ALL-RUSSIAN SCIENTIFIC RESEARCH INSTITUTE OF TECHNICAL PHYSICS
(VNIITF): FEDERAL NUCLEAR CENTER

LOCATION:
Snezhinsk (formerly Chelyabinsk-70), 20 km north of Kasli and approximately 120 km from Chelyabinsk, Chelyabinsk Oblast. {updated 7/20/00 ES}

HOMEPAGE: http://www.vniitf.ru/

SUBORDINATION: Minatom

ADMINISTRATION:
Director: Georgiy Rykovovanov, appointed 16 December 1998

Deputy Chief Engineer: Valeriy Drozdov
[Nuclear Business Directory (Moscow, IBR Corporation, 2000), p. 57.] {Entered 7/20/00 ES}

Deputy Director: Rodion Voznyuk

Deputy Director for International Contacts: Boris Vodolaga

ACTIVITIES:
Established in 1955, VNIITF's primary mission has been to design nuclear warheads, but it also fabricates experimental and prototype warheads. It possesses facilities that simulate different aspects of nuclear explosions, including pulsed reactors, lasers, shock wave generators and computers.

In early 1992, approximately 50 percent of its work force was reportedly engaged in non-military research, although it continues to conduct research on the development of nuclear weapons.[1] The non-defense related work includes development of dosimeters, medical equipment and irradiation devices.[2] This facility employed some 17,000 persons (as of 1992). It was designated a Russian Federal Nuclear Center by Boris Yeltsin in 1992.[3] Foreign contracts and programs at VNIITF amounted to approximately 2 percent of the institute's total budget for 1996.[4] Other reports indicate that revenues from international projects amount to only the equivalent of 16 percent of VNIITF's total debt, suggesting an income from international sources of approximately $10 million. This latter figure, however, seems rather high given the limited resources available to the International Science and Technology Center and other sources of international funding.[5]

After the suicide of Vladimir Nechay, Yevgeniy Avrorin was appointed director for a two-year period.[5] The current director of VNIITF, Georgiy Rykovovanov, was appointed in December 1998.[6] Avrorin retains the position of Scientific Director.[7]

Sources:

STRUCTURE: VNIITF contains the following subdivisions:
1. Theoretical Physics Division
2. Division of Mathematical Modeling
3. Computing Center
4. Division of New Commercial Technologies and Materials
5. Experimental Physics Division with a number of simulation facilities

The facility has two design offices, two experimental plants and one internal test site.

Other sites and facilities, including the Research Technological Center (RTC) at VNIITF have received physical
protection upgrades, including barriers, intrusion detectors, and video surveillance. An institute-wide computerized badge system has been implemented, and all access control systems will be integrated into a central control station, which, as of July 1999, was under development.[1]

In March 1998, plans were made to complete site-wide security upgrades. These upgrades included a measured physical inventory of all nuclear materials as well as the development of a complex-wide computerized material control and accounting system. As of July 1999, physical inventories were underway in two buildings at the PRR facility and at other buildings at VNIITF.[1]

In September 1999, DOE halted all new contracts for MPC&A work at VNIITF, VNIIEF, Sarov (Arzamas-16), Trekhgororny (Zlatoust-36), Lesnov (Sverdlovsk-45), and Zarechnyy (Penza-19). DOE and Minatom could not agree on assurance measures (either physical access or video or photo evidence) that accounted for MPC&A upgrades at these facilities.[3] However, contracts that were signed before September 1999 were still being fulfilled by DOE. In May 2000, both sides agreed to a proposal which allowed new work, albeit limited in scope, to begin at VNIIEF and VNIITF.[4]

The full text of a brochure produced by VNIITF in 1998 describing the MPC&A upgrades installed at the site is available in the full-text documents section of NIS Nuclear Profiles in English and Russian. For additional descriptions of the MPC&A work performed at VNIITF in 1997-1998, see the DOE’s December 1997 document, United States/Former Soviet Union Program of Cooperation on Nuclear Material Protection, Control, and Accounting: Partnership for Nuclear Security, or the DOE’s September 1998 document, United States/ Former Soviet Union Program of Cooperation on Nuclear Material Protection, Control, and Accounting: Partnership for Nuclear Security.

Sources:

REACTORS:
According to information from the International Atomic Energy Agency (IAEA), there are three operational reactors and one decommissioned reactor at VNIITF. However, a paper written in 1999 by officials at VNIITF and the US Department of Energy (DOE) states that there are four reactors and one "critical mass stand."[1, 2]

Sources:

NAME: BARS-5
TYPE: Metal pulse reactor
POWER: 10kW of steady power, 160,000MW of pulsed thermal power
FUEL: 250kg of U-235, enriched up to 90%
STATUS: The IAEA lists this reactor as decommissioned, but other sources do not confirm this.
Sources:

NAME: IGRIK
TYPE: Liquid pulse reactor
POWER: 30kW of steady thermal power, 25,000MW of pulsed thermal power
FUEL: 7kg of U-235, enriched up to 90%
STATUS: Operational
Sources:

NAME: YaGUAR
TYPE: Liquid pulse reactor
POWER: 10kW of steady thermal power, 40,000MW of pulsed thermal power
FUEL: Minimum critical mass of fuel is 15.64kg of U-235, enriched between 17% and 90%
**STATUS:** Operational

**Sources:**

**NAME:** FBR-L

**TYPE:** Fast burst laser

**POWER:** 5kW of steady thermal power, 800MW of pulsed thermal power

**FUEL:** 76kg of U-235, enriched up to 90%

**STATUS:** Operational

[IAEA website, http://www.iea.org/worldatom/rrdb/.] {Entered 2/16/01 GD}

**VNIITF AND SNEZHINSK DEVELOPMENTS:**

**3/1/2003: RUMYANTSEV AND VERSHBOV VISIT SNEZHINSK**

On 1 March 2003, Minister of Atomic Energy Aleksandr Rumyantsev and US Ambassador to Russia Alexander Vershbow visited Snezhinsk. The visit focused on achievements in US-Russian cooperation since 1992: employment of former nuclear scientists, reduction of nuclear weapons infrastructure under the Nuclear Cities Initiative and the Initiatives for Proliferation Prevention; safety and security of hundreds of kilograms of nuclear material and plans for construction of a central storage facility under the MPC&A program; and development of new technologies to counter terrorism under the 1994 US-Russian Agreement on the Exchange of Technical Information in the Field of Nuclear Warhead Safety and Security.[1] The ambassador visited several research centers and commercial enterprises that had been created with US financial support, including the Spektr Konversiya scientific production enterprise, the Snezhinsk International Development Center, a pharmaceutical factory, and the Uraltravers-PAK company, and met with students from the Snezhinsk Physics and Technical Academy.[2]

**Sources:**

**4/2001: NCI SUPPORTS START-UP COMPANY IN SNEZHINSK**

A new civilian enterprise, Identification Technologies Company (ITEC), is being established in Snezhinsk with support from the Nuclear Cities Initiative (NCI) Program. The enterprise will market equipment and provide support services for bar coding and other digital identification technologies for business and government customers in the Russian Federation. ITEC currently sells and provides support for bar code equipment to projects associated with the DOE Material Protection, Control, and Accounting (MPC&A) Program. Appropriate Russian licensing has been obtained which will allow ITEC to design and install MPC&A systems and equipment at Russian nuclear facilities. The Electrochemical Plant in Zelenogorsk and the Urals Electrochemical Combine in Novouralsk have already contracted with ITEC. An important result of this venture is the non-military employment that it provides for personnel from VNIITF. Employment levels after one year of operation show four full-time and 10 part-time employees. Employment projections for ITEC’s second year are for 10 full-time and 20 part-time employees.


**3/2000: SNEZHINSK’S IDC PROMOTES CONVERSION PROJECTS**

At the Second International Forum “High Technologies of the Defense Industry” held in March 2000, Snezhinsk’s International Development Center (IDC) demonstrated the achievements of the Nuclear Cities Initiative (NCI) Program, which aims to create civilian jobs for scientists in Snezhinsk. The Center currently provides consulting services to 20 local companies, which produce a variety of construction materials and unique equipment for civil use, such as melting furnaces, supersonic asphalt density meters, back-up devices for emergency shutdown of gas-fired plants, etc. For example, the company Bars-70 develops and produces industrial air purification systems, Avangard manufactures rubber goods for the automobile industry, and Itek imports identification equipment from the United States and adapts it for Russian consumers. In light of the expected VNIITF workforce reduction from 10,000 to 8,000, the International Development Center is offering special courses in business plan writing, market research, and other business skills. IDC also helps local companies with investment and technology searching. In addition, an Open Computing Center supervised by VNIITF Director Yevgeniy Avrorin is being established to employ software specialists formerly engaged in the military sector (for details, see the 11/18/2000 entry, below). [Vladimir Dernovoy "Konversiya po-snezhinski," *Yadernaya bezopasnost*, No.46-47, April 2001, pp. 12-13.]

{Entered 6/11/02 DA}

**11/18/2000: COMPUTING CENTER OPENS IN SNEZHINSK UNDER NCI FRAMEWORK**

On 18 November 2000, a US Department of Energy delegation headed by former ambassador Ronald Lehman, Director of the Center for Global Security Research at Lawrence Livermore National Laboratory, commissioned the Strela Open Computing Center in Snezhinsk. Strela was established under the Nuclear Cities Initiative and is expected to involve 120 nuclear weapons specialists from VNIITF in civilian high-tech projects within a year.
Four commercial projects in software programming, computer modeling, and computer-assisted engineering and design will begin immediately; five more projects are expected to be added in the next several months. During the visit, the Department of Energy representatives pledged to provide $9.7 million for conversion projects in Snezhinsk, including $3.9 million from NCI and $5.8 million from the Initiatives for Proliferation Prevention Program.


