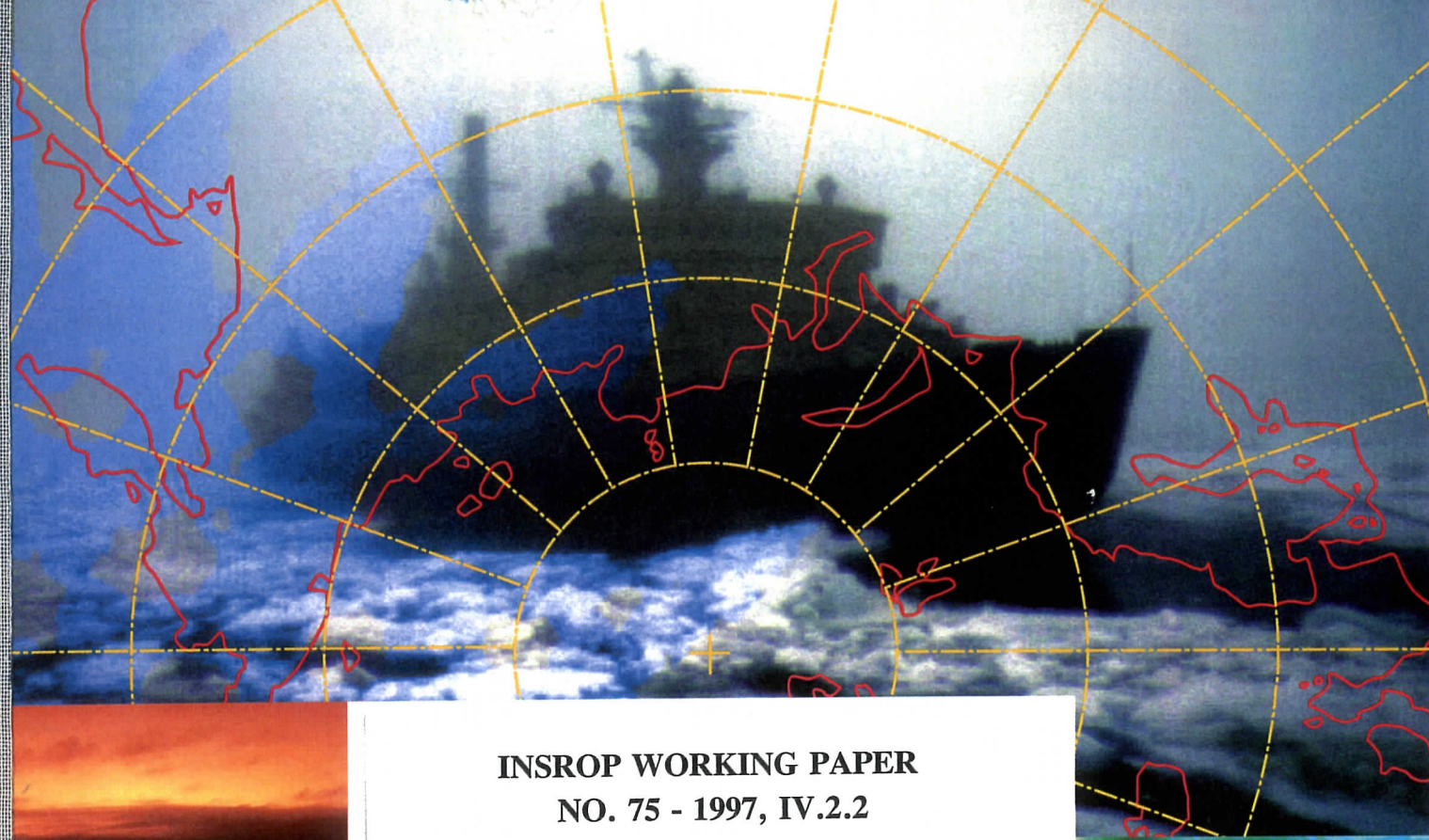

INSROP WORKING PAPER
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Political Aspects of International Shipping along the Northern Sea Route

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Ship and Ocean Foundation, Japan

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Supervisors:	Anatoliy N. Yakovlev and Alexander I. Arikainen
Title:	**Political Aspects of International Shipping along the Northern Sea Route**
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FOREWORD - INSROP WORKING PAPER

INSROP is a five-year multidisciplinary and multilateral research programme, the main phase of which commenced in June 1993. The three principal cooperating partners are **Central Marine Research & Design Institute (CNIIMF)**, St. Petersburg, Russia; **Ship and Ocean Foundation (SOF)**, Tokyo, Japan; and **Fridtjof Nansen Institute (FNI)**, Lysaker, Norway. The INSROP Secretariat is shared between CNIIMF and FNI and is located at FNI.

INSROP is split into four main projects: 1) Natural Conditions and Ice Navigation; 2) Environmental Factors; 3) Trade and Commercial Shipping Aspects of the NSR; and 4) Political, Legal and Strategic Factors. The aim of INSROP is to build up a knowledge base adequate to provide a foundation for long-term planning and decision-making by state agencies as well as private companies etc., for purposes of promoting rational decisionmaking concerning the use of the Northern Sea Route for transit and regional development.

INSROP is a direct result of the normalization of the international situation and the Murmansk initiatives of the former Soviet Union in 1987, when the readiness of the USSR to open the NSR for international shipping was officially declared. The Murmansk Initiatives enabled the continuation, expansion and intensification of traditional collaboration between the states in the Arctic, including safety and efficiency of shipping. Russia, being the successor state to the USSR, supports the Murmansk Initiatives. The initiatives stimulated contact and cooperation between CNIIMF and FNI in 1988 and resulted in a pilot study of the NSR in 1991. In 1992 SOF entered INSROP as a third partner on an equal basis with CNIIMF and FNI.

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Foreword

The aim of project IV.2.2. " Political Aspects of International Shipping along the Northern Sea Route" is to analyse domestic and foreign policies of USSR (Russia) relating to the Northern Sea Route (NSR) and on this basis, give a political prognosis of international shipping along the NSR.

In this connection research was conducted with consideration of three major themes, as also recommended by the reviewer Prof.Oran R.Young:
The first theme is a domestic policy of the USSR (Russia) directed towards the creation of the Northern Sea Route as a national sea transportation way.
The second one is a foreign policy of Russia in the Arctic which enables the development of international shipping along the NSR.
The third one is political prognosis of the development of international shipping along the NSR.

Political decisions of the USSR to create the NSR are analysed in the first theme of this paper in chronological order. During the "cold war" period (1949-1987), large-scale investments needed for NSR development, were stipulated, to a larger extent, by political propositions than by ecological ones. In the post-Soviet period characterised by extreme political and economic reforms in the country, the state has taken measures to keep the centralised management and financial support of national and international shipping along the NSR.

Current Russian policy in the Arctic is presented in the paper as realisation of peaceful Murmansk initiatives (1987) to render the Arctic a zone of peace and co-operation. Russia's efforts considerably reduced the level of military marine activity in the Arctic and thus, favourable political conditions have been created for the development of international shipping along the NSR. The emphasis of the paper is placed on the necessity of co-operative expansion on NSR investment and economic problems at both regional level (the Arctic Council, Barents/Euroarctic Region Council, Northern Forum, INSROP) and by means of bi-lateral agreements with Arctic states. States which express interest, may obtain factual information, in the process of co-operation, about the material and technical possibilities of the NSR, potential transit cargoflows along this route and may take part in the development of international shipping along the NSR.

Political prognosis of the development of international shipping along the NSR is given on the basis of syntheses of modern domestic and foreign policies of Russia

Research results of the three themes indicated reflect contents of reports produced earlieron the project in 1993, 1994 and 1995 [1,2,3]. The materials are restructured, abridged and clarified at the wish of the reviewer Prof. Oran R.Young whose useful notes the authors very much appreciate.

As indicated in [1] information sources were: official documents of representative and executive bodies of USSR and Russia, state programs on the Arctic and NSR, documents of Ministry of Foreign Affairs, Ministry of Defence, State Committee on the Arctic, Administration of the NSR, declarations and publications of local authorities on NSR problems as well as the archives of the Institute of Systems Analysis which provided scientific support for the State Committee on the Arctic for more than ten years.

Overall, in our view, publication of this Working Paper in such edition will help the reader to understand more deeply the existing NSR problems and to be sure that Russia, despite a temporary unstable political and economic domestic situation, takes steps to ensure the reliable functioning of the NSR with regard to domestic and international interests.

Contents:

Introduction

Analysing the political aspects of international navigation along the NSR, one should bear in mind that they reflect the general policy of the USSR (Russia) in the Arctic.

Proceeding from the understanding that a policy is defined as implemented interests, it is necessary to determine, in the first place, the pattern of these interests and their bearers - the operating subjects (Table 1).

Table 1. Structure of interests in the Arctic

Subjects	Main interests under analysis
The State	Political (based on international law), socio-economic, defence (military), ecological
Regions	Political, socio-economic, ecological
Agencies	Status (administrative), economic
World community	Political (based on international law)military, economic

When all available materials have been analysed, one can identify 4 stages in the changing policy of the USSR (Russia) with respect to international shipping along the NSR.

The initial (1st) stage (1917-1940) can be characterised by domination of state (national) interests - political ones (consolidation of the new state's rights to its ownership of Arctic territories, also by using them as transportation routes) and socio-economic ones (to a considerable degree oriented towards resource development). There was practically no one to express the regional interests, whereas departmental interests became apparent only at the end of that period. As to the world community, it did not display its interest in using the NSR for transportation or military applications.

The 2nd stage (1941-1945)can be characterised by almost the same correlation of interests on a subjects level. As for the state (national interests), their political component became less significant, whereas the defence component significance went up. This situation was becoming manifest closer to the end of the 1st stage. By that time the NSR had developed into a united shipping route and proved its efficiency, which created premises for emergence and display of the world community's interests.

The 3rd stage (1946-1987) showed a marked growth of the role of the Soviet Arctic as supplier of resources for the nation. This period is also known for a drastic aggravation of the international situation. In this connection, the totality of the state interests was given top priority. At the same time there appeared the first signs of regional interests, and the interests of various agencies that were actively fighting for attention. Besides, the world community in the person of the USA and NATO demonstrated presence of military interests in the region.

The 4th stage (from 1988 up till now) is characterised by implementation and development of the Murmansk initiatives. At that time in some way or other all the interests indicated in Table 1 become apparent. The defence component is no more the most important one, the significance of the socio-economic and ecological components has grown. For the first time the world community showed their interest in utilisation of the NSR for commercial transportation purposes. The regional interests were growing substantially.

All the above makes a full picture of the inception of the USSR (Russian) policy towards international navigation along the NSR.

1. Domestic Policy of USSR (Russia) Relating to the NSR

In the Soviet period the development of national Arctic shipping, to a large degree, was defined by the foreign political course of the USSR in the Arctic. On the basis of the NSR two tasks were decided: due time delivery of supply cargo into the Arctic zone and development of military infrastructure stipulated by the existance of a threat from the North.

Priority of military strategic goals of the USSR made no favourable conditions for international commercial use of the NSR. Development of the material and technical base of the fleet and coastal infrastructure was identified by political decisions with emphasis on potential defence demand with no economic substantiation.

From the standpoint of transit navigation, the NSR may be regarded as the shortest seaway 3500 kilometres long from the port of Murmansk along the north coast of Russia to the Bering Strait. ("The Regulations of navigation along the NSR", 1991 define the NSR as a national transport communication 2500 miles long from the Novaja Zemlja Straits to the Bering Strait).

The national policy of the USSR with respect to the NSR was always oriented towards creation of a transportation route in the Arctic, and in the recent years - towards development of international commercial transit transportation.

1.1. Creation of Material and Technical Prerequisites for Commercial Utilisation of the NSR (1917-1940)

In the first years of Soviet power the policy concerning the NSR was dependent on the objective to provide transportation capabilities for west and east areas of the Extreme North and development of coastwise cargo transportation in these areas.

Utilisation of the entire length of the NSR for transportation was first put on the agenda in 1918. However, the grave post-war economic situation of the country put off implementation of that program.

The expedience of full use of the NSR was brought up again in the 1920s in connection with the project of constructing a transarctic railway.

The dispute ended in favour of the NSR due to two circumstances. In 1932 the icebreaking freighter "Sibiriakov" made a successful through passage along the NSR within one navigation period. The other circumstance was the danger of war in the Far East and the need to move the war ships from the west to the east via the NSR.

In the 1930s the policy concerning the NSR was based on the understanding that the Extreme North industrial development would be possible only if there was a permanently operating transarctic marine route. Such factors as remoteness from the country's industrial centres and lack of labour force in that region made it mandatory to

solve a set of business, transportation and research problems to develop a through transportation route. In order to do that, one should elaborate an appropriate mechanism of controlling the united transportation-business- research system.

In 1932 the USSR Government adopted a Resolution on establishing the NSR Head Office (NSRHO) reporting to the central authorities. The Resolution placed at the Office's disposal icebreakers, ice reconnaissance aircraft, polar stations and hydrographic service.

The new organisation's first steps were hard to make. However, in the summer of 1935, in conformity with the single plan, its ships managed to make the first commercial through passages. In 1936 navigating the through transportation of cargoes was continued. In 1937 navigation, however, turned out to be tragic: 25 ships had to spend the winter jammed in the ice, one ship sank crushed by ice.

The misfortunes of 1937 were partly accounted for by the fact that the NSRHO was forced to perform additional business functions not consistent with its mission. Then a reverse process was started - disintegration of the NSRHO and its conversion into a specialised transportation organisation. Its industrial and trading complexes were transferred to the jurisdiction of the appropriate departments, and the supplying functions were undertaken by the local authorities.

In the subsequent years the navigations were successful. The last pre-war navigation in 1940, though, reminded one of the hard navigation of 1937. Nevertheless, due to the acquired experience, the navigation had a happy end: not a single ship stayed in the Arctic ice for winter.

Thus, the period of making the NSR an internal commercial marine route was over. Its material and technical base was completed, and the efficiency of using the NSR under planned economy proved. There appeared premises for international commercial utilisation of that route.

1.2. NSR - a Strategic Marine Transportation Route of the World War II Period (1941-1945)

In the years of the war with Germany, the NSR had several objectives: to provide transportation support for the North industry reoriented towards military production, deliveries from the North to the front, supplies of foodstuffs and other goods to the enterprises and population of the Extreme North, convoying war ships from the East to the West.

