

15 NEWLY-INDEPENDENT STATES

ARMENIA

INTERNAL DEVELOPMENTS

3/23/95

According to Oleg Saraev, Chairman of the World Association of Nuclear Operators' Moscow Center (WANO-MC), and Anatoly Konstevoy, the Center's director, Armenia's nuclear power facility at Metsamor will be formally admitted to WANO before the organization's biennial meeting on 4/24/95-4/25/95.

Ann MacLachlan, *Nucleonics Week*, 3/23/95, pp. 14-15 (12613).

ARMENIA WITH IRAN AND RUSSIA

5/95

According to *Turan*, an Armenian publication, "credible sources" say that Russia is planning to secretly transport materials via Armenia for the reactors it plans to build in Iran, using deliveries of materials to Armenia's Metsamor nuclear power station as a cover.

Turan (Baku), 5/18/95; in FBIS-SOV-95-097, 5/18/95 (12902).

The numbers listed in parentheses following the bibliographic references refer to the identification number of the document in the Emerging Nuclear Suppliers Project Database, from which the news summaries are abstracted. Because of the rapidly changing nature of the subject matter, The Nonproliferation Review is unable to guarantee that the information reported herein is complete or accurate, and disclaims liability to any party for any loss or damage caused by errors or omissions.

ARMENIA WITH MULTI-COUNTRY GROUP

4/21/95

Nuclear scientists and experts from the E.U. and the former Soviet Union recently held a conference in St. Petersburg to discuss accountability and monitoring of nuclear materials in storage and during transport. Officials from Armenia, Belarus, and Russia attended the event, which was sponsored by the European Energy Foundation.

Nataliya Korkonosenko, *Rabochaya Tribuna* (Moscow), 4/21/95, p. 3; in FBIS-SOV-95-078, 4/21/95 (12929).

AZERBAIJAN

AZERBAIJAN WITH FRANCE, NETHERLANDS, AND UNITED STATES

4/1/95

According to Fikret Aslanov, chief of the Radiation Medicine Department in the Azerbaijani Republic Center for Hygiene and Epidemiology, "unless steps are taken to tighten control over radioactive materials, our republic could well be accused of facilitating international terrorism and dealing in [nuclear] smuggling." Aslanov cites as an example a 12/93 incident in which the French firm Shlumberge illegally shipped a container of radioactive waste to Azerbaijan via the Netherlands on U.S.-owned Buffalo Airways. The Shlumberge container reportedly held 736 kg of radioactive waste, including cesium-137, americium-241, and beryllium. The containers were marked as chemical waste and were destined for the

State Oil Company, but lacked proper import documentation. The nuclear material had arrived on board a plane at Baku's Bina Airport without the knowledge of Azerbaijani customs agents and without a permit for the shipment of the material. A short time later a second container that weighed 196 kg and was labelled as radioactive material, arrived in Azerbaijan from the U.S. firm Ponder International Service. Since the incident Azerbaijani government officials have taken measures to tighten export and import controls.

Arif Useynov, *Segodnya* (Moscow), 5/5/95, p. 7 (13032). N. Medzhidova, *Zerkalo* (Baku), 4/1/95, pp. 1, 8; in FBIS-TAC-95-003, 4/1/95 (13077).

AZERBAIJAN WITH RUSSIA, TURKEY, AND UKRAINE

4/1/95

It is reported that Ukraine and Azerbaijan are the primary transshipment points for smuggling nuclear materials out of Russia. *Der Spiegel* reported that former Russian military officers, KGB agents, and officers of Russia's Northern Fleet are involved in the illicit transfer of nuclear materials and have created the transshipment routes through Ukraine and Azerbaijan. According to a German Bundestag Security Commission report on the disappearance of nuclear materials and the nuclear black market, a nuclear mafia is beginning to take shape, with Russian dealers selling to Third World buyers.

N. Medzhidova, *Zerkalo* (Baku), 4/1/95, pp. 1, 8; in FBIS-TAC-95-003, 4/1/95 (13077).

BELARUS

INTERNAL DEVELOPMENTS

3/28/95

Alexander Mikhailevich, chairman of the Belarus Atomic Energy Commission, says that Belarus will probably decide in 1996 whether to go ahead with construction of a nuclear power plant. In 1992, plans were made to build one or two 1,000 MW nuclear reactors. Mikhailevich said that possible sites for the plant, which could go on line sometime between 2005 and 2010, are being considered, and that a nuclear waste management strategy is also being drawn up.

Ann MacLachlan, *Nucleonics Week*, 4/6/95, p. 13 (12630).

4/21/95

It is reported that Belarusian President Aleksandr Lukashenka said that further disarmament in Belarus is contingent on the West fulfilling its commitment to finance the disarmament process. Lukashenko says he refuses to cover the costs of retiring military technology with funds from the "state budget." The disarmament process was halted two months ago.

Interfax (Moscow), 4/21/95; in FBIS-TAC-95-003, 4/21/95 (12873).

BELARUS WITH GERMANY

4/4/95

German Interior Minister Manfred Kanther and Belarusian Interior Minister Yuri Zakharenka sign an agreement to cooperate in combatting organized criminal activities, including nuclear smuggling. Under the terms of the agreement, Belarus and Germany will "exchange information [and] results of applied research."

Gennadiy Temnenkov, *Itar-Tass* (Moscow), 4/4/95; in FBIS-SOV-95-065, 4/4/95 (12645).

BELARUS WITH IAEA

4/14/95

Ivan Kenika, Minister of Emergency Situations and Protection of the People from the Consequences of the Chernobyl Disaster, and IAEA Director General Hans Blix sign a full-scope nuclear safeguards agreement in accordance with Article III of the NPT. By 8/2/95, the Belarusian Minister of Foreign Affairs is to take all measures necessary to ensure the agreement's entry into force.

Belapan (Minsk), 4/17/95; in FBIS-SOV-95-074, 4/17/95 (12710). *Yaderniy Kontrol*, 6/95, p. 13 (12926).

BELARUS WITH MULTI-COUNTRY GROUP

3/30/95-3/31/95

The International Science and Technology Center (ISTC) governing board approves 38 peace-related projects that will be supported by \$13.6 million in approved funding. Belarusian and Kazakhstani observers attend the board meeting, and both countries are expected to have functioning branch offices in their capitals by fall 1995. In 5/95, it was reported that, with these newly-approved projects, the ISTC now supports 130 projects from a funding base of about \$60 million, and provides employment to more than 8,200 Belarusian, Georgian, and Russian engineers and scientists, the majority of whom have backgrounds in missile technology and weapons of mass destruction research.

Arms Control Today, 5/95, p. 31 (13177).

4/11/95

It is reported that Colonel-General Uladimir Yahoraw, chairman of the Belarusian KGB, said that Belarus maintains approximately 440 kg of nuclear material for scientific purposes at the Academic Scientific-Technological Complex [Sosny], located 20 km from Minsk. According to Yahoraw, nuclear material may have been smuggled across Belarusian territory in the past, given the fact that Belarus lacks adequate border controls with Russia, Ukraine, and the Baltics. Yahoraw cited as an example the case of a CIS citizen arrested at

Brest in 1/95 for attempting to smuggle radioactive uranium through Belarusian customs.

Belapan (Minsk), 4/11/95; in FBIS-SOV-95-070, 4/11/95 (12861).

BELARUS WITH RUSSIA

3/95

The U.S. Department of Defense issues a report confirming that Belarus, Kazakhstan, and Ukraine are destroying their respective nuclear stockpiles at a faster rate than mandated under START I. By mid-3/95, the three countries had removed 1,555 warheads from missiles and transferred 1,097 warheads to Russia. Belarus has eliminated 45 SS-25 warheads. A Belarusian military spokesman says that Belarus will transfer all its remaining strategic nuclear weapons to Russia by 7/25/95. The spokesman said that Belarus still has 36 SS-25 (Topol) missiles located at two sites.

Agence France-Presse International News, 3/15/95; in Executive News Service, 3/15/95 (12612). *Arms Control Today*, 4/95, p. 22 (12652). *Radiostantsiya Belarus* (Minsk), 3/16/95; in JPRS-TAC-95-012-L, 3/16/95 (12709).

5/26/95

Colonel-General Viktor Yesin, head of Russia's Strategic Missile Troops, says that all 18 nuclear missiles remaining in Belarus will be transported to Russia by the end of 1995.

Interfax (Moscow), 5/26/95; in FBIS-SOV-95-103, 5/26/95 (12702).

BELARUS WITH SWEDEN

3/16/95-3/17/95

Representatives from Belarus and Sweden meet in Stockholm to discuss third-party nuclear liability and related issues. During the talks, Belarus agrees to sign the Vienna Convention, which it had been reluctant to do for fear of being held financially responsible for the aftereffects of the Chernobyl accident. The Stockholm agreement includes proposals to improve Belarusian nuclear material accounting and control and to assist in selecting radwaste storage sites in Belarus. It also provides for bilateral cooperation between Belarus and Lithuania

on nuclear material issues.

Ariane Sains, *Nucleonics Week*, 3/23/95, p. 12 (12626).

BELARUS WITH UNITED STATES

2/95

Lawrence Livermore National Laboratory's (LLNL) Laboratory-to-Institute Program has grown considerably during 1994 and currently involves collaboration with scientists at 42 institutes in the former Soviet Union, primarily in Russia and Ukraine. LLNL is also establishing contact with institutes in Kazakhstan and Belarus, and is assisting the U.S. in implementing on-site inspections of fissile material storage facilities.

Robert T. Andrews and George G. Staele, *Energy & Technology Review*, 1/95-2/95, pp. 4-14 (13022).

3/1/95

In accordance with START I provisions, three U.S. On-Site Inspection Agency teams arrive in Russia to begin a series of 71 inspections at nuclear sites in Russia, Belarus, Ukraine, and Kazakhstan. A team of Russian, Belarusian, Kazakhstani, and Ukrainian inspectors also begins its inspection of 36 sites in the U.S.

Arms Control Today, 4/95, p. 22 (12746). *Washington Times*, 3/4/95, p. A9 (12746).

3/17/95

First Deputy Minister of Foreign Affairs Valeriy Tsepkala says that he fears the U.S. may significantly reduce aid to Belarus since Congress is now dominated by Republicans. In early 3/95, the U.S. and Belarus decided that \$25 million in Nunn-Lugar funding would be used to implement defense conversion and other disarmament-related programs.

