly all the new production facilities for surface ships will be completed during the early 1970's.

31. Most Soviet ports are well equipped to handle general and bulk cargo but have not proceeded very far with facilities to handle container traffic. However, inadequate storage space, clearance facilities, and wharfage sometimes result in long turn-around times detrimental to economical ship operations. Improvements would require massive capital investment and major reform of bureaucratic deficiencies. Current capital investment is expected to alleviate but not cure the turn-around problem.

32. Programs for research and for training personnel give some clues as to the size and quality of Soviet maritime activity. The Ministries of Defense, Shipbuilding, Maritime Fleet, and Fishing Industry all have their own research and training facilities—some very large. For example, the ship design research institute in Leningrad is said to employ 7,000 persons; this would make it by far the largest such institution in the world. It presently has the world's largest ship model basin and is constructing advanced facilities for ship research. This institute conducts research on all types of warships and also on merchant and fishing ships.

G. Assistance to Other Countries

33. The Soviets have provided a variety of maritime assistance to other Communist nations; they have transferred naval units, furnished technical assistance and advisors, participated in port and naval base construction, and provided training both in the USSR and in the various countries. The most conspicuous assistance has been the transfer of naval units by gifts, loans, and cut-rate sales; some 37 major combatant ships, 65 missile patrol craft, and 453 minor combatant, auxiliary, and service craft have been delivered. (See Table III.)

34. The Soviet Union also furnishes maritime assistance to some 20 non-Communist countries in the less developed world. (See Tables IV and V.) This aid consists of ships, equipment, training, technical assistance, help in the development of fishing industries, and aid in the construction and development of ports

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and harbors. Such assistance has been only a small part of the total Soviet foreign aid program. Recipient countries often have agreed to permit Soviet use of shore facilities in their ports—a notable advantage to Soviet vessels operating far from facilities in the Soviet Union itself.

H. Attitudes Toward Law of the Sea

35. Coincident with their maritime growth since the mid-1950's, the Soviets have displayed increasing awareness of the advantages of an international legal regime for the sea. They actively participated in the Geneva Conference on Law of the Sea in 1958, acceding with some reservations to three of the four resulting conventions—those concerning the territorial sea and contiguous zone, the high seas, and the continental shelf. They favor most of the provisions of the fourth which deals with the conservation of fishery resources. On the major issue of the width of the territorial sea, the USSR favored the 12-mile limit and led a group of states at Geneva in preventing acceptance of the 3-mile limit. Although acceding to the Geneva Convention which established the right of innocent passage through territorial waters, the USSR did so with reservations that in effect virtually deny the right to warships. During the past year, however, the Soviets have accepted a draft article as the basis for a new Law of the Sea Conference, which establishes a right of free navigation through and over all international straits for all ships and aircraft in transit through such straits. The Soviets have advanced proposals for international controls over the deep seabed.

II. OBJECTIVES OF SOVIET MARITIME PROGRAMS

General Objectives

36. It is apparent from the above review of the various Soviet maritime programs that the USSR has emerged as one of the major maritime nations. In arriving at this status, its motivations have been as varied as its programs. Aiming as they were at great power status and especially at demonstrating to the world that the USSR and the Communist system were able to compete successfully with the US in acquiring military power, political influence, and economic strength, the Soviets apparently have believed it imperative to move ahead with a variety of maritime programs.

37. But from the beginning the Soviet leaders accorded the highest priority to the naval forces. While the emphasis in the naval program has shifted according to their perception of the threat and their view of the feasibility of projecting their power more distantly from the homeland, the Soviet leaders have devoted to the navy the lion's share of the physical and financial resources available for maritime development. The maritime program—including the naval sector—has not, however, been a crash program. Except for the years 1957 and 1958, when there was a drop as a consequence of policy decisions, the expenditure of resources on ship procurement has been fairly steady. (See Table VI.) It was not until 1968, when the impact of the Y-class submarine construction program

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began to be felt, that expenditures on naval vessels may have exceeded the peaks attained in 1955 and 1956.