In the war period the role of the NSR as a transit transportation route grew substantially. Owing to the overload of Siberian rail-, river- and airways, part of the cargo traffic for the front was redirected to the NSR, making use of its reserves. In the war years the cargo traffic along the NSR grew fourfold, whereas to Yakutia - almost tenfold. Due to the construction of new moors, the capacity of the ports Dikson and Tiksi increased considerably. In 1942 construction of a new port - Pevek- was started.

During the war the plan of almost each Arctic navigation had to be approved by a special resolution of the Government. The centralised organisational structure of the NSRHO Arctic navigation plus the wartime arrangements ensured unconditional and prompt fulfilment of all the orders. There lay the main advantage of the NSRHO system.

Control of war freight carriage by sea and co-ordination of the Northern Navy operations were effected by the staff of the State Defence Committee Commissioner from Arkhangel'sk. Special headquarters for direct control of marine operations were set up in Dikson and Pevek.

As a result, the established organisation of war freight along the NSR and the capabilities of the permanently operating transarctic route ensured deliveries to the front, development of the most important strategic objects. The NSR became a matter of life for the Soviet North.

At that stage, the important defence role of the NSR was confirmed. The successful transit transportation along the NSR during the war years became the object of special attention on the part of the world community.

1.3. Post-War Years. Propositions to Use the NSR for International Navigation (1946-1987)

In the post-war years development of the productive forces of the Arctic zone and defence construction in the later period of "cold war" strengthened considerably the role of ministries and departments in designing the USSR Arctic policy. Due to their joint efforts, the material and technical base was extended and consolidated, but the issues concerning the Arctic regions were increasingly given the confidential status. A number of ministries and departments were given the task of harmonising the activities of all the NSR components, so that they could provide for the national economic freightage. Creation of a powerful icebreaker fleet, whose capacity would determine the parameters of the cargo-carrying vessels, was recognised as a task of top priority. The major goal was to provide for guaranteed cargo deliveries in the main directions of cargo transportation in the Arctic during prolonged terms of navigation..

As the freighters' displacement capacity grew, modernisation of the ports began. New ports were constructed - Khatanga (1954) and Zeleniy Mys (1960), as well as port-points Shmidt, Amderma, Kharasavey.

As the ministries' activities in developing the North extended, the NSRHO's functions were reduced and decentralisation of the NSR system components was underway .

In 1964 the NSRHO was abolished, and its functions were transferred to the Main Office on Navigation of the Marine Ministry. This led to less serious attention to the NSR problems. Relatively easy ice conditions of the 1960s created an illusion of similarly easy development of Arctic navigation. There was also an objective reason: share of

Arctic transportation in the total Marine Ministry operations was relatively small, whereas their specific costs exceeded by far the respective costs in other transportation directions. Trying to cover part of the NSR maintenance costs by hard currency revenues for convoying foreign vessels along the NSR, the Marine Ministry initiated opening the NSR for international shipping in 1967. However, not a single foreign vessel took the opportunity. The western consignors seemed to doubt profitability and reliability of transit passages along the NSR. Political considerations might have also played a negative role: at that time Soviet naval forces took direct deterrent actions against the US Coast Guard icebreakers on the NSR routes.

In the same 1967 five Soviet ships made transit voyages with commercial purposes. As there was no special body to duly organise their voyages, those ships were not provided with adequate volume of transit cargo and had demurrage at the ports. Nevertheless, the costs of those voyages (to say nothing about the costs of icebreaker convoys) were close to the average ones for vessels on overseas voyages. But the economic expedience of international transit transportation, its organisation and mechanism of control remained an open question.

In 1970 the Government adopted a resolution to set up an NSR Administration within the Marine Ministry. It guided a trial transit voyage of the nuclear-powered icebreaker "Siberia'" with a freighter "Kapitan Myshevsky". The experiment showed that the cost of carrying the cargoes from Murmansk to Magadan is 4.5 times higher than that of carrying them by railway to the Far East ports and then by sea. Meanwhile the Marine Ministry came to the conclusion that with increase in the vessels' freight-carrying and horsepower capacity, heavier freight traffic along the NSR (up to 20 million tons) they will be able to compete with railways [4].

Beginning with 1978, the State Commission for Arctic Affairs (set up in 1977) became involved in handling the transportation problems. It participated in the preparation of the Government resolution on further development of navigation in the Arctic. The objective to be attained was to provide for year-round marine transportation in the direction of Murmansk-Dudinka, as well as to the Yamal. A program for the period of 1981-1990 aimed at constructing atomic icebreakers, lighters, multi-purpose vessels-suppliers was adopted. In order to ensure a year-round navigation along the full length of the NSR, design of nuclear-powered leader-icebreaker with 150 000 h.p. capacity by 1983 was planned. The availability of such an icebreaker was considered the key issue for a year-round navigation along the full length of the NSR. Later the construction of that icebreaker was recognised inexpedient due to economic and other considerations.

In 1980 possibility of opening the NSR for international shipping was discussed again on the government level. Decision was postponed until the UN Law of the Sea Convention was signed (1982). The arguments for postponement were that the "Regulations for Navigation on the seaways of the Northern Sea Route" had to be co-ordinated with the Convention provisions with respect to jurisdiction of the coastal states in ice-covered areas.

1.4. Opening the NSR to International Shipping

The idea of transit transport along the NSR was given a new impulse by the USSR Murmansk initiatives. They stated the USSR's preparedness to provide icebreakers for convoying foreign vessels along the NSR, subject to the international situation returning to normal.

As a follow-up of those initiatives, it was decided to elaborate the appropriate legislation, formulate and enforce the documents regulating vessels' voyages along the NSR. "Regulations for Navigation on the Seaways of the Northern Sea Route" were published in 1991.

The abovesaid Regulations declared pre-eminence of the operating international law and the respective rights of the coastal states to adopt non-discriminating regulations with respect to shipping and ensure their observance.

The "Regulations for Navigation on the Seaways of the Northern Sea Route " proceeded from the concept of the NSR single legal status that was determined by the goals: safe shipping and prevention of seawater pollution by vessels. The provisions of the "Regulations" applied to the entire space of the NSR: internal waters, the territorial sea, the waters of the Arctic straits and economic zone. Thereby created were the premises for prevention in future of critical political incidents that had occurred with "innocent passage" of foreign merchant and war ships through the territorial waters and crossing over the "internal waters" of the Arctic straits.

The notification procedure established by the "Regulations" for all the vessels entering the NSR zone was more appropriate, if the NSR were to be opened for international commercial navigation.

On 1st July, 1991 the NSR was opened for international shipping. The first foreign vessel successfully convoyed through it in the 1991 navigation was a French polar supplier "Astroliabiya". This proved the practical feasibility of international commercial utilisation of the NSR. The marine operations headquarters, the NSR Administration and the icebreaker fleet demonstrated their readiness to guarantee reliability and safety of shipping along the NSR to the shipowners and foreign insurance companies.

1.5. Policy Concerning Commercial Utilisation of the NSR

Disintegration of the USSR territory did not affect the NSR integrity from a geographical point of view. The NSR is fully in Russia's jurisdiction now. Being the USSR's only successor in the Arctic, Russia continues to implement the Murmansk initiatives with respect to commercial utilisation of the NSR.

In the context of radical domestic political and economic reforms, Russia is undertaking some measures aimed at preservation of the existing system of controlling the NSR, its icebreaker and transport fleet.

At the same time, the Federation subjects are interested in creating a united international marine route that would connect all the northern regions of the planet and provide them with an access to the world markets. On the proposal of the Russian delegation, the Assembly "North Forum" (Tromsø, 1993) supported the idea of uniting the capital resources of all states interested in developing the NSR.

The federal approach to the NSR problems is defined by the "Constitution of the Russian Federation" (1993), "Federative Agreement" (1992), "State Privatisation Program"(1993). It proceeds from the understanding that the federal transport is to be controlled by the state.

Since 1994 in accordance with the Decision of the Government of Russia [5] the following measures were being taken aimed at enhancement of the NSR management.

Atomic and diesel icebreakers and vessels of atomic-technological services which are not subject to privatisation were leased to joint-stock limited companies "Murmansk Sea Shipping Company", "Far-East Sea Shipping Company", "North Sea Shipping Company", "Sakhalin Sea Shipping Company", "Arkhangelsk Sea Trade Port". The duties of the above-mentioned joint-stock limited companies are determined in terms of their annual contracts with the Ministry of Transport and the Ministry of Finance of the Russian Federation. The Federal Fund provides for annual state support aimed at compensation of expenditures on maintenance and utilisation of icebreakers, other vessels and objects belonging to the repair-technological enterprise "Atomflot" ("Atomic Fleet") which are not covered by income from their use.

Two questions of great importance are under consideration now:

- the first of them has a goal to turn over the right of ownership of sea ports located along the lines of the NSR and ensuring necessities of Arctic regions to the Republic of Saha (Yakutia), Nenets, Taimyr (Dolgano-Nenets), and Chukchi Autonomous Regions;
- the second one is aimed to find a possibility to direct part of the dividends on the shares allocated to federal ownership of sea shipping companies and ports, ensuring transportation along the NSR, to the Fund of Revitalisation of the Trade Fleet of Russia and on financial support of the above-mentioned shipping companies and ports.

The Decision [5] plans to elaborate the main directions of the NSR development as a constituent part of the programme of socio-economic transformation of the regions of the Far North.

According to the experts of the Department of the Sea Transport, it is necessary to provide for some measures on further strengthening the state management of transportation along the NSR.

Assuming that the main role in the structure of management of Russian and international navigation along the NSR (Fig. 1.) is to be played by the Administration of the NSR, the latter has to determine the program of development of the icebreaking fleet and other parts of the NSR, develop and issue the state order to the shipping companies on transportation accomplishment for the state needs and on their icebreaking support. The Administration of the NSR has to control and get paid for the fulfilment of the state

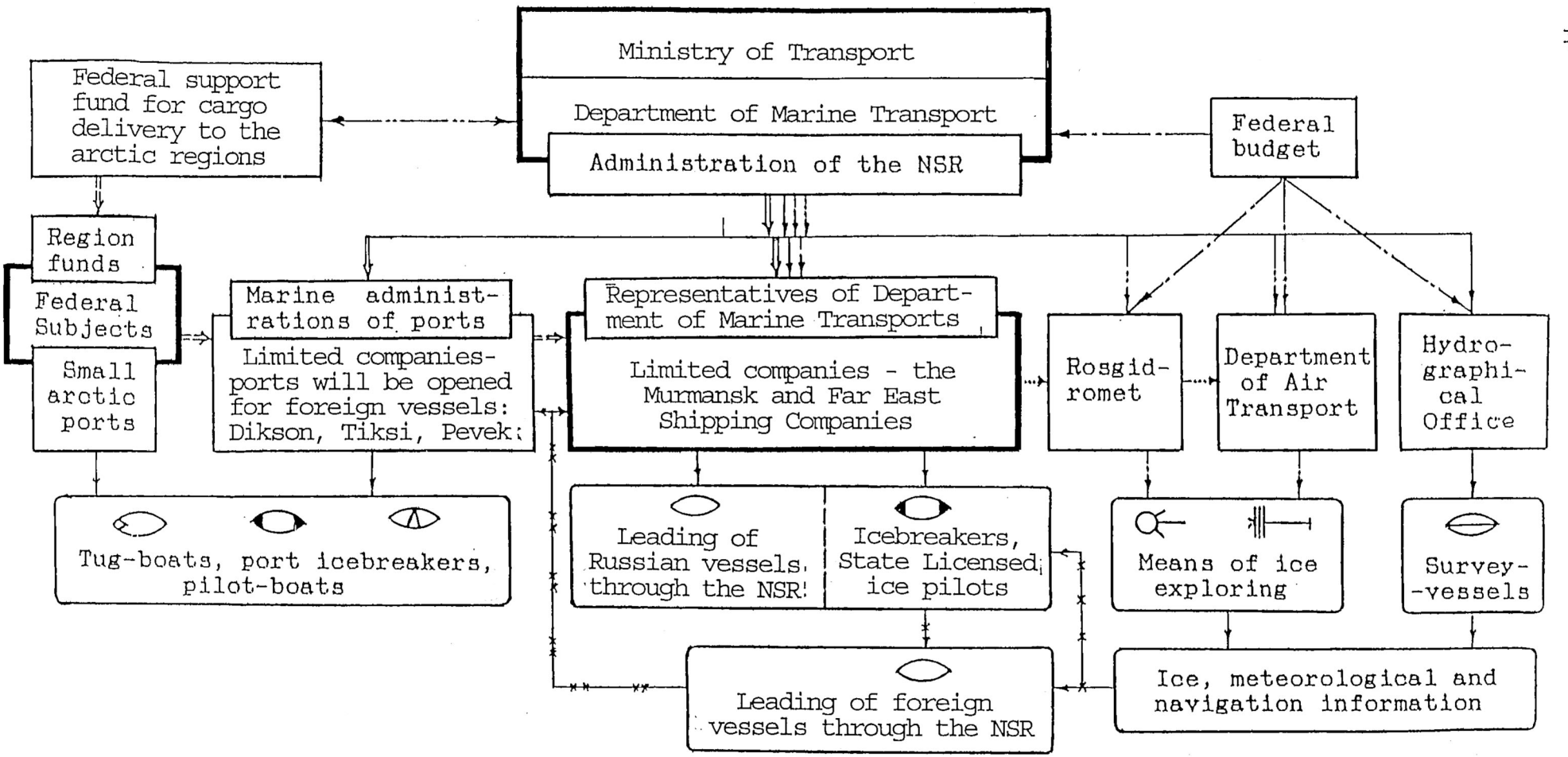

Fig. 1. Structure of state management of Russian and international shipping along the NSR

- State order for delivery of cargo along the NSR and icebreaker leading
- Commercial utilization of the limited companies' shares fixed as the federal property
- Utilization of federal fund for finance delivery of cargo to the arctic regions
- State support of the icebreakers and nuclear-technological service vessels
- Federal budget
- Co-ordination of the yearly finance plan for sea operations
- Contract for hydrometeorological service; the lease rent of ice survey aircraft
- Services: icebreaker-assisted pilotage; ice meteorological and navigation information
- Receipt of the foreign currency for leading of foreign vessels

order through state representatives in the shipping companies and ports. All in all, it is necessary to establish relations of the NSR Administration and shipping companies and ports on the basis of commercial utilisation of shares allocated to federal property (49% in shipping companies, and in ports - e.g. 38% in Murmansk).