**10/26/2000: SPEKTR NO LONGER A PART OF VNIITF**

By the end of 2000 the Spektr state unitary enterprise is to be replaced by Spektr-Konversiya.[1] The new enterprise will be a joint stock company independent from VNIITF. Spektr-Konversiya will concentrate on profitable conversion projects, such as high-temperature electric heating devices, treatment of precious stones, and others.[2] The staff will be significantly reduced from 357 to around 60 employees. Most of the former Spektr employees will be transferred back to VNIITF. The Snezhinsk city administration is providing partial financial support for Spektr-Konversiya projects.[1]

Sources:

**6/29/2000: VNIITF PROJECT EXPLORES ENERGY PRODUCTION USING SMALL THERMONUCLEAR EXPLOSIONS**

On 29 June 2000, Snezhinsk's online newspaper Okno reported that a group of VNIITF scientists has drafted a project that would use small thermonuclear explosions to generate extremely high temperatures and "separate" energy from the earth's vast reserve of deuterium. A thorium and uranium-233 fuel rod would be used to initiate the explosion of deuterium, although the precise method by which this would be accomplished is not specified. The project's co-author, Gennadiy Ivanov, claimed that deuterium-based energy production would be less expensive, cleaner, and safer than traditional methods of power generation, including nuclear power. To ensure safety, special two million cubic meter explosive combustion chambers would be built from steel and reinforced concrete, hermetically sealed, and buried below ground. According to Ivanov, VNIITF lacks the funding and the permission from Minatom to advance the project from models and blueprints to the design and experimental phases.[1] According to Moskovskiy komsomolets, in late May VNIITF specialists received the permission from the government to conduct an expert evaluation of the deuterium energy production project. The article noted that such a project would violate Russia's obligations under the Comprehensive Test Ban Treaty (CTBT), which prohibits nuclear testing and peaceful nuclear explosions.[2]

Sources:

**6/14/2000: INTERNATIONAL DEVELOPMENT CENTER OPENS IN SNEZHINSK**

On 14 June 2000, US and Russian officials attended the opening of Snezhinsk's International Development Center (IDC), which will provide business development resources, training, consulting, and telecommunications access under the auspices of the US Department of Energy's Nuclear Cities Initiative (NCI).[1,2] NCI will provide initial financial support to the IDC, which will eventually become self-supporting through fee-for-service activities.[2]

Sources:

**3/31/2000: PUTIN ATTENDS EXPANDED MINATOM COLLEGIUM SESSION IN SNEZHINSK**

On 31 March 2000, President-elect Vladimir Putin visited Snezhinsk (Chelyabinsk-70), which hosted an expanded session of the Minatom Collegium. For details, see the 31 March 2000 development in the Closed Cities and General Weapons Facilities developments section of the NIS Nuclear Profiles database. {Entered 4/26/00 SS}

**3/28/2000: CHELYABINSK OBLAST AMENDS ENTERPRISE REGISTRATION LAWS**

On 28 March 2000, Chelyabinsk Oblast amended local laws on the registration of enterprises in response to reports from local tax police that gaps in the current legislation caused the oblast to lose nearly 1.5 billion rubles ($53 million as of 28 March 2000). The amendments require the registering agency to verify a new enterprise's address. According to Izvestiya, Snezhinsk (Chelyabinsk-70) had the largest number of fictitious firms registered on its territory. The Federal Tax Police Service found 373 firms registered at the same address in Snezhinsk, and only one firm was actually operating at this address. Of the 61,000 enterprises operating in the oblast, 22,000 firms are registered in Snezhinsk. Initially, the 1997 Law on Closed Administrative-Territorial Formations (ZATO) granted tax breaks to firms registered in Russia's 42 ZATOs to help these cities convert from military to civilian production. On 3 December 1999, the Duma rescinded the investment zones at 40 of
the ZATOs, leaving the tax zones in place at Snezhinsk and Sarov (Arzamas-16).


3/14/2000: EUROPEAN STATES DISCUSS CREATION OF EUROPEAN NUCLEAR CITIES INITIATIVE

During the conference "Helping Russia Downsize its Nuclear Weapons Complex" held on 14 March 2000 in Princeton, New Jersey, the Italian-based non-governmental organization Landau Network-Centro Volta promoted the creation of a European Nuclear Cities Initiative (ENCI) to complement the US DOE’s Nuclear Cities Initiative. Initially, the ENCI would be limited to two pilot cities, Snezhinsk (Chelyabinsk-70) and Sarov (Arzamas-16). For details, see the 14 March 2000 entry in the Nuclear Cities Initiative Developments section of the NIS Nuclear Profiles Database.


2/3/2000: RUSSIAN GOVERNMENT RECOGNIZES THREE VNIITF PROJECTS

On 3 February 2000, Chelyabinsk Oblast Governor Petr Sumin and VNIITF Director Georgiy Rykovovov presented national recognition awards to 14 VNIITF scientists for three research projects. According to Vecherniy Chelyabinsk, the first award recognized scientists for the development of sub-critical testing methods used at Novaya Zemlya that adhere to the Comprehensive Test Ban Treaty (CTBT). The second award-winning project simulated the conditions of a nuclear explosion to study the behavior of materials under extremely high temperatures and pressure. A third award was presented to researchers who had developed instruments and automation systems to guarantee the safety of nuclear munitions during emergency situations. While at VNIITF, Sumin visited several research projects, including one of the world’s most powerful lasers. Sumin met VNIITF scientists collaborating on the CERNAtlas project, which includes 1,700 researchers from 34 countries, to develop eight highly sensitive rings used to study proton-proton interactions. Sumin also toured the newly constructed shop where VNIITF manufactures perforators used by the oil industry.