38. It is also quite clear that the Soviet leaders have progressively extended the mission of their naval forces, adapting them to the developing capabilities of their potential enemies (principally the US) and to the evolution of the world political situation. From an original mission of defending the Soviet shores and supporting military operations on the Soviet periphery, they moved to develop forces to counter the carrier task forces, then to create a seaborne strategic missile attack force, and then to acquire modern anti-submarine forces. Most recently, as they progressed toward winning worldwide political acceptance, they have begun to develop and to utilize a capability for cruising and showing the flag in such areas as the Mediterranean Sea and the Indian and South Atlantic Oceans.

39. The Soviets had persuasive economic reasons for expanding their merchant marine. As their overseas trade increased, over half their seaborne cargoes came to be carried in foreign bottoms, throwing a substantial burden on the Soviet balance of payments. Moreover, an expanded merchant fleet to carry Soviet exports promised to increase the USSR's hard currency earnings. There were political and strategic inducements as well. Soviet leaders almost certainly felt that no nation claiming great power status could do without a merchant fleet to carry its own goods, maintain contacts with friendly powers, and service its own forces and allies beyond its own periphery. There was also the belief that, in a strategic sense, the USSR could not allow its expanding seaborne trade to be at the mercy of foreign powers or shipping lines, which for political or economic reasons might withhold their services from Soviet shippers.

40. The USSR's motivation for the expansion of the fishing fleet was primarily economic, and the size of the fleet is probably close to the planned objective. The Soviet government appears to recognize that some fishing grounds have been overused, that some species need to be protected, and that some limitation and regulation of high-seas fishing need to be established by international agreement. Since stated goals are larger than their present catch, the Soviets may be expected to increase the fishing fleet's efficiency to investigate new areas for exploitation.

41. Soviet objectives in oceanographic research are scientific, economic, and military. Publicly admitted Soviet objectives in the study of the oceans include a prognosis of currents for more efficient ship operations, improvement in forecasting weather, the disclosure of food, chemical, mineral, and other resources, and the development of means for resource development.

Short-Term Prospects

42. Over the next three to five years it appears unlikely that Soviet maritime policy will change very much from the main directions outlined above. The current submarine program has probably not yet peaked. Aside from this, we do not anticipate a major jump in the production of any particular kind of ship,

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though their expanded shipyard capacity gives the Soviets the capability to increase production if they so choose. In any case, Soviet economic planners and policy makers are faced with a serious problem in allocating resources; they are, after all, trying to sustain a growing competition with the US on an economic base half that of the US. In these circumstances, we believe that in the maritime field the Soviets will strive to meet planned goals rather than to adopt new and significantly higher ones.

43. In the field of merchant shipping, the Soviets have announced a goal of 13 million DWT by the end of 1970. If this goal includes vessels of the Caspian Fleet it will probably be met. If not, the goal can only be met with a substantial pick-up in the rate of acquisitions. In any case, the share of Soviet seaborne trade carried in Soviet bottoms, most recently reported as 52 percent, could rise to about 60 percent by the end of next year. During the next five years at least, the merchant fleet will continue to be an effective instrument of Soviet trade and aid programs.

44. In the naval field, the emphasis during the next five years or so also seems likely to follow the lines now indicated: the production of the Y-class ballistic missile submarine and the development of an improved ASW capability, utilizing new types of aircraft, surface ships, and submarines. Considering the probable Y-class construction capacity, the USSR could, and probably will, develop a ballistic missile submarine force during the next five years roughly comparable to the current US Polaris force. An effective anti-submarine force, especially against nuclear submarines, poses most formidable technical and operational problems for the Soviets.

45. There seems little doubt that out-of-area operations will increase over at least the next five years. When the Y-class becomes operational in greater numbers, out-of-area deployments of ballistic missile submarines will almost certainly become more extensive and regular. To extend the area of submarine patrol activity and to increase the number maintained on station, the Soviets could use afloat logistic support; they experimented with this concept in 1967 in the mid-Atlantic. They will probably attempt surveillance of Polaris operating areas and increase that of US naval forces cruising in waters near the USSR, including the Mediterranean. They will conduct show-the-flag cruises with increasing frequency. However, any major increase in the capability of Soviet surface forces to conduct sustained long-range operations would require access to foreign shore support facilities, augmentation of naval auxiliary forces, or an increase in support from the merchant fleet.

