CLASSIFICATION RESTRICTED
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY

RESTRICTED

REPORT

INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

CD NO. --

STAT

COUNTRY	USSR	DATE OF INFORMATION	1922 - 1950
SUBJECT	Transportation - Maritime Economic - Northern sea route		
HOW PUBLISHED	Daily newspaper	DATE DIST. 16	Jan 1952
WHERE PUBLISHED	Zurich	NO. OF PAGES	5
DATE PUBLISHED	30 Sep 1951		
LANGUAGE	German	SUPPLEMENT TO REPORT NO.	

THIS IS UNEVALUATED INFORMATION

SOURCE Neue Zuercher Zeitung.

ECONOMIC AND MILITARY CAPABILITIES OF USSR'S NORTHERN SEA ROUTE

Soviet Expeditions

Since 1922, the Soviets have systematically explored the Arctic sea routes. Each year new expeditions pushed ever further eastward, and in 1932 the icebreaker-freighter Sibiryakov succeeded in negotiating the west-east passage within a single navigation season. The trip of the Chelyuskin in 1933 - 1934 ended in a setback, as the ship was crushed by ice; but in 1934 the icebreaker Litke made the trip from east to west, thus ending the exploratory phase of the northern sea route.

In 1935, four freighters made the trip in 72-78 days, two of them traveling from east to west and two from west to east. Fourteen freighters made the passage in one or the other direction in 1936, but during the 1937 season arctic navigation suffered a setback. Some of the 26 ships that started the trip got stuck in the ice and had to stay put for the winter. Although this setback could be traced principally to an unusually hard winter, Prof Otto Schmidt, chief of the Administration of the North Sea Route, was removed. At that time, apparently, there were still too few weather stations to permit a reliable and long-range ice forecast. Since that time, the number of ships which travel the arctic route in both directions has increased steadily, and it is said that about 50 freighters a year are at present transporting approximately 200,000 tons of goods over this route. However, this amounts to only 0.5 percent of the total freight transported by the Soviet maritime fleet.

In addition to icebreakers and merchant ships, warships have used this route. In 1936, two Soviet destroyers were transferred from the Arctic Ocean to the Pacific, and three submarines are believed to have been transferred as well. Some torpedo boats made the trip before 1941, and in 1942 some destroyers and submarines were brought from the Pacific to the Arctic Ocean for use there against the Germans. No enemy action was encountered during these ship movements, but a submarine seems to have been lost in this operation through accident.

CLASSIFICATION RESTRICTED

STATE	X NAVY	X NSRB	DISTRIBUTION		
ARMY	X AIR	X FBI			

STAT

In 1940, the German Navy sent the auxiliary cruiser Komet to the Pacific by this route. Of course, the transfer of the ship was possible only with Soviet agreement and support, which was given after lengthy negotiations. The Komet left Germany on 3 July 1940 and went to the Barents Sea by way of Norway. On 15 July, the auxiliary cruiser joined a Soviet convoy at the Yugorskiy Strait, but all kinds of delays and frictions with the Russians made it impossible to continue the trip with this convoy. The German warship waited 4 weeks for a Soviet icebreaker and, on 13 August, went to the Matochkin Strait, which was negotiated with the aid of Soviet pilots. On 19 August, contact was made with the icebreaker Lenin, which brought the auxiliary cruiser through the Vil'kitskiy Strait. The icebreaker Stalin then took over the escort as far as the Sannikova Strait. Later, the Komet was accompanied by the icebreaker Kaganovich, but 600 nautical miles before it reached Bering Strait, the Soviets refused any further aid. The Komet continued alone and passed through Bering Strait on 5 September 1940. It was the first and, until now, the only non-Russian warship that has made the passage. The German auxiliary cruiser then made a surprise attack on Allied navigation in the Pacific, sank ten merchant ships, and returned to Germany safely after 515 days.

Parallel with Soviet efforts of a purely maritime character to make the northern sea route accessible to their merchant marine, measures were also taken to secure politically and to open up economically the entire region between the Siberian coast and the North Pole. More than 400 scientific expeditions were made, and numerous radio stations, lighthouses, navigation aids, and airfields were set up. There were only five polar radio stations in 1917, but there were 72 in 1940, and there are more than 130 today. In 1944, there were 77 scientific stations in existence. In 1934, there was only one lighthouse east of the Yamal Peninsula, while today 15 lighthouses are known. There are polar airfields at Kotlas, Ust'-Usa, Salekhard (formerly Obdorsk), Berezova, Samarova, on Dikson Island, near Ust'-Port, Noril'sk, Dudinka, Port-Igarka, Turukhansk, Alinskoye, Khatanga, Nordvik, Tiksi, Bulun, Zhigansk, Yakutsk, Yanskiy, Olekminsk, Mukhtuya, Ust'-Maya, Nizhne-Kolymsk, Uelen, Novo-Mariinsk, Gischiga, Nogayevo, Okhotsk, Ayan, and Neld, to name only a few.

