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BIR:

HYDROMETEOROLOGICAL SERVICE OF THE U.S.S.R. (GMS) (GIDROMETSLUZHBA)

1. The Hydrometeorological Services of the USSR, 1/ also referred to as the All Union Hydrometeorological Institute, 2/ (and hereafter referred to as HMS) services the national economy and the defense of the nation with information concerning the status of the weather, of the rivers and of the seas, and also with prognostications of the weather, of the thaw and freezing of rivers, etc. (This organization) also studies the climate and precipitation of the country.

The service of this unit is based on the daily observations of a wide network of hydrological and meteorological stations. To this organization belongs a series of scientific institutes: institutes of weather, hydrological institutes, institutes of experimental meteorology, the main geophysical observatory and also higher educational institutions and "teknikuns". 1/

2. The following brief sketch indicates the position of the HMS in the overall governmental structure of the USSR.

Council of Ministers

Ministries

Ministry of Foreign Affairs
Ministry of Health
Ministry, etc.

Other Administrative Organizations

1. Councils
2. Committees
3. Main Administrations
   a. Hydrometeorological Services
   b. Civil Air Fleet
   c. Northern Sea Route
   d. etc.
4. Others

1/ Abridged Soviet Encyclopedia, Moscow 1943 (Unclassified)
2/ Department of State, Incoming Telegram, Moscow, No. 2729, Aug. 28, 1947 (Confidential)

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COPS		FBP		FBW		MOS		TRS									

The Main Administration of the Hydrometeorological Service is attached to the Council of Peoples Commissars (now designated Council of Ministers), USSR. 3/ As set up by law in 1939, the administrative organization was made up of a Chief, and two (2) Deputies, one of whom was nominated by the Civil Aviation Administration (now designated Main Administration of the Civil Air Fleet), and the following subordinate units:

a. Meteorological Administration
b. Hydrological Administration
c. Agricultural-Hydrometeorological Section
d. Marine Hydrometeorological Section
e. Section for Defense
f. Section for Cadres
g. Section for Educational Institutions
h. Planning Section
i. Finance Section
j. Section for Production Enterprises and Supply
k. Communications Sector
l. Capital Construction Sector
m. Administrative Economic Section
n. Secretarial
o. Archives

In addition there was a Council under the supervision of the Chief. 4/ (Undoubtedly changes have occurred since 1939 but this is a general outline.)

3. Dr. of Geographical Sciences, Lt. Gen. Evgenii Konstantinovitch FEDOROV, was first identified as Chief of this Service, May 25, 1941 3/ and held that position until September 1947. It has been reported that Fedorov was supposed to attend the International Meteorological Conference in Washington, D. C. September 22-October 11, 1947 and that at the last minute the Russian government notified the Conference that Fedorov had been given a new assignment and that their delegation would consist of V. A. Uryaev and V. M. Sadovnikov. 5/ (It is not known whether Uryaev, chief delegate, has replaced Fedorov as Head of the HMS.)

Yakov Solomonovich LIBIN was appointed First Deputy on June 26, 1941 and as of March 3, 1943 VOLINSHCHIKOV was a member of the Board (probably similar to the Council referred to above) and handled political matters.

The official journals of this organization are "Meteorologiya I Gidrologiya" (Meteorology and Hydrology) and "Pogoda" (Weather). 3/ Both are issued from the Leningrad Publishing House, 53 V.O. 2 Liniya, D. 23, Komn 25, Tel. 90-99 with offices in Moscow at UL--Gorikoyo D 18A Tel. KO 8405 under an editorial board composed of the following: 6/

N. N. GRIBANOV	T. V. POKROVSKAYA
L. K. DAVYDOV	A. A. SOKOLOV
V. K. AGAPOVOV	M. I. YUDIN
M. I. L'VOVICH	

4. In 1945 the HMS undertook measures for considerable expansion in order to satisfy the needs of different branches of the national economy on a larger scale with the following improvements:

a. From 1941-1945 two hundred and sixty-eight (268) "met" stations and posts were constructed, and in 1945 an additional four hundred and forty-three (443) were added. At that time it was stated that expansion would be even greater during the

3/ Department of State, DRE, EER, Report (Secret)
4/ Library of Congress, "Sobranize Postonovlenii i Rosporyazhenii, SSSR (USSR) 1939, No. 56, Article 547
5/ Conversation with John [illegible] Jr., Dept. of State, [illegible] to the Conference, Washington, D. C.
6/ "The Observation Work of the Hydrometeorological Net", V. I. Kirzun, Meteorologiya i Gidrologiya (Meteorology and Hydrology) No. 3, Moscow 1946

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next few years, 6/ a statement which was substantiated by Fedorov at a conference of scientists at Moscow in 1946 when he claimed seven thousand (7,000) "met" stations were conducting observations and that the new Five Year Plan (1946-1950) provides for an increase to twenty-five thousand (25,000).