46. Out-of-area operations for primarily political reasons almost certainly will continue and perhaps extend beyond those already apparent; for example, to the Indian Ocean and the Persian Gulf. How much larger and more active the Mediterranean Squadron becomes will depend a good deal on the course of events in the Middle East; barring an unlikely deterioration of the Soviet position in that area we would expect the capability of the force gradually to increase. It is not necessary to assume that the Soviets expect to drive the US Navy out of

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the Mediterranean, and there are obvious dangers for them in risking too much on the potentially precarious line of communication through the Turkish Straits. The primary Soviet purpose is to achieve the political and psychological advantages of a naval presence and to deny exclusive domination to the US and its allies. And, if war came, the Soviets could at least pose a challenge to US naval power.

47. Projected improvements in Soviet sealift capabilities over the next several years will also give the Soviets a greater capability for military intervention in situations where there is little risk of conflict with a major power. Amphibious assault lift will continue to increase. The merchant fleet could augment this lift by transporting substantial quantities of military equipment and supplies, but in most cases this would require the use of ports. Considerable time might be required to gather suitable merchant shipping for a major effort, since about 45 percent of active Soviet merchant ships are normally outside Communist waters. In general, we believe the Soviet leaders would be very cautious about committing themselves to military operations very far from Soviet territory, especially in view of their lack of carriers and advanced bases, but it is possible that in some conceivable situations—as for example in some area where US interests were negligible—they might feel that they could use their limited capability to support a political leader or nation with whom they had close ties.

48. We do not foresee any radical changes in Soviet naval assistance programs. The recipients for the most part have been in developing areas where the Soviets have sought to displace Western influence and to create a climate conducive to the growth of Communist influence. Except in the UAR and Indonesia, the emphasis has been on providing coastal defense rather than large combatant units. We expect that the emphasis on coastal defense will continue, but with a gradual trend toward providing more modern ships and weapons together with the necessary training and technical assistance. Despite the negative results in Indonesia, Moscow still appears willing to give naval assistance where suitable opportunities appear. One such opportunity may now exist in India, which apparently is seeking to strengthen its naval forces and has already purchased some ships from the USSR. Pakistan, too, appears likely to seek Soviet naval assistance. While the geographic scope of this assistance is likely to grow, we do not envisage any appreciable increase in these programs—barring, of course, a crisis similar to the Arab-Israeli war of 1967.

III. LONGER RANGE POSSIBILITIES

49. The Soviet leaders have probably not made detailed program decisions beyond the next four or five years. Lead-times in most cases do not require them to do so; uncertainty over technological progress—both in the USSR and the US—inhibits decisions on costly programs; and the current economic difficulties and possible political infighting in Moscow do not seem conducive to major departures from present patterns. Nevertheless, there are a number of questions

which may arise as the Soviet planners consider the impact of changing requirements on their maritime establishment.

Capacity to Produce

50. Since 1960, an annual average of about 250,000 GRT of dry cargo ships and tankers has been built in Soviet yards, as well as 142,000 tons FLD⁵ of naval ships. If the Soviets should decide to do so, and it would be a major policy change, ship construction could be substantially increased by making the requisite inputs of materials and skilled labor and the necessary adjustments in management. However, we see no indications that these measures are being undertaken. Nor do we find evidence of increased naval construction at the expense of merchant construction, or vice versa. We are unlikely to acquire early notice of a Soviet decision to make such trade-offs, but we see no reason for them to occur on a large scale.

51. A major increase in Soviet shipbuilding capacity could also be achieved by the construction of new yards. However, we see no evidence that a program of any magnitude is in the offing. In any case, because of the time required to construct shipyards, such a program would have to begin in the very near future to have a significant impact on production capabilities in the next 10 years or so.

52. We believe that over the next decade the rate of domestic ship production will increase moderately. The increases will probably result from expansion and modernization of existing yards.

Prospects for the Merchant Marine

53. In recent years, Soviet seaborne foreign trade has been increasing at an average rate of some 9 percent annually. This rate is unlikely to be sustained, but the trade will probably continue to grow at a rate only slightly less than the growth of the Soviet merchant fleet. In this case, much of the planned growth in merchant shipping must be devoted to carrying Soviet cargoes, and relatively little additional capacity will be available to compete for Western trade. To make serious inroads into the non-Soviet shipping trade, the Soviets would have to acquire substantially more shipping than the 22-23 million DWT goal announced for 1980.