Belapan (Minsk), 3/20/95; in FBIS-SOV-95-054, 3/20/95 (12715).

5/16/95

The U.S. recently committed an additional \$26 million in Nunn-Lugar funding to the International Science and Technology Center (ISTC) in Russia (including the ISTC branch offices in Minsk, Belarus and Almaty, Kazakhstan) and the Science and Technology Center in Ukraine.

Post-Soviet Nuclear & Defense Monitor, 5/16/95, p. 14 (12942).

6/23/95

The U.S. and Belarus sign two agreements by which Belarus will receive \$19 million in disarmament aid. The assistance is earmarked for the monitoring of nuclear material at the Sosny facility, the elimination of missile fuel and launch sites, and the destruction of "nuclear infrastructure."

Valentin Menshikov, *Itar-Tass World Service* (Moscow), 6/23/95; in FBIS-TAC-95-014-L, 6/23/95 (13228).

ESTONIA

INTERNAL DEVELOPMENTS

5/11/95

Estonian police in Tallinn arrest two men from the town of Haapsalu (in western Estonia) trying to sell 5 kg of U-238 to undercover police officers for \$45,500. Estonian agencies are attempting to determine the source of the radioactive material.

Segodnya, 5/11/95 (12923). *Guardian*, 5/11/95 (12875).

ESTONIA WITH IAEA, RUSSIA, AND SWEDEN

3/14/95

In an international meeting in Stockholm, specialists from Estonia, Russia, and Sweden produce a plan for dismantling the nuclear reactors at the Paldiski submarine training station. An IAEA final assessment of the plan is due in early 5/95. Russia is to transfer control of the facility to Estonia by 9/30/95.

Evaleht (Tallinn), 3/16/95, p. 3; in FBIS-SOV-95-102-S, 3/16/95 (12714).

5/10/95

A Russian delegate to the IAEA Paldiski International Expert Group announces that one of the two reactors at Paldiski has been

fully dismantled, and the other is 80 percent through the dismantlement process.

BNS (Tallinn), 5/10/95; in FBIS-SOV-95-092, 5/10/95 (12872).

GEORGIA

GEORGIA WITH MULTI-COUNTRY GROUP

3/30/95-3/31/95

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Arms Control Today, 5/95, p. 31 (13177).

KAZAKHSTAN

INTERNAL DEVELOPMENTS

6/7/95

It is reported that Kazakhstani President Nursultan Nazarbayev said that during 45 years of nuclear testing, 459 nuclear explosions were carried out in the Semipalatinsk region, including 113 above-ground tests.

A. Nugmanova, *Russian Public Television* (Moscow), 5/29/95; in JPRS-TEN-95-009, 5/29/95 (13029).

KAZAKHSTAN WITH MULTI-COUNTRY GROUP

3/30/95-3/31/95

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Arms Control Today, 5/95, p. 31 (13177).

KAZAKHSTAN WITH RUSSIA

3/95

The U.S. Department of Defense issues a report confirming that Belarus, Kazakhstan, and Ukraine are destroying their respective nuclear stockpiles at a faster rate than mandated by START I. By mid-3/95, the three countries had removed 1,555 warheads from missiles and transferred 1,097 warheads to Russia. Kazakhstan has eliminated 440 SS-18 and 370 air-launched cruise missile warheads. Kazakhstan will complete the transfer of its SS-18 warheads by the end of 1995.

Arms Control Today, 4/95, p. 22 (12652).

4/24/95

The last of 104 SS-18 missile warheads is transferred from Kazakhstan to Russia in accordance with the 5/23/92 START I Lisbon Protocol. Each of the missiles was equipped with 10 "multiple reentry vehicles." The missiles will be destroyed by the end of 1996.

Vladimir Krivomazov, *Krasnaya Zvezda* (Moscow), 4/28/95, p. 1; in FBIS-SOV-95-083, 4/28/95 (12614). Kazakh Radio First Program (Almaty), 5/24/95; in FBIS-SOV-95-101, 5/24/95 (12659). Itar-Tass (Moscow), 4/25/95; in FBIS-TAC-95-003, 4/25/95 (13026). Interfax (Moscow), 5/26/95; in FBIS-SOV-95-103, 5/26/95 (12702).

5/31/95

Russian specialists destroy a nuclear device, which had been located underground since 1991 at Kurchatov, near Semipalatinsk. The device had a yield of 0.3 Kt. The explosion used to destroy the device was not an atomic blast, and no chain reaction occurred. In 2/95, it was reported that three more unexploded nuclear devices remain at the Semipalatinsk test site: a 150 Kt device, which is apparently lodged in a tunnel, and two devices of unidentified yield, both located 500 meters underground.

Itar-Tass (Moscow), 5/31/95; in FBIS-SOV-95-105, 5/31/95 (12747). Vladimir Yelufimov, *Selskaya Zhizn* (Moscow), 3/10/95, p. 2; in JPRS-TAC-95-012-L, 3/10/95 (12747). *Le Monde*, 2/23/95; in *PPNN Newsbrief*, First Quarter 1995, p. 3 (12747). Anatoliy Ladin, *Krasnaya Zvezda*, 6/2/95, p. 3 (13038). Teuzhan Yesilbayev, *Pravda*, 6/7/95, p. 2 (13029).

KAZAKHSTAN WITH UNITED STATES

2/95

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Robert T. Andrews and George G. Staele, *Energy & Technology Review*, 1/95-2/95, pp. 4-14 (13022).

3/1/95

In accordance with START I provisions, three U.S. On-Site Inspection Agency teams arrive in Russia to begin a series of 71 inspections at nuclear sites in Russia, Belarus, Ukraine, and Kazakhstan. A team of Russian, Belarusian, Kazakhstani, and Ukrainian inspectors also begins its inspection of 36 sites in the U.S.

Arms Control Today, 4/95, p. 22 (12746). *Washington Times*, 3/4/95, p. A9 (12746).

3/13/95

It is reported that Kazakhstan and Uzbekistan have protested the U.S. Department of Commerce (DOC) requirement that, as part of

the uranium suspension agreement, Kazakhstan and Uzbekistan must report the countries to which they have exported uranium. DOC has stated that it wants information on the consumers of the uranium, rather than on "intermediate processing." Kazakhstan's legal representative, the firm Shearman & Sterling, stated in a letter to DOC that, under the terms of the suspension agreement, Kazakhstan is not obligated to identify those who purchase uranium after it has been enriched. The letter explains that it is unreasonable for DOC to expect Kazakhstan to report the consumers of its uranium two years after the agreement was implemented, especially since previous reports that omitted final users elicited no such criticism from DOC.

Michael Knapik, *NuclearFuel*, 3/13/95, pp. 1-2, 18 (12651).

3/27/95

The U.S. DOC and Kazakhstan sign an amendment to the Kazakhstan suspension agreement. The amendment allows one million pounds of Kazakhstani uranium to be imported into the U.S. once the "DOC-determined price" reaches \$12 per pound. In exchange, Kazakhstan agrees to forego bypass enrichment deals. According to Roland MacDonald, Director of the DOC Office of Agreements Compliance, U.S. importers of Kazakhstani uranium are now required to have an export certificate signed in Kazakhstan. In addition, U.S. importers must identify where the uranium was mined, converted, enriched, and fabricated. The amendment will reportedly allow Kazakhstan to receive higher profits from its uranium sales to the U.S., since all uranium mined in Kazakhstan will be considered of Kazakhstani origin, even if the uranium was enriched in a third-party country.

Michael Knapik, *NuclearFuel*, 4/10/95, pp. 1, 15-18 (12748). *Nuclear News*, 5/95, p. 17 (12864).

4/5/95

During a visit with Kazakhstani Defense Minister Saghadat Nurmaghambetov, U.S. Secretary of Defense William Perry pledges to provide Kazakhstan with \$14.7 million in nuclear disarmament assistance. The creation of four conversion-related U.S.-Kazakhstani joint ventures will raise total U.S. assistance to \$36.9 million.

Itar-Tass (Moscow), 4/5/95; in FBIS-SOV-95-066, 4/5/95 (12616). *Jane's Defence Weekly*, 4/15/95, p. 8 (13013).

4/7/95

The U.S. will grant Kazakhstan \$70 million in conversion and disarmament assistance, \$15 million of which will be provided under the Nunn-Lugar program for the establishment of four U.S.-Kazakhstani joint ventures. The Almaty branch office of the International Science and Technology Center will receive \$6 million, and Kazakhstan's National Nuclear Center will receive \$4 million to convert the Semipalatinsk nuclear test site into a joint venture producing printed circuit boards.

Raisa Dobraya, *Kazakhstanskaya Pravda* (Almaty), 4/7/95, p. 1; in FBIS-SOV-95-070, 4/7/95 (13093).

5/16/95

The U.S. recently committed an additional \$26 million in Nunn-Lugar funding to the International Science and Technology Center (ISTC) in Russia (including the branch offices in Minsk, Belarus and Almaty, Kazakhstan) and the Science and Technology Center in Ukraine.

Post-Soviet Nuclear & Defense Monitor, 5/16/95, p. 14 (12942).

LATVIA

INTERNAL DEVELOPMENTS

4/24/95

Latvian Foreign Minister Valdis Birkavcs affirms Latvia's support for an indefinite extension of the NPT.

Radio Riga Network (Riga), 5/1/95; in FBIS-SOV-95-084, 5/1/95 (12589).

6/7/95

Latvian authorities are considering dismantling the country's only nuclear research reactor, which it inherited from the former Soviet Union.

Vasily Starov, *Rossiiskaya Gazeta*, 6/7/95, p. 6 (13030).

LITHUANIA

INTERNAL DEVELOPMENTS

4/19/95

It is reported that a lead tube containing 357 g of uranium was discovered near a residential area in Vilnius. According to Lithuanian media reports, police "do not rule out the possibility" that this incident is linked to the 1993 disappearance of a nuclear fuel "cassette" from the Ignalina nuclear power plant.

Radio Vilnius (Vilnius), 4/19/95; in FBIS-SOV-95-076, 4/19/95 (12621).