From 25-28 January 2000, Snezhinsk hosted the second meeting meeting of US and Russian legislators and mayors from the two countries' nuclear cities. Seminar participants discussed a draft memorandum of understanding between representatives from the Association of Minatom Closed Cities, the US Union of Energy Associations, and the International Association for City Administration. On the final day of the meeting, US and Russian participants signed a memorandum for further cooperation. According to VNIITF Deputy Director for International Contacts Boris Vodolaga, VNIITF does not plan to reduce the number of nuclear weapons specialists during the restructuring process. Vodolaga reported that VNIITF has considered new projects and new technologies with the goal of creating new jobs and minimizing its dependence on state financing. In 1998, VNIITF created the separate enterprise Spektr, which now employs approximately 400 specialists. Spektr projects include computer assisted tomography (CAT) equipment, hydroabrasive cutting, fiber optic communications lines, and superplastic forming. Although these products generated widespread interest among Russian enterprises, most of these enterprises are unable to pay for the new technologies. Vodolaga also reported that VNIITF had created a business plan for the CAT equipment, which it presented to the US investors. During the first phase of the VNIITF restructuring program, Snezhinsk officials must convince the federal government and residents to make the closed cities more accessible to private business. The second phase of the restructuring program will create new jobs. Deputy Director Aleksandr Makarenko from Minatom's Department of Social Policy stated that discussions about opening the closed cities are premature because Minatom's reasons for restricting access still exist. Makarenko added that removing guards from the city's external perimeters means that the city would need to increase its internal security. According to Trekhgorny Mayor and President of the Association of Minatom Closed Cities Nikolay Lubenets, Trekhgorny is currently working on 20 different projects and is able to sell its products to 20 constituencies of the Russian Federation. Lubenets noted that the Russian government has rushed the restructuring process, spending a lot of money to retrain nuclear specialists to "sew gloves and crochet vegetable netting." Instead, Lubenets argued, Russia should find work that corresponds to the level of skill of the unemployed nuclear specialists.


11/29/99: VNIITF PAYS EMPLOYEES BACK WAGES, GETS FUNDING FOR NEW PROJECTS

On 29 November 1999, VNIITF Deputy Director Rodion Voznyuk reported that the Russian government had almost entirely paid its debt to VNIITF and financed new defense projects. According to Yuzhno-Uralskaya sluzhba novostey, VNIITF recently intensified its work on state defense orders and rehired some of its former employees. Voznyuk added that VNIITF will maintain its intensive work load in the last months of 1999 and throughout 2000 in order to finish the back orders and the new projects.


10/14/99: NEUTRON THERAPY CENTER OPENS IN SNEZHINSK

On 14 October 1999, Russia's first regional neutron therapy center opened in Snezhinsk. The center is a
cooperative project between nuclear scientists and medical specialists, and it will have the capacity to treat 200 patients annually. VNIITF gave the center one gram of tritium, enough to operate the center's neutron generator for one year. Minatom allocated five million rubles to the center for FY 1999 and FY 2000.

[Yevgeniy Tkachenko, "Unique Neutron Therapy Center Opens in South Urals," ITAR-TASS, 14 October 1999.] (Entered 5/18/00 SS)

9/17/99: MOBIL TECHNOLOGY AND VNIITF SIGN ISTC PARTNER PROJECT AGREEMENT
On 17 September 1999, the International Science and Technology Center (ISTC) announced that Mobil Technology Company signed a $330,000 partnership agreement with VNIITF, the Institute of Mathematical Modeling, and the Institute of Numerical Mathematics. Under the three-year contract, 30 scientists and technical team members from the three Russian institutes will model the flow of oil through porous media and provide Mobil Technology with mathematical solutions for oil well optimization. The contract is the first investment at VNIITF through the ISTC Partner Program, and according to representatives from Mobil Technology Company, ISTC was central in identifying the technical talent available at VNIITF and the other two institutes. Mobil will use ISTC infrastructure to pay the scientists and to monitor the project during its implementation.


8/18/99: US DELEGATION VISITS SNEZHINSK
On 18 August 1999, US Congresswoman Ellen Tauscher (D-California) headed a delegation of US business leaders who traveled to Snezhinsk to become familiar with defense conversion programs and emerging business opportunities in the civilian nuclear industry. [1] During the visit, Representative Tauscher and Chelyabinsk Oblast Deputy Governor Vladimir Utkin agreed that the United States and Russia must concentrate on developing business ties within the framework of the Nuclear Cities Initiative. Utkin stated that Chelyabinsk Oblast would support the development of joint US-Russian projects to help create jobs for specialists. Members of the US delegation noted that the scientists had become more receptive to the idea of using their skills in the private sector, and during the visit, the delegation was "almost overwhelmed with commercial-style proposals" from the weapons scientists. [2]

Sources:

3/13/99: ADAMOV VISITS SNEZHINSK, WANTS TO KEEP NUCLEAR CENTERS AT BOTH SAROV AND SNEZHINSK
During his visit to Snezhinsk on 13 March 1999, Russian Minister of Atomic Energy Yevgeniy Adamov stated that he would prefer that Russia keep both federal nuclear centers at Sarov and at Snezhinsk open. In response to criticism that only one center should stay open, Adamov maintains that mutual control and competition between both centers is beneficial to the industry. [1] Adamov commented that the existing salary level of nuclear scientists--less than $60 a month--is unacceptable. He noted, however, that the situation was slowly improving: employees' salaries were no longer paid out from borrowed funds but from existing funds. Furthermore, Adamov harshly criticized the mayors of Minatom cities for their failure to use efficiently special tax breaks in order to assure salaries for the employees. When asked to comment on the campaign of Chelyabinsk Oblast Governor Petr Sumin to move companies out of the closed cities to the open areas where they would not enjoy the special tax status, Adamov discouraged any drastic moves. He stated that the tax breaks were specifically aimed at the creation of new jobs in the developing conversion industries. Although the tax breaks granted to the nuclear cities constitute significant losses in the federal budget, Adamov proposed balancing the needs of the nuclear cities for incoming capital with the government's need of tax funds. In the meantime, the level of unemployment at Snezhinsk has reached the nation-wide level in Russia, which, in the specific context of closed cities, implies higher social tension and fewer opportunities to find employment.

Commenting on this situation, VNIITF Director Georgiy Rykovovan said that his goal was to avoid eliminating any jobs in 1999. And although VNIITF received 10 million rubles ($427,350 as of 13 March 1999) to develop production, the situation with salary payments remains problematic. Despite Minatom's promise to allocate part of the US-Russia HEU deal proceeds to the institute, VNIITF has not yet seen any money. [2]

Sources:

3/99: VNIITF DIRECTOR RYKOVANOV DISCUSSES NUCLEAR CENTERS
In an interview with the Sarov newspaper Gorodskoy kurer, VNIITF Director Georgiy Rykovovan discussed the similar nature of problems faced by Russia's two major nuclear centers VNIITF and VNIIEF. First, Rykovovan voiced his concern about the lack of funds for the development of the defense sector and scarce resources for the creation of new conversion projects. The majority of the funds allocated to VNIITF by the government (about 65 percent) goes towards the payment of salaries, and the remaining funds are insufficient for fast and
2/24/99: US TO APPROPRIATE $60 MILLION FOR CONVERSION AT RUSSIAN NUCLEAR CITIES

Speaking at a press conference in Moscow on 24 February 1999, Rose Gottemoeller, US Assistant Secretary of Energy for Nuclear Nonproliferation and National Security, stated that the US government plans to appropriate $60 million for nonproliferation and conversion programs at 10 of Russia's closed nuclear cities over the next two years.[1,2] According to Gottemoeller, $30 million dollars will be appropriated in 1999, with roughly $15 million reserved for conversion projects at the closed cities and $15 million used to resolve problems related to nonproliferation of nuclear materials.[1,2] Gottemoeller added that the US DOE would appeal to Congress to renew funding for these programs in the FY 2000 Budget.[2] Initially, the US funding will focus on conversion work at the three largest nuclear cities, Sarov (Arzamas-16), Snezhinsk (Chelyabinsk-70), and Zheleznogorsk (Krasnogorsk-26).[2] According to Interfax, funds will be used to establisha high-speed computing center at Sarov and a pharmaceutical center at Snezhinsk.[1] A telecommunications center will also be established.[2]

Sources:

2/3/99: VNIITF PRODUCES MOBILE FACILITY TO EXTRACT TNT FROM ARTILLERY SHELLS

Writing in the 3 February 1999 issue of Atompressa, VNIITF Deputy Chief Designer Aleksandr Vasilyev, Deputy Department Head Gennadiy Svalov, and Department Head Aleksandr Koskin reported that specialists at VNIITF's scientific research testing bureau had created a mobile facility to extract and reprocess trinitrotoluene (TNT) from old artillery shells, negating the need for specialized railway cars to transport old artillery shells from military bases to munition factories and reducing the cost of extracting the TNT from the shells. At the end of 1995, VNIITF conducted production test runs of two smelting and TNT reprocessing stands, and in March 1996 VNIITF delivered a mobile complex to a customer, whom the article did not name. [Aleksandr Vasilyev, Gennadiy Svalov and Aleksandr Koskin, "Utilizatsiya boyeprispsavov," Atompressa, 3 February 1999.] {Entered 6/22/00 SS}

2/99: SUBSIDIARY ENTERPRISE SEPARATES FROM VNIITF

A division of VNIITF separated from the institute and formed the Spektr state enterprise. Spektr will coordinate all the conversion programs at VNIITF.


2/99: PAPER NOTES PERSONNEL SHORTAGE FOR THEORETICAL WORK AT VNIITF

In February 1999, Atompressa reported a shortage of personnel for theoretical work at VNIITF.