It is supposed to bring the functions of state representatives in shipping companies and ports into correspondence with the RF President's Decree [6] which determines the measures on ensuring state control of the economy. In addition to the duties of control, the state representatives are supposed to co-ordinate all the system of the decisions being made by joint-stock limited companies (shipping companies, ports) aimed at ensuring transportation along the NSR, including the volumes, financial calculations, tariff rates indexing, collecting port taxes, etc.

Economic relations of the Sea Transport Department with shipping companies, ports, and subjects of the Russian Federation with regard to transport insurance of transportation along the NSR have to be established with due consideration of the Decisions of the Russian Federation Government [7, 8] on changing the mechanism of state financial support of production (goods) delivery in the regions of the Far North and founding the corresponding Federal and Regional Funds. Distribution of the Federal Fund assets is realised on the basis of proposals of the Commission of the Russian Federation Government on insurance of the goods delivery into the regions of the Far North (the Department of the Sea Transport is represented in the Commission by the Deputy Director of the Department). Reciprocally, while distributing the investments of the Federal Fund the Commission proceeds from calculations and substantiation presented by executive power bodies of the Russian Federation subjects , enterprises, and organisations accomplishing the delivery of production.

Interaction of the Sea Transport Department with the Federal Fund will be expressed by co-ordinating with it the estimated expenditures on the transportation along the NSR and icebreaking support, as well the questions of controlling the goal-oriented utilisation of the Federal Fund resources.

A new organisational - financial - economic mechanism for the state management of the NSR system (Fig. 1.) will be orientated not only towards ensuring Russian navigation in the Arctic, but also towards development of international utilisation of the NSR. This mechanism will permit the Administration of the NSR to reserve the right to manage international navigation on the NSR. In particular, the NSR Administration will be able to more effectively than shipping companies identify potential of foreign clients which are interested in commercial utilisation of the NSR. The Administration can assume responsibility for the whole procedure of requests, processing and issuing information about the possibility of leading the foreign vessels along the NSR to the submitters.

The Administration of the NSR in collaboration with the shipping companies have to determine tax rates for leading vessels along the NSR acceptable to foreign applicants. All the agreements (contracts) between shipping companies and foreign submittals on remuneration for all types of services on icebreaking and pilotage leading, as well as on

providing foreign vessels with all types of information have to be made legal under the auspices of the NSR Administration.

In the future, as international navigation develops, the NSR Administration and shipping companies will improve "Taxes and Rates for Foreign Vessels Leading" which will include icebreaker and pilotage dues. A special instruction will determine the pattern of transferring assets got as pilotage taxes into income, covering expenditures on displacement of state ice pilots, on their hotel accommodation, and their business trip bonuses.

The development of the mechanism of economic relations of shipping companies with enterprises of Roshydromet, Civil Aviation, Ministry of Communications, Emergency-Rescue Services in the acts of leading foreign ships along the NSR is in progress.

"Guide to navigation through the NSR" including "Requirements for design, equipment and supplies of vessels passing through the NSR" were being prepared in the spirit of the "most-favoured treatment" for international shipping and were published in 1995.

By now the ports of Igarka and Dikson are opened to foreign vessels. The opening of other Arctic ports for foreign vessels is annually declared by special decrees of the Russian Federal Government. At present the issues concerning the legal status of the ports and the control stations therein are being co-ordinated with the local authorities.

To ensure state regulation of the ports' activities, regardless of their authorisation, the Decision of the Russian Federation Government dated December 12, 1993 No. 1299 presupposes creation of Marine Administrations of Ports. The general control over Marine Administrations of Ports is effected by the Ministry of Transport. The Marine Administrations of Ports are given over the right of ownership for the ports' property not subject to privatisation. These Administrations are charged with the functions of ensuring security of navigation and order in the ports, including supervision after observing the laws, rules, and international treaties of the Russian Federation on trade navigation.

Through its collaboration with the INSROP programme, Russia and other countries concerned got one more chance to get a comprehensive evaluation of the likely advantages of the NSR as the shortest and a relatively safe sea route between Europe and Asia, and in case of positive results, transfer this information to foreign consignors and shipping companies.

1.6. Policy Relating to Military Navigation along the NSR

The policy of the USSR (Russia) relating to military navigation along the NSR was always centred around the primacy of the NSR national economic role and took into account the need to strengthen the nation's defence capability. However, limitations for

military navigation along the NSR were also taken into account. The ice conditions rule out year-round escorting of warships. Even after ice strengthening of the vessel, its light hull, rudder and propellers do not allow one to guarantee that the ships will be safely led during any summer navigation.

Military navigation along the NSR is considered from the standpoint of its influence on commercial utilisation of the NSR.

First Through Passages of Warships along the NSR

The need for the first passages of warships along the NSR from the West to the East was connected with the emergence of war threat of Japan in the Far East. It became mandatory to strengthen the Pacific Navy. In 1936-1940 various class warships were transferred there (see Table 2). Experience of their shipping in ice conditions deserves special attention.

To protect the ship's hull from ice pressure, it was planked with a wood-and-metal belt ("fur coat"); the bronze propellers were substituted by steel ones of a smaller diameter with replaceable blades. But that made the ships less capable to manoeuvre and battle.

Table 2 . First through Passage of Warships along the NSR [4]

Year	Ships	Direction	Time of passage along NSR of passage from Novaya Zemlya straits to Bering Strait	
			dates	number of days
1936	Torpedo-boat destroyers "Voykov" and "Stalin"	West-East	1.08-18.09	49
1937	Hydrographic ships "Okhotsk", "Okean" and "Kamchadal"	West-East	4.08-4.09	31
1940	Submarine - 423"	West-East	7.08-8.09	32
1942	"Baku"-leader, destroyers "Razumniy", "Razyarenniy"	East-West	15.08-10.10	57

The first voyages of the warships proved that they could be led along the NSR in the most favourable (in relation to ice conditions) period of summer navigation (August - September). The ships ended the passages without any serious damage inflicted by ice. The leading of the ships through ice was effected by the most powerful (in that period) icebreakers "Lenin", "Yermak" and "Krasin". Ice reconnaissance was performed by the aircraft of the hydrography service. Due to their complexity and defence importance, the warships' passages through the NSR were planned and effected as "special expeditions".

In the 1940 navigation season the German armed raider "Komet" was active on the west part of the Northern Sea Route. Extension of the Northern Navy responsibility zone was a response to this.

Defence of the NSR During the War with Germany (1941-1945)

There were two main routes in the North in that period: an external route used for transportation of cargoes from the USA and Great Britain, and an internal one - the Northern Sea Route, used for war deliveries to the fronts from the Eastern regions of the country, and moving warships from the East to the West.

The German alignment of troops "Nord" was assigned with the task of ensuring full control of the German marine and air forces in the Barents and Kara seas. The German aircraft acted on the areas stretching to the Novaya Zemlia coasts, while their submarines and warships moved along the NSR as far as Vil'kitskiy Strait.

To guard the shipping in the Arctic, Belomorskiy flotilla, (1941), Novozemelskiy Naval Base in the inlet Belushya Guba (1942) and Kara Naval Base on Dikson (1944) were organised. The Northern Navy led 2568 ships in 1421 convoys through the inland sea waterways. German submarines used torpedoes and mines in operations against the convoys in the Kara Sea. The Soviet convoyed freighters suffered losses amounting to 0.47% of their total number; the losses suffered by the Germans - three submarines were sunk, one submarine and the cruiser "Admiral Sheyer" damaged (Fig. 2).

Shipping in the Soviet eastern Arctic developed without any counteraction on the part of the enemy. Lend-lease shipments moved west along the NSR from the US Pacific-coast ports.

The warship convoys along the NSR were organised by the Polar Department of the General Staff of the Navy. In 1942 "Baku", the TBD leader, the destroyers "Razumniy" and "Razyarenniy" were moved west to enforce the Northern Navy (Table 2).

On the whole, the enemy failed to terminate the transportation along the NSR. All the icebreakers were in operational condition, the NSR continued to function as a latitudinal Arctic waterway connecting the north Pacific areas with remote territories of the Soviet North. Transit transportation of cargoes to meet the needs of the Navy and through convoys of warships gave the opportunity to increase considerably the NSR material, technical and organisational potential for future commercial operations.

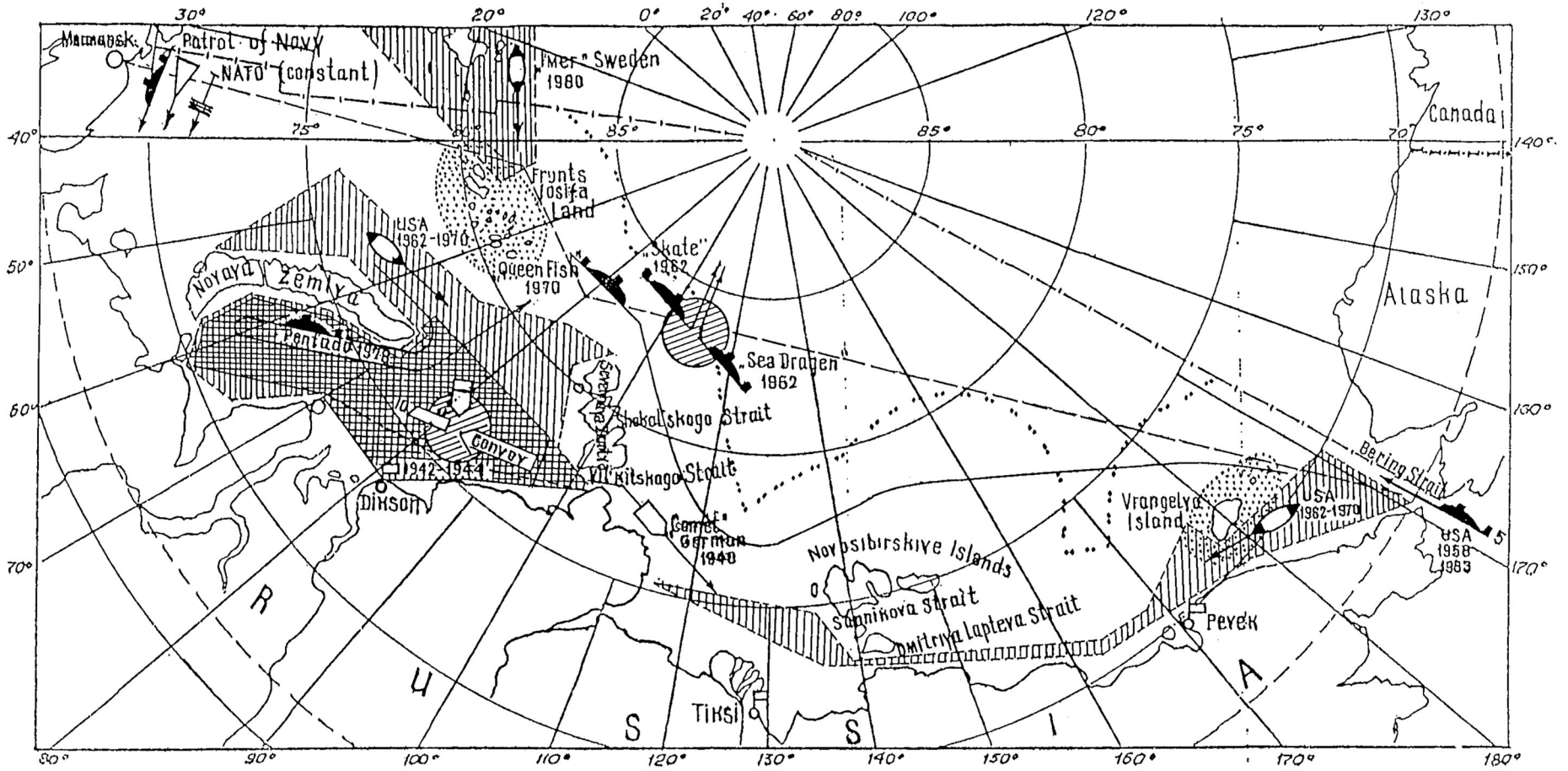

Fig. 2. Sailing of foreign war ships in the regions of the NSR

- Cruises of foreign nuclear submarines
- Region of the operations of German submarines( ) and the cruiser "Admiral Speer" ( ) in 1942-1944
- Investigation regions of the US and Swedish icebreakers ( )
- Sea protective zones of the reserves "Frants Iosifa land" and "Vrangelya Island"
- Borders of the Russian polar posessions
- External border of the NSR
- External border of the Russian economic zone
- Marine Operations Headquarters (Dikson, Tiksi, Pevek)

Military Navigation along the NSR in the "Cold War" Period (1946-1987)

Global NATO-Warsaw Treaty opposition substantially aggravated military and political problems in the Arctic. The USSR policy relating to foreign military navigation consisted in deterring the NATO naval forces from the Soviet Arctic. In the military sphere the USSR had to reinforce the Northern and Pacific Navies. In order to replenish the navies special expeditions were formed every year during 1949-1986 to lead warships along the NSR. In summer navigation mostly minor auxiliary ships were led, including diesel-engine submarines of the Northern Navy that were replaced by nuclear-powered submarines.

Warship passages through the NSR were effected, as before, in the most favourable period of summer navigation. The ice-strengthening works required dry docking the ships, which kept them out of warfare for months.

Noteworthy is the fact that even in the most intensive periods of warship transits, their number of voyages was only 1/30 compared with that of non-war ships, and consequently, military navigation did not interfere with commercial shipping.

The NSR was never used for the operation and battle training of Soviet surface warships. The only exceptions were counteractions of the Northern Navy vessels and aircraft in the cases of the US Coast Guard icebreakers' penetration into the NSR areas in 1962-1970 (altogether 19 trips). The operations were effected, as a rule, by one Soviet vessel tracking the US icebreaker and individual operational flights of a reconnaissance aircraft. Since there were no more than 4 trips of US icebreakers to the NSR routes within one navigation period (1970), and those few sailed largely in ice-free water, the operations of individual Northern Navy vessels tracking US icebreakers did not handicap the Arctic navigation.

The fact that Americans were making use of warships for reconnaissance and military applied research on the seaways of the NSR was not casual: warships are alloted certain immunity, including freedom from foreign jurisdiction (non-distribution of action of any state laws and rules on warships in the high sea, exception of access aboard the ship) and freedom from compulsion (impossibility of detention, arrest, examination).

American icebreakers made 19 research cruises on eastern and western sites of the NSR in 1962 - 1970 (Fig. 2).