RUSSIA

INTERNAL DEVELOPMENTS

2/95

In the Russian journal *Noviy Mir*, Aleksei Yablokov, former advisor to Russian President Boris Yeltsin on economic policy and public health, describes the Russian Ministry of Atomic Energy as "a state within a state," and "a closed system capable of surviving independently in different conditions." According to Yablokov, the Ministry has accumulated a large quantity of human and natural resources in the process of developing nuclear weapons technology. Yablokov states that the Ministry should be divided into several "autonomous departments under greater state control."

Yuri Ivanenko, *Sovetskaya Rossiya*, 4/1/95, p. 3; in FBIS-SOV-95-064, 4/1/95 (12755).

3/95

According to the Russian State Duma, nuclear fuel has been removed from only one-third of the 53 nuclear-powered submarines that have been decommissioned and are awaiting dismantlement. The cause for

the delay is limited storage space and the limited availability of service ships. Spent fuel shipments to Chelyabinsk have been virtually halted due to lack of money to pay the Mayak plant for reprocessing. The Russian Navy is preparing to accelerate the fuel removal process in 1996.

Joshua Handler, *Jane's Intelligence Review*, 3/95, pp. 136-140 (12980).

3/6/95

It is reported that Valeriy Menshikov, an expert from a joint committee for environmental safety, said that 121 Russian nuclear submarines have been decommissioned in the North and Pacific Fleets. However, only 42 of these vessels—18 in the North Fleet, and 24 in the Pacific Fleet—have been dismantled. The remaining 79 are still afloat and loaded with nuclear fuel. Menshikov indicated that emergency measures should be taken to deal with submarine dismantling and the handling of nuclear waste.

Interfax (Moscow), 3/6/95; in JPRS-TEN-95-055, 3/6/95 (12756).

3/7/95

Dmitri Tolmatsky, a representative of Greenpeace in Moscow, says that Russian President Boris Yeltsin's 1/25/95 decree to complete the RT-2 VVER-1000 reprocessing facility in the formerly secret city of Krasnoyarsk-26, now called Zheleznogorsk, may help "some countries produce nuclear weapons." Due to financial constraints, the RT-2 project was abandoned in 1989. Current plans call for the project's completion by 2004. According to Greenpeace, RT-2 will cost \$500 million to complete. Georgi Kaurov, spokesman for the Russian Ministry of Atomic Energy, says that profits realized from reprocessing foreign spent fuel at Russia's other facilities would be used to pay for RT-2's construction. The RT-1 facility, located near the city of Chelyabinsk-65, is Russia's only operational plant for storing and reprocessing foreign spent fuel. Kaurov says that a portion of the reprocessed fuel would be returned to the country of origin, but it was not clear whether this would include fissile material obtained from reprocessing spent fuel. According to Tolmatsky, the RT-2 plant will be one of the world's largest reprocessing plants and will be capable of extracting enough fissile

material to produce 428 nuclear bombs annually.

Jean-Christophe Peuch, Reuter (Moscow), 3/7/95; in Executive News Service, 3/7/95 (12933).

3/11/95

It is reported that Russian Chief of General Staff of the Navy Admiral V. Selivanov said that the Pacific Fleet lacks the financial resources to remove its decommissioned nuclear submarines from Postovaya Bay in Sovetskaya Gavan.

Igor Krasikov, *Trud* (Moscow), 3/11/95, p. 1; in JPRS-TEN-95-005, 3/11/95 (12758).

3/16/95

Aleksei Yablokov, chairman of the Russian Security Council's Interdepartmental Commission for Environmental Safety, says that of the approximately 100 Russian nuclear submarines that have already been decommissioned, 30 remain loaded with nuclear fuel. According to Yablokov, 17 nuclear submarine reactors, some of which contained nuclear fuel, have been dumped in the Kara Sea. Yablokov refers to the decommissioned nuclear submarines as "floating atomic bombs." The Russian Northern Naval Fleet must "salvage" over 100 nuclear-powered submarines, some of which carry more than one reactor. A train specially designed for the transport of spent nuclear fuel recently stopped at the Murmansk Maritime Shipping Line port for the first time in four years, and may make over six trips annually to the region. Spent fuel from the Northern Naval Fleet has filled all available storage space; all land-based and floating storage facilities were filled in early 1995.

Izvestiya (Moscow), 3/17/95, p. 1 (12827). Arkadiy Zheludkov, *Izvestiya* (Moscow), 3/14/95, p. 5 (13089).

3/23/95

A report by Evgeniy Primakov of Russia's Ministry of Foreign Affairs advocates the establishment of a "center for control of proliferation of weapons of mass destruction" that would collect nuclear-related intelligence from the world's national intelligence services and report to the United Nations.

Peter Coryn, *Nucleonics Week*, 4/16/95, pp. 14-15 (12694).

3/25/95

It is reported that Russian Minister of Ecology Viktor Danilov-Danilyan criticized President Boris Yeltsin's 1/25/95 edict "On State Support for the Restructuring and Conversion of the Atomic Industry in the City of Zheleznogorsk, Krasnoyarsk Krai" because it authorized the import of spent nuclear fuel from foreign countries for storage and reprocessing. Aleksei Yablokov, chairman of the Russian Security Council's Interdepartmental Commission for Environmental Safety, said the edict was illegal because only the Russian Federal Assembly could authorize the acceptance of nuclear waste from countries that have no existing agreement with Russia. Yablokov said that Yeltsin's edict would not be binding unless the Assembly altered the Environmental Protection Law, which prohibits the import of radioactive waste.

Yelena Subbotina, *Moskovskaya Pravda* (Moscow), 3/29/95, p. 2; in JPRS-TEN-95-006, 3/29/95 (13188).

3/28/95

Russia dismantled only four nuclear submarines in 1992, three in 1993, and two in 1994 due to insufficient funds and a lack of spent fuel storage space. It is uncertain whether any will be dismantled in 1995. Under START I, Russia is required to dismantle 61 nuclear submarines by the year 2000; it has so far dismantled only 21. Moscow attributes the slow pace of nuclear disarmament to spent fuel disposal problems and lack of storage space.

Washington Times, 3/28/95, p. A14 (12602).

3/28/95

Russian Minister of Atomic Energy Viktor Mikhailov says that the establishment of joint ventures with foreign companies would help prevent unemployment in 10 formerly closed cities which house nuclear complexes. In 1994, Ministry of Atomic Energy exports increased by 20 percent to more than \$1 billion, due in part to foreign investments. Mikhailov says 20 military-to-civilian conversion schemes have already been completed.

Veronika Romanenkova, *Itar-Tass* (Moscow), 3/28/95; in FBIS-SOV-95-060, 3/28/95 (12979).

3/31/95

A spokesman for the Public Relations Center of Russia's Counterintelligence Service (FSK) says that foreign intelligence organizations have shown a "continuing interest" in Russia's nuclear and other weapons-related technology. By its own account, the FSK has successfully prevented approximately 60 attempts by Russians to provide secret materials to parties representing foreign states or foreign intelligence agencies.

Interfax (Moscow), 3/31/95; in FBIS-SOV-95-069, 3/31/95 (12632).

4/95

A Russian government decree makes official a series of amendments and additions to the "Statute on the Procedure for the Export and Import of Nuclear Materials, Technology, Installations, and Equipment, Special Nonnuclear Materials, and Radioactive Sources of Ionizing Radiation and Isotopes." The amendments and additions stipulate that import/export licenses may be granted to individuals if they have received authorization from the Federal Inspectorate for Nuclear and Radiation Safety. A final decision on granting a license will only be made once the licensing agency is satisfied that the export will not be used to promote nuclear weapons proliferation.

Rossiiskiy Vesti (Moscow), 4/1/95, p. 3; in JPRS-TAC-95-012-L, 4/1/95 (12963).

4/5/95

The Russian Foreign Ministry issues a statement declaring its intention not to use nuclear weapons against non-nuclear weapon states (NNWS) party to the NPT. However, Russia declares its right to use nuclear weapons in the event that Russian troops, territory, or allies come under attack. An "appropriate draft" of the declaration will be submitted to the U.N. Security Council, which is currently debating security guarantees for NNWS.

Interfax (Moscow), 4/6/95; in FBIS-SOV-95-066, 4/6/95 (12831).

4/6/95

It is reported that Duma Chairman Ivan Rybkin said that Russia had "closed the gaps" in its system of nuclear facility security and control, but admitted that "a few problems" remain related to the technological safety

within nuclear research centers, particularly in the area of nuclear waste disposal.

W. Briem, *News* (Vienna), 4/6/95, p. 70; in FBIS-SOV-95-069, 4/6/95 (12739).

4/9/95

It is reported that FSK agents prevented four young men from smuggling two containers of cesium-137 from Yoshkar-Ola, Mari El [Mariiskaya] Republic. The men had been attempting to smuggle the material to the Baltics.

Russian Television Network (Moscow), 4/9/95; in FBIS-SOV-95-072, 4/14/95 (12646).

4/14/95

New types of Russian nuclear weapons are being developed at the Arzamas-16 Federal Nuclear Center despite the fact that no "full-scale nuclear tests" are being carried out. According to Stanislav Novikov, head of the Department of Explosion Studies, nuclear weapons designs are tested on special ranges at Arzamas-16 by using conventional explosions, with other materials substituted for uranium and plutonium. The majority of tests at Arzamas-16 are designed for peaceful applications. However, Yuri Zavalishin, director of the Arzamas-16 "Avant-garde" Electrochemical Plant, says that virtually no new nuclear weapons are being manufactured at Arzamas-16. The nuclear weapons development process at Arzamas-16 is hindered by poor pay for nuclear scientists, which averages around 300,000 rubles per month.

Veronika Romanenkova, Itar-Tass (Moscow), 4/14/95; in FBIS-SOV-95-072, 4/14/95 (12752). Andrei Lvov, *Rossiiskaya Gazeta* (Moscow), 4/22/95, p. 4; in FBIS-SOV-95-079, 4/22/95 (12932). Veronika Romanenkova, Itar-Tass (Moscow), 4/15/95; in FBIS-SOV-95-074, 4/15/95 (12759).

4/20/95

President Boris Yeltsin signs Presidential Decree No. 389 "On Additional Measures to Step Up Monitoring of Environmental Safety Requirements During the Reprocessing of Spent Nuclear Fuel." The decree grants federal organs the authority to oversee "economic activity related to the management of foreign and domestic spent nuclear fuel that is to be reprocessed in Russia." The decree charges the State Duma with formulating and approving a plan by

7/20/95 to receive foreign spent fuel for reprocessing at Russian facilities, and to return waste and "materials formed" during reprocessing to the country of origin.

