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Author: *Umnov, V.*
Title: *GENETIC-ENGINEERING PROJECT FOR OBTAINING BACTERIOLOGICAL WEAPONS RECALLED*
Primary Source: *Komsomolskaya pravda, April 30, 1992, No. 80 (20380), p. 1, cols. 2-8*

Abstract: The article reports on results of an investigation of secret bacteriological-warfare research in the former USSR.

The author relates that this investigation was begun in response to letters from *Komsomolskaya pravda* readers concerning a bacteriological test facility on Vozrozhdeniye Island in the Aral Sea.* It was alleged in particular that experiments on animals had been conducted here without proper immunization of personnel, in facilities which were closed to the public. Military authorities refused to answer requests for information in this connection or to allow journalists to visit the test facility. Such information as is available indicates that the Aral Sea facility has now been practically deactivated.

It is recalled that institutes engaged in bacteriological-weapons research appeared in the Ministry of Defense at a comparatively early date. During the 1970s, a special system was created with a view to catching up with the West in genetic-engineering research aimed at obtaining altered forms of bacteria and viruses. This system remained in operation despite Soviet ratification, in 1975, of an international convention banning bacteriological weapons. Projects which were essentially military began under the auspices of the USSR Council of Ministers' Main Administration for the Microbiology Industry. A bacteriology center was opened in the Moscow suburb of Obolensk, and a virology center was created in Koltsovo, near Novosibirsk. A biological-instrument building institute and an institute for designing machinery for biochemistry were created in Moscow, and an institute for extra-pure preparations appeared in Leningrad. Experimental industrial facilities were opened. Whole schools were respecialized at the Moscow Higher Technical School imeni Bauman, Moscow State University, Medical Institute No. 2 and other higher schools in Moscow. Specialists sought by genetic-engineering methods to obtain new microorganisms with prescribed properties, for specific clients. This was not accomplished because scientists involved in military projects lacked sufficient knowledge of the nature of these properties. On the other hand, directions of research which were pursued on the side could now become main directions in virology, vaccination and diagnosis, it is claimed. A method of obtaining interferon was learned at the center in Koltsovo, for example.

Specialists reportedly have the task of utilizing potential in the field of microbiology which has been developed as a result of defense research. The author mentions in conclusion that a Committee on Conventional Problems of Chemical and Biological Weapons was created under the President of Russia in February.

*See also the *Daily SNAP*, May 6, 1992, p. 3, col. 1
(SNAP 920521)

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Title: *RUSSIAN LAW ON CONVERSION STIPULATES LIMITATIONS ON TECHNOLOGY TRANSFER*
Primary Source: *Ekonomika i zhizn, May 1992, No. 18 (8399), p. 20, cols. 1-5*

Abstract: The texts of a law of the Russian Federation "On Conversion of Defense Industry in the Russian Federation" and of a resolution of the Russian Federation Supreme Soviet on procedure for putting this law into effect are published. The law and

resolution are dated March 20, 1992.

The ten articles of the law are divided into four sections entitled respectively "General Provisions"; "Organization, Planning and Financing of Conversion of Defense Industry"; "Social Protection. Compensations and Benefits for Converted Enterprises"; and "Foreign Economic Activities of Enterprises in Conditions of Conversion." An introductory paragraph states that the law defines legal principles for the work of defense enterprises, organizations and associations and of organizations associated with them in conditions of reduction or termination of defense orders and conversion of their industrial capacities, scientific-technical potential and labor resources in this connection. The law regulates mutual relations between state administrative agencies and defense enterprises in the process of conversion and stipulates a procedure for resolving legal, economic and social questions which arise in the process of conversion, with the aim of utilizing production capacities, scientific-technical potential and labor resources of converted enterprises as effectively as possible for civilian purposes.

Article 2 stipulates that production for military needs shall be reduced or terminated at defense enterprises in accordance with decisions of state governing bodies or actual reductions of expenditures for these purposes from the budget. The main operating principle of enterprises which are being converted shall be utilization of high technologies of the defense complex for production of output which is capable of competing on the foreign market. Production capacities, labor resources and scientific-technical potential which are freed in the process of conversion shall be enlisted in carrying out high-priority state targeted programs for the social and economic development of the Russian Federation. Enterprises which are being converted shall be supplied on a contractual basis, using funds allocated for defense needs. Mobilization capacities shall be created, preserved and developed in accordance with assignments approved by the federation's government.