["The Motto 'Personnel Resolve Everything' Continues to be Important," Atompressa, No. 4 (333), February 1999, p. 3; in "Minatom Collegium on Future Direction of Nuclear Sector," FBIS Document FTS19990324001362.] {Entered 4/12/00 SS}

11/10/98: WORKERS BEGIN STRIKES AT VNIITF

On 10 November 1998, VNIITF employees began a work stoppage. Citing long periods of work without pay, diminishing real wages, the VNIITF management's unilateral decision to limit social benefits without consulting VNIITF's trade union, and the failure of management to fulfill previous agreements, the trade union voted to strike. Protestors demanded that VNIITF and Minatom pay wage arrears by 25 November 1998, triple workers' salaries, and compensate employees for damages caused by wage delays and the rising cost of living by 1 January 1999. Other demands included amendments to recent decisions by VNIITF management to reduce pay bonuses and to cut back on the number of workers employed at VNIITF. The trade union further decided that if its demands are not met by VNIITF management, workers would vote to continue strikes. [1] On 19 November
1998, approximately 3,000 VNIITF employees held a one-day strike. About 100 striking workers picketed outside of the municipal administration building and collected signatures for an appeal to Minister of Atomic Energy Yevgeniy Adamov to settle wage arrears and increase salaries.[2] (See also the developments from 11 July 1998 and June 1998 below.)

Sources:

11/98: NUCLEAR ACCIDENT RESPONSE CENTER AT VNIITF RECEIVES GOVERNMENT ACCREDITATION
At the end of December 1998, the nuclear response center at VNIITF (officially named the "Accident-Technical Center") received government accreditation. Once the center has an official license, it will be sanctioned to participate in the liquidation of emergencies that might stem from nuclear fuel and waste transportation accidents. The center is to service 16 regions stretching from Samara to Tomsk. Special equipment from leading British, German, and US firms will be used by the accident response center; however, in two to three years the free equipment servicing contracts will run out. The scarce and unstable financial situation of the center, where the wages have not been paid for four months, raises some concerns about its operational dependability. See 3/25/93 entry below.


9/22/98: MINATOM AND DOE SIGN AGREEMENT ON CONVERSION AT RUSSIAN NUCLEAR WEAPONS FACILITIES
On 22 September 1998, Russian Minister of Atomic Energy Yevgeniy Adamov and US Secretary of Energy Bill Richardson signed a five-year agreement according to which the United States will allocate $30 million for the conversion of Russia's closed nuclear cities. The agreement affects 10 of Russia's closed nuclear cities, including Zheleznogorsk (Krasnoyarsk-26), Sarov (Arzamas-16), and Snezhinsk (Chelyabinsk-70). According to Minatom, the US-Russian agreement would facilitate the creation of 15,000 jobs in coordination with the Russian program "Reconstruction and Conversion of Enterprises of the Atomic Industry (the Nuclear Weapons Complex) in 1998-2000," which the Russian Government approved on 24 June 1998. Izvestiya reported that some of the US financial assistance will be used to stop the emigration of nuclear specialists to other countries. (For the complete text of this document please see the NCI Agreement file. For more information please see the NCI Overview.)


7/11/98: VNIITF WORKERS HOLD SERIES OF WARNING STRIKES
Workers at the Russian Federal Nuclear Center-VNIITF in Snezhinsk (formerly Chelyabinsk-70) participated in a series of short warning strikes to protest the delayed payment of back wages. On 23 July 1998, workers at both Federal Nuclear Centers (VNIITF and VNIIEF) held a three-hour warning strike.[1,2] At the same time, trade union leaders from VNIITF sent a letter to Minister of Atomic Energy Yevgeniy Adamov urging him to consider the chronic financial problems at nuclear enterprises.[2] Two months later, in September 1998, more warning strikes occurred, [3,4] this time in front of the Ministry of Atomic Energy, Ministry of the Economy, and Russian Duma buildings in Moscow.[3,4] A third warning strike was held on 19 November 1998, when 3,000 workers at VNIITF engaged in a one-day strike. Their demands included the repayment of back wages by 1 January 1999, compensation for financial losses associated with inflation and late payments, and a tripling of their wages.[6]

Sources:

6/98: STRIKE AGAIN THREATENED AT VNIITF
Chroni financial problems continue to plague the Russian Federal Nuclear Center in Snezhinsk (formerly Chelyabinsk-70). By the end of March 1998, nuclear workers in Snezhinsk had not been paid for three to four months, and plans for a strike began.[1, 2, 3] A visit by the Russian Minister of Atomic Energy, Yevgeniy Adamov, failed to satisfy the workers' demands, and on 9 April 1998 a strike meeting was held. Workers
drafted a list of demands that included the payment of back wages and future funding for the nuclear sector.[1, 4] The matter was resolved at the last moment when the Russian government committed itself to paying the workers' back wages by 1 September 1998. In connection with this, Russian Deputy Prime Minister Viktor Khristenko stated that "the deadlines have been set by which wage arrears should be paid and further funding for the nuclear complex's facilities should be found."[5]

Sources:

5/98: RUSSIAN-US CONFERENCE HELD IN SNEZHINSK; SYSTEM FOR MONITORING NUCLEAR MATERIALS INSTALLED
A two-day Russian-US conference on nuclear disarmament was held in Snezhinsk, formerly known as Chelyabinsk-70.[1, 2, 3] The US delegation was led by Under Secretary of Energy Ernest Moniz, while the Russian side was headed by Yevgeniy Avrorin, director of VNIITF.[2] The two sides discussed a range of topics, including nuclear disarmament and problems faced by "closed" nuclear cities.[1, 2] Much of the conference, however, was devoted to installing a new nuclear materials monitoring system at Snezhinsk, which will aid in the physical protection, monitoring, and stockpile accounting of nuclear materials. A portion of the funding for this new system came from the US Department of Energy's MPC&A program.[3]

Sources:

3/98: VNIITF TO REMAIN OPEN
After several months of speculation, it was announced that the Russian Federal Nuclear Center located in Snezhinsk (formerly Chelyabinsk-70) will remain open.[1, 2] Rumors about the possible closure began to circulate in early 1998, when the Russian government indicated it was considering closing one of the two federal nuclear centers (VNIITF and VNIIEF), or merging them into one center.[2, 3, 4, 5] A decree entitled "On measures for preserving the Russian Federation's scientific-technical potential in the sphere of nuclear weapons production" included the recommendation that Russia should "start producing nuclear weapons of a new generation." According to the document, Russian President Boris Yeltsin considered it "expedient to concentrate everything" that potentially "has a direct relationship to the production of nuclear weapons," including its financial resources, into a single "separate, compact, independent structure."[4] While some reports suggested that former Russian Minister of Atomic Energy Viktor Mikhailov (who is also Scientific Director of VNIIEF) supported this move, other Minatom officials denied ever seeing the decree.[3, 5] The matter was resolved when Yevgeniy Adamov, the newly appointed Russian Minister of Atomic Energy, visited Snezhinsk and announced that both of the federal nuclear centers would remain open.[1, 2] Adamov did indicate, however, that the nuclear centers at Snezhinsk and Sarov would have to undergo restructuring that would involve reducing their experimental facilities and reviewing their scientific programs.[2]

Sources:

12/97: FINANCIAL PROBLEMS CONTINUE AT VNIITF, UNIONS AGAIN THREATEN STRIKE
Financial problems continued to plague the Russian Federal Nuclear Center in Snezhinsk (formerly Chelyabinsk-70). Despite measures taken by the Russian government in September 1997 to alleviate the financial crisis faced by the nuclear center, rumors of a possible strike by workers began to circulate in December. In addition to unpaid back wages, workers complained of a decline in working conditions. They also pointed out that equipment at the center was becoming outdated and voiced concern over chronic shortages of necessary materials. At a meeting held on 20 December 1997, trade unions called for a strike that would begin on 16 January. After promises were received from the nuclear center's leadership and the Russian Ministry of Atomic
Energy, employees' representatives voted against a strike, although they warned that such action might be taken in the future if their demands were not met. By the end of 1997, the Russian government still owed VNIITF more than 55 billion rubles ($93.3 million dollars).

[Enter 11/17/96 KVY; Revised 1/10/97 JL]

10/97: STRIKE THREATENED, AVERTED AT VNIITF

At a protest held on 16 September 1997, managers and trade union leaders at the Russian Federal Nuclear Center at Slezhinsk (formerly Chelyabinsk-70) threatened to declare an indefinite strike on 30 September unless back wages were paid. According to some sources, wages and salaries had not been paid in over three months (Interfax reports six months).[1, 2, 3] Voicing concern over the "catastrophic position" of the nuclear center, workers warned that funding problems were jeopardizing safety.[1, 3] As of September 1997, debts to the federal nuclear center totaled 111 billion rubles ($18.9 million dollars).[4, 5, 7] In order to ameliorate the financial crisis, the management of the nuclear center took out a loan from a commercial bank in order to pay wages for May, June and part of July 1997.[4, 5, 6] Finally, at the end of September 1997, the government announced that it was transferring 150 billion rubles to VNIIEF and VNIITF in order to cover approximately 80 percent of the wages due for the past nine months.[8, 9, 10]

Sources:

9/97: FEDERAL GOVERNMENT TRANSFERS MONEY TO VNIIEF AND VNIITF

At the end of September 1997 the federal government transferred 150 billion rubles ($25,635,000 as of 16 September 1997) to VNIIEF and VNIITF. The two facilities received, respectively, 78 percent and 85 percent of the money they were owed for the first nine months of the year.

[Otsutstviye deneg stanovitsya 'vzryvoopasnym'," Rossiyskaya gazeta, 1 October 1997, p. 1.] [Enter 11/13/98 CF]

3/97: RUSSIAN GOVERNMENT OWES VNIITF 23 BILLION RUBLES IN BACK WAGES

As of March 1997, wage arrears at VNIITF (formerly Chelyabinsk-70) totaled 23 billion rubles ($4 million dollars). Representatives of the nuclear weapons industry, together with trade union leaders, hoped to meet with Russian Minister of Atomic Energy Viktor Mikhailov in order to discuss the problem and arrive at a solution.


