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GEOGRAPHIC INTELLIGENCE REPORT

**AN APPRAISAL OF SOVIET PLANS TO REMAIN
IN THE ANTARCTIC AFTER THE IGY AND
OF THE REPORTED ESTABLISHMENT
OF A SUBMARINE BASE**



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AN APPRAISAL OF SOVIET PLANS TO
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REPORTED ESTABLISHMENT OF A SUBMARINE BASE

THE PROBLEM

To appraise Soviet intentions of continuing continental activities in the Antarctic after the termination of the IGY in 1959 and to examine the validity of reports concerning the establishment of a Soviet submarine base in Antarctica.

CONCLUSIONS

I. There are indications that Soviet Antarctic activities, both economic and scientific, are likely to be exploited for political purposes in support of the Soviet demand for the right to participate in any settlement of Antarctic sovereignty questions. Definite evidence indicates that the Soviets intend to remain in Antarctica after the IGY. They are also considering the strengthening of future scientific research and development activities, the establishment of settlements, and the possibility of constructing ports and airdromes at some future date.

II. Although available evidence does not support the report that a Soviet submarine base has been set up in Antarctica, this estimate is based on a recognized deficiency in our on-site surveillance of activities at both Soviet coastal bases. Nevertheless, it is believed that the establishment of a submarine base is highly unlikely at this time, even though some Soviet submarine operations could take place

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in Antarctic waters, ostensibly for scientific purposes. Of much greater long-term importance is the prospect that the Soviets will substantially improve their Antarctic naval capabilities as a result of the comprehensive and extensive oceanographic and hydrographic surveys to be undertaken in Antarctic waters during the IGY.

DISCUSSION

I. Foreword

A brief summary is given of the origin and evolution of Soviet official interest in Antarctica through three phases that have gradually been developing since 1939 -- the initial diplomatic approach, the launching of a whaling fleet during each year of the past decade, and the activities of the Soviet Complex Antarctic Expedition. Following an examination of evidence bearing on the subject, a fourth phase -- post-IGY Soviet plans -- is anticipated and discussed.

 the establishment of a submarine base in the Antarctic is discussed with the Expedition programs since, were such a base established, it would be closely related to whatever facilities are maintained in the Antarctic.

II. Soviet Interest in the Antarctic Prior to the IGY

Little Soviet interest was manifested in the Antarctic prior to 1939, and none of it reflected official sponsorship. The first official action was taken in January 1939 in the form of a Soviet note to Norway disputing the latter's claim to Peter I Island and asserting that the USSR "would reserve its opinion as to the national status

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of territories discovered by Russian citizens." This may be viewed as initiating the first official phase -- the diplomatic -- in the development of a Soviet political policy for Antarctica.

None knew better than the Soviets that the reservation of rights on the basis of a discovery nearly 120 years old would have little validity, particularly in the face of some prior territorial claims and a subsequent history of exploration, discovery, and some research by citizens of a half-dozen or more countries. To establish a valid basis for the reservation of rights to participate in an international settlement of Antarctic sovereignty would require some form of current activity. According to recent Soviet statements, proposals for scientific research in the Antarctic were made as early as the 1930's by the Institute for the Study of the North and again in 1944 by the Arctic Scientific Research Institute. It has been recently reported that in 1945 Soviet scientists proposed a systematic study of Antarctica by means of a "continuously operating geographical observatory." If such reports are true, Soviet entry on the Antarctic Continent would have occurred regardless of the IGY.

Following the interruption caused by World War II, Soviet action to advance its interest in Antarctica entered its second phase with the organization of a whaling expedition, which sailed into Antarctic waters for the first time in December 1946. Whaling expeditions became even more significant in the 1947-48 season, when whaling was combined with scientific research consisting of a limited range

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of meteorological, oceanographic, glaciological, and biologic investigations. Combined activities of this type have continued to the present. As subsequent events disclose, this dual activity appears to have been designed not only to secure the immediate benefits of the whale catch and scientific data but also to lay the initial groundwork for the USSR assertion of the right to participate in any international agreement on the unresolved question of Antarctic sovereignty.

