

DECLASSIFIED
Authority *NND 949670*

~~SECRET~~

S/AE
File No
1558
6

SCIENTIFIC INTELLIGENCE REPORT

CONTRIBUTIONS OF GERMAN SCIENTISTS
TO THE SOVIET ATOMIC ENERGY PROGRAM



CIA/SI 2-57
30 January 1957

ASSISTANT TO THE SECRETARY
S/CE
MAR 6 1957

CENTRAL INTELLIGENCE AGENCY
OFFICE OF SCIENTIFIC INTELLIGENCE

Declassified Authority: 33546 By: Dorothy Johnson Date:
02-08-2017

~~SECRET~~

~~SECRET~~

DECLASSIFIED
Authority *NWD 949670*

Scientific Intelligence Report

CONTRIBUTIONS OF GERMAN SCIENTISTS TO THE SOVIET ATOMIC ENERGY PROGRAM

NOTICE

The conclusions, judgments, and opinions contained in this finished intelligence report are based on general classified source data and represent the immediate views of the Office of Scientific Intelligence.

CIA/SI 2-57
30 January 1957

CENTRAL INTELLIGENCE AGENCY
OFFICE OF SCIENTIFIC INTELLIGENCE

~~SECRET~~

NW#: 33546

DocId: 31432014

~~SECRET~~

DECLASSIFIED

Authority *NAJ 949670*

PREFACE

This report summarizes and evaluates the activities of those German scientists taken into the Soviet Union in 1945 to work on projects related to the Soviet atomic energy program. Detailed reports on their activities at five Soviet research institutes have been prepared as Research Supplements and include:

- | | |
|--------------------|--|
| CIA SI-2-RS I-56 | Contributions of German Scientists to the Soviet Atomic Energy Program — SINOP, Secret |
| CIA SI-2-RS II-56 | Contributions of German Scientists to the Soviet Atomic Energy Program — SUNGUL, Secret |
| CIA SI-2-RS III-56 | Contributions of German Scientists to the Soviet Atomic Energy Program — AGUDZERI, Secret |
| CIA SI-2-RS IV-56 | Contributions of German Scientists to the Soviet Atomic Energy Program — ELEKTROSTAL, Secret |
| CIA SI-2-RS V-56 | Contributions of German Scientists to the Soviet Atomic Energy Program — OBNINSKOYE, Secret |

Intelligence research ended 15 August 1956.

~~SECRET~~

iii

8201

CONTENTS

	Page
PREFACE	iii
PROBLEM	1
SUMMARY AND CONCLUSIONS	1
DISCUSSION	2
Introduction	2
Sukhumi (Sinop and Agudzeri)	2
Sungul	3
Elektrostal	3
Obninskoye	4
Moscow	4
Research Environment	5
Other Activities	6
APPENDIX A — 	7
APPENDIX B — Soviets Associated with German Scientists	13

EO25x1 CIA

FIGURES

	Following Page
1. Map Locations of Soviet Atomic Energy Installations Where German Scientists Worked	6

CONTRIBUTIONS OF GERMAN SCIENTISTS TO THE SOVIET ATOMIC ENERGY PROGRAM

PROBLEM

To assess the significance of the contributions to the Soviet atomic energy program of German scientists deported to Russia 1945-1946.

SUMMARY AND CONCLUSIONS

At the close of World War II, the Soviet Union found itself with an insufficient supply of scientific manpower and facilities to staff and execute adequately an independent research and development program in atomic energy. To fill the Soviet needs, many German nuclear scientists and technicians under Soviet occupation-control were taken in 1945-46, either voluntarily or involuntarily, into the Soviet Union to work on important research and development aspects of the nuclear energy program. This recruitment appears to have been very successful, and some of the best scientific talent was efficiently exploited. The employment of the Germans permitted Soviet scientists and technicians to concentrate on other aspects of the atomic energy program, especially in sensitive areas such as nuclear weapons development. Most of these scientists were returned in early 1955.

The total effect of the contributions of the German scientists on the over-all success of the Soviet nuclear energy program was considerable in that they greatly accelerated, either directly or indirectly, all aspects of the research and development of nuclear energy in the Soviet Union. The most direct contributions are listed below:

a. The German scientists working at Elektrostal were instrumental in the successful development and probable acceleration by 6 to 12 months in 1946 of the Soviet uranium metal production program essential to the subsequent production of weapon grade fissionable materials;

b. The diffusion barriers developed by the Sukhumi complex were probably the second and third barrier types adopted by the Soviets for use in their uranium-235 gaseous diffusion plants and probably permitted a significant increase in uranium isotope separation capacity;

c. The analytical mass spectrograph developed and constructed at the Sukhumi complex played a very significant role in the support of the isotope separation system. These mass spectrographs were used to determine the efficiency of the isotope separation at various stages of the diffusion cascades;

d. The German group working on reactor research and development at Obninskoye made basic contributions to the Soviet reactor program in general;

e. The so-called "Volmer" group working near Moscow probably made significant contributions to the heavy water production program;

f. The Germans at the Sungul Institute contributed, to a lesser degree, in the fields of radiobiology and radiochemistry and probably helped to promote biological research within the Soviet atomic research program;

g. Although the exact nature of the theoretical calculations on isotope separation systems made by Barwich at Sukhumi is unknown, it is probable that they were of some value to the Soviets in their program;

h. It is doubtful that the German scientists contributed directly to weapons developments or to production reactor developments within the Soviet atomic energy program;

i. The Germans contributed greatly to the expansion of the basic Soviet nuclear research program through establishing laboratories, constructing equipment, and training of scientific and technical personnel.

DISCUSSION

INTRODUCTION

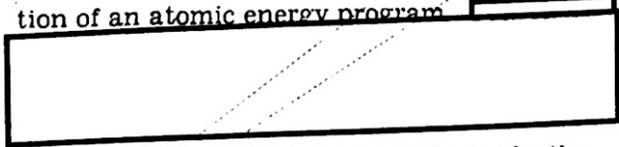
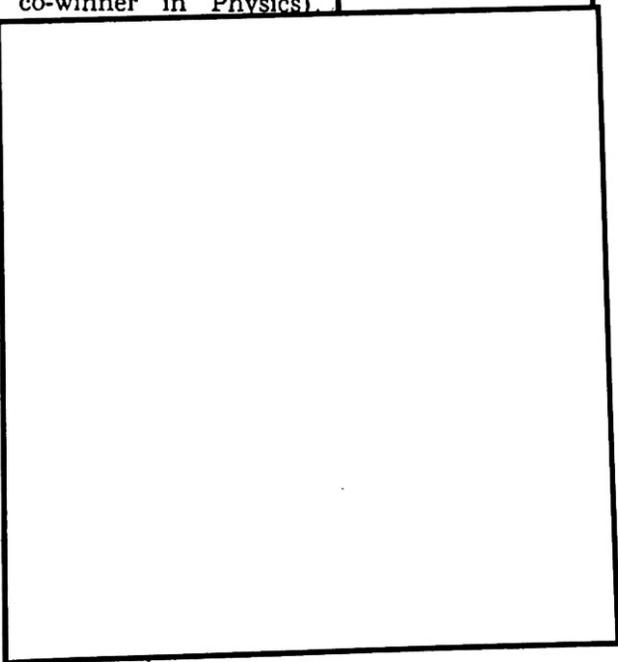
Immediately following World War II, the Soviets virtually isolated all German scientific research installations within the areas occupied by the Soviet armies. From these installations, as well as from the various industries within the area, the Soviets acquired many German and Austrian scientists for work within the USSR. While some were recruited on a voluntary basis, others were coerced into serving under the initial 5-year employment "contracts." In addition, scientists and technicians were carefully selected from prisoner-of-war camps within the Soviet Union and throughout all Soviet occupied territory and used to assign this group. Many of these German nuclear scientists and technicians were taken to the USSR in May 1945, several months in advance of the deportation of the German guided missiles and electronic scientists.