Organization of the Administration

The administration of the northern sea route is carried out by Glavsevmorput' (Main Administration of Northern Sea Route), located in Moscow, and the original control station in Krasnoyarsk seems to have been discontinued. The Siberian sea route is divided into different divisions. The western part is under the control station on Dikson Island, the central part is directed from Tiksi at the mouth of the Lena, and the eastern part is administered from Ayon Island. The icebreakers are under a special icebreakers organization (Ledach) in Leningrad. At present, 30 large and as many smaller icebreakers are operating in the Baltic Sea, the Arctic Ocean, and the Pacific Ocean, and more are under construction. Among the modern Soviet icebreakers there are also two vessels from the US Navy, which were built in 1944 and lent to the Soviet Union. The icebreakers have a displacement of up to 15,000 tons, carry airplanes, but are not armed in peacetime, and have civilian crews. Under Glavsevmorput' there are about 50,000 seamen, officials, pilots, scientists, and workers, including some who have been exiled to remote regions as punishment.

The Soviets have made efforts to bring the entire arctic region lawfully under their dominion. Until 1918, Franz Josef Land was an Austrian possession, since it had been discovered by an Austrian expedition, while Wrangel Island nominally belonged to the Americans. Naturally, there were no inhabitants of any kind on either island and as the governments concerned had never formally taken possession, there existed merely a right of discovery. Shortly after the revolution, the Russians set up a station on Franz Josef Land, although this region had been completely forgotten in the peace treaty of St. Germain

STAT

in 1919 and therefore still belonged to the Austrians. Soon thereafter, a station was also established on Wrangel Island. Formal annexation by the USSR followed a little later and was accepted without protest by the US. Encouraged by these successes, the Soviet government then ordered that the whole territory between the Siberian coast and the North Pole was to be considered as belonging to the USSR, regardless of whether it was a question of already discovered or still unknown islands. The Soviets relied in this on the questionable "sectors theory," as it was applied in the Antarctic by the Western powers.

Navigation Conditions on the Northern Sea Route

Over a period of nearly 100 years, a noticeable increase in temperature has been observed along the northern sea route. The temperature, it is true, can still drop to minus 40 and 50 degrees, but the thickness of the ice is decreasing steadily. In general, the ice masses drift from east to west with an average speed of about 4.5 nautical miles a day. The northern sea routes are never completely free of ice. Certain routes are passable only with the aid of icebreakers even in summer because the ice, driven by wind and current, collects in the routes and blocks them. On the other hand, certain seas never freeze over completely even in the winter, as, for example, the Kara Sea which is totally covered with ice only in very severe winters. On the average, navigation is possible 2½-3½ months a year. Navigation conditions along the eastern part of the Siberian coast are likely to be more favorable than in the western Kara Sea, although the ice is thicker in the east. The powerful Siberian rivers, which empty into the arctic seas, freeze over at approximately the same time as the seas. This makes it impossible to transport goods into the arctic seaports by river steamers ahead of the navigation season, and a rational utilization of the short navigation period is not possible. The most favorable time for navigation on the northern sea route is between 15 July and 30 September. Any ship traffic is out of the question before and after these dates, unless it is accomplished with the aid of the drifting ice. In the latter case the ship is allowed to be enclosed by the ice and then drifts with it for approximately 8 months, insofar as the ship's hull can withstand the pressure.

Ships making the west-east passage (usually in convoy), first cross the Barents Sea, which in its southern parts never freezes over completely, even in winter, due to the influence of the warm Gulf Stream. The winter ice limit runs in a gradual arc south of Bear Island and hits the coast east of Murmansk, but in summer the Barents Sea is, for all practical purposes, free of ice.

The double island of Novaya Zemlya divides the Barents Sea from the Kara Sea. There are four different connecting routes between these two seas: (1) the route north of the island group which can only be used in extremely favorable years for a short time; (2) the route through Matochkin Strait, which separates North Island from South Island, whose east exit is often blocked by large ice fields; (3) the Karskiye Vorota Strait between South Island and Vaygach Island which is passable during 4 months; and (4) the 97-mile-long Yugorskiy Strait between Kolguyev Island and the mainland which can be used during 5 months with the aid of icebreakers. The latter route is the most-traveled passage. The southern Kara Sea is open to traffic during 4 months, the lower region of the Ob to Salekhard is open to navigation for up to 5 months, and the northern Kara Sea is passable during only about 3½ months.