This attitude was reflected in the Soviet memorandum of June 1950 delivered to the United States, the United Kingdom, Australia, New Zealand, Argentina, and Norway which (1) noted the economic importance of the continent and adjacent waters not only to the claimant countries but also to other countries of the world, (2) emphasized the scientific importance of Antarctic meteorological observations to the entire Northern Hemisphere, (3) reaffirmed the position expressed in the Soviet note of 1939, and (4) maintained that, in accordance with international practice, the determination of sovereignty of any given region should include all interested countries.

The period from 1950 to 1954 was marked by the absence of field activity other than whaling, probably because of the assignment of polar research resources to the Arctic Basin to undertake a greatly expanded geographic and geophysical program by a combination of "flying laboratories," drift stations, mobile research detachments, and icebreakers. Operations in the Arctic effort provided the Soviet Union with experienced personnel and the equipment needed to make

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possible a grandiose Antarctic program that would be second to none. In 1955 the Soviet Union announced its plans to participate in the Antarctic program of the IGY, thus introducing the third phase of its developing interest in the area. In the plans for participation, the Soviet program was first linked to the Bellingshausen expedition and shortly thereafter to the scientific activities of the whaling fleet.

Soviet participation in the IGY could not be forestalled since the USSR was a member of the World Meteorological Organization, one of the member organizations of the Special Committee for the International Geophysical Year under the International Council of Scientific Unions.

III. The Soviet Complex Antarctic Expedition (SCAE)

With entry on the Antarctic Continent, the Soviet Union has launched what may be viewed as its third and major phase in the establishment of a record of activity to support its assertion of rights in Antarctica. It is not possible to say as yet whether the modest early announcement of planned activities was intended to obscure the true magnitude of Soviet scientific interest. The fact is, however, that the early announced intention of setting up "one or two" bases has expanded into a full-scale Soviet program that will include six bases and cover a broad sector of Antarctica that is likely to extend from coast to Pole in the deepest part of the continent (see Map 24401). This coverage deep into the interior not