After these nuclear scientists were taken to the USSR, they were assigned to various Soviet research institutes and laboratories. One group of about 400 scientists and technicians was especially recruited by the Ninth Directorate of the MVD and was assigned work related to the establishment and implementation of an atomic energy program.

installations, given German leaders, and assigned isolated portions of the over-all research program.

SUKHUMI (SINOP AND AGUDZERI)

One group, located at Sukhumi on the eastern shores of the Black Sea, was given the general assignment of research relating to uranium isotope separation. This group was divided into two sub-units, one at SINOP under the direction of Manfred von Ardenne and the other at AGUDZERI under the direction of Prof. Dr. Gustav Hertz (1925 Nobel Prize co-winner in Physics).



This atomic energy contingent was further divided into smaller units sent to research

~~SECRET~~

DECLASSIFIED
 Authority *NDJ 949670*

[REDACTED]

There is no available evidence indicating that either the "counter-current" or thermal diffusion separation systems worked on at Agudzeri were ever used by the Soviets. The mass spectrometer as developed and constructed by Werner Schuetze was introduced into the diffusion plant at Verkhneivinsk for determining the enrichment obtained in the cascade. A production version of this mass spectrometer was displayed at Geneva as a Soviet development and reportedly is now available on the Soviet market. [REDACTED]

[REDACTED] Accordingly, a barrier of this type was probably adopted for use in either a modification of existing plants or in construction of new gaseous diffusion separation plants. This new type barrier as well as the mass spectrometer undoubtedly contributed significantly to the isotope separation program in the Soviet Union. The investigation of a variety of isotope separation techniques also helped provide the Soviets with a strong foundation for future research in this area.

SUNGUL

A second group of German scientists was located at Sungul, a small village near Kasli. Kasli is only some 20 miles northeast of Kyshtym, the site of one of the Soviet plutonium production complexes. The unit at Sungul originally was under the direction of Dr. Nikolay Timofeyev-Ressovskiy, a Mendelian geneticist. This unit was established in late 1946-early 1947 and was staffed by personnel from Sinop, Agudzeri, and Elektrostal, as well as a few from elsewhere. It is considered to be the least important German

group with respect to the significance of its contributions to the Soviet atomic energy program. The latest information on this site indicates that it may be undergoing expansion into one of the main centers for health physics research in the Soviet Union. It has been indicated also that a large fission product separation plant was to be constructed in the vicinity of this installation and might well be a part of the installation itself.

The efforts of the Germans at Sungul were limited largely to the field of biological effects of radiation, including some basic work in dosimetry. The Germans contributed little or no new knowledge but were possibly responsible for the stimulation of a greater effort in radiobiology on the part of the Soviets.

In addition to the radiation effects research, the Germans did some basic research on separation of fission products from "pile soup" delivered to them, probably from Kyshtym. Some standardized sources of certain isotopes were prepared for other work. At the outset, this group was seriously handicapped by the lack of equipment and research materials. By the time they were withdrawn from the area, they had built a respectable research center and trained a number of scientists and technicians.

ELEKTROSTAL

A third group, under the leadership of Dr. Nikolaus Riehl, was established in Elektrostal and assigned the problem of producing pure metallic uranium. Elektrostal is a highly industrialized town some 33 miles east of Moscow and has proven to be the focal point of the initial Soviet efforts in establishing a uranium metallurgical program.

Riehl, formerly director of research of the Auergesellschaft chemical plant at Oranienburg, Germany, brought with him some 12 German scientists who were familiar with the German wartime uranium metallurgical research program. The Soviets also brought a major portion of the German World War II stockpile of uranium metal and uranium ore to Elektrostal. Using this stockpile of mate-

rials, the German group developed the procedure and methods upon which the Soviet uranium metal production program was established.

Riehl and his group continued their German uranium research program on the purification of uranium oxide and its subsequent reduction to metal. They initially used a fractional recrystallization method; but later, when the Smyth Report came into their possession, they developed an ether extraction method for preparing purified uranium salts. This work on the production of pure uranium salts was an essential step in the production of pure uranium metal.

The Germans first attempted to produce pure uranium metal by the process of reducing uranium oxide with calcium. Even after numerous modifications, this process continued to prove unsatisfactory for producing pure metal. Success was achieved when uranium tetrafluoride was substituted for the uranium oxide as a feed material. The process was established as a "batch" process, each batch producing a 40-kilogram regulus. By mid-1946 the plant was producing at the rate of 1 ton of pure metal per month.

Although the basic work of the Germans was completed by mid-1946, they were retained on a consultant basis until 1949 when most of them were transferred to Sungul Institute. The few remaining Germans at Elektrostal were transferred to Sukhumi in the fall of 1952, where they spent a period of two and one-half years "cooling off" prior to repatriation to Germany in March 1955.

The work of the German scientists at Elektrostal was fundamental and contributed greatly to the early success of the Soviet nuclear energy program since the establishment of an adequate uranium metal production program is a prerequisite to the production of weapon grade material. The significance of the contributions made by this group is indicated by the large number of prizes and bonuses awarded to it, and especially to its leader, Riehl, who received in excess of 250,000 rubles and other considerations.

OBNINSKOYE

A fourth group, under the German leadership of Dr. Heinz Pose, was located at Obninskoye, some 70 miles southwest of Moscow. This group, in the period from 1948 to 1950, had two assignments of major importance: (1) reactor research and development and (2) development of a high-energy accelerator. Activities indicate the greater importance of the reactor development program. In 1950, the Institute was reorganized under the direction of Blokhintsev and thereafter concentrated on the development of reactor technology with the accelerator program being transferred to Moscow.

Although the reactor development program was extensive in scope, there was a definite concentration of research effort on two phases: (1) beryllium moderation and (2) corrosion problems inherent in liquid metal coolants. A zero-power, beryllium-moderated reactor that was activated at Obninskoye in 1954 and published reports and statements relating to liquid metal coolant research have indicated a continuation of these two phases of the reactor development program begun by the Germans.

It is apparent that the German group at Obninskoye was not directly contributing to the research and development of Soviet production reactors. Their work undoubtedly was applied to development of reactors intended primarily for research purposes and for the generation of electric power.

The substantial contribution made by this German group to the Soviet reactor development program is reflected by the eminence of the Obninskoye Institute in reactor technology. The construction of the "first in the world" power reactor at Obninskoye is a further substantiation of the belief that the Obninskoye Institute, established upon German technology, is a major center of reactor research.