The Kara Sea is joined in the east by the much shallower West Siberian Sea, the northern part of which is usually very heavily covered with ice, while the southern part is passable with the aid of icebreakers from the beginning of August to October. However, this route is rather difficult from a navigational standpoint due to the numerous shallow spots, islands, and reefs. The most dangerous part is the Vil'kitskiy Strait, the northernmost division of the passage, which is passable for 2-2½ months, but then only with

STAT

the aid of icebreakers because of the tremendous ice collections. East of the Taymir Peninsula, navigation in the vicinity of the coast is usually possible without great difficulties, but the eastern part of the Laptev Sea is often covered with large, connected ice fields which stretch far to the south.

Another very difficult spot is near the Novosibirskiye Islands, which can be circumnavigated in deeper water to the north only in very favorable years. The Sannikova Strait, between Kotel'niy and Laptev islands, is usually blocked by ice driven by wind and current and, because of this, ships are forced to use the free Laptev Strait to the south. The eastern part of the Sannikova Strait is only 12-13 meters deep, while in the Laptev Strait depths of only 7 meters are recorded, thus eliminating the passage of cruisers, battleships, and other deep draft vessels. In the lower regions of the Lena River the navigation season lasts about 3-3½ months; in the very shallow East Siberian Sea, only 2 months. Here the navigation route again keeps close to the coast, where a free passageway is formed by icebergs. These icebergs are found far from the coast, where they form a barrier against the drift ice. In the adjoining Beaufort Sea, navigation can be kept up during nearly 3 months.

Economic Importance of the Sea Route

The northern sea route from Arkhangelsk to Vladivostok is about 6,000 nautical miles long, 3,400 miles of which are in the arctic, west of Bering Strait. Although the distance between these two ports by way of the Panama or Suez Canal is approximately 14,000 nautical miles, the trip by the shorter arctic route takes longer than the trip via the Panama Canal. Because of the difficult navigation conditions of the northern route and the necessity of traveling in convoy, the average speed of ships is cut in half, and therefore no time is saved by using the northern route.

The practical importance of the northern sea route is small in comparison to the sums spent in its development. The yearly navigation periods are too short, and the volume of goods transported is relatively insignificant. Although there are immense mineral resources in northern Siberia -- lumber, coal, metals, graphite, etc. -- production is limited because of climatic conditions, and the transport of the raw materials to transshipping ports is very difficult. While arctic navigation permits the hauling of construction materials and consumers' goods to these regions in the summer months, the population density is extraordinarily sparse and the inhabitants, to a large extent people exiled to remote regions as punishment, are completely without demands, so that a few freighters a year can supply all northern Siberia.

Military Factors

The Soviets frequently point out that, if necessary, this route could ease the burden on the Trans-Siberian Railroad, especially in the case of military entanglements. The argument does not seem to be very convincing if one considers that the sea route is usable for only 3 months of the year. At any rate, the Trans-Siberian Railroad has been double tracked and can handle nearly 25,000 tons daily in each direction, considerably more than is carried by arctic navigation at present. Furthermore, freight transported by railroad takes only about half as long as by sea transport. The northern sea route is also almost worthless as a military defensive line in case of war, since larger ships cannot be moved from the North Atlantic to the Pacific because of the shallow water depths. Smaller units such as destroyers, submarines, and freighters, which could undertake the trip, are limited during the short navigation period to a narrow waterway, where it would be difficult to elude air and submarine attacks. US airplanes could lay mines again and again in certain

STAT

narrow waterways such as the Yugorskiy and the Sannikova straits. Losses among the icebreakers would be of particular consequence, since arctic navigation depends upon the existence of a large fleet of icebreakers. Since the Soviets do not possess any airplane carriers, the convoys cannot be accompanied at all times by fighter planes, and the numerous polar airfields are hardly usable for military operations. Even should the Soviet Union be able to bring convoys from west to east in case of war, the Soviet ships would be continually exposed to attacks while passing through the Bering Strait, the eastern shore of which is in US possessions, and along the east coast of Kamchatka.

As a matter of fact, the northern route is of importance only insofar as it makes it possible to maintain a large number of weather stations, which report their observations three times daily to the headquarters on Dikson Island. This data makes it possible, even months before the opening of the next navigation period, to make the necessary arrangements for assembling the merchant ships in time. However, these long-range weather forecasts are even more important as a guide to Soviet agriculture for sowing and harvesting crops.

- E N D -