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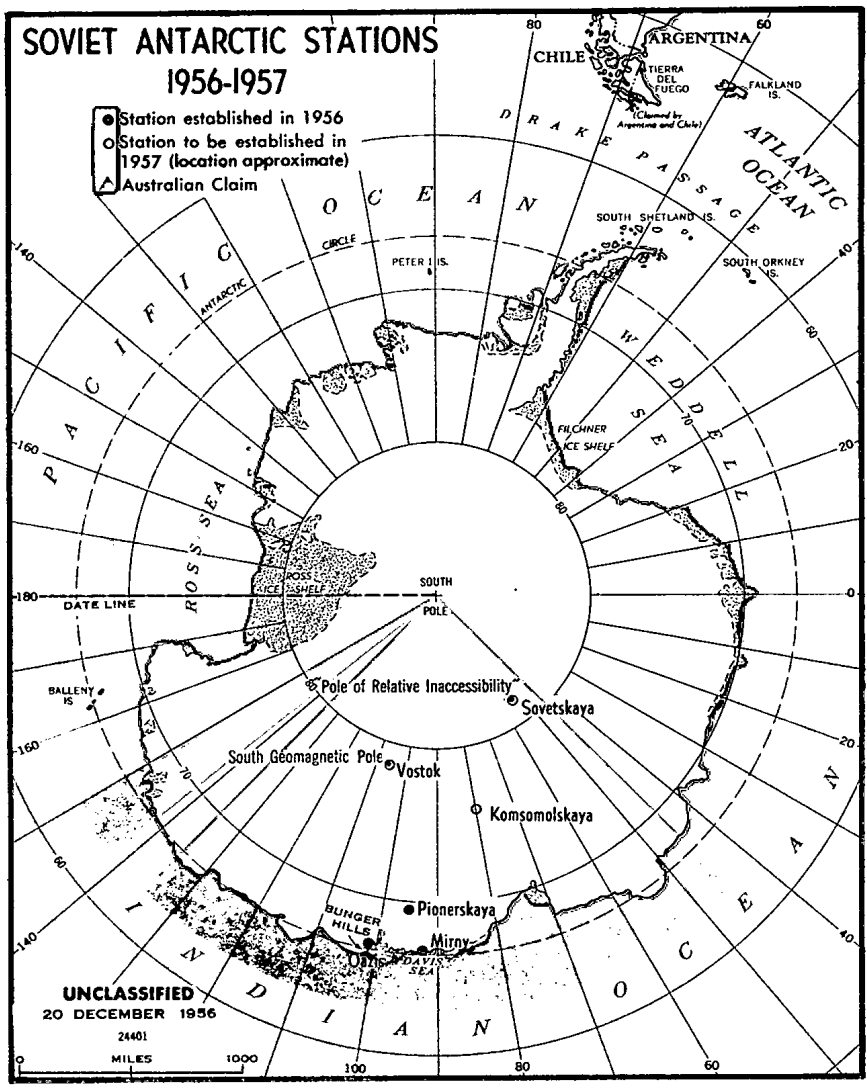
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only may be desirable for scientific objectives, but might also be exploited for political purposes. Shcherbakov, Chairman of the Council on Antarctic Research, notes that claims have been made to sectors extending to the Pole after an expedition has studied only a part of the sector coast. The Soviet Union, by pointing to the continental depth of its activities, might thus attempt to dilute sector claims based in the main on coastal activities.

The operation of the Antarctic Expedition has been assigned to the Chief Administration of the Northern Sea Route, Ministry of the Maritime Fleet, USSR, and the scientific planning to the Academy of Sciences, with coordination by the Council on Antarctic Research. Support of the broadest type has been provided by many scientific institutions and by "over 100 enterprises" representing many ministries. Soviet scientists claim that unlimited funds are available and that the only limitation is the manpower for implementing the program.

Since the scope of the program is so extensive for land and sea investigations, the Expedition has been organized into two detachments -- continental and marine. Particularly noteworthy is the extremely ambitious oceanographic program, including surveys connecting both polar areas (see par. IV). Also impressive is the comprehensiveness and extent of the continental program. In announcing the substance of these programs, the Soviets have been inconsistent. Eleven "themes," or topics, were announced at the Brussels conference in

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1955; at the Paris conference in 1956 the number was increased to twelve. Between the two conferences D. I. Shcherbakov and V. F. Burkhanov (Chief of the Chief Administration of the Northern Sea Route) listed fourteen themes. Significantly, both conference plans omit three groups of studies -- sea and air navigation and whaling resources. The Paris plan, however, included aerial surveys for mapping at 1:200,000, which is related to the study of aerial navigation.

Of the 14 themes which now comprise the Soviet program, 5 are devoted to oceanography, 3 to other IGY topics, and 6 to non-IGY research fields -- including geology, mapping, whaling resources, biogeography, methods of air and sea navigation, hydrographic charting, and the "navigational-hydrographic" characteristics of the oceans. It is believed that such comprehensiveness of scientific study was designed to fulfill two fundamental Soviet requirements: (1) to obtain basic knowledge of the characteristics of the continent, its waters, and its atmosphere to serve as basis for formulating future Soviet political, economic, and scientific policy; and (2) to obtain the geophysical data on a large but little-known region of the world that are essential to the worldwide scope of the Soviet integrated multidisciplinary study of the Earth as a whole.