Currently, with a world war threat substantially decreased, as well as due to the Soviet Armed Forces reorganisation in consistence with the new political orientation and economic capability of Russia, warship navigation along the NSR has practically stopped. Shipbuilding capability of the Northern and Pacific Navies allows local supplies of warships.

At the same time, episodic voyages of Russian warships along the NSR are not ruled out. In conformity with "The Guidelines of the Russian Federation Military Doctrine"(1993), such voyages are not excluded should major war threat arise.

2. Foreign Policy of Russia Relating to the NSR

Foreign policy of Russia came from the peaceful Murmansk initiatives of 1987 which opened, in principle, the NSR for international shipping. Due to the fact that the decision of this question was connected to prospects of normalisation of international relations, this section of the paper reflects efforts of Russia to improve the co-operation with Arctic states on Arctic shipping and further weakening the military confrontation between USA and Russia in the Arctic as a necessary prerequisite for the development of international shipping along the NSR.

2.1. Legacy of Military Confrontation in the Arctic

The geopolitical and geostrategic positions of the USA and the USSR in the epoch of nuclear confrontation were objective reasons for dispersing the navy as a component of the nuclear triad of these states. The spacious areas patrolled by the USA strategic submarines (SSBNs) include spacious areas of the Atlantic and Pacific Oceans, whereas the USSR had to concentrate and defend the SSBNs in limited zones of the Arctic and eastern seas.

The Arctic region has retained its strategic role both in the NATO and the USA defence plans, as well as in Russian priorities. Russia continues to keep a substantial part of its war (naval) nuclear potential in the Arctic. Adhering to the strategy of "advanced naval defence lines", the USA and NATO conduct reconnaissance activity and keep the Russian SSBNs under surveillance.

At present the number of Russian SSBNs on patrol has declined a great deal . By the year 2003, as the obsolete SSBNs will be withdrawn from the Northern Navy combat forces, the number of patrolling SSBNs and their defence support will be substantially reduced. The US anti-submarine defence in the region may be cut in proportion to that number, or maybe to a larger degree. The area of naval activity may be reduced respectively. Naturally, these areas will lie beyond the NSR routes.

Having studied the prospects for international shipping along the NSR, the majority of foreign experts believe [10] that the direct influence of naval activity on commercial transportation along the NSR has become insignificant. Moreover, the positive trend in

regional security that is now obvious will contribute to development of international navigation along the NSR.

A similar concept of the NSR military utilisation reflects the cardinal change in the Western way of thinking after realisation of the Murmansk peace initiatives of the USSR.

At the same time, some Western experts [11] draw public attention to the fact that Russia is now stationing a fleet in the North that " is superior by its power to all the fleets of Arctic states located in the Arctic." It is emphasised that Russia attaches special importance to the Barents Sea and the neighbouring water areas in their defence capability.

Russia's policy of cutting down the military activity in the Arctic, as an essential condition of developing international navigation along the NSR, is defined by the following:

It does not seem possible to solve the security problems in the Arctic only on the regional level. These problems are global and they emerge elsewhere beyond the Arctic boundaries. In order to find ways of bringing down the level of military action in the World Ocean and achieving strategic stability on the planet, it is possible to use international forums, putting the naval "variable" in the negotiation processes.

- Currently the Conference on Security and Co-operation in Europe and negotiations on reduction of strategic offensive weapon and conventional armed forces in Europe relate to the Arctic region only indirectly. The problem of reducing the level of military confrontation in the Arctic could be submitted for consideration to the Council of North-Atlantic Co-operation affiliated with the NATO in 1991. In addition to 16 NATO countries, including 5 Arctic states, it has as its member-states Russia and 10 other members of the Commonwealth of Independent States.
- The Arctic states are making an attempt to solve military, political and other problems of the Arctic on a regional basis. To this end, Canada suggested that a regional body - an International Arctic Council - should be established on a government level. The USA, as well as other Arctic states, has backed this idea. However, USA does not agree to discuss the problems of military security in the Arctic at the Council sessions. Establishment of the Arctic Council is expected to be in the fall of 1996.
- The Barents/Europearctic Region Council, establishment at Norway's initiative in 1993, made the Barents Sea a locality of co-operation of the Northern countries (Russia, Norway, Denmark, Finland, Sweden, Iceland) and the European Community. One may expect that, working on the level of foreign ministers and the EC representatives, the Council will not only develop international co-operation in socio-economic and environmental spheres, as well as commercial utilisation of the NSR, but will also touch security problems in the Barents Sea.

The above mentioned issues are given a more detailed treatment in [2]. According to the reviewer it is inexpedient to cover them fully in this publication.

2.2. Terms of Possible Foreign Military Navigation along the NSR *)

As far as one can judge from their last cruises (Tab. 3, Fig. 2), navigation of the foreign warships along the NSR could be connected with reconnaissance, war actions, war-applied research, and through passages. As to war actions, they are improbable within the foreseeable time prospect. As to through passages of warships aimed at solving problems of reconnaissance and war research, they definitely can be undertaken.

Table 3 . **Navigation of Foreign Warships in the NSR Areas**

No.	Year	Warship, country	Region	Purpose of voyage
1	1940	Raidar "Comet", Germany	Coastal NSR area	Reconnaissance, military applied research First reach of North Pole by sea
2	1958	Nuclear-powered submarine "Nautilus", USA	Bering Strait- North Pole	
3	1960	Nuclear-powered submarine "Sargo" USA	Bering Strait-North pole	First passage across Bering Strait under ice
4	1962	Nuclear-powered submarines "Skate" and "Sidregon"	North end of Laptev Sea	Antisubmarine manoeuvres
5	1962 - 1970	Icebreakers of Coast Guard "Berton Island", "Stained Island", "Northwind", "Eastwind", "Southwind", USA	Kara Sea, Laptev Sea, East Siberian Sea, Chukchi Sea	Geophysical and oceanographic research aimed at use of intercontinental ballistic missiles, reconnaissance (19 voyages)
6	1970	Nuclear-powered submarine "Queenfish", USA	Siberian shelf (north extremes oceanographic of Arctic seas)	Hydrographic and research, reconnaissance
7	1972 1983	Nuclear-powered submarines "Hockbill", "Sidregon", "Totog", USA	Bering Strait	Passages across Bering Strait, oceanographic research
8	1978	Nuclear-powered "Pintado", USA	Kara Sea	Hydrographic and submarine oceanographic research, reconnaissance
9	1980	Coast Guard Icebreaker "Imer"	Northern part of Barents Sea, Franz-Victoria	Oceanographic research

*) **Reviewer comment: I found this section a little unfocused and hard to follow. Is it realistic to expect foreign military navigation in the NSR to be a significant concern? What are the prospects of applying a code of conduct designed for surface vessels to the activities of submarines? The discussion of UNCLOS and especially the meaning of Article 234 (pp.56-59) seems important, but it is relevant to all shipping and not just military navigation.Perhaps, this section should be turned into a discussion of the relevance of developments in broader International Law regarding navigation to the case of the NSR. It would then duplicate Project IV.3.1. of INSROP.**

The authors believe that war shipping had a substantial influence on the formation of the NSR system. These questions have their prehistory, specifics and are worth the INSROP researchers' attention. Naturally, there is no need to compete with Project IV.3.1. In this connection contents of section 2.2. are considerably decreased.

Up to the beginning of the 60s there were no Soviet rules regulating navigation of foreign warships along the NSR. And only then, upon resolution of incidents, connected with penetration of American military icebreakers of the Coast Guard of the USA into the Soviet sector of the polar possessions, normative acts concerning foreign military navigation in the waters adjoin ing the Northern coast of the USSR, started to be formed.

On the occasion of intentions of American icebreakers to make through passages along the NSR it was declared in the Memorandum of the Ministry of Foreign Affairs of the USSR dated July 29, 1964, addressed to the Embassy of the USA in Moscow: the seaways of the NSR were and are made use of only by Soviet vessels; the NSR is an important national sea communication, parts of which pass through the Soviet territorial waters; on the waters of the straits connecting the Kara, Laptev, and East Siberian Seas the "Condition on protection of the State borders of the USSR of 1960" is completely extended. Similar contents were found in Memorandums of the Ministry of Foreign Affairs of the USSR on June 26, 1965, and on August 24, 1967. The latter appealed to the Embassy of the USA and focused on the fact that attempts of the American icebreakers to escape from following the rules of passing foreign warships through Soviet territorial waters contradict the international rights.

In 1965 the Decision of the Council of Ministers of the USSR established a permission arrangement for passage of foreign warships through territorial and internal waters of the USSR which was extended also on the Straits of Dmitry Laptev and Sannikov, as historically belonging to the USSR. The very same Decision instituted compulsory icebreaker-assisted pilotage of all ships including warships in the Straits of Vilkitskiy, Shokalskiy, Dmitriy Laptev and Sannikov due to adverse navigational situation and ice conditions in them and for the purpose of ensuring safe navigation.

The legal basis for leading foreign warships along the NSR are the abovementioned principles of the 1982 UN Convention on the Law of the Sea , as well as the Acts and the Orders of the state bodies of Russia (USSR) on the questions of navigation, in particular, "Regulations for Navigation on the Seaways of the NSR", 1990; "Rules for vessels, led by icebreakers through ice", 1966; "Rule of the state ice pilot" (to be published); "Regulations for navigation and stay in territorial waters (territorial sea) of the USSR, internal waters and ports of the USSR for foreign warships", 1983, "Requirements for the design, equipment and supply of vessels, navigating the NSR" incorporated into "Guide to navigation through the NSR", 1995.

The main principle of the "Regulations for navigation on the seaways of the NSR" is non-discrimination; the objects of regulation are vessels (civil ones and warships) of all the states; the purpose of regulation is ensuring safety of navigation and prevention of pollution of marine environment from vessels. Thus, the basis of the "Regulations" is provided by Article 234 of the 1982 UN Convention on the Law of the Sea relating to regions covered by ice within the limits of the exclusive economic zone.

In the notification for leading a foreign warship as a commercial ship, the Administration of the NSR informs about the characteristics of the ship, purpose of

navigation, time of the passage along the NSR. The application form is found in "Guide to navigation through the NSR".

The sole feasible purpose of navigation of foreign warships is the through pass along the NSR. If a foreign warship intends to do research on a seaway of the NSR, then the inquiries of the foreign submittals should be presented through diplomatic channels in accordance with the "Rules of issuing sanctions for carrying out scientific and expeditionary activities, as well as on tourism realisation in marine regions, adjacent to northern coast of the USSR", 1990.

A foreign warship accepted for leading should, in accordance with the "Regulations" (Article 7), navigate along the NSR following the assigned seaway and keeping to the routes recommended by the Marine Operations Headquarters. The routes are nominated only for reasons of safety of navigation and depending on the changes of ice conditions. They can pass through territorial waters (encompassing 30 % of the coastal seaway), as well as through internal waters covering Russian Arctic straits.

If a foreign warship shows up on a seaway of the NSR without the permission of the Administration of the NSR, besides a demand to leave the limits of the NSR, the protest on the occasion of infringement of the "Regulations" would be directed in address to the State of the Flag in accordance with the generally acknowledged norms.

All in all, a favourable regime for international navigation along the NSR being inducted by Russia opens a new era of peaceful co-operation on the seaways of the NSR, and so provides conflict-free development of commercial navigation on the NSR along with the possibility of putting military navigation under control.

2.3. Assessment of Arctic States Policies with Respect to Arctic Navigation

The analysis of the policy of these states with respect to navigation in the Arctic was performed under the assumption of the possibility of using their experience while considering the prospects of development of international navigation along the NSR.

The process of policy formation of the Arctic states with respect to navigation in the region has a long history, is complex, contradictory, and non-uniform.

One can single out two milestone stages in it: 1) the epoch of geographical discoveries and sovereignization of the region; 2) introduction of norms and rules, governing navigation in adjacent waters. In the framework of the second stage some differences in catching sea-food, sea scientific research, commercial shipping, and military navigation came to light. There are some differences in the policy of the states with respect to domestic and international use of Arctic sea routes.

The epoch of geographical discoveries lasts approximately four centuries and is connected with the search for the Northwest Passage - the way from the Atlantic to the Pacific Ocean first of all. The major contributions to the exploration of Northern Polar areas were done by sailors and scientists from Great Britain, Denmark, Canada

(Dominion), Norway, Russia and France, which had led to corresponding territorial acquisitions. After Russia had sold Alaska to the United States of America, the Spitsbergen Archipelago was entrusted to Norway in accordance with the Treaty of 1920, and Canada gained its independence, the political-geographical map of Arctic gained its contemporary appearance. During all this period governing of the Arctic navigation did not practically take place.

In the 50s of the current century influenced by international tension brought into being by the "cold war" and the increasing shipping activity in the Arctic region, some states tried to strengthen their sovereignty by means of corresponding laws, norms, and regulations. This process gained additional legitimacy after signing the 1982 UN Law of the Sea Convention. In accordance with this Convention (Article 234) coastal states were assigned the right to adopt and enforce non-discriminative legislation and regulations on preventing pollution of the marine environment from vessels in the ice covered regions within the exclusive economic zone.

During the last years the policy of Arctic states with respect to navigation in the Arctic has been influenced by improvement of the international political situation in the region. The tendency to collaborate on the items of navigation on the bilateral (Canada - the USA, the USA - Russia), regional (Barents / Euroarctic Region Council), and International Project "North Sea Route" (INSROP) levels has developed.

The policy of Canada with respect to Arctic navigation is characterised, first of all, by the wish to exclude non-regulated navigation by foreign ships in adjacent waters, and, secondly, by the necessity of supply cargoes delivery into Arctic regions and mineral raw materials shipping from these regions.

The first problem - the exclusion of non-regulated navigation by foreign ships - was solved by means of expanding the Canadian sovereignty and jurisdiction on the adjacent sea regions and the waters of Canadian straits.

The first controversies between Canada and the USA on the items of navigation along the Canadian part of the Northwest Passage arose in 1970 in connection with the experimental voyages of the American tanker "Manhattan". In response to the non-sanctioned voyage of the tanker, Canada extended its territorial waters from 3 to 12 miles, having overlaid the waters of straits; the Law and the Rules on preventing pollution of the Arctic waters from vessels in the 100-miles coastal zone was adopted. By these regulations Canada has altered the status of the Northwest Passage (NWP) from freedom of navigation to the regime of "innocent passage"; they introduced the "control zones" devised for protection of the sea environment.