Rossiiskaya Gazeta (Moscow), 4/27/95, p. 3; in FBIS-SOV-95-081, 4/27/95 (12835). Interfax (Moscow), 4/20/95; in FBIS-SOV-95-077, 4/20/95 (12973).

4/21/95

Ten cylindrical capsules of radioactive material are discovered in a residential area in Moscow. The capsules are enclosed in a polyethylene package and labeled "Radioactive Danger."

Segodnya (Moscow), 4/25/95, p. 7 (12741).

4/22/95

A subunit of the Russian Spetsnaz is being created to guard the Mayak Chemical Combine in Ozersk (formerly known as Chelyabinsk-65).

Andrei Lvov, *Rossiiskaya Gazeta* (Moscow), 4/22/95, p. 4; in FBIS-SOV-95-079, 4/22/95 (12932).

4/22/95

Reports from Arzamas-16 indicate that in the past year twice as many individuals as the year before have attempted to illegally enter the "Federal Nuclear Center's (FNC) closed zone." The FNC maintains a three-tiered security system which satisfies IAEA requirements and, among other things, prohibits foreigners from entering Arzamas-16 and many surrounding areas. Twenty-five percent of foreign visitors to the Nizhniy Novgorod oblast are reportedly "involved with the special services" and attempt to bribe FNC personnel for information.

Andrei Lvov, *Rossiiskaya Gazeta* (Moscow), 4/22/95, p. 4; in FBIS-SOV-95-079, 4/22/95 (12932).

4/24/95

Over 100 decommissioned Russian nuclear submarines, which have not been dismantled due to lack of funds, may be modified and used to transport supplies to Arctic regions. Most of the submarines' nuclear power facilities can be maintained for another 10 to 15 years, and several of the submarines contain "unspent fuel." This type of nuclear submarine conversion has never before been undertaken.

Valeriy Anuchin, Russian Public Television First Channel (Moscow), 4/24/95; in FBIS-SOV-95-083, 4/24/95 (12600).

4/25/95

During the NPT Review and Extension Conference, Russian Foreign Minister Andrei Kozyrev reaffirms Russia's commitment to comprehensive nuclear disarmament and says that this goal could be achieved within the context of President Boris Yeltsin's 9/94 proposal to the U.N. for a multilateral disarmament treaty.

Boris Sitnikov and Viktor Khrekov, Itar-Tass (Moscow), 4/24/95; in FBIS-SOV-95-079, 4/24/95 (12871).

4/25/95

FSK Chief Sergei Stepashin says in a meeting with senior FSK officials that foreign intelligence continues to target Russia's weapons of mass destruction. FSK officials approve measures related to the improvement of security at Russian nuclear complexes and military facilities, combatting nuclear terrorism and sabotage, and averting a leakage of state secrets.

Interfax (Moscow), 4/25/95; in FBIS-SOV-95-082, 4/25/95 (12836).

4/27/95

Head of Interpol's Moscow bureau Yuri Melnikov says that only half of the 70 "crimes" involving radioactive materials committed in Russia during the past 18 months were actually "thefts." These thefts involved "sources of ion radiation and mildly-enriched derivatives of uranium-238."

Artem Vetrov, *Segodnya* (Moscow), 4/28/95, p. 7; in FBIS-SOV-95-091, 4/28/95 (12692).

5/10/95

It is reported that, according to Tatyana Saolis, press secretary for the director of the Russian Foreign Intelligence Service (FIS), the FIS "is not aware of a single case of weapons-grade nuclear material being smuggled out of Russia." Samolis said that although "some minor theft" from civilian nuclear facilities may have occurred, the security of the military nuclear complex has not been compromised.

Informatsionnoye Aгенство Ekho Moskvyy (Moscow), 5/10/95; in FBIS-SOV-95-091, 5/10/95 (12617).

5/15/95

It is reported that Viktor Danilov-Danilyan, Russia's Minister of Environment and Natu-

ral Resources, said that the All-Russia Nature Conservation Congress, which meets in Moscow on 6/3/95-6/5/95, will address the difficulties Russia faces in processing, using, and burying radioactive waste.

Interfax (Moscow), 5/15/95; in JPRS-TEN-95-008, 5/15/95 (12948).

5/17/95

It is reported that the Russian Foreign Ministry issued a statement in which it welcomed the decision of the 1995 NPT Review and Extension Conference to extend the NPT indefinitely.

Rossiiskiy Vesti (Moscow), 5/17/95, p. 3; in FBIS-SOV-95-095 (12865).

5/19/95

According to Russian Minister of Atomic Energy Viktor Mikhailov, Russia hopes to annually export \$2 billion in nuclear technology and materials in an effort to bolster the aging nuclear power industry in Russia.

Toshihiko Kaya, *Nihon Keizai Shimbun* (Tokyo), 5/19/95, p. 9; in FBIS-EAS-95-098, 5/19/95 (12953).

5/24/95

The governments of St. Petersburg and Leningrad oblast have tightened security surrounding the Leningrad nuclear power station due to terrorist concerns. Additional security personnel have been stationed on the nuclear plant's grounds, and a coast guard is being formed for the southern coast of the Gulf of Finland, where a "border zone" has been established.

Krasnaya Zvezda (Moscow), 5/24/95, p. 1; in FBIS-SOV-95-100, 5/24/95 (12938).

5/24/95

The FSK announces that only 10 percent of Russian press reports on illicit nuclear trade are based on fact. As an example, the FSK cites a *Komsomolskaya Pravda* article that mistakenly reported the theft of 70 kg of enriched uranium in Kaliningrad. A subsequent investigation revealed that what had actually been stolen was a geological instrument.

Russian Television Network (Moscow), 5/24/95; in FBIS-SOV-95-101, 5/24/95 (12837).

5/24/95

Aleksei Pushkarenko, Russia's Deputy Head

of the Department for Protection of Strategic Objects, says that since mid-1991, 24 cases of theft or illicit transaction of nuclear materials were reported. To date, 19 Russian citizens have been convicted of nuclear smuggling, and 16 smuggling cases are under investigation.

Aleksander Kudakaev, *Segodnya* (Moscow), 5/25/95, p. 6 (13033). Olga Semenova, Itar-Tass (Moscow), 5/24/95; in FBIS-SOV-95-100, 5/24/95 (13074).

5/30/95

It is reported that officers from the FSK and the Main Administration of the Russian Internal Affairs Ministry arrested the chief engineer of the Mobrez company and an operator at the Elektrostal Engineering Plant joint-stock company for stealing 11 kg of nuclear fuel element components. Another source quotes Aleksei Pushkarenko as saying that 10 kg were stolen. The "tablets" contained only a small amount of U-235 and their value was less than \$200, not the hundreds of thousands of dollars the suspects expected to obtain by selling them.

Stepan Buylo, *Segodnya* (Moscow), 5/30/95, p. 6, in FBIS-SOV-95-103, 5/30/95 (12943). Boris Yamshanov, *Rossiiskaya Gazeta* (Moscow), 5/31/95, p. 3 (13031).

6/9/95

By early 1995, Russia had deactivated 127 nuclear-powered submarines, but removed radioactive fuel from only one-third of them. Russia plans to "vacate" only three more reactors in 1995. An additional 154 nuclear submarines have no place to unload their reactor fuel. The waters near Severodvinsk are home to ten submarines that are awaiting service.

Valentin Shishlevskiy, *Asian Defence Journal*, 6/95, p. 83 (12946).

6/5/95

According to some Russian experts, by 2003, Russian nuclear missile storage facilities will have reached the end of their life spans. Unless funds are forthcoming to maintain the viability of Russia's "SS-33" [as heard] missile stock, they, too, will reach the end of their life spans by 2005, which could mean the "complete nuclear disarmament of Russia." However, according to Yuriy Konov, a Russian missile division

commander, the "technical condition" of Russia's nuclear weapons remains secure.

Russian Public Television First Channel Network (Moscow), 6/5/95; in FBIS-SOV-95-108, 6/5/95 (13016).

6/10/95

Officers from Russia's Arctic Sea Fleet have made several attempts to steal nuclear material, and nuclear submarine fuel stolen from the Arctic Fleet had been confiscated—3 kg of highly-enriched uranium (HEU) and 2 kg of weapons-grade uranium in St. Petersburg, and 4 kg of HEU in Murmansk.

Karl-Ludwig Guensche, *Die Welt* (Berlin), 6/10/95, p. 3; in FBIS-TAC-95-014-L, 6/10/95 (13198).

6/15/95

An interagency commission designed to promote cooperation in the "Barents-European Arctic region" has tasked several Russian ministries as well as a number of governing bodies in the Arkangelsk and Murmansk oblasts to jointly develop a plan to construct solid radioactive waste storage facilities in Novaya Zemlya.

Izvestiya (Moscow), 6/15/95, p. 1; in FBIS-TEN-95-010, 6/15/95 (13179).

6/21/95

President Boris Yeltsin submits the START II treaty to the Russian State Duma for ratification.

Itar-Tass (Moscow), 6/21/95; in FBIS-TAC-95-014-L, 6/21/95 (13180). Scott Parrish, *OMRI Daily Digest*, 6/22/95 (12940). *Segodnya* (Moscow), 6/22/95, p. 1 (13028).

6/23/95

It is reported that the Moscow Environmental Committee (Moscompriroda) discovered a cache of plutonium in a laboratory at the National Institute of Aircraft Materials. The Russian State Committee for Nuclear Materials Oversight and Moscompriroda banned the work of the laboratory in 1994 after it was found to be working illegally on the development of nuclear fuel elements, but it did not shut down the institute.

Tatyana Zhelevskaya, *Pravda* (Moscow), 6/23/95, p. 2 (13027).

RUSSIA WITH ARMENIA AND IRAN

5/95

According to *Turan*, an Armenian publication, "credible sources" say that Russia is planning to secretly transport materials via Armenia for the reactors it plans to build in Iran, using deliveries of materials to Armenia's Metsamor nuclear power station as a cover.

Turan (Baku), 5/18/95; in FBIS-SOV-95-097, 5/18/95 (12902).