The achievements of the Expedition in the course of its 1955-56 season testify to the soundness of its planning and organization, as well as to its operational capabilities. With three vessels (the Ob',

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Lena, and Refrigerator Ship No. 7) and a peak complement of over 350, the Expedition not only delivered the aircraft, rolling stock, fuel, provisions, equipment, and instruments required to build and equip the main base, Mirnyy (Figures 1 and 2), and one of the four planned intracontinental stations, Pionerskaya, but it also managed to establish a hitherto unannounced coastal station, Oasis, in the ice-free area of American-discovered Bunger Hills, 220 miles east of Mirnyy (Figure 3).

Over and above this preparatory work, the Soviets began a program of comprehensive meteorological observations and conducted extensive air and ground exploration, aerial mapping, and geologic and topographic research. In addition to meteorology, some geomagnetic and ionospheric observations were started, even though IGY observations are not due to begin until 1957. One indication of the intensity of Soviet activity is the completion during the three winter months of June, July, and August of 33 flight missions that ranged nearly 1,400 miles inland and over 600 miles along the coast. In addition, the marine detachment on the Ob' completed oceanographic and hydrographic observations along 20,000 of the 33,000 miles cruised, 4,000 of which were in Antarctic waters. Of even more immediate significance than the scientific work is the evidence of action taken with an undeniable eye to political objectives, including reported discoveries (some of which were marked by the ceremonial raising of the Soviet flag and by placing records under stone cairns), the naming of a mayor for a

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Figure 1. The observatory of the South Pole station "Mirny" is situated on the surface of several protuberances of base rocks fringed with moraine and partly on the main ice field forming coastal precipices between the exits of the base rocks. (Soviet photo and caption)

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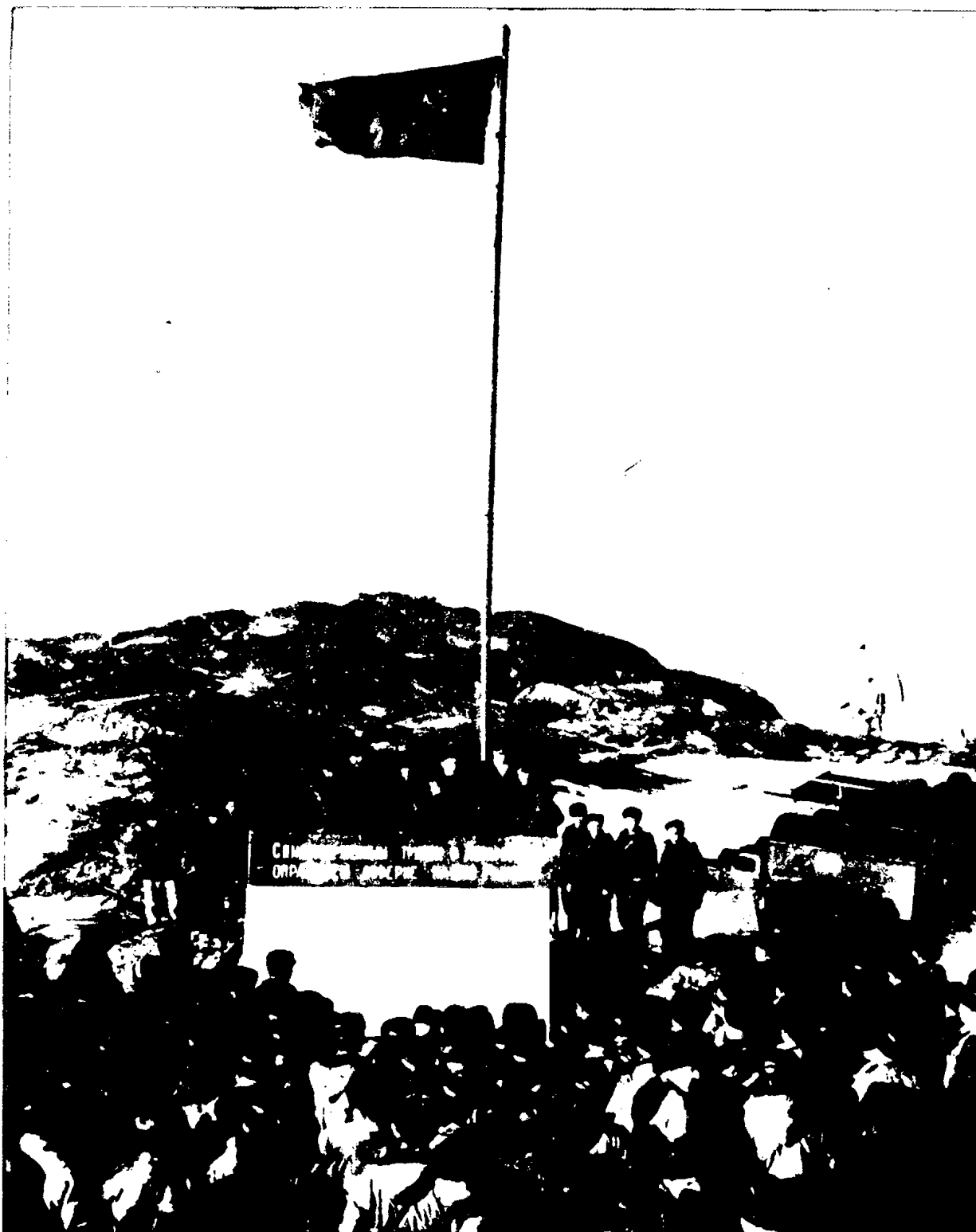