10/31/96: DIRECTOR OF VNIITF COMMTS SUICIDE

On 10/31/96, Vladimir Nechay, Director of the VNIITF (Chelyabinsk-70) nuclear research center since 1988, committed suicide in his office. According to the center's Deputy Director, Vladimir Nikitin, the growing financial crisis at Chelyabinsk-70 and the continuing delay in payment of workers' wages threw Nechay into despair.[1] In his suicide note, Nechay reportedly wrote that "it is impossible and wrong to go on living this way."[2] VNIITF, like other installations dependent on the Russian federal budget, had received only a small fraction of its allocated annual funding. The center's account had reportedly been frozen, and new funds received from the Ministry of Finance were being used to pay off debts, including those owed to the pension and medical insurance funds.[3] Komsomolskaya pravda reported that the Russian government owed the center 318 billion rubles, which was to be paid to the center by 10/31/96, but was not.[4] According to Izvestiya, VNIITF's 16,000 employees had last been fully paid in July 1996, and since then had received a stipend of only 150,000 rubles (approximately $30) per month, regardless of position and responsibilities.[5] The normal salary for a physicist at VNIITF is approximately 1.1 million rubles per month.[4]

Sources:
6/10/96: CHELYABINSK-70 WORKERS DEMAND BACK PAY
Five thousand out of 15 thousand employees of the Center held a demonstration demanding improvement in the federal financing of the center. The workers are owed 36 billion rubles in back pay.
[INTERFAX, 6/10/96; "Trevoga v yadernom tsentre," Pravda, 6/25/96, p. 1.] {REVISED 9/19/96 KPY}

9/12/95: SCIENTISTS INVESTIGATE NEW APPLICATIONS FOR NUCLEAR TRIGGERS
Izvestiya reported that scientists at Chelyabinsk-70 are developing ways in which to use conventional triggers from nuclear weapons in various scientific and applied tasks, including compressing substances, cutting up decommissioned tanks and submarines, destruction of scrap metal, and other applications.
[Izvestiya, 9/12/95; in "Chelyabinsk-70 Seeks New Uses For Nuclear Arms Triggers," FBIS-TAC-95-005, 9/12/95.]

8/10/95: NEW SYSTEM DEVELOPED TO DETECT NUCLEAR WEAPON DEVELOPMENT ACTIVITIES
It was reported that scientists at the Federal Nuclear Center at Chelyabinsk-70 are developing environmental monitoring techniques to enhance the verification of nuclear programs, including sampling of soil, water, sediment, and plants. The equipment could help detect clandestine nuclear weapon development activities.
[Moscow Russian Public Television First Channel Network, 8/10/95; in "Ural Scientists Offer Way To Track Nuclear Arms Work," FBIS-TAC-95-016-L, 8/10/95; Rabochaya tribuna, 8/18/95, p. 6; in "Nuclear Nonproliferation Monitoring Method Developed," FBIS-TAC-95-016-L, 8/18/95.]

7/95: COOPERATIVE RESEARCH FOR MATERIALS PROTECTION IS DISCUSSED
An IAEA delegation visited the Chelyabinsk-70 Federal Nuclear Center and discussed possible joint research with its scientists on nonproliferation and physical protection of nuclear weapons facilities.

4/95: CONVERSION PROGRAM AT FACILITY MAY BE COMPLETED BY 2000
It was estimated that 92 defense conversion projects will be completed at the Chelyabinsk-70 Russian Federal Nuclear Research Center by the year 2000. The RFNRC is developing, for example, components for communications systems, medical equipment and safety monitoring devices for use in nuclear facilities.
[ITAR-TASS, 4/4/95; in "Nuclear Center In Chelyabinsk Develops Conversion Program," FBIS-SOV-95-069, 4/4/95.]

5/13/94: EXPLOSION BLAMED ON UNSTABLE WORKERS
An explosion occurred at the Snezhinsk nuclear center in the Urals, injuring two workers. The center's leadership believes that the explosion occurred because of the "unstable psychological state" of the workers. Russia's debt to the workers at the Snezhinsk center is almost 30 billion rubles. Nuclear research at the center has virtually stopped.
[Radio Moscow, 5/17/94; in "Nuclear Blast Said Due To 'Unstable' Workers," FBIS-SOV-94-096, 5/18/94, p. 29.]

3/25/93: GOVERNMENT APPROVES DECREE TO CREATE NUCLEAR ACCIDENT RESPONSE CENTERS
On 25 March 1993, the Russian Cabinet of Ministers approved a resolution according to which the Ministry of Atomic Energy and the State Committee on Civil Defense Affairs, Emergencies, and Liquidation of Consequences of Natural Disasters are to create five "accident-technical centers" (ATCs) as part of an effort to improve Russia's emergency warning and response system as it relates to nuclear facilities. An ATC is to be created at each of the following locations: the All-Russian Scientific Research Institute of Experimental Physics (VNIIEF), the All-Russian Scientific Research Institute of Technical Physics (VNIITF), the Novovoronezh nuclear power plant, the Siberian Chemical Combine, and the V.G. Khlopin Radium Institute. The work of the ATCs is to be supported by the Ministries of Atomic Energy, Defense, the Economy, Transportation, Communications, and Health.