MOSCOW

A fifth group, under the direction of Prof. Dr. Max Volmer, was established in the suburbs of Moscow, probably at the NII 9, Lab-

~~SECRET~~

DECLASSIFIED

Authority AWD 949670

oratory II, complex. It has been indicated that this group concentrated its research efforts on problems involved in the production of heavy water by the ammonia-water exchange method. This work has never been confirmed. There have been reports to the effect that this group was responsible for the development and was instrumental in the establishment of a heavy water production plant in the far north at Noril'sk. Victor Bayerl was reported to have been responsible for the design of this plant and actually directed some phase of the construction. Gustav Richter is said to have designed the control system for the plant.

The heavy water plant at Noril'sk has increased the Soviet heavy water production capacity to such an extent that they are now seriously considering the construction of two very large heavy water moderated power production reactors. This phase of the Soviet nuclear power program appears to have been advanced a considerable amount by the work of the German scientists, especially in the improvement of heavy water production methods and procedures.

There have been indications that Josef Schintlmeister was working in or around Moscow, possibly at the NII 9, Lab-II complex, on problems related to the field of nuclear weapon development. It is thought that Wunibald Kunz assisted him in this work. A meaningful assessment of the contribution to the Soviet atomic program by the Moscow group cannot be made.

It is possible that there were other small groups or individuals working on other problems, but on these activities we have little or no information. The institutes in which the German scientists worked were, at the onset, subordinate to the Ninth Directorate, MVD, but in 1950 the entire complex was transferred to the First Chief Directorate attached to the Council of Ministers.

RESEARCH ENVIRONMENT

Each institute had Soviet personnel as well as German. Many of these Soviet scientists worked under the direction of the Germans. It has also become evident that the Soviets

established parallel scientific research groups in the program. One group was staffed by both German and Soviet personnel, another by Soviet personnel only. All groups worked on the same general projects. Though the data obtained by the Germans were made available to the Soviets, data obtained by the Soviets were seldom, if ever, made available to the Germans. Very few ideas or developments were taken directly from the German groups and applied to the Soviet program. Rather, they were usually given first to the Soviet groups and then utilized in the program.

The conditions under which the Germans worked were not always the most pleasant. They were constantly under guard, both on duty and off. If it were ever necessary for a scientist to leave the compound, he was accompanied at all times by one or more MVD guards. This constant guard and close supervision was irritating to the Germans and there was a constant striving on their part to "go home." The process of returning the German scientists started in 1949 when most of the prisoners of war were returned to camps for a "cooling off" period and eventual repatriation. In the fall of 1952 most of the German scientists were reassembled at Sukhumi. The lower-grade technicians, domestic workers, and a very few scientists were sent to Shcherbakov. A few of the scientists were sent to other locations within the Soviet Union and it is thought that some were kept at work on projects of a classified nature. Also in the fall of 1952 all Germans at Sukhumi were removed from any work that was classified and were allowed to publish papers for the first time since being taken to the Soviet Union. The first group of German scientists were returned to Germany in March 1955, after a "cooling off" period that had lasted for approximately 2½ years. By the end of 1955 practically all of the "recruited" scientists had been returned to Germany. Among the few that remained in the USSR, the most notable were Thiessen, Pose, and Steenbeck. These three will probably be returned to Germany in late 1956 or early 1957.

~~SECRET~~

DECLASSIFIED

Authority NWD 949670

~~SECRET~~

OTHER ACTIVITIES

These German scientists made minor contributions to fields other than nuclear energy. The group working under Manfred von Ardenne at Sinop did considerable work in the development of an improved electron microscope. Certain high-frequency techniques were worked out by Busse and others. Much work was done on spectroscopy by the workers at both Sinop and Obninskoye. After 1952, when most of the scientists had been reassembled at Sukhumi, a considerable amount of work was done in the field of semiconductor, rare-earth separations, and, to a lesser extent, lithium-boron isotope separations.

None of the above activities are considered to be of major importance but all tend to pro-

vide significant data in peripheral areas of nuclear science.

The German scientists apparently made no direct contribution to nuclear weapons development nor to the plutonium production program. The Soviets refrained from allowing the Germans to become knowledgeable in the actual production facilities of the Soviet nuclear energy program.

If the Germans had remained in the USSR and had been integrated into the Soviet Military atomic energy program, they could have continued to make substantial contribution. However, the Soviets apparently considered the security weaknesses that might result from such action and elected to repatriate them.