Figure 2. The grand opening of "Mirny" Observatory was held on February 13, a month after the beginning of unloading on the "Pravda" coast. The head of the expedition, M. M. Somov lifted the State flag of the U.S.S.R. (Soviet photo and caption)

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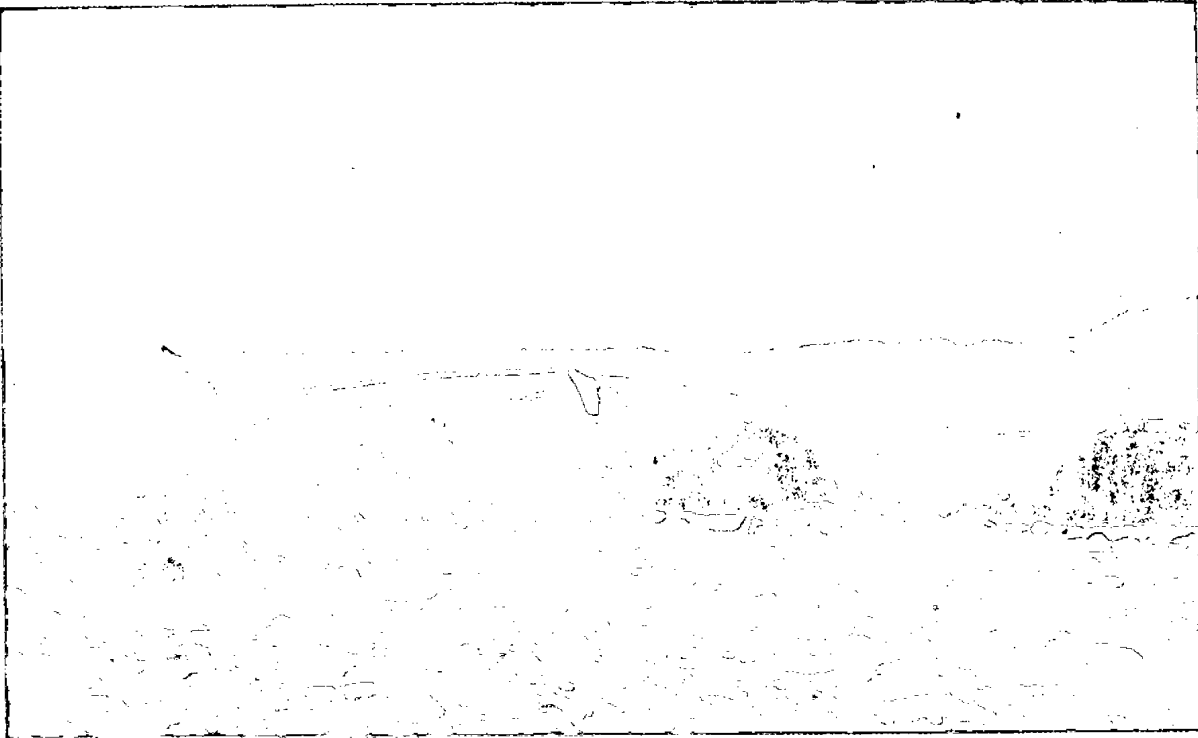