In 1986, in response to a subsequent non-sanctioned cruise of the American icebreaker "Polar Sea", Canada issued the Law on direct initial lines around the Canadian Arctic Archipelago and thus declared the waters within it its own internal waters. The Americans lodged a protest with respect to Canadian legislation acts of 1970 and 1986.

Conflict on the legitimate status of the NWP was smoothed to a certain extent by the Canadian-American treaty on collaboration in the Arctic (1988). The treaty secured

for the American icebreakers priority of transit through the Canadian straight in comparison to third countries.

The second problem (Fig. 3.4) - delivery of supply cargoes (300k tons) - was solved by ships of passive sailing (navigation) with the dead weight up to 15k tons. The main bulk of the cargoes delivered dealt with supply of the NORAD (North American Air Defence) system . Shipment of zinc-lead oars (350k tons) from the Polaris and Nanisiwick mines is done by bulk carrier of the ice class of the "Arctic" type (with the dead weight of 28k tons). The local leading of ships is done by 8 icebreakers (with the power of 7k - 24k HP) of the Canadian Coast Guard. The icebreakers are maintained at the expense of the State and fulfil leading free of charge. Six other icebreakers (with the power of 9.5k -23.5k HP) belong to private oil companies and carry out icebreaking leading on a contract basis.

Canada associates the prospects of international navigation along the NWP with the development of deposits of carbon-hydrogenous in the regions adjacent to the NWP. Along with this, Canada is going to work out a corresponding system of foreign vessels commercial navigation along the straight of the Canadian Arctic Archipelago.

The policy of USA dealing with Arctic navigation is governed more by geopolitical than economic interests. Following its concept of the freedom of navigation in the sea areas of the Arctic basin, Americans insist upon "innocent passage" through Canadian and Russian straights.

However, in the last years under the influence of a series of factors, the USA has signed bilateral agreements dealing with the regulation of Arctic navigation.

In 1988 USA and Canada signed the Treaty on Collaboration in the Arctic, including navigation.

In 1989 the Soviet-American Agreement on collaboration in preventing pollution from vessels in the Chukchi and Bering Seas was signed. It was the consequence of an ecological tragedy - the grounding on a shoal of the American tanker "Exxon Valdez" followed by the leakage of some 35k tons of oil into the aquatorium of the nature reservation of Prince Williams Bay.

International navigation in the American part of the NWP has not yet developed. At the same time, a Soviet-American Protocol expressing the intention of the sides to "give an assessment of the technological and economic potentialities of the NSR for making use of it for international shipping along the routes Europe - North America - States of South-East Asia" was adopted at the Third Conference of Heads of the Arctic States' Local Administrations in 1990 (Anchorage, Alaska).

Pursuing national goals, the USA delivers supply cargoes to the Northern slope of Alaska, mainly to oil and gas wells of Prudhoe-Bay (Fig. 3,4). The volume of shipment is equal to 40k tons per year. The barge-tugboat system is employed for cargo transportation. This system proved to be the most efficient and universal. Shallow

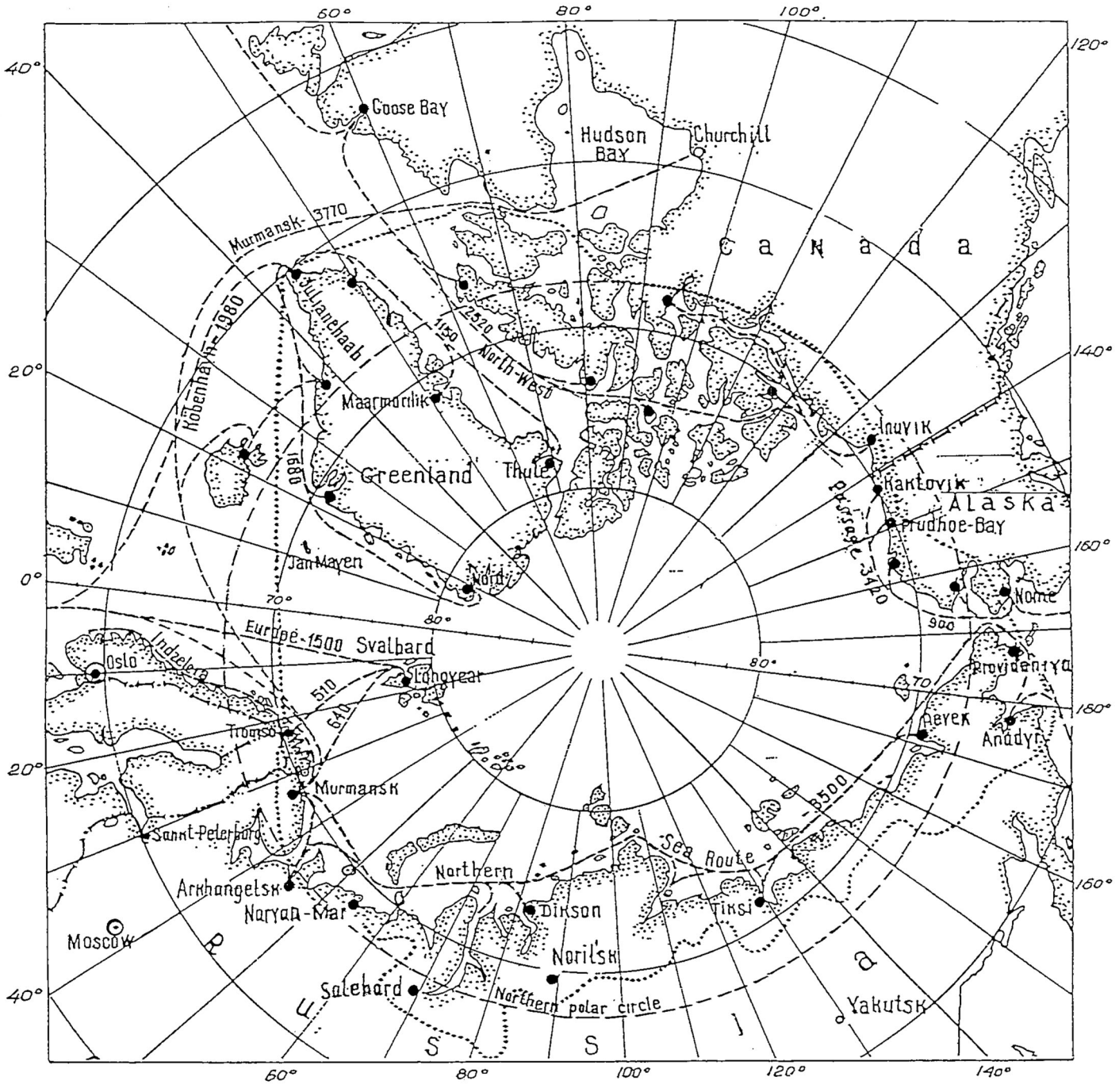

Fig. 3. Shipping routes in the Arctic

Northern Sea Route (Murmansk - Bering strait)	-	3500 miles
Canadian part of the Northwest Passage (Goose Bay - Inuvik)	-	2520 miles
American part of the Northwest Passage (Nome - Kaktovik)	-	900 miles
Longyear (Svalbard) - Tromsø	-	510 miles
Longyear - Murmansk	-	640 miles
"Indreleia"	-	930 miles
Julianehaab - Thule (western coast of Greenland)	-	1150 miles
Julianehaab - Nord (eastern coast of Greenland)	-	1680 miles

..... Border of the Arctic

draught of barges allows them to negotiate shallow-water river fairways . The system is being enhanced by making use of icebreaking barges and powerful icebreaking pushing tugboats.

The icebreaking fleet of the USA is not capable of supporting trade navigation at all. Three icebreakers (of power up to 60k HP) belong to the Coast Guard of the USA. They are financed over the Federal budget and used mainly for scientific research and navigational-hydrographic purposes, including military. One icebreaker, with a power of 12.7k HP, belongs to a shipyard. It is rented by the National Scientific Fund of the USA overthe State budget.

The USA icebreakers are based in the port of Seattle, where a special Department for Icebreaker Maintenance was created in 1978.

In accordance with the USA 1984 Law on Navigation, Americans pursue the policy of restriction of interference by state institutions into the commercial activities of shipping companies. For ships sailing along the seaways of Alaska and the Northwest Pacific some special requirements (double hull standards and other ship safety and design regulations) were imposed by the 1990 Oil Pollution Act, the 1978 Port and Vessel Safety Act and other applicable US Statutes.

The policy of Norway with respect to Arctic navigation is directed at insurance of sea-food catching in fishing zones around the Jan Mayen island and the Spitsbergen Archipelago, as well as at preservation of its sovereignty on the Spitsbergen Archipelago in accordance with the Treaty of 1920.

Maintaining control of fishing, patrolling the economic zone and protecting the resources of the continental shelf are provided by the Norwegian Coast Guard. It was established in 1977 and includes patrol ice class warships of the "Nordcap" type (dead weight 2,950 tons).

Navigation in the region of Spitsbergen is determined by the conditions of the Treaty of 1920. Norway is not permitted to use the Archipelago for military purposes. The states which signed the Treaty, enjoy equal rights of navigation, industrial business, mining and commerce, as well as scientific research. Shipment of cargoes from the Archipelago, in accordance with the Treaty, is not subject to any limitations.

There are currently about 1,000 Norwegian and 2,000 Russian permanent residents in the Archipelago. Coal mining is the main business there. Private Norwegian firms organise air tourism. Today up to 10,000 tourists visit the Archipelago annually. This figure is expected to increase up to 20,000).

Norwegians consider that their patrol warships have the right to use the port of Longyear (Fig. 3). These actions of the Norwegian side were deemed by the former USSR as violation of the demilitarised zone of the Archipelago.

Norway was the initiator of an important international precedent, i.e. the national sea route "Indreleia". The route passes along the Norwegian shores in the skerries region mainly in the internal waters of Norway (Fig. 1).

The beginning of the "Indreleia" history dates back to 1935 when Norway had drawn straight initial lines for marking off the fishing zone (the territorial waters) to protect its fishing resources. As a result, vast coastal water areas rich with fish turned out to be in the internal waters of Norway. Great Britain opposed it. The International Court, solving this argument in favour of Norway in 1951, drew the conclusion that the "Indreleia" is a sea route fitted out by the endeavours of Norway and the waters along it should therefore be considered internal Norwegian waters.

The sea route "Indreleia" is not used for international navigation because of its coastal character. Nevertheless, the special legal status of this sea route provides a juridical basis for developing a system of payment collection for services in the event that international navigation through it should develop.

The policy of Denmark (Greenland) with respect to Arctic navigation is connected to the questions of regulation of fishing in the waters of Greenland, delivery of supply cargoes to the coastal settlements of the island, export of non-ferrous metals mined here, as well as of tourism developed on the island.

The attention of Greenland to regulation of fishing has redoubled since receiving the rights of internal self-government (1979). Being directed by the interests of protecting its fishing resources, Greenland quitted the European Community in 1985. The countries of the Community were granted a limited fish quota in Greenland's waters (125k tons).

Greenland has its trawler fleet (10 vessels). Cod-fish is caught in coastal waters, as well as in distant waters. Export of fish products is directed to the European market.

Delivery of supply cargoes at the coastal settlements of the island is carried out by special vessels supported by four Dutch icebreakers (with the power of 3.2k - 12k HP). The icebreakers are maintained over the State budget.

Zinc-lead ores extracted at the Maarmorilik mine (Fig. 3,4) were exported mainly by bulk carriers of European shipping companies. The volume of ores export was equal to 200k tons per year. Extraction has now ceased.

Exotic sea tourism on Greenland is being developed using foreign cruise vessels. Tourism is organised by private companies with the financial support of the Greenland authorities. About 7,000 tourists per year currently visit Greenland. By 2005 this number may reach 35,000 (the population of Greenland is 50,000).

Thus, international navigation plays an important role in Greenland's international links. Greenland permits foreign, mainly American, warships to sail in its waters, due to the necessity of supplying American military bases (Thule, etc.) located on the island. Passage of foreign warships through the territorial waters of Greenland is possible only after prior notification, advanced through diplomatic channels.

The policy of Sweden, Finland and Iceland with respect to Arctic navigation is defined by their subarctic location. These states do not take part in commercial utilisation of navigable sea routes. Nevertheless, the practice of Sweden and Finland in maintenance of icebreaking support of navigation in their waters, as well as their position with respect to international navigation along the NSR deserves attention.

Sweden's icebreaking fleet consists of 7 icebreakers (with the power of 4.7k - 24.5k HP), maintained at the expense of the state. The icebreakers ensure winter navigation in the Botnik Bay, and are attached to scientific research in the Arctic. A modern icebreaker "Oden" (25k HP) is the property of several private timber industry firms and is rented by Sweden's Shipping Administration.

Finland has 8 icebreakers (with the power of 12k - 22k HP). The icebreakers are the property of the Marine Administration of Finland and are maintained at the expense of the state. The icebreakers ensure winter navigation in the Botnik and Finn Bays, and are used for hydrographical works. Payment for services collected in ports accrue to the State budget.

Sweden and Finland, being members of the Barents / Euroarctic Region Council actively discuss the problems of commercial utilisation of the NSR. On the initiative of Finland a group of experts on the questions of NSR has been formed within the Council.*) Finland, having a powerful shipbuilding potential, seeks to resume its tradition of getting Russian orders for building icebreakers, tankers, and vessels of ice class for navigation along the NSR.

Table 4. Commercial-Legal Regulation of the Shipping in the Arctic

Characteristics of seaways	Canada	USA	Norway	Denmark (Greenland)
Length of arctic seaways (miles)	2910 (Canadian part of NWP)	750 (American part of NWP)	930 (Seaway "Indreleia" 540 (Tromse-Spitsbergen)	1150 (Western coast) 1680 (Eastern coast)
Volume of trans-portation (thousand tons)	650	40 (Towards Alaska)	300 (From Spitsbergen)	200 (From Greenland)
Legislative acts for regulation	Law and Regulations on pollution prevention of arctic waters from ships	None	Treaty on Spitsbergen, 1920	None
Sailing of foreign ships	Single sailing	Singe sailing	Regular sailing	Regular sailing
Co-operation:				
• on bilateral level	Canada- USA	USA-Canada USA-Russia	None	None
• on regional level	None	None	Barents/ Europe-arctic Region Council	Barents/ Europe- arctic Region Council
• on internat. level	Project INSROP	Project INSROP	Project INSROP	None

*)**This fact cancels the reviewer's remark that "Formally the Council of the Barents/Euroarctic region does not include sea space issues."**

The policy of Iceland with respect to Arctic navigation is mainly connected to fishery regulation in its fishing zone. Legislative Acts, adopted by Iceland are directed on limitation or prohibition of catching fish by foreign vessels.