RUSSIA WITH AZERBAIJAN, TURKEY, AND UKRAINE

4/1/95

It is reported that Ukraine and Azerbaijan are the primary transshipment points for smuggling nuclear materials out of Russia. *Der Spiegel* reported that former Russian military officers, KGB agents, and officers of Russia's Northern Fleet are involved in the illicit transfer of nuclear materials and have created the transshipment routes through Ukraine and Azerbaijan. According to a German Bundestag Security Commission report on the disappearance of nuclear materials and the nuclear black market, a nuclear mafia is beginning to take shape, with Russian dealers selling to Third World buyers.

N. Medzhidova, *Zerkalo* (Baku), 4/1/95, pp. 1, 8; in FBIS-TAC-95-003, 4/1/95 (13077).

RUSSIA WITH BELARUS

3/95

The U.S. Department of Defense issues a report confirming that Belarus, Kazakhstan, and Ukraine are destroying their respective nuclear stockpiles at a faster rate than mandated under START I. By mid-3/95, the three countries had removed 1,555 warheads from missiles and transferred 1,097 warheads to Russia. Belarus has eliminated 45 SS-25 warheads. A Belarusian military spokesman says that Belarus will transfer all its remaining strategic nuclear weapons to Russia by 7/25/95. The spokesman says that Belarus still has 36 SS-25 (Topol) missiles located at two sites.

Agence France-Presse International News, 3/15/95; in Executive News Service, 3/15/95 (12612). *Arms Control Today*, 4/95, p. 22 (12652). Radiostantsiya Belarus (Minsk), 3/16/95; in JPRS-TAC-95-012-L, 3/16/95 (12709).

5/26/95

Colonel-General Viktor Yesin, head of Russia's Strategic Missile Troops, says that all 18 nuclear missiles remaining in Belarus will be transported to Russia by the end of 1995.

Interfax (Moscow), 5/26/95; in FBIS-SOV-95-103, 5/26/95 (12702).

RUSSIA WITH BRAZIL

4/95

Representatives from Russia's Ministry of Atomic Energy and Brazil's National Commission for Atomic Power discuss plans for Russia to construct low capacity nuclear reactors in remote areas of Brazil. The cooperation plan, created under the auspices of a bilateral agreement signed in the fall of 1994, also calls for exchanges in nuclear power engineering. Furthermore, Russia recommends that Brazil cooperate in ore processing and uranium exports, as well as in producing fuel for Brazilian nuclear power stations.

Veronika Romanenkova, *Itar-Tass* (Moscow), 4/7/95; in JPRS-TAC-95-002, 4/7/95 (12999). *Post-Soviet Nuclear & Defense Monitor*, 4/25/95, p. 13 (12713).

RUSSIA WITH BULGARIA

3/95

In Moscow, Bulgaria and Russia sign a draft agreement that includes a provision for Russia to receive spent fuel from four VVER-440 units at Kozloduy to be stored and reprocessed at the Mayak RT-1 plant near Chelyabinsk. This agreement is an extension of the 1994 protocol that permitted storage of spent fuel only from Bulgaria's VVER-1000 Kozloduy-5 and Kozloduy-6 reactors. Zheleznogorsk will accept the VVER-1000 spent fuel for storage. After the completion of the RT-2 plant, the spent fuel will be reprocessed. In the final reprocessing contracts, Bulgaria will be required to eventually take back reprocessing wastes

and to accept mixed-oxide (MOX) fuel from the reprocessing plants.

Nuclear News, 5/95, p. 41 (13044).

5/19/95

It is reported that Russian Minister of Atomic Energy Viktor Mikhailov signed a cooperation agreement with Bulgaria that calls for Russia to assist Bulgaria in constructing a new nuclear power plant at Belene if Bulgaria decides to begin construction. The Belene project has been "frozen" since 1990. The agreement will remain in force as long as the six Kozloduy reactors remain operational.

Khorizont Radio Network (Sofia), 5/19/95; in FBIS-EEU-95-098, 5/19/95 (12962). Interfax (Moscow), 5/19/95; in FBIS-SOV-95-098, 5/19/95 (12962).

RUSSIA WITH CHINA

5/95

It is announced that Russia will help finance, build, and operate a new nuclear power plant in China. Russia, the China Nuclear Investment Company, the Liaoning provincial government, and the Northeast China Power Group will invest a total of 27 billion yuan in the project. Russia will assemble technical equipment, and China's Second Nuclear Power Research Institute and the Northeast China Electricity Institute will construct the plant. When completed, the power plant will be equipped with four reactors. During the first phase of construction, two 1,000 MW VVER-1000 pressurized steam turbine reactors will be completed at the plant site.

Aleksandr Romanov, *Itar-Tass* (Moscow), 5/5/95; in FBIS-SOV-95-087, 5/5/95 (13083). *Zhongguo Xinwen She* (Beijing), 5/5/95; in FBIS-CHI-95-088, 5/5/95 (13083). *Xinhua* (Beijing), 5/5/95; in FBIS-CHI-95-087, 5/5/95 (13083). Aleksandr Koretskiy, *Kommersant Daily* (Moscow), 5/7/95, p. 4; in FBIS-SOV-95-105-S, 6/1/95, p. 10 (13193).

6/95

Premier of the Chinese State Council Li Peng will meet with Russian President Boris Yeltsin to discuss the expansion of Russian-Chinese cooperation in power generation and nuclear production. The two leaders are also expected to discuss the "problem of nuclear tests."

Aleksandr Korzun, Igor Porshnev, Yevgeniy Terekhov, and others, *Interfax* (Moscow), 6/22/95; in FBIS-SOV-95-121, 6/22/95 (12906).

6/15/95

Russia and China have been engaged in discussions on nuclear cooperation. Russian assistance to China "envisages the construction of a uranium enrichment plant," the agreement for which was signed in 3/94. China's decision to import enrichment technology from Russia stems from the fact that Russia produces "small but cheap and reliable gas centrifuges," which can be integrated into facilities containing "many thousands of units." Upon completion of the first phase of the Chinese project in 11/96, the facility will have the capacity to produce 200,000 separative work units (SWU) annually. This capacity is expected to increase to 500,000 SWU by 1998 and eventually to 1 million SWU. Although the enrichment facilities have potential military value, the project has elicited only "routine" protest from the West, which can be attributed to China's nuclear weapon state status.

Sergei Mushkaterov and Yuriy Rogozhin, *Izvestiya* (Moscow), 6/15/95, p. iv (13001). Ministry of Atomic Energy (Russia); in *ENS NucNet*, 3/21/94 (11165).

RUSSIA WITH CHINA, EGYPT, AND UKRAINE

6/27/95

It is reported that "responsible sources" said that China, Russia, and Ukraine are among a number of Asian and European countries that have established ties with Egypt to help it construct "a number of nuclear reactors for peaceful purposes."

Al-Sha'b (Cairo), 6/27/95, p. 8; in FBIS-NES-95-130, 6/27/95 (13176).

RUSSIA WITH CUBA

5/95

Oleg Davydov, Russia's Foreign Economic Relations Minister, and Ricardo Cabrisas, Cuba's Foreign Trade Minister, agree that Russia will assist Cuba in the completion of its Juragua nuclear power facility. Cuban sources say that a technical and economic feasibility study will be completed by 6/95. Firms from the U.K., Brazil, Italy, and Germany are interested in joining Rus-

sia to form an international consortium to complete Juragua's construction. Russia estimates that bringing the first reactor (440 MW) on line will cost \$800 million. Russian shipments of heavy equipment for the facility are continuing under the extension of \$30 million in intergovernmental credit to Cuba. While Cuba has all the equipment necessary to complete the installation of the first reactor, a representative of Russia's Zarubezhatomenergostroi says "the unit for automated control of the technological processes" [I&C] is still needed. The unit must be purchased from a Western firm and will cost approximately \$200 million.

Radio Rebelde Network (Havana), 5/6/95; in FBIS-LAT-95-090, 5/6/95 (12903). Toshihiko Kaya, *Nihon Keizai Shimbun* (Tokyo), 5/19/95, p. 9; in FBIS-EAS-95-098, 5/19/95 (12953). *Yaderniy Kontrol*, 6/95, p. 13 (12925). Aleksandr Koretskiy, *Kommersant Daily* (Moscow), 5/7/95, p. 4; in FBIS-SOV-95-105-S, 6/1/95, p. 10 (13193).

RUSSIA WITH CUBA AND GERMANY

5/29/95

Officials from Siemens AG announce that through a Russian-German joint venture called Nuclear Control, Siemens will supply instrumentation and control (I&C) for Cuba's two VVERs at the Juragua nuclear power plant. Siemens company officials indicate that the transfer of nuclear components to Cuba would only occur if the international community views the deal as "politically appropriate." Siemens spokesman Wolfgang Breyer says that any transfer of equipment or technology would be consistent with German export controls, which prohibit retransfer and military applications and require IAEA-type full-scope safeguards. Although not a party to the NPT, Cuba has concluded safeguards agreements with the IAEA, and it is believed that Cuba has no unsafeguarded nuclear installations.

Mark Hibbs, *Nucleonics Week*, 6/1/95, pp. 2-3 (12972).

RUSSIA WITH CUBA AND MULTI-COUNTRY GROUP

5/7/95

The Italian firm Ansaldo may participate with Brazil, Germany, Russia, and the U.K. in a joint stock company that will complete Cuba's Juragua nuclear power station. Under the terms of a contract between the Russian Ministry of Atomic Energy and the Cuban Minister of Foreign Trade Ricardo Cabrisas, the joint stock company is to be formed by 6/95. The company will provide the \$800 million necessary to finish constructing the Juragua plant.

Aleksandr Koretskiy, *Kommersant Daily* (Moscow), 5/7/95, p. 4; in FBIS-SOV-95-105-S, 6/1/95, p. 10 (13193).

RUSSIA WITH ESTONIA, IAEA, AND SWEDEN

3/14/95

In an international meeting in Stockholm specialists from Estonia, Russia, and Sweden produce a plan for dismantling the nuclear reactors at the Paldiski submarine training station. An IAEA final assessment of the plan is due in early 5/95. Russia is to transfer control of the facility to Estonia by 9/30/95.

Evaleht (Tallinn), 3/16/95, p. 3; in FBIS-SOV-95-102-S, 3/16/95 (12714).