~~SECRET~~

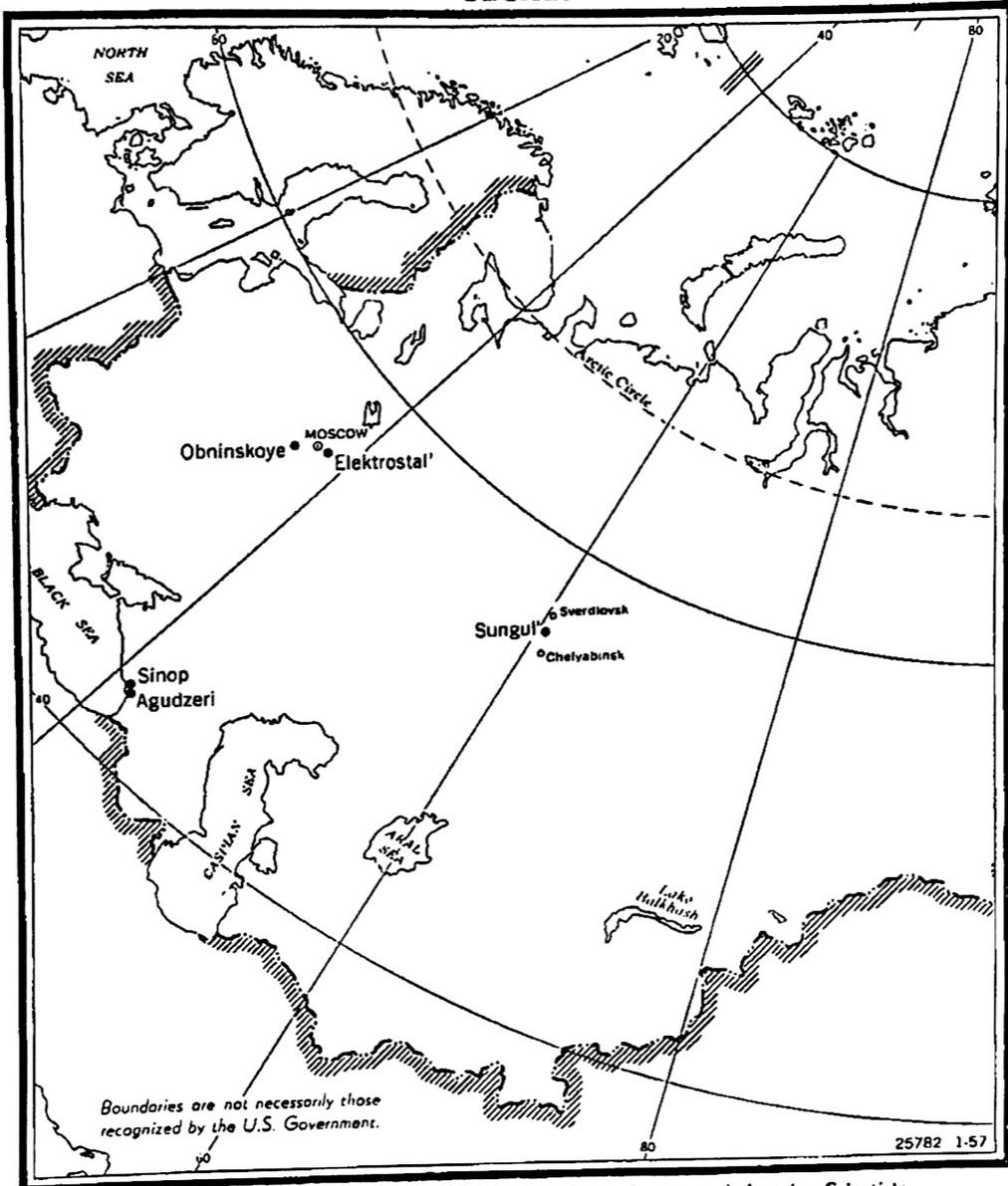


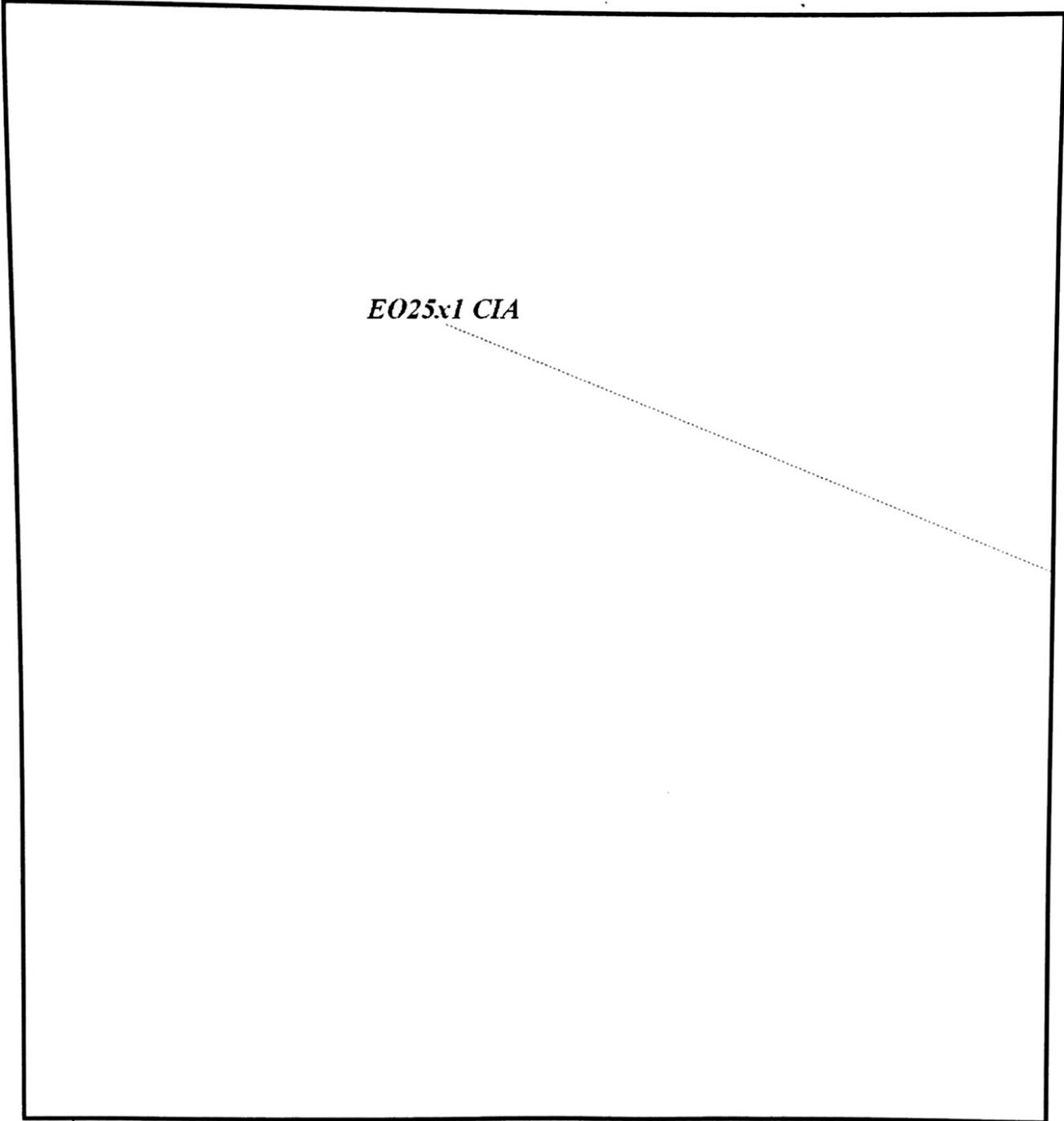
Figure 1 - USSR: Nuclear Research Institutes utilizing German and Austrian Scientists