54. We expect that the rate of additions to the Soviet merchant fleet will not increase significantly. As noted above, we believe that domestic production will not show a notable increase. Purchases from Western countries are constrained by hard currency requirements. And 80 percent of the output of East European yards is already going to the Soviets. All things considered, most future foreign acquisition will probably be from Eastern Europe, Yugoslavia, and Finland, where hard currency is not involved in payments.

55. We believe that for the next decade the Soviet merchant fleet will remain a carrier of Soviet cargoes and will not attempt to gain a major slice of world

⁵ Full load displacement.

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seaborne trade, even though it will probably acquire some container ships and supertankers. Even if the Soviet merchant marine attains the goal of 22-23 million DWT by 1980, this will still be less than 10 percent of today's total world tonnage, a percentage already achieved by five other nations. However, their fleet will continue to compete on some routes.

Future Role of the Navy

56. The USSR is a continental power with interior lines of communication, and is largely self-sufficient. However, its goals and a growing realization of the implications of sea power have led it over the past few years to strengthen and modernize its naval forces and to extend the naval missions. We believe that Soviet capabilities for the performance of naval missions will continue to grow but that there will be no appreciable change in the extent and character of these missions.

57. Beyond this, however, the Soviets probably foresee politico-military situations wherein the navy can assist state interests without inviting large-scale conflict. In such situations, a small Soviet naval presence could exert an influence far beyond that warranted by its intrinsic military capabilities. We thus expect an increasing Soviet presence in various ports and harbors of the Third World. Soviet policy will also derive considerable support from the capacity to establish a military presence in some areas, sometimes in circumstances which could have a deterrent effect on the will of others, including the US, to attempt intervention.

58. A Soviet decision to develop significant naval capabilities for sustained, long-range operations against substantial opposition would represent a major change in the role of the Soviet Navy and would cause great changes in its composition. It would involve the addition of substantial forces to provide logistic and combat support, particularly air cover; it would confront Moscow with a wholly new spectrum of military and technical problems; it would be very expensive. Moreover, in some cases the Soviets might calculate that the use of such forces to achieve political objectives could entail liabilities that might outweigh the advantages. Finally, they would probably reckon that the deployment of such forces would represent a direct challenge to the US and would greatly increase the risk of a direct confrontation, something that they have heretofore sought to avoid. For these reasons, we think it unlikely that the Soviets will develop any significant capability for distant military action against substantial opposition during the 1970's.

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TABLE I
SOVIET NAVAL CONSTRUCTION *
1958-1968

<u>YEAR</u>	<u>SUBMARINE ^b</u>	<u>TOTAL ^b</u>
1958	15,000	74,500
1959	48,500	146,000
1960	58,000	146,500
1961	73,500	149,500
1962	49,500	131,500
1963	44,000	123,000
1964	52,000	119,000
1965	44,000	115,000
1966	38,000	144,000
1967	40,000	178,000
1968	62,500	174,500
<u>TOTAL</u>	<u>525,000</u>	<u>1,501,500</u>

* All figures are rounded off to the nearest 500 tons.

^b Tonnage figures represent full load displacement (FLD) with ships fully equipped, manned and fueled (submarines in a surfaced condition).

TABLE II
YEARLY DELIVERIES OF NEW DRY CARGO SHIPS
AND TANKERS TO THE SOVIET MERCHANT FLEET *

<u>YEAR</u>	<u>MILLION DWT</u>	<u>YEAR</u>	<u>MILLION DWT</u>
1959	0.4	1964	1.2
1960	0.6	1965	1.1
1961	0.5	1966	1.0
1962	0.8	1967	0.8
1963	0.8	1968	0.8

* Including only vessels of 1,000 or more GRT delivered to the Ministry of the Maritime Fleet; excluding ships of the Caspian Steamship Company and river vessels of the Danube Steamship Company.