Figure 3. Temporary camp at Bungur Hills, January 1956; the Oazis station was not set up until the following October.

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Figure 4. The erection of the station [Mirnyy] was under the guidance of architect A. M. Afanasyev (on the left) and the head of the sea coast base of the expedition, the mayor of the future city H. I. Greku (on the right). (Soviet photo and caption)

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"future city" (Figure 4), and at least one announced instance of administrative action (the proclaiming of a game preserve).

These actions were complemented by a persistent publicity campaign in which the Soviet Union (1) claimed a number of "firsts" in the correcting of maps and charts and in the mapping and charting of virgin territory and coastal waters, even claiming the opening of the "first interior scientific station"; and (2) succeeded in deferring about a month the convening of the Paris Antarctic Conference of August 1956 in order to be able to distribute an impressive array of maps, photographs, and preliminary research reports. There can be little doubt that the Soviet efforts are part of an overall policy aimed at establishing undeniable evidence of outstanding activities and achievements equal to or surpassing those of present claimant nations. Such an accomplishment would correct a basic deficiency in the position of the Soviets with respect to their insistence on the right to participate in any sovereignty settlement.

Phillip Law, Antarctic explorer and Director of the Antarctic Division, Australian Department of External Affairs, expressed the following opinion of the Soviet continental operations and intentions after his visit to Mirnyy in January 1956:

The Russian station at Mirnyy is now firmly established. It is larger and more elaborate than any station in Antarctica other than the U. S. bases. Although no hint of the future of this station has been dropped, it is my firm opinion that the USSR will continue to man the station as a permanent establishment at the conclusion of the IGY.

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IV. The Reported Submarine Base Construction and Soviet Naval Capabilities

There is no evidence whatever [redacted] to confirm a report that a Soviet submarine base is under construction in Antarctica. [redacted]