b. A strict system of quality control for the information of the net was introduced. It is the responsibility of the directors of the met stations to systematically follow the work of those posts whose work is defective. A system of technical training has been established for net workers, all categories of whom have to pass an examination for minimum technical knowledge. In the future daily wages will be based on technical examinations and results of practical work and promotion will also depend on the results of these tests.

c. Descriptive hydrographic surveys of rivers, lakes and marshes were completed and an inventory of all rivers of the USSR, 10 kms. in length and over, was submitted by the met stations to the Hydrological Institute (GGI).

d. Climatological handbooks and descriptive summaries were edited which will be the basis for the compilation of the "Climatic Atlas of the USSR" scheduled for publication in 1949.

e. A project on the reallocation and distribution of the principal net of stations was initiated.

f. The accuracy of instruments was also provided for by the inauguration of central testing bureaus at the Hydrological Division (GGO) and the Hydrological Institute (GGI) and the reestablishment of testing bureaus at Rostof and Sevastopol.

g. Special commissions were instituted to examine the reliability of observation data, uncover defects and recommend solutions. All of their findings will be published in a new "Instructions to Hydrometeorological Stations and Posts" being prepared by the Central Geophysical Observatory, by the State Hydrological Institute of the Red Banner of Labor and the State Oceanographical Institute. 6/

5. The following is a partial list of those institutions attached to or directly under the [redacted]:

a. Hydrometeorological Institute, Leningrad
Chief, Prof. A. K. KHRGIAN

This organization sponsored an expedition which studied the winds of the mountain valleys and glaciers in Digaria, a mountainous region in the Caucasus. 8/

b. State Hydrological Institute

Prof. Daniel Lvovich SOKOLOVSKY of the Institute was awarded a Stalin Prize 2nd Class (100,000)rubles) for his "Water Resources of the Rivers of the Industrial Urals and the Method of their Calculation". 9/

c. Central Astrological Observatory
Director Sr. Lt. George GOLYSHEV 8/

d. Baltic Naval Observatory
Scientific Council includes Academican (Corr) Berg and Professors [redacted] and SIMANOV who are currently charting wind currents. 10/

6/ "The Observation Work of the Hydrometeorological Net", V. I. Kirzun, Meteorologiya i Gidrologiya (Meteorology and Hydrology) No. 3, Moscow 1946

7/ Information Bulletin, Embassy of the USSR, August 1945, Vol V, No. 85

8/ [redacted], Moscow, USSR A-97-46, 22 May 1946 (Unclassified)

9/ [redacted]

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e. Mikhelson Meteorological and Actinometrical Observatory
Nizhnaya Doroga, Moscow 11/

f. Agriculture and Weather Observatory
Southern coast of Crimea
Chief, Professor DIKTEVICH 12/

g. Scientific Research Institute No. 20
Laboratory Chief, Boris Mikhailovich KONOPLEV
Engineer, Valentin Mikhailovich KURBATOV 9/

h. Arctic Institute
Engineer, Mikhail Nikoloevich MALTSEV 9/

i. State Oceanographic Institute
Director, Rear Admiral N. N. ZUBOV 13/

j. Chief Geophysical Observatory
Head, A. J. CHUDNOVSKY
I. G. LUTERSTEIN 14/

k. Institute of Frost Study
Director, A. M. CHEKOTILLO (as of 1945)
Senior Scientific Collaborator, S. P. KACHURIN (as of 1945) 15/

l. Meteorological Survey Scientific Research Institute
Members, Lev N. KISLYAKOV
Boris Solomonovich ZELTSER 16/

m. Central Design Bureau of HMS
Members, Boris Mikhailovich KONOPLEV
Valentin Mikhailovich KURBATOV
Lt. Col. Mikhail Fedorovich SOLETSKII
Lev Nikoloevich KISLYAKOV
Boris Solomonovich ZELTSER
Anatoli Uladimirovich GORELICHENKO
David Yakovlevich SURAJSKI
Mikhail Nikolaevich MALTSEV 9/

These engineers worked for six years designing an automatic meteorological radio station for use in the polar regions. Information on pressure, air temperature and the speed and direction of wind is now received four times a day with the use of these stations on the Murmansk coast, in the Kara Kum desert and from the islands of the Aral Sea. The stations were designed to operate for twelve months without any control and to have a three hundred and seventy (370) mile radius of operation. 17/

n. In the Academy of Sciences of the USSR, the Department of Geologo-Geographical Sciences studies hydrogeology, oceanology, volcanology and aero-methods. Institutes under this particular department are:

(1) Oceanological Institute, whose function it is to explore the northern part of the Pacific Ocean.
~~(2) Institute of Geological Sciences~~
~~[illegible] SAVARENSKI [illegible]~~