5/10/95

A Russian delegate to the IAEA Paldiski International Expert Group announces that one of the two reactors at Paldiski has been fully dismantled and the other is 80 percent through the dismantlement process.

BNS (Tallinn), 5/10/95; in FBIS-SOV-95-092, 5/10/95 (12872).

RUSSIA WITH EUROPEAN UNION

3/28/95

It is reported that Russia signed an agreement with the E.U. worth \$400 million on "the utilization of nuclear munitions."

Ria Novosti (Moscow), 3/28/95; in FBIS-SOV-95-086-A, 3/28/95 (12737).

RUSSIA WITH FINLAND

3/95

The first "fully automatic radioactive materials monitoring system" is installed on a road near Vaalimaa, situated between St. Petersburg and Helsinki on the Russian-Finnish border, in an effort to curb nuclear materials smuggling.

Nuclear News, 6/95, p. 51 (12934).

RUSSIA WITH GERMANY

2/5/95

In 1994 Germany provided a total of DM 17 million to Russia and Ukraine for disassembling nuclear weapons. The Bundestag has made no decision on how much aid Germany will provide for 1995.

Wolfgang Pollack, *Welt Am Sonntag* (Hamburg), 2/5/95, p. 7; in JPRS-TEN-95-004, 2/28/95, pp. 52-53 (12950).

2/5/95

The German Foreign Ministry will head a consortium that includes Germany's Reactor Safety Company, Siemens AG, and the Russian Ministry of Atomic Energy to construct a mixed-oxide (MOX) fuel plant in Russia that will convert Russian weapons-grade plutonium into fuel rods for light water reactors. The facility will be built at Chelyabinsk at an estimated cost of DM 750 million. Construction is estimated to take three to five years, after which the plant will spend the next 25 years eliminating Russian stockpiles of weapons-grade plutonium.

Wolfgang Pollack, *Welt Am Sonntag* (Hamburg), 2/5/95, p. 7; in JPRS-TEN-95-004, 2/28/95, pp. 52-53 (12950).

3/3/95

The German Foreign Ministry announces completion of a joint Russian-German study on methods to convert weapons-grade plutonium into nuclear reactor fuel. The Foreign Ministry also says that Germany plans to increase disarmament aid to Russia in 1995; Germany has allocated about \$13.8 million to Russian disarmament since 1993.

Reuter (Bonn), 3/3/95; in Executive News Service, 3/3/95 (12707).

3/22/95

Joint research sponsored by the Russian Ministry of Atomic Energy and Siemens AG of Germany may lead to the construction of a DM 90 million MOX fuels facility (at Chelyabinsk-65) that would be capable of producing 20 MT of fuel per year. The MOX fuel would be used in BN-600 fast breeder reactors at the Beloyarsk nuclear power plant. Although Russian Ministry of Atomic Energy spokesman Georgi Kaurov denies the existence of definite plans for such a project, he says that "dozens of metric tons" of plutonium will be extracted from warheads and held at Chelyabinsk-65 until a final decision is reached. Kaurov also says that a storage facility with a capacity to hold 50,000 containers of weapons-grade plutonium is being built at the site.

Besik Urigashvili, *Izvestiya* (Moscow), 3/22/95 (13025).

3/30/95

It is reported that after German utilities decided to withhold their financial support for the Hanau MOX fuels plant, Siemens AG decided to abandon plans to use the nearly-completed facility to fabricate MOX fuel from plutonium obtained from dismantled Russian nuclear warheads. It is still possible that the Hanau facility, which has cost \$790 million to date, will be completed and used to make MOX fuel from weapons plutonium. However, "an elaborate compensation scheme" must be developed that would involve the Russian Ministry of Atomic Energy, Siemens, and German utilities.

Mark Hibbs, *Nucleonic Week*, 3/30/95, pp. 11-12 (12834).

5/95

Germany's Federal Office of Criminal Investigation reports a steady rise in illegal radioactive materials trade, saying that most of the "707 indications of [illegal] transactions" originate in Russia and Ukraine. In 1994, the number of cases rose to 182, up from 123 in 1993.

Reuter, 5/13/95; in D-Fax Summaries (12908).

6/5/95

Officials from Siemens have determined that, once operational, the MOX fuels facility in Hanau, Germany could annually

process 4.2 MT of plutonium and 9.8 MT of uranium from Russian nuclear weapons stocks. Since German law prevents Siemens from accepting weapons-grade material from foreign sources, the company would need to supply Russia with technology for the conversion of weapons-grade plutonium into a plutonium dioxide-uranium dioxide mixture prior to transport. Should the construction of a conversion facility in Russia be necessary, the implementation of the plan would be delayed. According to one Siemens official, the company would prefer to build a MOX fuels plant in Russia itself, rather than in Germany, but funding for such a project has yet to materialize.

Mark Hibbs, *NuclearFuel*, 6/5/95, pp. 6-8 (13228).

6/19/95

It is reported that a group of Bonn ministry officials recommended opening negotiations with the state of Hesse to resolve objections over using Germany's Hanau facility to process Russian weapons-grade uranium into MOX fuel. The state government of Hesse, which has the legal authority to license the facility, opposes the proposal to process 4 MT of plutonium and 10 MT of uranium from Russia each year. To date, neither Russia nor the U.S. has indicated a willingness to participate in the Hanau MOX fuels venture.

Mark Hibbs, *NuclearFuel*, 6/19/95, pp. 15-16 (12951).

6/28/95

Greenpeace says that Siemens of Germany plans to import 50 MT of weapons-grade plutonium from Russia during the next 10-12 years. However, Russian Ministry of Atomic Energy spokesman Georgi Kaurov refutes the allegation and says that no negotiations on this matter had taken place. Moreover, German law prohibits the import of nuclear materials that can be used to build nuclear weapons.

Kommersant Daily (Moscow), 6/28/95, p. 3 (13035).

**RUSSIA WITH GERMANY, IRAQ,
NETHERLANDS, UKRAINE, AND
UNITED STATES**

6/8/95

U.S. Customs Service Agents arrest three New York residents, Demetrios Demetrios, Rains Kourtides, and Constantin Zahariadis, for attempting to ship seven tons of Ukrainian-origin zirconium to Iraq via Germany and the U.S. Of the seven tons, two were seized in Cyprus and had been destined to go to Iraq via Amsterdam. Another source reports that eight tons were seized. According to Customs Service special agent Robert Van Etten, the U.S. government believes the zirconium was stolen from strategic reserves in the former Soviet Union. On 6/12/95, Ukrainian Foreign Ministry spokesman Yuri Serheyev says that the zirconium originated in Russia, not Ukraine. Director General Yuri Korovin of the Pridneprovskiy Chemical Plant in Dneprodzerzhinsk, characterizes a Russian report citing Ukraine as the source of the zirconium as "misinformation" aimed at barring Ukrainian exports from foreign markets. Korovin says that the plant, which "holds a monopoly on the production of this highly-refined nuclear material," discontinued zirconium production in 1994.

Grant McCool, *Washington Post*, 6/9/95, p. A16 (12975). Halia Pavlina, *Intelnews* (Kiev), 6/12/95; in FBIS-SOV-95-113, 6/12/95 (12975). Radio Ukraine World Service (Kiev), 6/13/95; in FBIS-SOV-95-114, 6/13/95 (12975). *New York Times*, 6/9/95, p. 1 (13207). *al-Quds al-Arabia*, 6/9/95, p. 1; in FBIS-NES-95-121, 6/9/95 (13217).

**RUSSIA WITH GERMANY AND
UNITED STATES**

6/25/95

It is reported that Herman Otto Solms, chairman of the Bundestag group of the Free Democratic Party of Germany (FDP), said that the plan to convert 120 MT of Russian-origin weapons-grade plutonium into mixed-oxide (MOX) fuel at the Siemens AG plant in Hanau, Germany is a "unique and irrefutable opportunity." Eight German ministries recently drafted a 16-page report on nuclear disarmament policy that included

the plutonium processing issue. The report, the substance of which will continue to receive attention from the German Federal Cabinet at its 7/5/95 meeting, characterized plutonium processing as "a disarmament measure that is technically possible and can be realized from a security and safety point of view." By the end of 1995, an "operating company," which will include representation from Germany, Russia, the U.S., and other countries, will be established, and will rent the Siemens AG plant in Hanau for the purpose of producing MOX fuel rods from weapons-grade plutonium. The U.S. backs the plan, which it considers advantageous to international nonproliferation efforts. Siemens officials in Washington said they could produce MOX fuels from Russian feedstock at a cost that is less than the present cost of uranium-based fuels. Solms said that a "detailed plan" has already been developed for shipping the weapons-grade plutonium from Russia to Hanau and then back to Russia following processing. Siemens has proposed 70 annual shipments of plutonium to Hanau by either ship, rail, or air. According to Solms, the fuel rods will ultimately be stored in the former Soviet Union. However, German utilities in the Hanau area have threatened to bow out of their financial commitments to the plant on 6/30/95, citing continued delays in the plant's operation as unacceptable. There is local opposition to the plant in Hesse, and a final decision on the fate of the Hanau plant has been postponed until 9/30/95.

Welt Am Sonntag (Hamburg), 6/25/95, p. 4; in FBIS-TAC-95-014-L, 6/25/95 (13175). DPA (Hamburg), 6/29/95; in FBIS-TEN-95-006-L, 6/29/95 (13175). Mark Hibbs, *Nucleonics Week*, 6/22/95, pp. 1, 14 (12985).

RUSSIA WITH INDIA

3/95

The Russian Ministry of Atomic Energy has said that it will not conclude a deal to supply VVER-1000 reactors to India unless India accepts full-scope safeguards on its nuclear facilities. The Ministry's stance is based on a 1992 presidential decree obligating countries that import Russian nuclear technology to accept full-scope IAEA safeguards. Russian Minister of Atomic En-

ergy Viktor Mikhailov announced in 12/94 that the two countries had reached an agreement on the supply of two VVER-1000 reactors for a plant in southern India, but the safeguards condition is likely to prevent the deal.

Nuclear News, 3/95, p. 47 (12605).