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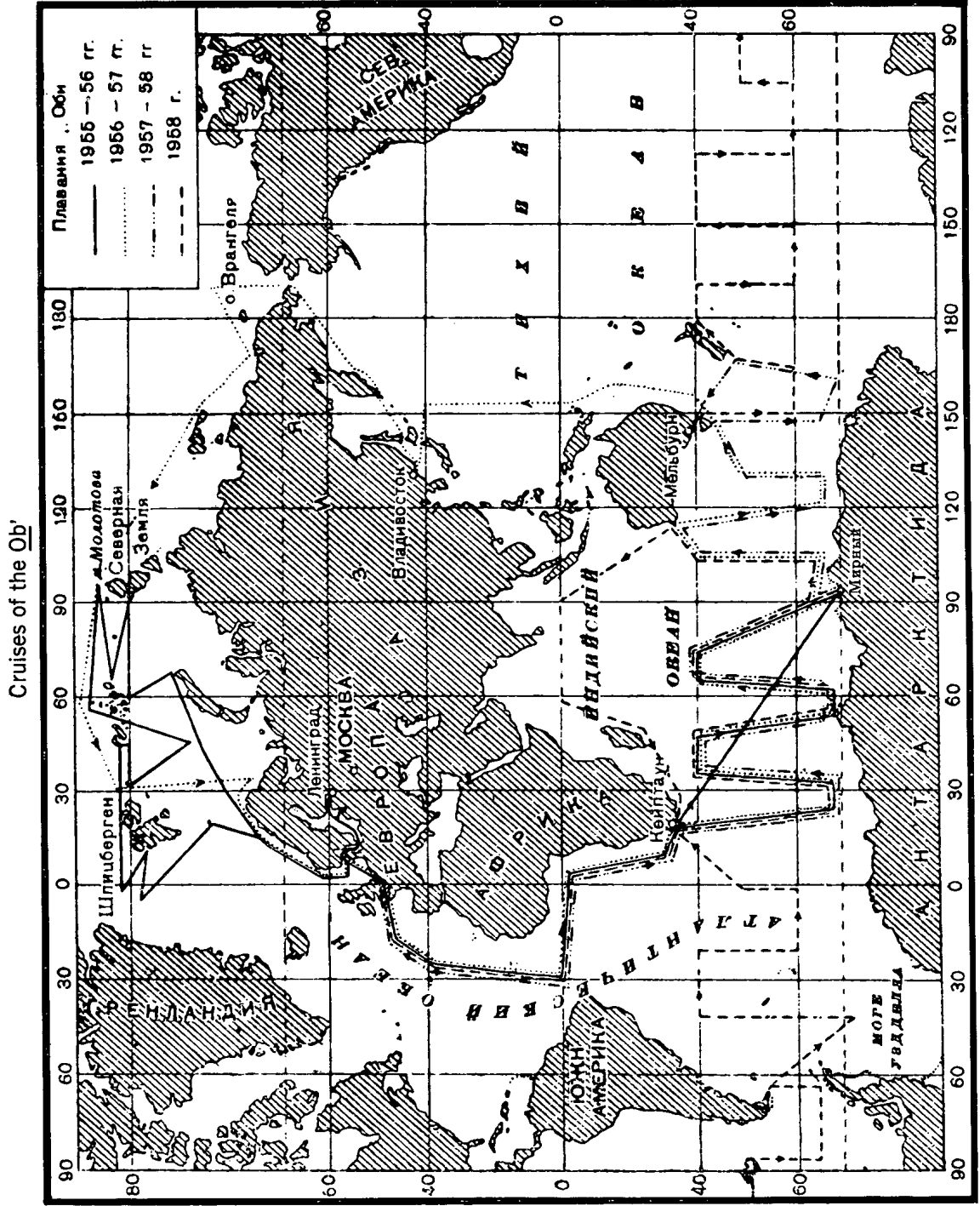
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[redacted] It is

believed unlikely that the Soviets would undertake the readily observable constructional or logistic activities related to submarine base development. Such an overt demonstration of Soviet military interest at this time could jeopardize a worldwide program that promises to secure a vast amount of geophysical data, which are much wanted by the expanding Soviet geophysical sciences. Moreover, repeated Soviet emphasis on the military aspect of U.S. Navy participation would argue against any overt military or naval activities on the part of the USSR at this time. On the other hand, it is not inconceivable that some naval experience may be sought in Antarctic waters or in the approaches thereto. Under the guise of supporting the IGY, (1) Soviet vessels, surface or submarine, could serve on a picket-rescue mission to cover Soviet flights from southeast Asia to Antarctica, and (2) submarines might engage in gravity surveys at sea.

A more serious and plausible cause for concern is the substantial increase in naval operational capabilities that will accrue from the comprehensive and extensive Soviet oceanographic and hydrographic

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Copy of Soviet map showing planned cruises of the Ob', 1955-58. The map was compiled before completion of the 1956-57 cruise and does not show the coastal survey east from Mirnyy to Balleny Islands and New Zealand, across the South Indian Ocean to Kerguelen Island, and the return via the Red Sea, nor does it show the proposed 1958-59 cruise.