9/ MA, Moscow, USSR R-97-46, 22 May 1946 (Unclassified)
11/ American Russ. Chamber of Commerce, Bulletin 787, June 1946
12/ Tass, Moscow, September 1946
13/ New York Times, 30 or 31 March 1946
14/ Bulletin, Academy of Sciences, USSR, Volume X, 1946
15/ USMA, Moscow USSR R-76-46, 9 September 1946
16/ MA, Moscow, 29 July 1947 (Secret)
17/ USSR, Information Bulletin, Vol. VI, No. 57, 31 August 1946

(2) Institute of Geological Sciences
(a) Section for Hydrogeology
Head, Prof. P. F. SAVARENSKI (as of 1945)
(b) Hydro-geological Laboratory
Head, G. M. KAMENSKI (as of 1936)

(3) Institute of Geography
(a) Section for Climatology
Head, E. E. FEDOROV (as of 1936)

o. The following organizations and institutions belong to the Academy of Sciences of the USSR, but it has not been established as yet to which department of the Academy they belong.

(1) Institute of Theoretical Astronomy, Moscow
Director, M. F. SUBBOTIN (as of 1945)
Leningrad Dept. Director, I. D. ZHONGOLOVICH (as of 1944)

(2) Central Astronomic Observatory, Pulkova, near Leningrad
Director, G. N. NEUMIN (as of 1946)

(3) Crimean Astro-Physical Observatory
Acting Director, S. A. SHAIN (as of 1946) 18/

p. A model central observatory for hydrological observations will be constructed at Valdayskaya Vozvyshennost.

q. Leningrad Hydrometeorological Institute

r. Odessa Hydrometeorological Institute

s. Moscow University

t. Leningrad University 19/

u. Institute of Experimental Meteorology 20/

v. Institute of Theoretical Geophysics 21/

6. With reference to part f. of the Definition of Requirement, the Northern Sea Route (Glavsevmorput, GSMP) occupies a position equal to that of the HMS, i.e. a main administration, in the governmental structure of the USSR.

Within the organization one of the assistants to the Chief has charge of scientific details: as of May 1943 A. E. KAMINOV held that position. Other officials of the Administration are: Real Admiral Ivan Dmitrievich PAPININ, who was first identified as Chief in May 1943. Deputies to the Chief are Lt. Gen. Mark Ivanovich SHEVELEV, (as of September 1943), M. V. STREKALOVSKI (as of April 5, 1940), Fedor Kornevich YUZEFOVICH (as of December 3, 1942) and Novikov (FNU) who as of May 26, 1943 was head of the Political Section. The Administration of Polar Aviation under the NSR as of April 4, 1941 was headed by Col. I. P. MAZURUK, Hero of the Soviet Union. 3/

3/ Department of State, DRE, EER, Report (Secret)
[illegible]/ Academy of Science, USSR, 1946, Scientific Branch, CIA
[illegible]/ CIA, [redacted] Jan. 26, 1948 (Restricted)
[illegible]/ CIA, [redacted] Dec. 26, 1947 (Restricted)
[illegible]/ MA, Moscow R-304-47, September 30, 1947 (Secret)

7. No information relative to the coordination of facilities as applied to the NSR was found but there were evidences of increased exploration and development in the Arctic, one of the objectives of which was the establishment in the northern areas of "met" stations. The following is a general summary of the activity since 1945.

Oct. 1945—The "USSR N-331" flew over Arctic waters in an exploratory flight for the preliminary study of the positions of ice during the "post navigation period".

Nov. 1945—A press dispatch from Sverdlovsk spoke of "polar expeditions in the Far North".

Jan. 1946—"Evening Moscow" reported that "one of the highest meteorological stations in the Soviet Union" had been established in the TIEN SHAN mountains.

Feb. 1946—The Institute of Theoretical Geophysics was studying the warm spells in the Arctic.

1946—A new polar station was opened on Bennett Island. The Rudolf Island Arctic Station in Franz Joseph Land, closed since 1942 resumed operations in May 1947. Through volunteers, a meteorologist, a radio operator and a mechanic were dispatched from the Tranquility Bay Arctic Station.

1946—It was announced that the Soviets had placed into operation additional automatic weather stations.

1947—The Leningrad Arctic Institute undertook to study and verify the existence of a second magnetic pole. It was planned to establish several observation posts on the ice fields in the area where the second pole is believed to exist. The theory is proposed by M. OSTREKIN, Soviet Arctic explorer who reported his observations in 1941 confirmed the opinion announced before the war by Soviet Arctic expert B. WEINBERG.

1947—Reconnaisance was made of the Chukotsk and East Siberian Seas by Pilot KRUZE. The Kara and Laptev Seas were reconnoitered by Pilot TOMLIN.