~~SECRET~~

~~SECRET~~

DECLASSIFIED
Authority AWD 9496 70

APPENDIX A



EO25x1 CIA

~~SECRET~~

Three Pages Exempted

APPENDIX B

SOVIETS ASSOCIATED WITH GERMAN SCIENTISTS

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Abshandadze, Electrical Engineer	Sin	Berezina,	A
Abshelava, Medical Doctor	Sin	Bigvava, Fenya Ilarinovna	A
Abzyanidze, Electrical Engineer	Sin	Chemical Laboratory Assistant	A
Afonina, Aleksandra Ivanovna		Bizayev, MVD Lt. Col	O
Chemical Laboratory Assistant	A	Visitor from 9th Directorate	O
Aganyan, Glassblowing Assistant	A	Bizayev, Aleksandr Dionisovich	A
Ageyev, Metallurgist	O	Administrative Chief	A
Agress, Mathematician	Sin	Bizayeva, (Wife of above)	A
Akhlyustin, Escort	S	Blinova, Lyusya Office Clerk	A
Aleksandrov, Laboratory Assistant	A	Blokhintsev, Dimitri Ivanovich Physicist	O
Aleksandrovich, Visitor 1951	O	Blumkina, Yula Administrative	O
Alikhanov, Physicist	Sin	Bobrikova, Secretary-bookkeeper	A
Andreyeshchev, Nuclear Physicist	Sin	Bochikasvili, Nina Petrovna	A
Andreyev, Pavel P. Physicist	Sin	Laboratory Assistant	A
Andreyeva, Anna Fedorovna	Sin	Bokerev, Sr. Lt. MVD Security Officer	Sin
Laboratory Assistant		Bokuchava, Tina Laboratory Assistant	A
Anokhin, Vladimir Lvovich	S	Bolotnikov, Aleksey Laboratory Assistant	A
Physical Chemist	O	Bolotnikova, Designer	A
Arzhba, David Escort	O	Bonch-Bruyevich Visitor	O
Assotiani, Pridon Laboratory Assistant	A	Borisova, Nina Dmitriyevna	S
Assotiani, Yakov	A	Scientific Assistant	S
Chemical Laboratory Assistant	A	Boronilo, Ivan Makarovich	A
Babayeu, Chief: Security 1948-49	O	Mechanical Laborer	A
Babayev, MVD Maj.	A	Bubnov, Machine Construction Engineer	A
Chief: Escort Section	S	Budko, Ludmilla Nikolayevna	S
Babkin, Chief: Maintenance	S	Scientific Assistant	S
Balakin, Aleksandr	A	Budnikova, Iraida Designer	S
Glassblowing Technician	S	Buldakov, Lev Aleksandrovich	S
Balashhev, Physicist	S	Scientific Assistant	S
Balashva, Laboratory Assistant	S	Buldakova, Margarita Nikolayevna	S
Baranov,	O	Medical Doctor	S
Ceramic Laboratory Assistant	O	Burdiyashvili, A. Physicist	Sin
Barbabanov, Escort	O	Butov, Maj. Escort Section	O
Barnabishvili, Donara Nikolayevnz	A	Chabtsovich, Physicist	O
Chemical Engineer	S	Chaprov, Ivan Mikhaylovich	Sin
Batrakov, Electrician	S	Mathematician	A
Baulin, First Section	O	Chekhovtsov,	A
Baysheva, Chemist	A	Chekrygn, Nikolay Pavlovich	A
Belyakov, Yerginiy MVD Escort	A	Chief: Admin-Maint.	A
Berezin,	A	Chelidze, Petr Varlomovich	A
		Technical Supply Section	A

*Same as footnote on page 7.

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Chernov, Physicist	O	Gasparov, Agas Nikitovich	
Chernov, Anatoliy Artemyevich		Chief: Glassblowing Section	A
Laboratory Assistant	A	Gavrilovich, Chief: Bookkeeping Section	A
Chernova, Lyubov Ivanovna		Glaskov, Physicist	O
Laboratory Assistant	A	Glazanov, Vladimir Nikolayev	
Chkuaseli, Physicist	Sin	Chief: High Frequency Laboratory	O
Chufarov, Mikhail Danilovich		Golibyev, MVD Lt. Col. Visitor 1950	O
Maintenance	S	Goloborodko, Maj. Chief: MVD Guards	A
Chukhin, Engineer	Sin	Golz, Physicist	O
Demikhanov, Ratch Aramovich		Goncharov, Vasiliy Ivanovich	
Electronic Physicist	Sin	Precision Mechanic	A
Demirkhanov (Possible same as above)		Gorbachev, Chemist	O
Plasma Physicist	Sin	Gorbacheva,	
Demitriyev, Pavel Petrovich		Secretary: Secret Department	O
Theoretical Physicist	Sin	Gorbatyuk, Nestor Vasilyevich	
Demkin, Aleksey Gavrilovich		Mechanic-Laboratory Assistant	S
Chief of Procurement	S	Gorbunov, Engineer	A
Demkina, Zinaida Laboratory Assistant	S	Gorbunova, Nina Teacher	A
Didko, Policeman	S	Gorizontov, Boris Arkadyevich	
Dramin (Dryamin) Boris (Lt MVD)		Special Materials Control (Metals)	S Sin
Escort	O	Gorkunova, Valentina	
Drey, Chief: First Section	A	Laboratory Assistant	S
Dubrov, Engineer	Sin	Gorodnichenko, Nuclear Physicist	Sin
Dubrov, Ivan Gavrilovich		Gorskiy, Chief Bookkeeper	A
Chief: Supply Warehouse	A	Goryunov, Anatoliy Alekseyevich	
Dulov, MVD Maj.		Chief Radiochemist	S
Military Commandant to 1951	O	Gergoryans, Electrical Engineer	O
Dzhevelikyan, Galina Ivanovna		Grigorashvili, MVD Maj.	
Medical Technician	A	Chief: Escort Section	A
Dzhikaya, Varlaam Kukich		Grigoryan, Physicist	Sin
Nuclear Physicist	A	Grigoryan, Lt. Col.	
Dzhuya, Mikhail MVD Escort	A	Chief: Escort Section	A
Fayer, Warehouse Clerk	S	Grishenko, MGB Lt. Col.	
Fedorenko, Administrative	A	Chief: Escort Unit	O
Fedorenko, Administrative	Sin	Gruber, Iosif Leybovich Tailor	S
Fedorov,		Gusev, Physicist	Sin
Chief Inspector: Technical Supplies	A	Guseva, Scientific Assistant	Sin
Flerov, G. N. Visitor	O	Gutkin, Theoretical Mathematician	Sin
Fomenko, Ivan Kondratyevich		Gvendzhilya, Scientific Assistant	A
Janitor	A	Gverdtsiteli, Irakliy Georgorvich	
Fomenko, Viktor Kondratyevich		Physicist-Administrative	A
Laboratory Assistant	A	Ignatenkova, Aleksandra Ivanovna	
Gabysheva, Tamara Design Office	A	Laboratory Assistant	A
Gagua, Taras Arksentyevich		Inozemtseva, Irina Aleksandrovna	A
Physicist-Scientific Assistant	A	Isayev, Ivan Mikhaylovich	
Galinin, Bookkeeper	A	Physicist-Admin. Director	Sin
Garakhovskiy, Maj.		Ivanov, Lt. Aleksandr Terentyevich	
Chief: Construction Battalion	S	Chief: First Section	S
Garboshova, Design Engineer	A	Iyevlev, Andrey Chief: Secret Section	O