Article 10 provides for protection of the military-economic and scientific-technical potential of the Russian Federation. In line with this article, converted enterprises must be governed strictly by limitations which are set on the export, transfer or exchange of products and technologies that are intended for civilian purposes but can be used for development of weapons of mass destruction. These limitations shall be set by the federation's Supreme Soviet and government. Converted enterprises are required to follow certain rules in their foreign economic activities. These rules call for strategic types of raw materials, other materials and equipment to be exported in accordance with licenses conforming to laws of the Russian Federation; and for technologies, licenses, know-how and scientific-technical information for organizing production of civilian products and/or utilizing them in trade and scientific-technical relations with foreign firms to be transferred on the condition that the federation's military-economic interests are protected. Weapons; military equipment; special systems, complexes, functional units and assemblies which are components of weapons and military technology; and processes for producing these items shall be sold to other states in accordance with procedure established by the federation's government.
(SNAP 920521)

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Author: *Velichkin, S.*
Title: *METEOROLOGICAL INFORMATION-GATHERING SYSTEM "RUTA" FOR HIGH ELEVATIONS*
Primary Source: *Pravda Vostoka, March 10, 1992, No. 49 (22769), p. 4, cols. 2-5*

Extract: Testing of the new automated system for the collection and processing of hydrometeorological information "Ruta" has begun at the "Dukant" avalanche station of the Uzbek Hydrometeorology Service (Uzgidromet). Authors of the unique development are the Kiev Institute of Automation, the Central Asian Scientific Research Hydrometeorology Institute and Uzgidromet specialists.

"'Ruta' is intended for telemetry of hydrometeorological parameters," said one of its developers, V. A. Korobkov, chief engineer of "Dukant" and a laureate of the USSR State Prize. "Specifically, one can

obtain with it data about air temperature and humidity, wind velocity and direction, snow temperature, depth and density, duration of sunshine, physicomechanical parameters of the snow cover, and time of avalanche occurrence."

Special sensors are installed at hard-to-reach high-altitude locations. The information gathered with them is transmitted automatically via radio communication channels into the computer of the avalanche station. All measurements are made according to a special program, which is entered into a personal computer. The information is processed and transmitted by telephone to the Tashkent Hydrometeorology Center for subsequent analysis and compilation of weather forecasts.

"Ruta" is a new generation of the "TM-910 Lavina" telemetry complex. The complex has proved itself well in the avalanche service, in collecting diverse hydrological information and in the elimination of the consequences of the Chernobyl accident.

The main advantage of "Ruta" is its versatility. The system makes it possible to conduct measurements without human participation in difficult conditions and to obtain information for 3,000 square kilometers.

(Two photographs are given showing V. A. Korobkov and Candidate of Physical-Mathematical Sciences V. V. Ipatov, a representative of the special design bureau "Meteopribor" of the scientific production association "Tayfun" from Obninsk, with weather data; and Petr Lifanov, head of "Dukant," getting "Ruta" ready for operation on a snow-covered slope.)
(SNAP 920521)

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Author: *Kapustin, Sergey*
Title: *PHYSICAL-FIELD THERAPEUTIC DEVICE DEVELOPED AT DEFENSE ENTERPRISE*
Primary Source: *Kuranty, April 28, 1992, No. 82 (347), p. 8, cols. 1-5*

Extract: Professor, Doctor of Medicine Dzhuna (Yevgeniya Yuvashevna Davitashvili) has been the first to report truly sensational news to our newspaper: the U.S. Patent Office has issued her Document No. 5095901 registering a stimulator which bears her name.

"The human biofield is a combination of infrared, microwave and electrostatic fields," Dzhuna explained. "At a Moscow defense enterprise, a device which emits specifically the fields that are characteristic for man was developed for the first time under my direction. Its radiating surface was designed in the shape of a hand. Every radiator on it is connected to a computer, into which a specific program has been entered. What kind [of program]? Changes in the radiation parameters of the fields in my hand during the treatment of particular diseases have been measured, and this is what became the basis of the computer's 'mind.' Thus, when the necessary operating conditions have been specified, the robot extrasensory will in some cases be able to take my place."

(A photograph of Dzhuna is given.)
(SNAP 920521)

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Title: *Yu. B. KOBZAREV (obituary)*
Primary Source: *Moskovskaya pravda, April 29, 1992, No. 83 (171), p. 8, cols. 7-8*

Extract: Yuriy Borisovich Kobzarev, an eminent scientist in the field of radio engineering and radiophysics, died on April 25, 1992, at the age of 86. He was a Hero of Socialist Labor, a laureate of the USSR State Prize and a member of the Russian Academy of Sciences.

The death announcement is made with deep regret by the academy's presidium, its division of general physics and astronomy and its Institute of Radio Engineering and Electronics, and sincere condolences are expressed to the family and friends of the deceased.
(SNAP 920521)

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