1947—It was announced seventy-one polar stations were in operation in the Arctic. 21/

An interesting note in reference to polar stations is the fact that under Lend Lease we shipped to Russia one and one-half (1.5) thousand tons of wireless and communications equipment consisting of radio equipment for polar observation station. 3/

8. No indication of how liaison with other services operate, but it is known that visits by Americans to research and development institutes are never authorized and Soviet engineers and scientific workers are not permitted to talk to foreigners. 21/ An example of how the liaison with services other than Soviet operates is the USSR request for visas at the very last minute on September 18, 1947 for the delegates to the Meteorological Conference in Washington after the invitation had been issued in March. 22/

3/ Department of State, DRE, EER, Report (Secret)
21/ MA, Moscow, R-304-47, September 30, 1947 (Secret)
22/ Department of State, In Telegram from Moscow, No. 2883, September 19, 1947

* * *

EDD:

No information on the administrative organization of the Hydrometeorological Service in Russia can be found in the files of the Library. The following documents mentioned in bibliographies and intelligence reports, as noted, may contain data pertaining to the requirement:

A. Foreign Dotuments Branch, OO, CIA

1. W.D.C. #239688n 453.02 (38) (In Japanese)
Condition of Soviet Meteorology by Shirahama Heizo, N.D. 25pp.

2. W.D.C. #239688d 450.02 (38) (In Japanese)
Soviet Geology and Meteorology

B. From a list of documents sent by the National Academy of Sciences to the Library of Congress, Dec. 8, 1947, and presently available there.

1. Transactions, Geological and Hydrological and Geodetical trust of Central Asia, Moscow, Novosibirsk, USSR.

2. Hydrology and Meteorology, Central Institute of Experiments, U.S.S.R.

3. Arctic Institute of the U.S.S.R., Transactions, Hydrology, 1936, Leningrad, U.S.S.R.

C. Intelligence Division, War Department

1. Inclosure to MA Moscow, R-4-47, 7 Jan. 1947. (Inclosure not received in CIA)

"Regulations for Hydrometeorological Stations and Posts, Issue #6". (Restricted)

2. Inclosure to MA Moscow, R-53-47, 31 Jan. 1947, "Soviet Hydrometeorological Apparatus". (Inclosure not received in CIA)

"Handbook on Radio Sounding of the Atmosphere for Aerological (Meteorological) Stations of the Arctic." (Restricted)

* * *

GMD:

The following information is offered for whatever value it may have to activities working on the documentary research:

1. Izvestiya Akademii Nauk SSSR, Seriya Geograficheskaya i Geofizicheskaya. "News of the Acad emy of Sciences of the USSR, Geography and Geophysics Series".

The above periodical may contain information on the Hydrometeorological Service in Russia.

It is known that Vol. IX, No. 4, (April 1945) contains articles on Meteorological Research which may be of some help in suggesting additional sources to be checked. The publication is in the Library of Congress.

2. Vestnik Akademii Nauk SSSR (Herald of the Academy of Sciences of the USSR), Vol. XVI, No. 8/9, Aug./Sept. 1946.

Contains a two page article, "In the Presidium of the Academy of Sciences", listing changes in structure of institutions of Academy of Science - - new commissions set up and existing institutions abolished or incorporated in other organizations. Also in the Library of Congress.

3. The following individuals are known to have done meteorological research in USSR:

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V. M. Obukhov
V. V. Burgsdorf
A. F. Chudnovsky
I. G. Luterstein
M. N. Grischenko

4. LIFE Magazine had pictures of the following persons who may be identified with subject request:

Alexander Fersman. Pioneer in geochemistry. Helped prospect Soviet resources and direct a subarctic research center. (LIFE V. 17. 23 October 44, p. 15) OSS P12870

Otto Schmidt. Headed Arctic Institute. Directed pioneering of Soviet Arctic Regions. (LIFE V. 17. 23 October 44, p. 16)

* * *

Extract from INTELLIGENCE DIGEST, A Review of World Affairs,

Produced by Kenneth de Courcy, December 1947 issue, page 7.

Latest Russian Notes * * *

"There is further important news about Russian military preparations. The things theoretically planned do not necessarily indicate the direction in which Russia would strike in the event of war. Many of the things being done are for precaution and reinsurance. They must, nevertheless, all be reported.

"From Petsamo to the Bering Straits there are large preparations. There is a chain of radar stations and large anti-aircraft defenses of a kind far surpassing anything seen during the last war. Many of these installations have been built by Germans working for Russia.

"There are frequent large scale Arctic maneuvers. The Soviets are far in advance of others in matters of Arctic warfare.

"They attach great importance to their meteorological installations in the Arctic region, and there are about 58,000 people employed on this work alone. They take it most seriously. They believe themselves to be so advanced that they can forecast weather twenty-four hours before any other observers in the world."

* * *