SECRET

DECLASSIFIED
Authority NWD 949670

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Iyevlev, (Possibly the same as above) Chief: First Section	A	Khelaya, Electrophysicist	Sin
Izrailevskaya, Emiliya Lvovna Librarian	A	Kholodilin, Aleksandr Ivanovich Physician	A
Izrailevskiy, Vladimir Mikhaylovich Interpreter	A	Khromova, Physician	Sin
Kachov, Andreas Stepanovich Metallurgical Physicist	A	Khullidze, Dimitri Nuclear Physicist	Sin
Kakabadze, Chemical Laboratory Assistant	S	Kichigin, Engineer	Sin
Kakabadze, (Possibly same as above) Chemist	A	Kirilov (Kirylvov) Fluid Metal Laboratory	O
Kakabadze, Meri Georgiyevna Chief: Medical Section	Sin	Kirvalidze, (Possibly Kervalidze) Physicist (Semi-conductor)	Sin
Kalashnikov, Visitor from 9th Directorate	A	Klimentyev, Viktor Ivanovich Chief: Escort Section	A
Kalesivikov, High Frequency Physicist	A	Kobaladze, Zhuzhuna Laboratory Assistant	A
Kalinin, MVD Col. Visitor 1949	O	Kochlavashvili, Aleksandr Ivanovich Chief: MVD, Agudzeri and Sinop	A Sin
Kaminir, Lev Petrovich Physicist	O	Kochnev, Nuclear Physicist	Sin
Kankava, Vikhtany Foreman: Mechanical Workshop	O	Kolnov (Koinov) Lt. Col. Aleksandr F. Commandant: Sungul 1953	S
Kapanadze, Administration	A	Komissarova, Valentina Ivanovna Laboratory Assistant	S
Kapanadze, (Possibly same as above) Chief: Personnel 1953-55	Sin	Konobeyev, Laborer, Supply Depot	A
Kapaushchenko, Escort	A	Konogray (Konograi) Tasya Secretary	A Sin
Kaprov, Physicist	A	Kornilenko, Aleksandr Lavrentovich Accelerator Physicist	O
Karabash, Aleksii Georgievich Metallurgist	Sin	Korostylev, Chief Mechanical Foreman	A
Karpenko, Ina Physicist	O	Korostylev, Lenya Mechanic	A
Karzhavin, Vsevolod Aleksandrovich Chemist	A	Korvalskiy, Aleksey Ivanovich Fireman	A
Katin, Electrical Engineer	A	Korvyrzin, Chemist	A
Katov, Experimental Physicist	Sin	Korvyzina, Chemist	A
Katskatsyan, MVD Maj. Visitor 1948	Sin	Koryavov, Petr Gavrilovich Mechanics Foreman	A
Kavanov, Capt. Commander: MVD Guards	O	Kozhkin, Chief: Design Office	O
Kazachkocskiy, Oleg Dmitrivich Physicist	S	Kotova, Mariya Konstantinova First Section	S
Kazhchkovskiy (Kazachkovskaya) Tomara Physicist	O	Kovalenko, Physicist	Sin
Kazebaya, Electrical Engineer	O	Kovalev, Valdimir Savelevich Chief: First Section	S
Kervalidze, Physicist (Crystals)	Sin	Kozakov, Ivan Mechanic	A
Khachaturov, Khachatuv Abramovich High Frequency Physicist	Sin	Kozakova, Valentina Ivanovna Chemical Laboratory Assistant	A
Khachaturov, (Possibly same as above) Physicist	O	Krasnov, High Frequency Engineer	Sin
Khachaturov, Purchasing Department	O	Krassin, Andrei Kupitonovich. Departmental Chief	O
Khachaturova, Design Office	O	Krauz, Chemist	O
Khachishvili, Varlaam Ivanovich Chemist	O	Krayevna, Yelena Gnadyevna Radiochemical Technician	S

SECRET

15

NW#: 33546

DocId: 31432014

~~SECRET~~

DECLASSIFIED
Authority AWJ 9496 70

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Krutkov, Prof. Dr. Theoretical Physicist		Lezin, Chief: Motor Pool	S
Krutkov, Yuri Aleksandrovich Physicist	A	Lobin, Mechanic	Sin
Kruzhko, Interpreter	O	Loginov, Nikolay Nikolayevich Bookkeeper	S
Kucheryayev, Physicist	O	Lomadze, Angelina	
Kudryashev, Arkadiy Electrician	A	Laboratory Assistant	A
Kudryavtsev, Escort	A	Lomadze, Eteri	
Kulagin, Ivan Vasilyevich Glassblower-Chauffeur	S	Chemical Laboratory Assistant	Sin
Kurashvili, Safety Engineer	A	Lomova, Valeriya Andreyevna Chemical Laboratory Assistant	A
Kurchatov, Visitor 1947-1951	A	Lordkipanidze, Administrative	Sin
Kurchakov, Mathematician	O	Luchnik, Nikolay Viktorovich	
Kurochkin, Sergey Mikhaylovich Chief: Mechanical Workshop	A	Scientific Assistant	S
Kurochkina, Irina Sergeyevna Chief: First Section	A	Lukashin, Mefodiy Georgevich Precision Mechanic	S
Kuzmin, Ivan Escort Section	A	Lukin, Arkadiy Escort	A
Kuzmin, Administrative Director	A	Lukyanov, Anatoliy Aleksandrovich Technical Draftsman	S
Kuznetsov, Michael Michaelovich Visitor 1946-1955	Sin	Lutsnik, Chemist (MVD Informer)	S
Kuzovkin, Yergeny Nikolayevich Chief Caretaker	O	Makarov, Metallurgical Laboratory	O
Kuzovkina, Lidiya Andreyevna Chief Laboratory Technician	S	Makarov, Scientific Assistant	S
Kvartsedeli, Physicist	S	Makeyev, Chief Foreman: Mechanic	A
Kvartskhava, Ilya Filippovich Physicist	A	Maksimov, Theoretical Physicist	Sin
Lashenko, Chief: Metallurgical Laboratory	A	Malishev, Radiological Laboratory	O
Lavrench, Aleksandr Chief: Crystal Counter Laboratory	O	Maltseva, Anga Secretary-Bookkeeper	A
Lazarev, Vasily Georgevich First Section	S	Malykh, Chief: Ceramic Laboratory 1949	O
Lazerev, Electrical Engineer	Sin	Mamurin, Sergey Laborer	A
Ledsadze, Tengela Nesterovna Chemist	A	Markaryan, MVD Maj. Chief: Admin.-Maint. Section	A
Leontev, Nikolay Ivanovich High Frequency Lab	O	Martur, Anatoliy Grigoryevich Chief: Pu & U Chemical Section	S
Leonteva, Laboratory Assistant	O	Martur, Anni (Possibly same as above) Chemist	S
Leontyev, Ivan Pakhomich Chief Bookkeeper	S	Mashtakova, Nina Karlovna Chief Librarian	Sin A
Leontyev, Nikolay Physicist-Electronics Assistant	A	Matalin, Chief: Electronics Laboratory 1949-1950	O
Leontyeva, Irina Electronics Engineer Assistant	A	Matyushenkova, Zingida Fedorvna Medical Doctor	O
Levchenko, Aleksandr Chief: Personnel	Sin	Maukin, Lt. Escort	O
Levrentev, Accelerator Physicist	O	Melnikov, MVD Capt. Purchasing Department	O
Leypunskiy, Physicist	O	Migulin, Vladimir Vassilyevich Electrophysicist (Director)	Sin
		Mikheyev, Ivan Ivanovich Chief: MVD Unit at Sinop	Sin
		Mikushkin, MVD Capt. Chief: Purchasing Department	O
		Mikushkina, Secretary	O