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TABLE III
SOVIET NAVAL SHIP DELIVERIES TO COMMUNIST COUNTRIES
1953-1968

	ALBANIA	BULGARIA	COMMUNIST CHINA	CUBA	EAST GERMANY	NORTH KOREA	NORTH VIETNAM	POLAND	RUMANIA	YUGO- SLAVIA	TOTAL
Submarines....	4	5	8	..	..	4	..	4	..	..	25
Destroyers....	..	..	4	..	..	..	..	2	..	..	6
Escorts.....	..	2	..	..	4	..	..	..	..	..	6
Missile Patrol Boats.....	..	..	..	18	12	11	..	12	5	7	65
Motor Torpedo Boats.....	6	8	76	24	27	20	12	19	13	..	205
Coastal Es- corts.....	6	8	6	18	12	6	4	4	4	..	68
Patrol.....	11	..	..	..	1	20	2	..	..	5	39
Mine Warfare.	8	7	2	..	..	27	..	..	20	..	64
Auxiliary.....	4	..	1	..	1	6
Amphibious...	3	5	8
Service.....	14	23	..	16	53
TOTAL.....	53	53	97	79	57	88	23	41	42	12	545

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TABLE IV
SOVIET NAVAL SHIP DELIVERIES TO NON-COMMUNIST COUNTRIES
1956-1968

	FIN-		INDO-				TANZA-				TOTAL			
	ALGERIA	CYPRUS	LAND	GHANA	GUINEA	INDIA	INDONESIA	IRAQ	NIGERIA	SOMALIA		SYRIA	UAR	YEMEN
Cruisers.....	..	..	..	..	..	..	1	..	..	..	..	..	..	1
Submarines.....	..	..	..	..	..	1	10	..	..	..	..	18 ^a	..	29
Destroyers.....	..	..	..	..	..	..	4	..	..	..	..	6 ^a	..	10
Escorts.....	..	..	2	..	..	2	8	..	..	..	..	..	..	12
Missile Patrol Boats.....	9	..	..	..	..	..	12	..	..	6	..	20	..	47
Motor Torpedo Boats.....	12	6	..	..	..	..	14	12	..	..	..	30	..	89-92
Amphibious.....	..	..	..	..	..	2	6	5	..	15-18	..	11	2	28
Mine Warfare.....	2	..	..	..	..	..	6	..	..	2	..	8	..	18
Patrol.....	..	..	..	4	8	..	18	..	3	6	..	6	..	45
Coastal Escort.....	6	..	..	..	..	..	8	3	..	..	..	12	..	29
Auxiliary.....	1	..	..	..	..	..	21	..	..	..	..	5	..	27
Service.....	2	..	..	..	..	5	5	7	..	2	2	5	2	30
Miscellaneous ^b	13	..	..	..	..	..	..	..	..	11	..	24	..	48
TOTAL.....	45	6	2	4	8	10	113	27	3	8	36-39	145	4	413-416

^a Includes two destroyers and five submarines exchanged for more modern units.

^b Includes border patrol and police units not included in order of battle.

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TABLE V
SOVIET SUPPLY OF FISHING VESSELS TO LESS
DEVELOPED COUNTRIES ON
LONG-TERM CREDIT, 1960-JANUARY 1969

<u>COUNTRY</u>	<u>NUMBER PROVIDED FOR UNDER AGREEMENT</u>	<u>VALUE OF CREDIT</u>	<u>NUMBER KNOWN DELIVERED</u>
Algeria	NA ^a	...	...
Ghana	18	\$3.6	18
Guinea	10	\$3.5 ^b	4
Senegal	10	\$3.6	...
Indonesia	NA ^a	...	1
Ceylon	1	...	1
Pakistan	8	\$1.6	...
UAR	10	\$3.5 ^b	...
Yemen	7	\$2.0 ^b	...
TOTALS	64	\$17.8	24

^a NA—number not available.