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survey program in Antarctic waters and the correlation of them with Soviet Arctic surveys. In addition to the 1955-56 cruise, three other seasonal cruises are planned (the 1956-57 cruise will last 7 months and cover 35,000 miles), as well as an unprecedented winter cruise in Antarctic waters in 1958. It is estimated that well over 150,000 miles of surveys will be undertaken by the Ob' alone (see map). Substantial additional observations will be undertaken by the Lena, and supplementary observations will be made by other vessels of the Expedition, including refrigerator ships, tankers, and ships of the whaling fleet with its scientific group.

The naval operations are designed to cover the waters around the entire continent and are being coordinated with the whaler activities of the past 10 years. Since the whaling fleet has concentrated its activity in the American-African quadrants, the new coverage of the Ob' and Lena will overlap from the African area and extend into the Indian Ocean quadrant. As a part of its overall operations the Ob' will also undertake coastal surveys including radarscope photography ("radio location surveying") and echo-soundings, together with scattered onshore observations (including gravimetry). By the end of the 1956-57 season, the coastal survey will have covered the Antarctic coast from the Balleny Islands at 162°E on the east to 20°E on the west.

The practical importance of these surveys to the improvement of Soviet naval capabilities is clearly indicated by D. I. Shcherbakov,

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who underscored the importance of the oceanographic program to navigation, shipbuilding, compilation of charts, improvement of navigational aids, testing of navigational-piloting equipment, and improvement of weather forecasting.

Any surveillance of Soviet naval activities that may be required in the future is confronted by the complexities associated with physical conditions in the Antarctic and the great distances between bases. The marked drop in open Soviet reporting of its operational activities this season as compared to that of 1955-56 suggests the possible cessation of reporting in the post-IGY period.

V. Soviet Intentions to Remain After the IGY

To remain in the Antarctic after the close of the IGY would seem to follow logically the three phases of Soviet policy that have already emerged -- all of which are directed toward gaining for the USSR at least equal rights with other nations for participating in the determination of sovereignty in the Antarctic. This fourth or post-IGY phase would serve to consolidate and confirm the Soviet position stated in the notes of 1939 and 1950 and further developed by the whaling fleet and the current Expedition.

Although not indicated in the IGY plans, there is definite evidence to indicate that the Soviets intend to remain in the Antarctic. The politically oriented activities of SCAE have already been mentioned. The erroneous concept voiced by some Soviets that IGY activities in Antarctica have been allocated to countries,

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including the USSR, by "Sectors" may be a reflection of official thinking. An increased long-term economic interest in Antarctica is demonstrated by the fact that the Soviet whaling flotilla has been increased by the addition of three vessels for its eleventh season. Another Soviet report indicates that construction has begun on a whole new whaling fleet, which may include one or more atomic-powered vessels. The most direct evidence of intentions, however, has been provided by the two leading figures in scientific planning and operations, D. I. Shcherbakov and V. F. Burkhanov.

In a lecture given in March 1956, which was widely published in the Soviet Union, Shcherbakov categorically stated that "the Antarctic, its shores and islands, are strategically important." At about the same time, in a widely-disseminated journal, he expressed his personal conviction that the Soviet Union will continue its scientific research activities in Antarctica "since they are extremely necessary to strengthen a variety of applied branches of science: sea and air navigation, forecasting service, the whaling industry and others." Shcherbakov then continued to explain that after the IGY the fundamental Soviet bases will gradually be improved by the installation of more and more modern facilities and that they will ultimately become continuously operating bases for strengthening scientific research as well as productive activities in the "Far South." He speculates that settlement and development will progress as they have in the Soviet Far North. Meteorological and radio stations

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will be established, with little settlements around them, and this will be followed by the construction of ports and airdromes.

Burkhanov, in an extended interview in June 1956 with Dr. B. B. Roberts of the Scott Polar Research Institute, made remarks indicating that he did not believe that any nation had established sovereignty to Antarctic territory and made it clear that the Soviets planned to remain after the IGY.

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