~~SECRET~~

~~SECRET~~

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Mirianashvili, Experimental Physicist	A	Orlov, (Possibly same as above)	
Mironov, Anatoliy Personnel Section	S	MVD Escort	Sin
Mironovo, Vera Volkovna Dentist	S	Ovchennikov, Evgen Petrovich	
Mitrenin, Boris Petrovich		Busse Laboratory	O
Physical Chemist-Physicist	A Sin	Ovechgin, MVD Col.	
Mitrenina, Olga Medical Doctor	A	Chief: Power Station Construction	O
Molchankin, Personnel Chief	A	Oziashvili, Yelena D.	
Morozov, Vasilii		Scientific Assistant	Sin
Chemical Laboratory Technician	A	Palivin, Visitor 1947	O
Morozov, Political Leader	O	Palkin, Nikolay Georgevich	
Morozova, Galina Gavrilovna		School Teacher	S
Analytical Chemist	O	Panin, Design Office	A
Moskalev, Yurin Ivanovich		Panina, Political Section	A
Scientific Assistant	S	Peizelayev, Analytical Chemist	O
Moskovskiy, Electrician	A	Pepelyeyeva, Galina	
Mozdokeli, Tinatin Georgiyevna		Laboratory Technician	S
Chemical Laboratory Assistant	A	Perelegin, R. G.	
Mozgovaya, Tamara Afanasyevna		Chief Electrical Engineer 1948	O
Laboratory Assistant	A	Perevalo, Dina	
Mukhin, Calt Chief: Fire Department	S	Chief: Personnel Section	A
Musatov, MVD Capt. Escort	O	Perevalo, Ira First Section	A
Musatova, Escort	O	Perov, Vyacheslav Stepanovich	
Nazarov, Georgiy, Chief: Motor Pool	A	Scientific Assistant	S
Negodin, Lt. Personnel Department	S	Pervukhin, M. G. Visitor 1947	O
Nekrilov, Boris Mikhaylovich		Petriv (Petrin)	
Chief: Escort Section	A	Chief Electrical Engineer	S
Nemirovskiy, Boris		Petrov, Chief of Procurement	S
Physicist-Visitor from Lab II	O	Petrov, Mechanic	Sin
Neshcheglotov, Lt. Col. Mikhail		Petukhov, Valentin Afanasovich	
Chief: MGB Section	S	Accelerator Physicist	O
Nikolashvili, Chief: Political Section	A	Pevsner, Anatoliy	
Nishiklotov, MVD Capt.	S	Procurement Section	S
Novikov, Ivan Ivanovich		Pevsner, Scientific Assistant	S
Visitor 1951-1952	O	Pivin, Lt. Escort	O
Novikovskiy, Boris		Pluton, Nuclear Physicist	A
High Frequency Physicist	O	Pogrebnyak, Political Section	A
Obchnikov, Physicist	O	Polikhatko, Dispatcher	A
Oganisyan, Unknown	Sin	Polyanskiy, Chemist	S
Oleynichenko, Petr Maksimovich		Polyanskiy, Visitor 1947	O
Chief: Fire Department	A	Polyanskiy, Nikolay Georgevich	
Oleynikov, Dep. Admin. Chief	O	Metallurgical Chemist (Possibly	
Ordzhonikidze, Avtandil		Polyanskiy)	S
Chemical Laboratory Assistant	A	Ponomarev, Capt.	
Ordzhonikidze, Ketovan Georgiyevna		Worked in Kommandatura	S
Physicist	A	Popov, Mechanic	A
Ordzhonikidze, Rastom		Popov, Sergey Physicist	A
Laboratory Assistant	A	Poroshin, Oleg Physicist	A
Orlov, MVD Maj.		Poryadkova, Nadezhda	
Chief: Escort Section	A	Scientific Assistant	S

~~SECRET~~

~~SECRET~~

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Postak, Yelizaveta Abramovna Radiochemical Assistant	S	Semenov, Alecksey Afanasevich First Section	S
Postnikov, Chemist	A	Semenov, Dmitriy Ivanovich Scientific Assistant	S
Postnikova, Zinaida Grigoriyevna Chemist	A	Semenov, Medical Doctor	S
Preshibaylo, Maj.		Semyenov, Visitor 1951-52	O
Chief: MVD Section after 1950	S	Serbinov, Arkadi Nokolayrvich High Frequency Physicist	O
Pribitkov, Designer	Sin	Sereda, Bleb Arkadiyevich Chief: Sungul after 1953	S
Prokudin, Chemist	Sin	Seregin, Vasily Ilyich First Section	A
Prokudin, Ivan Petrovich Chemist	A	Sergeyev, Aleksey Fedorovich (Capt.) Chief: Personnel 1948-52	S
Prokudina, Laboratory Technician	A	Serogin, Administrative Secretary	Sin
Pupko, Chief: Fluid Metal Laboratory	O	Shariga, Tamara Ignatyevna Administrative Supply	A
Pupkov, Scientific Assistant	S	Shchamba, Nadezhda Laboratory Assistant	Sin
Putsenko, Petr Carpenter	A	Sherman, Lev Yeremevich High Frequency Physicist	O
Rakhinov, Khamil Mirsaidovich Accelerator Physicist	O	Shilova, Ida Borisovna Scientific Assistant	S
Rasvin, MVD Col. Adminstrative Chief	Sin	Shishkina, Fedosiya Ivanovna Medical Assistant	S
Rayskiy, Igor Vasilyevich Instrument Technician	A	Shitikov, Mechanic	Sin
Rayskiy, Slava Vasilyevich Electrician	A	Shkolnikov, Leonid Borisovich Chief: Workshop	S
Rayskaya, Marina Vasilyevna Chemist	A	Shkolnikova, Margarita Nikolayevna Chief: Dispensary	S
Razorenov, Ivan Electrician	A	Shkualidze, High Frequency Specialist	Sin
Remezeva, Nina Alekseyevna Chemical Laboratory Technician	S	Shlyakhin, Sergey Mikhaylovich Chief: Personnel	A
Repin, Physicist	Sin	Shlyakhin, Yura Sergeyeovich Glassblower	A
Repin, Physicist	O	Shlyakhina, Tamara Sergeyeovna Laboratory Assistant	A
Resigyan, Physicist	Sin	Shamkov, Ivan Chauffeur	A
Roganyan, Chief of Depot	A	Shmakova, Valentina Bookkeeper	A
Rogava, Escort Section	A	Shoniya, Benno Chemical Laboratory Assistant	A
Romanov, High Frequency Physicist	Sin	Shuleshko, Aleksandr Political Section	A
Romanov, Theoretical Physicist	O	Shulesko, Sascha (Possibly above) Administrative	Sin
Romanova, Chemist	O	Shvanev, Lt. Venyamin Semenovich Chief: Escort Section-Interpreter	S
Romanovich, Theoretical Physicist	O	Shvangeradze, Rezo Rozhdenovich Chemist	A
Roslov, Chief: Supply Warehouse 1949-50	S	Sinetskiy, Fireman	A
Roslova, Bookkeeper	S	Sinovev, P. Petrovich Accelerator Physicist	O
Roznan, Josef Mironovich Physicist	Sin		
Rudanovskiy, Engineer	Sin		
Rudenko, Technician	Sin		
Rudenkova, Unkown	Sin		
Ryazantsev, Nikolay Sergeyeovich Mechanical Foreman	A		
Samoylov, Maj. Administrative Deputy to Director	S		
Saryan, Chief: Supply Depot	A		
Savin, Lt. Secret Department	O		
Savina, Laboratory Technician	O		
Selyutin, Escort Section	A		