RUSSIA WITH IRAN

3/95

Russian Ministry of Atomic Energy spokesman Georgi Kaurov says that Russia currently has 150 nuclear specialists working at a proposed reactor site in Iran and plans to send more. The Russian Ministry of Atomic Energy is also seeking to open an office in Tehran. Russian Minister of Atomic Energy Viktor Mikhailov says that the reactors Russia is planning to build in Iran are the same type as those an international consortium intends to construct in the DPRK. Kaurov claims that production of weapons-grade material from a light water reactor (LWR) is not possible. U.S. officials argue that no nuclear technology should be supplied to Iran on the grounds that it would aid Iran in becoming a "nuclear-armed terrorist state." Kaurov notes in response that many Iranian nuclear experts are trained in the U.S. Mikhailov says that if the deal with Iran is cancelled, it could lead to an Iranian withdrawal from the NPT.

Fred Hiatt, *Washington Post*, 3/3/95, p. A30 (12914). *Wall Street Journal*, 3/2/95, p. A10 (12618).

3/14/95

It is reported that Mitch McConnell, chairman of the U.S. Senate Foreign Operations Appropriations Subcommittee, said that current U.S. laws require the suspension of all aid to Russia if the Russian-Iranian deal continues as planned. James Collins, U.S. Ambassador-at-Large to the post-Soviet states, stated that existing U.S. laws require a cessation of aid only if Russia transfers nuclear weapons technology to Iran.

Post-Soviet Nuclear & Defense Monitor, 3/14/95, p. 2 (12750).

3/18/95

It is reported that Yuri Kotov, head of the Russian Foreign Ministry department that

deals with Iran, says that Russia does not plan to concede to U.S. pressure and will go ahead with the \$1 billion nuclear reactor agreement with Iran.

Washington Times, 3/18/95, p. A6 (12619).

3/22/95-3/23/95

Russian Foreign Minister Andrei Kozyrev and U.S. Secretary of State Warren Christopher meet in Geneva to discuss U.S. opposition to the pending Russian sale of two LWRs to Iran. The only agreement reached during the meetings is a decision to meet again before Presidents Yeltsin and Clinton meet on 5/9/95 in Moscow. At a Geneva press conference, Yevgeniy Primakov, head of Russia's External Intelligence Service, distributes a 1993 report written by his organization that says that even if Iran were given sufficient funding and technical assistance, it would take a minimum of 10 years for Iran to build a nuclear bomb.

John J. Schulz, *Arms Control Today*, 4/95, p. 20 (12633). UPI, 3/23/95; in Executive News Service, 3/23/95 (13004). UPI (Moscow), 3/23/95; in Executive News Service, 3/23/95 (12667).

3/23/95

Lieutenant-General Gennady Yevstafyev, a senior official of the Russian Foreign Intelligence Service (FIS), affirms that Russia will proceed with the Iranian nuclear reactor sale because FIS officials "have no grounds for changing [Russia's] assessment vis-a-vis Iran."

Reuter (Moscow), 3/23/95; in Executive News Service, 3/23/95 (12619).

4/2/95

The U.S. shares intelligence information on Iran with Russia that shows Iran is importing equipment necessary for nuclear weapons production, has attempted to procure enriched uranium from Kazakhstan and nuclear components from Germany, and is employing techniques and using smuggling routes similar to those used by Iraq and Pakistan. The Clinton administration is offering Russia nuclear cooperation projects worth "at least tens of millions of dollars" to entice Russia to cancel the reactor deal with Iran. The U.S. has also indicated to Russian officials that Russia may be able to play a larger role in the construction of the two LWRs for North Korea under the U.S.-

DPRK Agreed Framework.

Reuter, 4/2/95; in Executive News Service, 4/3/95 (13003). Martin Fletcher, *Times*, 4/4/95 (12991).

4/3/95

Russian Prime Minister Viktor Chernomyrdin rejects a plea by U.S. Defense Secretary William Perry to cancel the Russian-Iranian nuclear contract. Chernomyrdin says that Russia is "fully aware of the [U.S.'s] misgivings" and that the nuclear deal would not violate the NPT. Perry says that Russia and the U.S. will continue talks on safeguarding spent fuel from the reactors. Russia has asked the IAEA to tighten control over implementation of the contract.

Martin Fletcher, *Times*, 4/4/95 (12991). Voice of Russia World Service (Moscow), 5/4/95; in FBIS-SOV-95-066, 4/5/95 (12991).

4/5/95

It is reported Viktor Chernomyrdin said that Russia would not, under any circumstances, terminate the \$1 billion deal with Iran. The contract with Iran will reportedly bring Russia \$1 billion from the sale of a one reactor, and \$8 billion from subsequent sales.

Stanislav Kucher, *Komsomolskaya Pravda* (Moscow), 4/5/95, p. 7; in FBIS-SOV-95-065, 4/5/95 (12619).

4/5/95

Russia has not yet decided whether it will build a waste burial site in Iran or reprocess the spent fuel from the reactor it will build in Iran at Krasnoyarsk. Another source reports that spent fuel would be reprocessed in Russia and waste products would then be returned to Iran for burial. The Gore-Chernomyrdin Commission is expected to address the spent fuel management issue.

Galina Penenkova, Voice of America World Service (Moscow), 4/5/95; in FBIS-SOV-95-066, 4/5/95 (12663). Veronika Romanenkova, Itar-Tass (Moscow), 4/5/95; in FBIS-SOV-95-066, 4/5/95 (12663). Gennadiy Yezhov and Andrey Serov, Itar-Tass (Moscow), 5/11/95; in FBIS-SOV-95-091, 5/11/95 (12663).

4/10/95

U.S. President Bill Clinton signs into law a bill that makes further Russian access to U.S. nuclear technology conditional on the cancellation of the Russian-Iranian nuclear reactor deal.

Post-Soviet Nuclear & Defense Monitor, 4/25/95, p. 4 (12740).

4/12/95

In an article in *Izvestiya*, Aleksei Yablokov, chairman of the Russian Security Council's Interdepartmental Commission for Environmental Safety, states that the 1/8/95 Russian-Iranian protocol on the completion of Iran's Bushehr nuclear power plant also includes provisions for the supply of a 30-50 MW light water reactor (LWR) for research, additional research reactors, training of Iranian nuclear specialists, assistance in developing uranium deposits, and construction of a gas centrifuge uranium enrichment facility. Under the terms of the protocol, signed by Russian Minister of Atomic Energy Viktor Mikhailov and President of the Iranian Atomic Energy Organization Reza Amrollahi and published in 7/95, the two countries will prepare and sign an agreement within three months on the supply of the 30-50 MW LWR. They will also, during the first quarter of 1995, sign agreements on training 10-20 Iranian specialists annually and on the delivery of 2,000 MT of Russian natural uranium. Upon completion of the latter agreement, talks will begin on the construction of the uranium enrichment plant. In addition, the two countries stated their intention to prepare and sign an agreement within six months on the establishment of a uranium mine in Iran. According to Yablokov, officials in a number of ministries were not consulted prior to the signing of the protocol and, consequently, questions on the wisdom of cooperating in Iranian nuclear development were never raised.

Aleksei Yablokov, *Izvestiya* (Moscow), 4/12/95, p. 3 (13088). *Izvestiya* (Moscow), 6/2/95, p. 3 (13088). *Yaderniy Kontrol* (Moscow), 7/95, pp. 14-15.

4/14/95

Vyacheslav Sychev of the Russian Ministry of Atomic Energy says that Russia will meet its contractual obligation to supply Iran with nuclear power reactors. Under the terms of the Russian-Iranian agreement, spent fuel from the reactors will be sent to Russia for processing and then returned to Iran for burial. Sychev says that the U.S. offered Russia the opportunity to process waste from

the LWRs to be constructed in the DPRK as compensation if it cancels its nuclear deal with Iran. However, Russia rejected the offer on the grounds that it was insufficient compensation.

Anatoliy Yurkin, *Itar-Tass* (Moscow), 4/14/95; in FBIS-SOV-95-073, 4/14/95 (12994).

4/19/95

Russian Foreign Trade Minister Oleg Davydov says that, although the nuclear reactor deal between Russia and Iran is "in the stage of final specification," it will not be signed until at least 9/95 or 10/95.

Andrey Surzhanskiy, *Itar-Tass* (Moscow), 4/19/95; in FBIS-SOV-95-075, 4/19/95 (12915).

4/25/95

It is reported that the Clinton administration said that the Russia-Iran nuclear deal could jeopardize the 22-year old Peaceful Use of Atomic Energy agreement between the U.S. and Russia that provides for cooperation in nuclear-related research among scientists and engineers. If Russia follows through on its deal with Iran, the U.S. has stated that it will not sign the Section 123 Agreement that is aimed at modernizing Russia's aging commercial reactor industry with U.S. exports of advanced nuclear reactor technology, restricted data, and fuel.

Post-Soviet Nuclear & Defense Monitor, 4/25/95, pp. 1-2 (13078).

4/28/95

Russian Foreign Minister Andrei Kozyrev says that it would be safer to allow the proposed Russian-Iranian nuclear reactor deal to be implemented than to risk the possibility that Iran will seek nuclear technology from another source. Kozyrev reiterated Russia's commitment not to assist Iran in manufacturing nuclear weapons.

Itar-Tass (Moscow), 4/28/95; in FBIS-SOV-95-083, 4/28/95 (12660). Gennadiy Yezhov and Andrei Serov, *Itar-Tass* (Moscow), 5/11/95; in FBIS-SOV-95-091, 5/11/95 (12660).

4/28/95

Senior U.S. officials confirm that in 1/95, Russian Minister of Atomic Energy Viktor Mikhailov agreed to provide Iran with a gas centrifuge. The officials were alerted to the deal by a 4/12/95 *Izvestiya* article by Aleksei Yablokov, chairman of the Russian Security

Council's Interdepartmental Commission for Environmental Safety. A number of U.S. officials say several sources had confirmed Yablokov's report. U.S. foreign aid legislation requires that aid to Russia be suspended if Moscow sells Iran equipment that can be used for nuclear weapons production. In discussions with U.S. Secretary of State Warren Christopher, Russian Foreign Minister Andrei Kozyrev says that many senior Russian officials, including himself, were unaware that an agreement had been made to provide centrifuges. Kozyrev suggests that Mikhailov may have acted independently in making the deal, and that the terms might still be changed by the Kremlin.

Steven Greenhouse, *New York Times*, 4/29/95, p. 5 (12968). Jefferey Smith and Michael Dobbs, *Washington Post*, 4/29/95, p. A8 (12668).