The main statements of this section are presented in Table 4.

Analysis of these data allows one to conclude that all Arctic countries make an active use of international legislation to protect their national interests (fishing resources, environmental management, defence aspects). Russia consistently uses foreign experience in this field. Foreign countries lack experience in paying for pilotage and icebreaker convoy services in the Arctic. Their experiences in building all-purpose icebreakers and ice-class ships are primarily worthy of note.

2.4. Comparison of Navigation along NSR and Northwest Passage

The task of this section consisted in evaluating the influence of a number of factors on the likely development of navigation along two major sea routes in the Arctic, along Russia's and North America's coasts respectively. The authors share the reviewer's point of view that in the foreseeable future the NWP cannot be regarded as a competitor of the NSR. Therefore the given publication includes only the general conclusions confirming the above mentioned point of view. Those who are interested in more detailed considerations, can refer to [3].

The preceding sections of this publications, as well as [3,13,14,15], served as a basis for identifying and presenting in Table 5 basic factors that influence the prospects of international Arctic navigation.

Political, technological and economic factors. Figure 4 shows the main routes, cargoflows , its volume and periods of navigation in the Arctic. Evaluation of the first group of factors in Table 5 testifies a good deal of the NSR preparedness for the beginning of international transit voyages. The available practical experience and technological capability will make it possible to include an international variable in the organisational and technical system that can be further developed on a mutually unofficial basis.

The North American Arctic has not got such a system yet, and its establishment will require considerable effort and time.

Military factors. Figure 6 indicates the main traditional areas of naval activity in the Arctic. Undoubtedly, it may make a negative influence in case of substantial transit cargo traffic in the Barents Sea area. However, in recent years the level of naval activity has been declining. The problem got on the agenda of international forums, and, if necessary, the corresponding decisions will be found, as the USA remains in isolation seeking to avoid discussing the problem.

Legal factors. Figure 5 presents the zones of different legal regulations in the Arctic basin. Comparing the conditions of international navigation in the Arctic, one can conclude that the NSR has some advantages.

The NSR, in contrast to the NWP, has the united legal status determined not only by purposes of ensuring safe navigation and preventing environment pollution from ships, but also by purposes of creating a favourable legal regime for international shipping along its seaways.

Table 5. Basic Factors Influencing Possible Development of International Shipping along the NSR and Northwest Passage

Legend:
(++) - essentially assisting
(+) - moderately assisting
(P) - possibly assisting in perspective
(-) - preventing, having no premises

No.	FACTORS	Appreciation		
		NSR	Northwest Passage	
			Canadian part	American part
1.	**Political and technical-economic factors:** Politics of Russia, Canada and the USA with respect to international shipping	++	P	-
2.	Commercial use of transit sea routes	+	P	-
3.	National cabotage cargo transportation	++	+	-
4.	Icebreaker support of international shipping	++	P	-
5.	Transport fleet of the arctic navigation	++	P	-
	Military factors:			
6.	Naval activity on the sea routes	-	-	-
7.	Ability of Russia, Canada and the USA to carry out the control for naval activity on their sea routes	+		+
8.	Attitudes of Russia, Canada and the USA on limitation of military activity on their sea routes	++	+	
	Legal factors:			
9.	Spreading of the sovereign rights on sea space, through which the sea routes are passing	-	-	+
10.	Arrangement for passages of foreign ships through sea routes	++	+	++
11.	Order of navigation on the sea routes with consideration of requirement of the 1982 Law of the Sea Convention, Article 234	++	+	+
12.	Authorities regulated the shipping along the sea routes	++	+	+
13.	Co-operation in shipping on the sea routes:			
	• on bilateral level	++	+	++
	• on regional level	+	-	-
	• on international level	+	-	-

The Russian NSR normative acts are based on the principle of non-discrimination and provide not only development of international navigation along the NSR but also enable administrative bodies of Russia to effect complete control and regulation of military navigation along the NSR.

As for legal relations the NWP is not a united sea transport route. The different legal approaches of the USA and Canada in the regulation of shipping are evident.

The Canadian legal approach is oriented towards securing sovereign rights on its part of the NWP. For this purpose, in essence, Canada declared the normative acts on preventing marine environment pollution. The USA is adhering to principles of "peaceful passage" and "innocent passage" through the NWP and is not intended for the present time to use this route for international commercial shipping. The Canadian and American normative acts with respect to the NWP differ from the NSR by discrimination: cargo transportation in the region of the Canadian Arctic Archipelago is only permitted for Canadian transport ships, along Alaska - for American transport ships (the Jones Act).

The disagreements between the two states on the NWP legal status had been softened to some extent by the Treaty on co-operation in the Arctic signed by the USA and Canada in 1988. The Treaty has legal force only in respect of the primary right of the American icebreakers to transit passage through the Canadian part of the NWP and does not mean, in the USA's opinion, acknowledgement of the Canadian right on strait waters as internal. The Treaty is bilateral and does not take into account the rights of other states.

Co-operation applied to the NSR has been developed on a larger scale. It is oriented specifically towards international shipping along this route. The measures conducted within the framework of two Agreements (USSR - USA, 1989 and USSR - Canada, 1991), the activity of the Working Group in the Barents/Euroarctic Region Council and the results of International Project for the NSR (INSROP, since 1993) will help all the states concerned and foreign shipping companies to get comprehensive information about possibilities of the NSR as a short and sufficiently safe route between Europe and Asia.

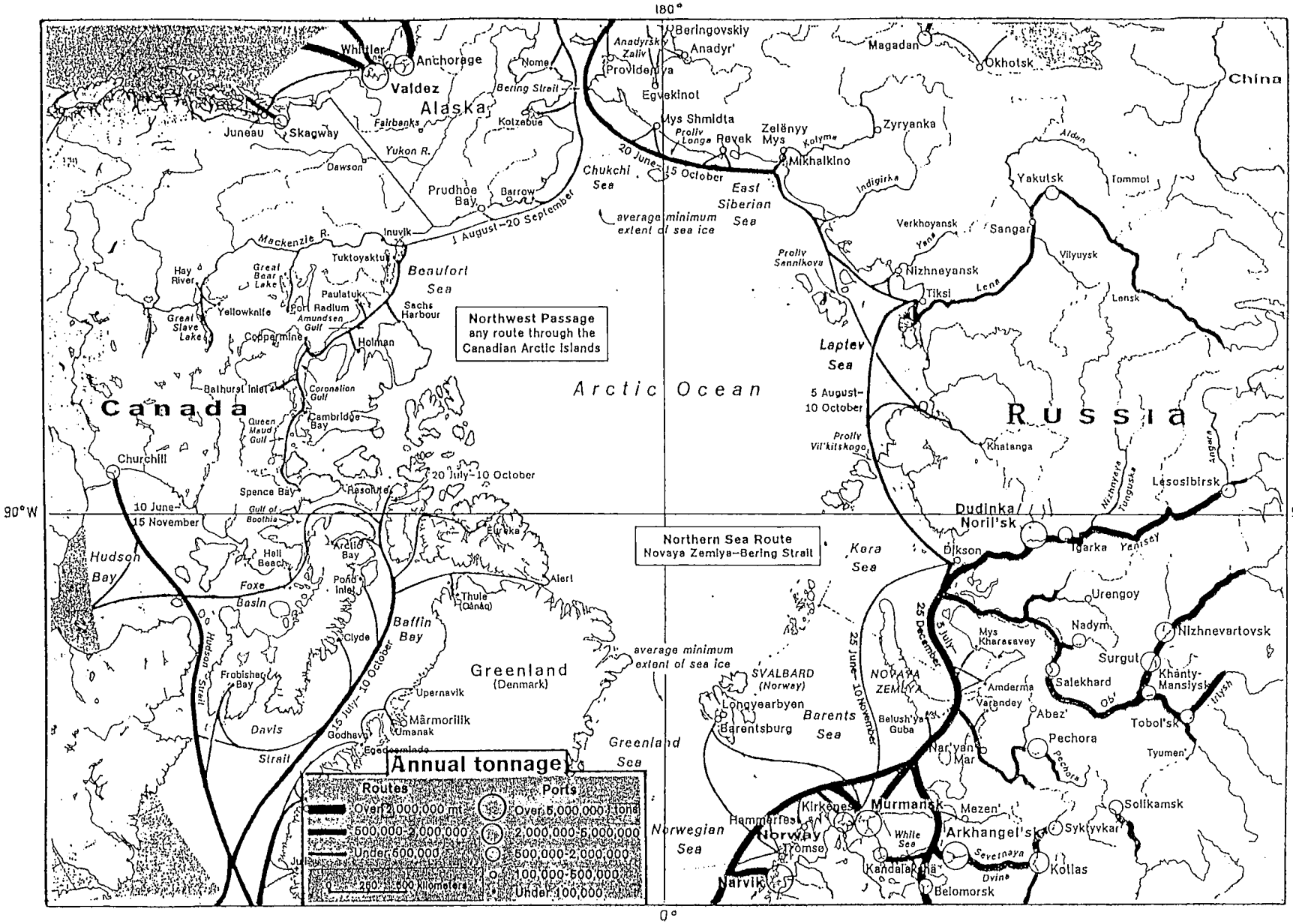

Fig. 4. Some economic and physical-geographical indicators of the Northern Sea Route and the Northwest Passage.

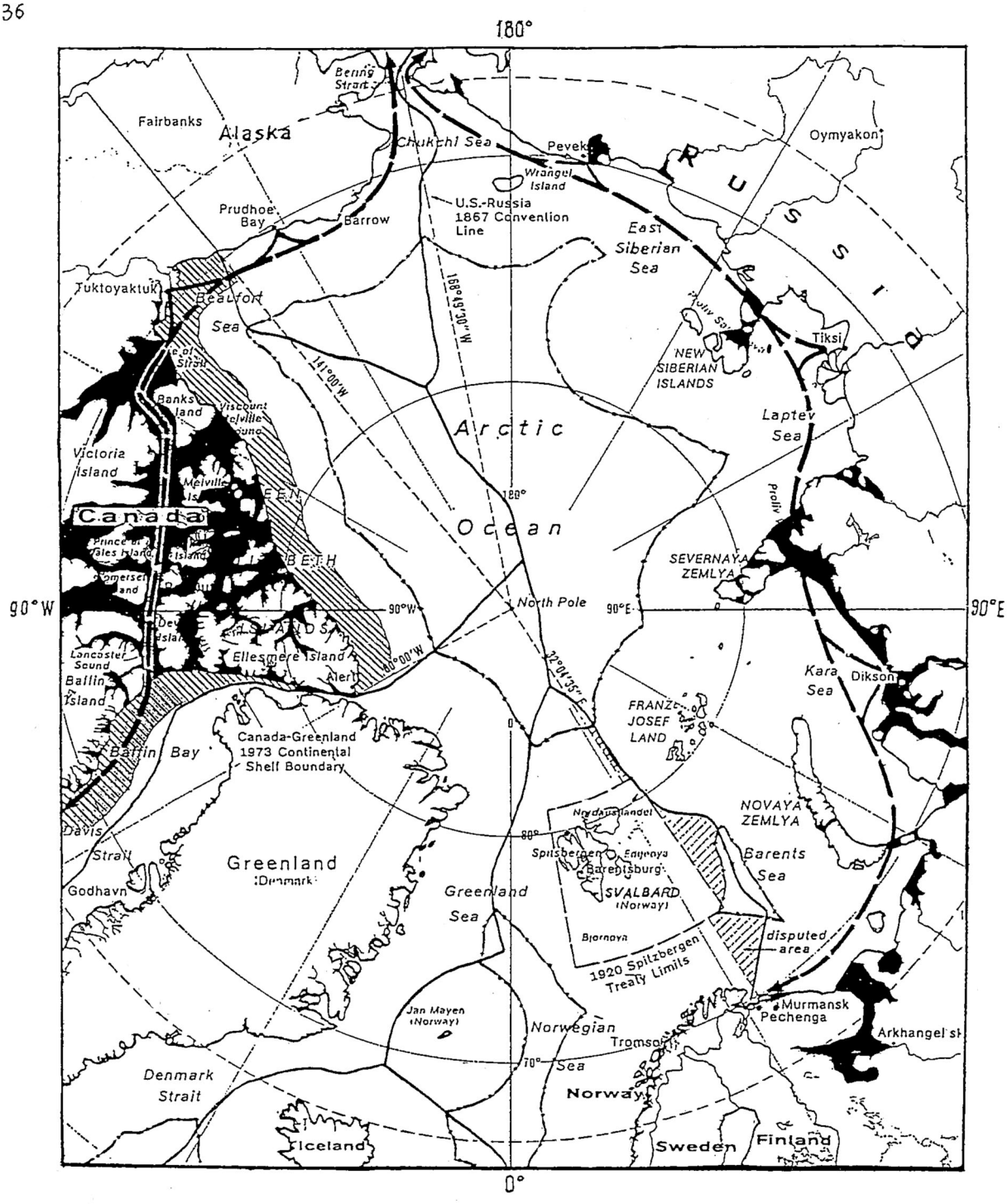

Fig. 5. Legal regulation features of shipping along the Northern Sea Route (NSR) and the Northwest Passage (NWP)

—·— – Exclusive economic zones (200 mile limit).
— — — – Treaty limits (Svalbard zone).
----- – Sector lines.
——— – Equidistant lines.
←——→ – Seaways of the NSR and the NWP.
▨ – Canadian pollution control zone (100 mile limit).
■ – Internal waters of Russia and Canada.

3. Political Prognosis of the Development of International Shipping along the NSR

Political prognosis is a syntheses of domestic and foreign policies of Russia. Political prognosis assumes that economic and political reforms conducted in Russia, carry non-returnable character . The NSR as opened for international shipping, will contribute to the development of international co-operation by means of setting up beneficial transport communications with partners of interested states.

As for prospects of the NSR system development, [1] identified 3 possible alternatives:

- rejection of market-oriented transformations in the national economy and return to administrative command methods, on the NSR as well;
- unorganised development of market relations, increased influence of the Russian Federation subjects on separate elements of the NSR;
- a more significant role of the state in the development of the NSR as a united system functioning within the market-based economy.