~~SECRET~~

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Sinyavskiy, Aleksandr Electrician	A	Tissen, Mark Yulianovich	
Skolnikov, Engineer	S	Chief: Physics Section	S
Skorobogatova, Scientific Assistant	S	Tkachenko, Lt. Gen.	S
Slyusarev, Radiological Laboratory Technician	O	Tkemaladze, Nikolay Escort	A
Slyusareva, Chemist	O	Topolin, Chief: Administrative	Sin
Smirnov, Chief: Escort Section	O	Tregubenko, Irina Petrovna	
Smirnov-Averin Radiological Laboratory	O	Laboratory Assistant	S
Smirnov-Averina Chemist	O	Trenev, Lt. Georgiy Petrovich	
Soifer, Chemist	Sin	Administrative Deputy to Director	S
Sokolova, Chemist	Sin	Trenev, MVD Lt. (Possibly above)	A
Sokurova, Yelizaveta Nikolayevna		Trigubnyna, Medical Assistant (MVD Informer)	S
Scientific Assistant	S	Trubnikov, Xylantovich (Lt. Col.)	
Solntsov, Yuriy Mechanic	A	Deputy Administrative Chief: 1948-50	O
Starikov, Aleksandr Mikhaylovich		Tsarapkin, Kayta	
Escort	S	Laboratory Assistant (MVD Informer)	S
Staviski, Crystal Counter Laboratory	O	Tsarapkin, Sergey Romanovich	
Stepanenko, MVD Lt.		Biological Laboratory Assistant	S
Chief: MGB Section	A	Tsaretskiy, Theoretical Physics Laboratory 1949	O
Stolbovskiy, Medical Section	A	Tschirner, Paul Laboratory Technician	O
Stolyarova, Nina Secretary	A	Tsigareyshvili, Nodari	
Strebniyskiy, MVD Lt.		Laboratory Assistant	A
Interpreter and Escort	A	Tskhakaya, Vakhtang Kalistratovich	
Streltsov, Yegeniy Ceramics Laboratory	O	Physicist	A
Streltsova, Vera Nikolayevna		Tsomaya, Radiological Physicist	A
Scientific Assistant	S	Tumanova, Valentina Ivanovna	
Strepkova, Angelina Pimenovna		Laboratory Assistant	A
Medical Assistant	S	Rumanovna, Yekaterina Ivanovna	
Stubniyskiy, Chief: Legal Department	O	Laboratory Assistant	A
Stubniyskaya, Escort	O	Tupikova, Nadya Secretary	A
Subarev, Gennadiy		Tyemnikov, Security	Sin
Laboratory Assistant	A	Ukrainitsev, Feodor	
Sych, Zinaida Gavrilovna		High Frequency Technician	O
Scientific Assistant	S	Ulitenko, Anya Chief of Mess	A
Tabulevich, MVD Lt. Col.		Ulitenko, Sergey Ivanovich Bookkeeper	A
Deputy Chief: Administrative	O	Uralets, Col. Aleksandr K.	
Tarunina, Zoya Ivanivna		Chief: Administrative and Scientific	S
Chief Bookkeeper	A	Uralets, Galina Gavrilovna	
Tekhnedshan, Fireman	A	Chief Librarian	S
Thyssen, Visitor 1947	O	Uralets, Yurily Aleksandrovich	
Tigishvili, Ilya Tsaakovich		Radio Technician	S
Chief: Mechanical Workshop	A	Uvin, Lt. Ivan Petrovich	
Timofeyev-Resovskaya, Andrea N.		Chief Bookkeeper until 1950	S
Laboratory Assistant	S	Vakhonin, Petr Fedorovich	
Timofeyev-Resovskaya, Nikolay Vlad.		Chief: Motor Pool 1949	S
Chief: Radiobiological Section	S	Vasilenko, Motya Chemist	A
Timofeyev-Resovskaya, Yelena A.		Vasilyev, Ivan Electrician	A
Scientific Assistant	S		
Timoshenko, Boris			
Laboratory Assistant	O		

~~SECRET~~

DECLASSIFIED

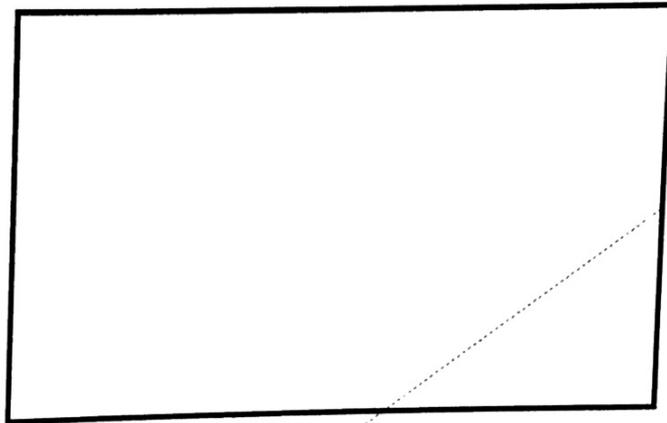
Authority NAID 949670

NAME and TITLE	LOCATION*	NAME and TITLE	LOCATION*
Veksler, Visitor 1949	O	Yemelyanov, Vasilii Simionovich	
Vereshchagin, Maksim Nikolayevich (Lt. Col.) Commandant	S	Visitor	O
Vereshchagina, Aleksandr Sememovna Laboratory Assistant	S	Yermin, Vladimir Nikodimovich Chemist	A
Viktorov, Darian Physicist	Sin	Yermina, Natalya Nikolayevna Laboratory Assistant	A
Vlasenko, Valentin Pavlovich Physicist	Sin	Yermolayev, Yulian Technician	Sin
Volikova, Dentist	A	Zakharev, Petr Ivanovich (Lt. Col.)	O
Volkol, Vladimir Volodya Technician	Sin	Zamoilov, MVD Maj.	S
Voronets, Georgiy Yevstafiyevich Laborer	A	Zavenyagin, Avraami Paulovich Visitor 1947-35	O
Voronkov, MGB Lt. Col. Mikhail Chief: MGB Section	A	Zaytsev, Viktor Trifonovich Mechanics Foreman	A
Voytsenya, Bookkeeper	A	Zaytseva, Natalya Romanovna Kindergarten Worker	A
Voznesenskiy, Sergey Aleksandrovich Chief: Chemical Section	S	Zhelyayeva, Anastasiya Stepanovna Chemist	A
Voznyuk, Design Engineer	Sin	Zhemov, Theoretical Physicist	A
Vyatkin, Mechanic	A	Zhilin, MVD Security	O
Yakhontov, Chief Engineer 1947	S	Zhokhov, Aleksandr Vasilovich Mechanic	Sin
Yegorov, Chief Electrical Engineer 1953	S	Zimin, Maj. Chief: MGB Section 1952	S
Yegorova, Yevgeniya Leontyevna Laboratory Assistant	S	Zueryev, Visitor 1947-50	O
Yelistratov, Electrical Engineer	Sin	Zveryev, Brig. Gen. Visitor 1946-51	O
Yelkin, Chemist	Sin		

~~SECRET~~

~~SECRET~~

DECLASSIFIED
Authority *AWD 949670*



UNCODED

E025x1 CIA

~~SECRET~~



National Security Archive,
Suite 701, Gelman Library, The George Washington University,
2130 H Street, NW, Washington, D.C., 20037,
Phone: 202/994-7000, Fax: 202/994-7005, nsarchiv@gwu.edu