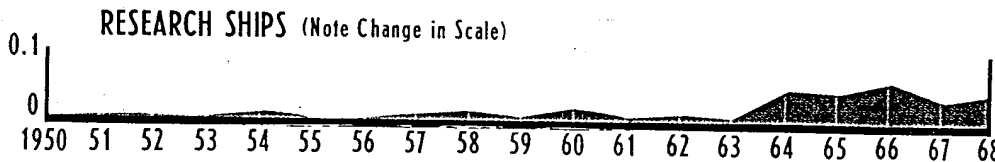
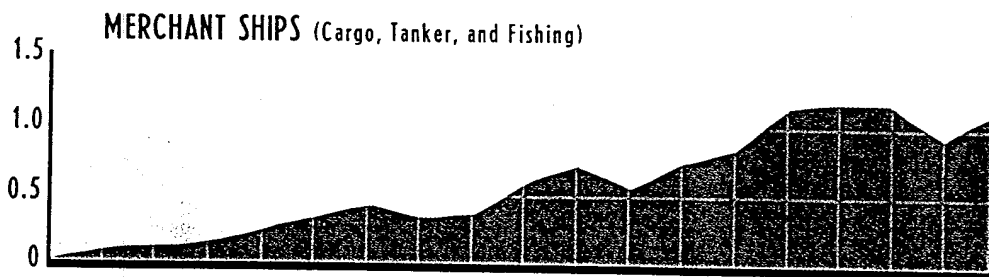
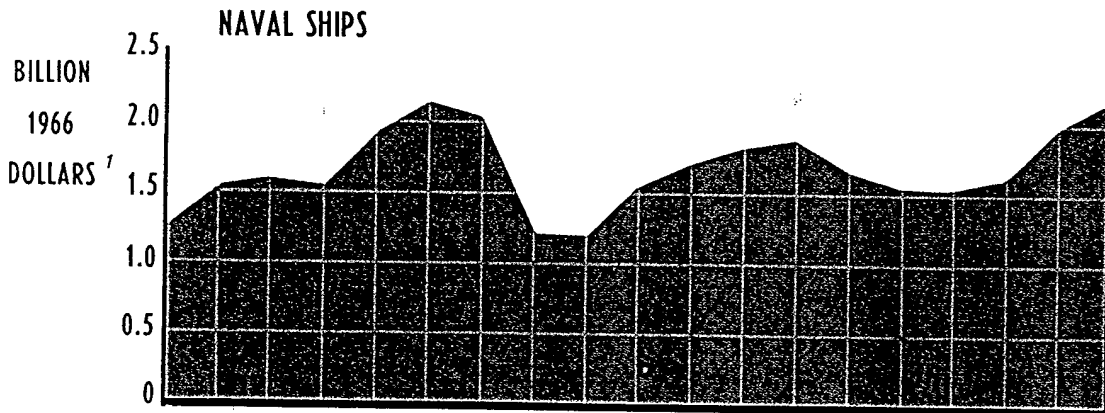
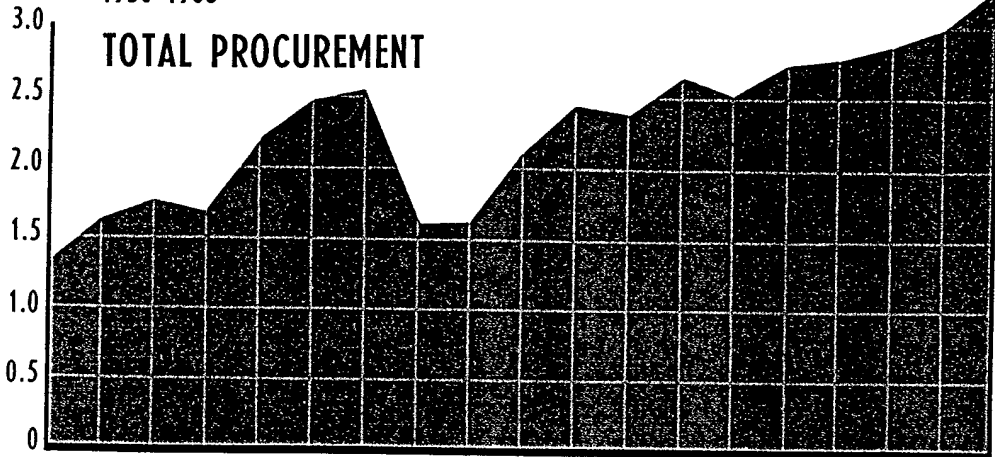
^b Estimated.

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Table VI

USSR: EXPENDITURES FOR PROCUREMENT OF SHIPS

1950-1968



95239 6-69 CIA

1/ Dollar values reflect estimated ship procurement expenditures as if purchased in the US. They thus do not necessarily represent actual or real costs to the USSR.

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