It was then stated that the first one is unlikely and does not deserve particular attention, as the ideas of international shipping along the NSR were suggested within the old political system.

3.1. Transformations in the NSR System in Transition towards Market-Oriented Economy

The first "market-oriented" steps towards transforming the NSR system were obviously spontaneous, i.e. were carried out in the framework of the second alternative.

Establishment of the joint stock companies on the basis of shipping enterprises and ports, with the preservation of state ownership for icebreakers, moors and some other objects resulted in a situation where the interests of individual elements of the NSR turned out to be contradictory. The shipping companies sought to avoid using icebreakers and refused to be involved in Arctic transportation as it was unprofitable. The rates and the logic of their calculation did not correspond to the actual costs of the marine transportation in the Arctic and did not ensure efficiency of the transportation services provided.

The negative changes in the organisation of the transport and economic relations in the NSR system were aggravated by the general economic instability in the Far North, recession in production, disintegration of the crediting system, drastic cut in investments.

The Subjects of the Russian Federation (Yakutiya, Chukotka Autonomous District), declared certain NSR sections running along their coast and the ports in their territories

as their property without having any legal right thereto or material resources for investments.

As a result, there was a real threat of disintegration and aggravation of the organisational and economic crisis of that Arctic route. The cargo traffic along the NSR in 1991-1993 was nearly half of that before. The Far North population's needs in fuel, food and commodities were satisfied to the degree of 20-40% only.

Thus, the second alternative exhausted itself within two years. The measures taken in 1993-1995 testify the inevitability of the NSR development in the framework of the third alternative.

Since all those years a state policy of the NSR development and international navigation along it in a new economic environment has been formulated. The legislative and normative acts on the NSR are dictated by the urgency of solving the arising current problems. The most important of them are presented in Table 6.

Table 6 .**Political Resolutions and Legislative Acts Concerning the NSR and Adopted in 1993-1995**

No.	Goals of state policy	Political resolutions, legislative and normative acts adopted
1.	Checking the disintegration process of the NSR	Russian Federation (RF) President's Decree "On Measures for Implementation of State Policy while Transforming State-Owned Organisations into Joint Stock Companies and Privatisation of Sea, River and Air Transport Enterprises" (1993).
2	Enhancement of the role of the state in management of the national sea transportation route in the Arctic.	The RF Government Resolutions: "On Organisation of Sea Ports Management" (1993) "On Measures of Improvement of the NSR Management" (1994)
3	Strengthening of the NSR material and technical base.	"Program for Revival of Russia's Merchant Marine" in part of construction of icebreakers, ice strengthened ships, arctic port facilities (1993).
4	Provision for guaranteed deliveries of cargoes to the North.	The RF Government Resolution "On the System of State Support and Organisation of Deliveries of Food (commodities) to the Regions of the Far North and the Areas Equated to them in 1995" (1995)
5	Co-ordination of the NSR activities with other means of transport.	To be partially effected through the annual "Plans of Sea Ice-breaker-assisted Ships Operations along the NSR".
6	Creation of a favourable political and legal regime for development of international navigation along the NSR.	To be achieved by developing collaboration with the countries interested in commercial use of the NSR; "Guide to Navigation through the Northern Sea Route" is being prepared for publication in English.

The first results of shaping up a new organisational and economic mechanism of the NSR in a market-oriented system give grounds to believe that the premises for preserving the NSR as a united national sea transportation system in the Arctic have been created.

The adopted legislative acts restored the legal aspects of the state regulation of the NSR system, provided an initial basis for co-ordinating legal, economic, financial and organisational relations between the state and the federation subjects, as well as with the

joint-stock shipping companies relating to the NSR problems and international navigation along it. They also defined the roles of the local self-government bodies in settling the problems within their competence (Table 7).

The adopted measures prevented the disintegration of the NSR system, but they could not solve all the problems that arose. The volume of cargo traffic along the NSR continues to fall though there is still a tendency towards slower rates of falling.

Table 7 . **Functions of State, Subjects of Federation, Local Self Government Bodies, Joint Stock Companies - Steamship Lines and Port Administrations in the NSR Management**

No.	Subjects	Functions
1.	State	Designs internal and external policies with respect to the NSR, performs (through the NSR Administration) the functions of the NSR state regulation: approves comprehensive programs of the NSR development; issues normative acts; controls safe navigation; places state orders to shipping companies for cargo transportation and their icebreaker convoy; organises research; provides state support of the icebreaker fleet; finances construction of icebreakers, icebreaking cargo and hydrographic vessels; co-ordinates the activities of the NSR and other transport facilities. As for international navigation, it identifies foreign clients of consignors; clears foreign vessels for passage through the NSR; establishes jointly with the shipping companies the tariffs for foreign ships icebreaker-assisted passage through the NSR.
2.	Subjects of Federation	National autonomous districts of the arctic zone, on the basis of "Joint Agreement" on the NSR use, seek to improve the economic relations, introduce market relations into practice of arctic navigation; develop the port facilities; provide means of transport for transportation of cargoes for the indigenous peoples of the Far North. With the aim of developing foreign commercial navigation, they improve the infrastructure of the ports to call foreign ships into the ports. On this basis they establish regular commercial and tourist relations with foreign citizens (investors).
3.	Local self-government bodies	Possess, use and dispose municipal property of the ports; develop social infrastructure of the ports; build and maintain the local roads; give support to traditional branches of economy, trades and crafts of the population of the North oriented towards commercial contact with foreign citizens arriving on board merchant and tourist vessels.
4.	Joint- stock companies-shipping companies	"Murmansk Sea Shipping Company", "Far East Sea Shipping Company" and "Northern Sea Shipping Company" use icebreaker fleet on the lines leasing basis; conclude agreements with the RF Government for organisation and provision of icebreaker-assisted cargo transportation along the NSR; participate in elaboration and implementation of marine ice operations plans. With respect to international navigation along the NSR they identify jointly with the NSR Administration foreign clients; effect the escorting of foreign ships through the NSR; establish tariffs for the services rendered.
5.	Administra-tions of Arctic sea port	Make use of the state-owned port facilities and storage space; define and control the order of navigation at the ports. With foreign vessels calling at the port, arrange pilot and icebreaker convoy, take the payments for the services rendered by the port.

Cargo transportation by foreign ships has not been significantly developed either. Yet, in recent years the volume of transit cargo transportation, including foreign cargoes, by Russian ships held its own (about 150 thousand tons).

Some difficulties cropped up in renewal of material and technical base of the NSR. The "Program of revival of Russia's merchant marines in the period of 1993-2000" envisages deliveries to the Arctic of 6 linear icebreakers (one of them atomic) and 76 vessels.

There were plans to place orders for construction of 24 mWt capacity linear icebreakers (nuclear-powered icebreaker of the "Arktika" type will be commissioned in 1998); Arctic tankers of 2500,5000 and 17000 dead weight of UL ice class; Arctic ships of 5000 dead weight of UL and L1 ice class; Arctic ships - of 20000 dead weight of UL ice class and 9000-10000 dead weight of L1 ice class; passenger ships for 300 people capacity for the North.

The delivery of icebreakers and vessels for the Arctic is financed by the "Foundation of Revival of Merchant Marine" and the federal budget.

Implementation of the shipbuilding Program would ensure increased deliveries of cargoes for the Noril'sk complex, timber export from Igarka, delivery of equipment for the Yamal gas fields and shipments therefrom of gas condensate.

However, the Program is on the verge of wrecking. Owing to a drastic reduction in the volume of financing, there are only resources to finish construction of the nuclear-powered icebreaker "Ural" and one tanker of UL class. In case the Program is not realized, the situation with timber-ships, supply ships and tankers may remain very serious. Some of the vessels that participated in Arctic transportation were left behind in the Baltic countries (timber-ships and refrigerator ships - in Lithuania, tankers - in Latvia). Russia will have to continue leasing up to 10 foreign tankers to deliver oil products to the western Arctic.

The Program envisaged renovation and technical reequipment of the Arctic ports at the federal budget expense. However, the state could not find the necessary resources. In the period under analysis (ending in the year 2000) the Arctic ports belonging to the Department of Marine Transport (Amderma, Khatanga, Tiksi, Pevek) will be titled to the Subjects of Federation. The port of Dikson has already been transferred to the "Noril'sk Nikel" complex. However, the local authorities have not got the necessary funds for repair and modernisation of the port facilities either. If the required funding is not provided, the ports will remain the weakest link in the NSR system...

Among the new technology-oriented developments of interest is the project of underwater cargo transportation in the Arctic. An agreement for project development between the Central Design Bureau of Marine Technology "Rubin", the shipbuilding production association "Sevmashpredpriyatiye" and the joint stock company engaged in supplying the North with food products and consumer goods was signed in October 1994.

The preliminary studies indicate that each nuclear-powered submarine is capable of delivering up to 15 thousand tons of cargoes. The first step towards realising the project was delivery of cargo by the nuclear-powered submarine of "Victor-3" class to the port of Kharasavey on 5th September 1995. The joint stock company "Gasprom" and the enterprises of the Russian oil producing system that financed the first commercial passage of the submarine, decided to finance modernization of two nuclear-powered submarines. This modernisation is to be finished in 6 months, after which the submarines will be ready for commercial voyages...

Development of international commercial utilisation of the NSR in the coming years is possible, subject to increasing the transit traffic of the cargoes of the West and East exclusively on the Russian ice-strengthened ships. The western shipping companies have no similar ships so far. So, with the Russian transport fleet comprising over 100 vessels of ice class, there are real premises to increase by the year 2000 the volume of foreign clients' transit cargo transportation up to 400-500 thousand tons a year.

The effectiveness of such carriages is once more confirmed by the experimental voyage of the ice-strengthened ship of "Kandalaksha" class with a foreign cargo on board along the route from Yokohama (Japan) to Kirkenes (Norway) in the period 1-28 August 1995. The trial cargo voyage was effected within the framework of the international project INSROP. In fact, the vessel passed along the NSR independently, being convoyed by icebreaker in the eastern sectors of the route only. If the vessel had not had stops for research monitoring, the duration of the navigation from the Bering Strait to the port of Kirkenes would not have exceeded 10 days. The successful passage of the "Kandalaksha" with experts from Japan, Norway and other countries on board is sure to attract the attention of the states interested in cargo transportation along the NSR.

3.2. Medium-Term Political Forecast of Development of International Navigation along the NSR *)

The stated data testify to considerable internal difficulties of the NSR system and availability of a consistent policy of the government bodies aimed at their elimination.

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*)Reviewer comment: The section on forecasts (pp.39-56) also poses problems in my mind. The thing that seems most clear to me is that any specific forecasts or predictions regarding this subject are extremely difficult to make and likely to be erroneous. Again, my own sense is that the forecasts included here are probably too optimistic. But more generally, the way to deal with this kind of uncertainty is to devise a range of scenarios relating to the key economic, military, and political variables and then to explore the implications of each for the prospects of commercial navigation along the NSR.
Authors' answer: understanding the difficulty of predicting the prospects of just commercial navigation along the NSR development and its dependence not only on the factors of Russia's transformations but also on many of the processes in other parts of the world, the authors limited themselves only to coverage of the RF policy towards international commercial shipping and tried to make it clearer while the text was under final editing.

One of the lines of this activity is the creation of the necessary conditions for international transit shipping. Table 8 presents a list of the regular normative acts being prepared.

Table 8 Improvement of Legal Basis in the NSR Development

No.	Normative acts	Time of issue
	Normative acts of permanent effect:	
1.	Decree of President of Russian Federation "Basic Lines of NSR Development" (Program of NSR Development)	1996-1997
2.	Agreement between RF Government and Federation Subjects' Governments "On Utilisation of the NSR"	1996
3.	"Regulations for NSR Administration" (revised)	1997
4.	"Regulations for Marine Operations Headquarters" (revised)	1997
5.	"Regulations for State Ice Pilot"	1997
6.	"Regulations for State Representatives in Joint Stock Shipping Companies"	1997
7.	"Regulations for Administration of an Arctic Sea Port"	1997
8.	"Regulations for Interaction of Marine, River and Airborne Means of Transport in Cargo Traffic along the NSR"	1997
9.	"Instructions for Research and Operational Support of Marine Arctic Operations" (revised)	1997
10.	"United Scheme of Cargo Deliveries to the North and the Arctic"	1997-1998
	Normative acts issued annually:	
1.	"State Agreements between RF Government (Ministry of Transport) and Shipping Companies for Cargo Transportation and Icebreaker Leading along the NSR"	-
2.	Plan of Marine Operations on Icebreaker Leading of Ships along the NSR	-

Along with solution of the internal problems, these documents intend to consistently pursue a policy towards improving the conditions of international commercial shipping. In particular, they envisage:

To enhance via the NSR Administration the following functions of the state: identification of foreign clients (consignors), clearance of foreign ships for passage along the NSR, definition of tariffs (jointly with shipping companies) for escorting foreign vessels and control their safe navigation on the NSR seaways;

To support by means of central subsidies the Subjects' of Federation and local governments bodies' strive to improve the infrastructure of the ports, develop the traditional trades and crafts of the indigenous peoples of the North oriented towards commercial contacts with foreign citizens arriving at the ports on board merchant and tourist vessels;

To make consistent the rules and procedures of the relationships in the management system "Foreign vessel - State Ice Pilot - Icebreaker - Marine Operations Headquarters -

NSR Administration" with the present Russian attitude to international commercial use of the NSR and the principle of notification by foreign cargo of passage on the NSR seaways.

In the link "Foreign vessel - Marine Operations Headquarters- NSR Administration" to proceed from the basic standpoint: Headquarters of marine operations are responsible directly for marine ice operations, whereas the NSR Administration effects general co-ordination of the Headquarters' activities;

To perfect the tariffs for payments on usage NSR and for NSR services in order to attract shippers and cargo owners;

To provide foreign users with operational information on the proposed term of Arctic navigation and the predicted ice condition on the NSR seaways , as well as on the parameters of the Russian ice-strengthened vessels available for freight and placement of icebreakers on the NSR seaways.

In the medium-term perspective the NSR system remains a national transport route, whose stabilisation and development is dictated by Russia's economic interests. Development of international shipping may attract additional investments and facilitate solution of the internal problems. In view of the above, one can predict with confidence the consistency of Russia's policy in support of international shipping along the NSR. Its development will be dependent on the economic benefit of the transit, but this benefit should be well substantiated. It will also depend on the future large-scale projects of developing energy and mineral resource fields in the coastal area and shelf of the Russian Arctic.

Conclusion

The publication contains analysis of the USSR (Russian) policy, as well as policies of other Arctic countries, towards international shipping in the Arctic in general and along the NSR, in particular. The analysis is made on the basis of systems approach. It has taken into account historical, legal, political, military, economic, social, ecological and other factors.

The stages of the NSR system transformation into a national transportation route are identified and the USSR initiatives on commercial international transit shipping are highlighted. It is stated how the legal status of shipping in the Russian Arctic waters was established.

The publication treats the issues of military utilisation of the NSR, including prevention of foreign warship attempts to penetrate into the Russian Arctic, and establishment of a modern non-discrimination procedure for warships to pass along the NSR routes.

It contains an analysis of the policies and practices of other Arctic states relating to transit voyages and regulation of navigation in the adjoining Arctic waters. There is comparative analysis resulting in the conclusion that by virtue of the natural conditions, availability of an infrastructure, practical experience and the established legal order, the NSR has a number of advantages compared to the NWP.

It shows that realisation of the USSR initiatives in the documents adopted by Russia ensures the legal status of the international NSR utilisation for transportation purposes most adequate to the statements of the UN Law of the Sea Convention

The publication also deals with the complexities that became evident in the NSR system in the period of transition from centrally planned economy to market relations in Russia. At the first stage the relations between the new subjects of the Russian Federation, formed without necessary regulation, brought about serious contradictions, which could lead to the ruin of the former united smoothly functioning system. Measures were suggested aimed at enhancing the role of the NSR system' central bodies. The documents that are already adopted and are being prepared for publication should ensure stabilisation of the NSR's functioning and its further planwise development that will satisfy the requirements of the economy to be restored.

These documents envisage solution of the problems guaranteeing creation of the conditions required for international utilisation of the NSR for transportation purposes. This allows one to predict invariability of Russia's policy in this question for a medium-term perspective.

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Appendix

Reviewer's Comments and Authors' Answer

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To: Douglas Brubaker

From: Oran Young

Subject: Yakovlev/Arikainen paper

I have read the paper entitled "Political Aspects of International Shipping along the NSR (Final report, first part of the project 1993-1995)" and can offer the following comments on it.

There are some good ideas in this paper, and my overall impression is that it could form the basis for an INSROP Working Paper. But it will require serious editing and some substantive restructuring to make the paper suitable for publication. Here are some specific comments that may provide guidance to the process of revision.

1. The "Introduction" (pg. 4) is unnecessary and can be deleted. It is possible that some future version of the paper would benefit from the inclusion of a prefatory note (in contrast to the existing "Introduction"). But that would depend on the circumstances of publication.

2. The current pp. 5-9 are essentially and executive summary of the earlier work carried out under this project. They can be deleted in this paper; a reference to the earlier paper will suffice. If the two papers are published together at some stage, there will be a need to give some serious thought to developing a bridge that joins them together.

3. Pages 10-38 provide a very long comparison between the NSR and the Northwest Passage regarding a variety of political, military, and legal issues. I am not convinced that it is helpful to go

through these comparisons at such great length. The two cases are obviously different. For all kinds of reasons, commercial navigation in the Northwest Passage is unlikely during the foreseeable future. What is more, there is no reason to look at the two routes as alternatives which potential users are likely to compare and contrast. There is nothing wrong with a brief discussion of differences between the two cases. But I would compress this account considerably.

4. The essential points are summarized in Table 4 on pp. 33-34. I find some of the summary judgments included in this table rather unpersuasive. My problem is not with the somewhat pessimistic conclusions about the Northwest Passage; these judgments strike me as generally correct. Rather, my concern is with the optimistic judgments regarding the NSR. I am not so sure, for example, about the favorable political environment or the experience with international cooperation in this area. Thus, I am skeptical about the conclusions summarized in this table. The accompanying text does not alter my skepticism.

5. One point that is not included in the summary table that strikes me as highly important involves the economic circumstances of the Russian Arctic in the post-Soviet period. The paper includes a number of observations about the demographic and economic problems besetting the Russian Arctic in recent years. This is important stuff, and I would urge the authors to include a more systematic and sustained account of this situation in the revised version of the paper. But to return to the previous point, this set of issues contributes substantially to my sense of skepticism about the prospects for commercial navigation along the NSR during the near future. The authors conclude that a mixed state/private effort will be needed to overcome these problems. But I don't see much evidence of it occurring at this stage.

6. The section on forecasts (pp. 39-56) also poses problems in my mind. The thing that seems most clear to me is that any specific forecasts or predictions regarding this subject are extremely difficult to make and likely to be erroneous. Again, my own sense is that the forecasts included here are probably too optimistic. But more generally, the way to deal with this kind of uncertainty is to devise a range of scenarios relating to the key economic, military, and political variables and then to explore the implications of each for the prospects of commercial navigation along the NSR. Whereas most of

the rest of this paper could be shortened, this section probably ought to be expanded to look with some care at a number of major scenarios.

7. This leads me to two more general observations. The first is that there seems to me to be a fair amount of overlap between this paper and the earlier one that I reviewed some time ago. The most obvious area of overlap involves Section 3 of the earlier paper and Section 3 of this paper. In other sections, the overlap is less noticeable but not insignificant. A little bit of repetition is probably all right in a project of this kind. But I think there is a need to look again at the two papers with an eye toward dividing the important materials between them.

8. Finally, there is the question of putting this paper, like its predecessor, into standard English. This will be a substantial job, and I believe it should be done by a native English speaker. I do not know about the administrative and logistical issues involved in dealing with this problem. But I think it would be highly irresponsible and counterproductive to publish this paper without a substantial effort to improve the English.

Reviewer's Comments

INSTITUTE OF ARCTIC STUDIES
within the
Dickey Center
Dartmouth College

18 November 1996

Oran R. Young, Director
Hanover New Hampshire

Douglas Brubaker
Fridtjof Nansen Institute
N-1324 Lysaker
Norway

Dear Douglas,

I have looked through the revised version of the paper by Yakovlev and others on "Political Aspects of International Shipping along the NSR" and can offer you the following comments on it.

As you know, I think, there is a good deal of work to be done to make the paper's English presentable. But I will follow the advice in your note of 30 October and leave this matter to you.

With regard to substance, I feel the authors have taken my comments seriously, worked hard to deal with them, and produced a product that is a substantial improvement over the previous draft. I would favour going ahead and publishing it as an INSROP Working Paper at this stage.

I will, however, mention one substantive point that the authors may wish to ponder even at this late stage.It is extremely easy for the reader to get bogged down in the details of this paper and, as a result, to lose the forest for the trees. To overcome this problem, it would help if the authors could articulate one or a few major themes and relate the detailed discussion in the paper back to these themes from time to time. To illustrate, it is apparent that Soviet policymakers approached the large-scale investments needed to develop and maintain the NSR in large major as a political proposition rather than as a commercial or economic proposition.What can we say about the nature of this political calculus and how did it affect the attitude of the Soviets towards foreign shipping in the NSR? How has this calculus changed in the post-Soviet period and in the light of changes in the economic as well as political calculations of Russian policymakers? Are there major debates going on now about Russian policy in the North that are likely to affect Russian calculations about the administration/operation of the NSR and, more

specifically, dealings with non-Russian potentially interested in using the Route? My point is not that there is anything wrong with the revised text as it stands.But it would make life a lot casier for readers to have a few main themes that could serve as landmarks to guide them through the details of the analysis.

As I say, the bottom line is that I feel you should go ahead with circulation of this essay as an INSROP Working Paper. But perhaps these few comments will be of some help as you prepare the paper for circulation.

Best regards

Oran R.Young

Authors's Answers

5 December 1996

To : Prof. Oran R.Young, Director
Institute of Arctic Studies,
Hanover New Hampshire,
USA

Dear Prof. Oran R.Young,

Thank you for your comments on the papers of project IV.2.2. "Political Aspects of International Shipping along the Northern Sea Route" .

The comments served the very useful purpose of confirming some of the weaknesses of the papers for 1993-1995.

In accordance with your first two comments of 17 January and 11 March 1996, the papers' contents were radically restructured and shortened, clarified and submitted as six sections:

1. Policy of the USSR (Russia) relating to commercial utilisation of the NSR

2. Policy of the USSR (Russia) relating to military navigation along the NSR

3. Legacy of military confrontation in the Arctic and possibilities of using the NSR for international military shipping

4. Policy of Arctic States with respect to Arctic navigation

5. Comparison of international navigation along the NSR and Northwest Passage

6. Forecast of Russian policy relating to international navigation

After having received your last review dated 18 November 1996, we again critically analysed our version of the Working Paper and shared your conclusion that " the authors may wish to ponder even at this late stage".

In accordance with your recommendations we select three main interrelated themes and relate the detailed discussion in the paper back to these themes from time to time.

These themes are given in the paper with three sections (instead of six as in last version):

1. Domestic policy of USSR (Russia) relating to the NSR

2. Foreign policy of Russia relating to the NSR

3. Political prognosis of development of international shipping along the NSR

Such titles of the sections serve as landmarks to guide the reader through the details of the analysis.

The following changes and corrections were made in the last version of the paper:

- materials relating to military navigation along the NSR, have decreased considerably;

- duplicating with project IV.3.1. "International Law and Russian Arctic Waters" eliminated;

- additionally, in accordance with Decree of the Government from 18 July 1996, N1154-p, information is given of annual opening of Arctic ports (Dikson, Tiksi, Pevek, Dudinka , etc.) for foreign tankers and reefers and order of navigational and pilot support to call at these ports is indicated;

- political prognosis on development of international shipping along the NSR is given only in the medium term (3-5 years) as this is the most realistic given the instability of political and economic reforms in Russia.

Your comments incorporated in the first two reviews and authors' answers are indicated in the text as footnotes.

Overall, the revised version of the Working Paper does in our view, correspond to a greater extent with the goals of project IV.2.2.

Best Regards

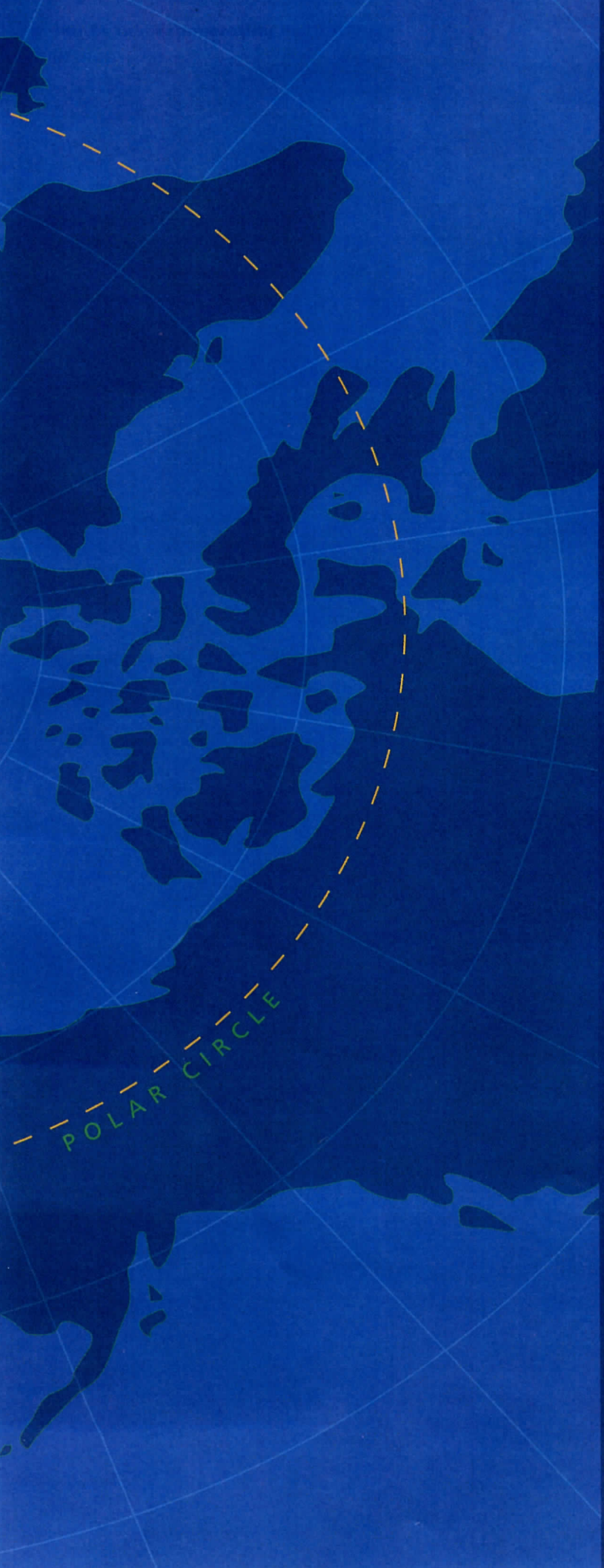
Prof. Anatoly A.Yakovlev

Dr. Oleg A.Kosov,

Institute for Systems Analysis,

Russian Academy of Sciences

Moscow, Russia



The three main cooperating institutions of INSROP

Ship & Ocean Foundation (SOF), Tokyo, Japan.
SOF was established in 1975 as a non-profit organization to advance modernization and rationalization of Japan's shipbuilding and related industries, and to give assistance to non-profit organizations associated with these industries. SOF is provided with operation funds by the Sasakawa Foundation, the world's largest foundation operated with revenue from motorboat racing. An integral part of SOF, the Tsukuba Institute, carries out experimental research into ocean environment protection and ocean development.

Central Marine Research & Design Institute (CNIIMF), St. Petersburg, Russia.
CNIIMF was founded in 1929. The institute's research focus is applied and technological with four main goals: the improvment of merchant fleet efficiency; shipping safety; technical development of the merchant fleet; and design support for future fleet development. CNIIMF was a Russian state institution up to 1993, when it was converted into a stock-holding company.

The Fridtjof Nansen Institute (FNI), Lysaker, Norway.
FNI was founded in 1958 and is based at Polhøgda, the home of Fridtjof Nansen, famous Norwegian polar explorer, scientist, humanist and statesman. The institute spesializes in applied social science research, with special focus on international resource and environmental management. In addition to INSROP, the research is organized in six integrated programmes. Typical of FNI research is a multi-disciplinary approach, entailing extensive cooperation with other research institutions both at home and abroad. The INSROP Secretariat is located at FNI.