4/30/95

U.S. President Bill Clinton imposes a trade embargo against Iran as a demonstration of U.S. determination to prevent Iran from acquiring nuclear weapons and to persuade Russia to cancel the reactor deal.

Xinhua (Beijing), 5/2/95; in FBIS-CHI-95-084, 5/2/95 (12664).

5/95

According to *Turan*, an Armenian publication, "credible sources" say that Russia is planning to secretly transport materials via Armenia for the reactors it plans to build in Iran, using deliveries of materials to Armenia's Metsamor nuclear power station as a cover.

Turan (Baku), 5/18/95; in FBIS-SOV-95-097, 5/18/95 (12902).

5/4/95

Russia's First Deputy Minister of Atomic Energy Lev Ryabev says Russia has no plans to supply Iran with gas centrifuges or dual-use military equipment. An unidentified senior member of the Russian Foreign Ministry says that Russia may "introduce additional measures of control over the construction of the nuclear power plant" in Iran in an effort to appease U.S. concerns and quiet international public opinion. Ryabev says that no final agreement has been reached on whether Russia would be training Iranian nuclear experts. Ryabev says that only preparatory work is currently underway at the

plant site and that construction has not yet begun.

Interfax (Moscow), 5/4/95; in FBIS-SOV-95-087, 5/4/95 (12960). *Interfax* (Moscow), 5/4/95; in FBIS-SOV-95-087, 5/4/95 (12958).

5/4/95

Vladimir Loborev, a member of the Russian Academy of Natural Sciences, says that the nuclear waste from the LWRs to be supplied to Iran cannot be reprocessed into weapons-grade material in Iran because Iran lacks the necessary scientific and engineering capabilities. Georgi Kaurov, official spokesman for the Russian Ministry of Atomic Energy, says that according to the agreement Russia will process nuclear waste from the Bushehr reactors and then ship it back to Iran in glass-encapsulated containers for disposal underground. According to Kaurov, Iran would not be able to use the glass-encapsulated nuclear waste for nuclear weapons production.

Anatoliy Yurkin, *Itar-Tass* (Moscow), 5/4/95; in FBIS-SOV-95-086, 5/4/95 (12957).

5/4/95

Mohammed Sadegh Ayatollahi, a senior official from Iran's NPT Review and Extension Conference delegation, says that Iran is not interested in storing spent fuel from its Russian-supplied reactors. Ayatollahi says that the spent fuel would be sent back to Russia. Ayatollahi denies that the Russia-Iran deal includes a provision for the supply of a gas centrifuge.

Evelyn Leopold, *Reuter*, 5/4/95; in *Executive News Service*, 5/4/95 (12959). Steven Greenhouse, *New York Times*, 5/5/95, p. A4 (12840).

5/4/95

Yuriy Perekyostov, a representative from Russia's nuclear power plant construction conglomerate Zarubezhatomenergostroi, says that his company is working on a feasibility study for the completion of the nuclear power plant at Bushehr. The study will be completed by 9/95. Russia has reached a preliminary agreement with Ukraine's Turboatom to supply Bushehr with a new turbine. Bushehr's reactor will be built by Izhorskiy or Atom mash.

Interfax (Moscow), 5/4/95; in FBIS-SOV-95-086, 5/4/95 (12956).

5/5/95

It is reported that Russian Ministry of Atomic Energy spokesman Georgi Kaurov said that Russia's agreement with Iran on the construction of a nuclear power plant does not include the installation or transfer of centrifuge technology. Kaurov said, however, that the transfer of enrichment technology is consistent with NPT guidelines as long as Iran "takes responsibility not to produce [nuclear] weapons and the IAEA guarantees all Iranian technology." The protocol to the agreement specifies that Russia will provide training for 100 Iranian specialists.

Informatsionnoye Agentstvo Ekho Moskvyy (Moscow), 5/5/95; in FBIS-SOV-95-088, 5/5/95 (13041).

5/5/95

It is reported that Russian Ministry of Atomic Energy spokesman Georgi Kaurov said that Russia plans to negotiate new contracts with Iran, within the framework of the existing 8/25/92 contract, to construct one additional VVER-1000 and two VVER-440 reactors at Bushehr. Adding three more reactors increases the value of the deal from \$800 million to \$2 billion. Kaurov also mentioned the existence of a Russian-Iranian "understanding in principle" to train Iranian nuclear personnel in Russia, but said the understanding was verbal and had not yet been committed to paper. Kaurov said 180 Russian nuclear technicians are working at the site.

Interfax (Moscow), 5/5/95; in FBIS-SOV-95-088, 5/5/95 (13086).

5/8/95-5/9/95

During a meeting with Russian President Boris Yeltsin, U.S. President Bill Clinton provides Yeltsin with a five-page U.S. intelligence report claiming that Iran has "an organized structure whose purpose is the production of nuclear material for nuclear weapons." Clinton tells Yeltsin that Iran is pursuing nuclear weapons in accordance with a "nuclear weapons acquisition blueprint" drafted four years ago with the help of Pakistani officials. The report details Iran's acquisition strategy, claiming that it mirrors Pakistan's "successful campaign" to purchase, piece by piece, nuclear technology and materials from Western and Asian

sources over an eight-year period. The report says that Iran has been attempting to develop a nuclear weapon with the help of China and Pakistan. Clinton also shares with Yeltsin "sensitive details" of Iranian contacts with the same foreign companies that provided Pakistan with the equipment necessary for the development of nuclear weapons components. The report, which was based on human and signals intelligence, does not include satellite imagery or other physical evidence. Yeltsin does not question the content of the report. During the meeting, Yeltsin says Russia will not transfer technology to Iran that could be used for nuclear weapons production. However, Yeltsin says Russia retains the right to train Iranian nuclear specialists in Moscow and to supply Iran with a power reactor.

J. Jennings Moss, *Washington Times*, 5/11/95, pp. A1, A20 (12997). Jim Hoagland, *Washington Post*, 5/17/95; in Executive News Service, 5/17/95 (13075).

5/10/95

U.S. President Bill Clinton and Russian President Boris Yeltsin hold a joint press conference in Moscow concerning the Russian-Iranian nuclear cooperation agreement. Clinton indicates that the deal is legal but should not be carried out. Clinton also says that Yeltsin agreed to take the U.S.'s position into account despite potential financial losses, and suggests the Gore-Chernomyrdin Commission as the proper forum for continuing discussions on the technological aspects of the issue. Yeltsin underscores the international legality of the deal, but concedes that the deal has military as well as civilian applications. Yeltsin announces that Russia has agreed to suspend the military elements of the contract so that "only the civilian power station with [LWRs] remains."

Russian Public Television First Channel Network (Moscow), 5/10/95; in FBIS-SOV-95-090, 5/10/95 (13087).

5/10/95

Russian Ambassador to the U.S. Yuliy Vorontsov says that Russia will most likely cancel the shipment of gas centrifuge equipment as well as the training of Iranian nuclear physicists. Vorontsov says that the nuclear training and transfer of centrifuge

equipment have possible military consequences which run counter to Russian policy. Vorontsov says that the inclusion of these elements in the Russian-Iranian agreement was the work of the Russian Ministry of Atomic Energy and was never authorized by Moscow. With the training and centrifuge components of the agreement excluded, the agreement is worth only half of its original cost of \$1 billion.

Interfax (Moscow), 5/10/95; in JPRS-TAC-95-002, 5/10/95 (12966).

5/11/95

Russian Ministry of Atomic Energy spokesman Georgi Kaurov says that Russia never had any intention of supplying Iran with gas centrifuges, and that the contract for the completion of the reactors at Bushehr never included any provision for centrifuges. Mikhail Kokeev, deputy department head in the Russian Foreign Ministry, says that Russia "did not, does not, and will not support programs that will bring Iran to another military level." Kokeev says, however, that departments in several Russian ministries have entertained the possibility of exporting dual-use technologies to Iran.

Michael Mihalka, *OMRI Daily Digest*, 5/12/95 (12912).

5/11/95

Russian Minister of Atomic Energy Viktor Mikhailov says that although the current Russian-Iranian agreement does not provide for the supply of a centrifuge to Iran, Russia may build a centrifuge in Iran sometime in the future.

Gennadiy Yezhov and Andrey Serov, *Itar-Tass* (Moscow), 5/11/95; in FBIS-SOV-95-091, 5/11/95 (12663).

5/11/95

First Deputy Speaker of Russia's State Duma Mikhail Mityukov tells Iranian Ambassador to Russia Mehdi Safari that "no changes would be made in the text of the Iranian-Russian nuclear cooperation agreement." Mityukov emphasizes that the Russian Parliament supports the nuclear deal. Apparently, Iranian Deputy Majlis Speaker Hasan Ruhani plans a trip to Moscow to hold discussions on the nuclear agreement.

Irna (Tehran), 5/12/95; in FBIS-SOV-95-093, 5/12/95 (12955).

5/16/95

A report on the condition of the Iranian nuclear power complex under construction at Bushehr estimates that 150 Russian specialists are now working on the project. Iranian sources say that 500 workers will eventually be involved, but Russian sources say the number will be 3,000.

Elaine Sciolino, *New York Times*, 5/19/95, p. A1 (13084).

5/16/95

At a closed-door meeting of the Russian State Duma, Foreign Minister Andrei Kozyrev says that no final decision on the Russian-Iranian nuclear deal will be made until the Gore-Chernomyrdin Commission concludes its meetings by 6/7/95. Kozyrev's statement appears to contradict Russian Minister of Atomic Energy Viktor Mikhailov's 5/12/95 statement that Russia is moving forward in implementing the reactor deal with Iran. According to an anonymous Russian Duma member present at the closed Duma hearings, Kozyrev asserts that Mikhailov concluded a separate agreement with Iran, which was unknown to President Yeltsin, to provide a gas centrifuge.

Georgiy Bovt, *Kommersant Daily* (Moscow), 5/18/95; in FBIS-SOV-95-096, 5/18/95 (12954).

5/18/95

A senior Russian Foreign Ministry official says that Russia had never signed a centrifuge deal with Iran, and that if such a contract did exist, it would be cancelled by the Russian government as a violation of the 1992 Russian-Iranian nuclear cooperation agreement. Although the official says that Russian Minister of Atomic Energy Viktor Mikhailov had the legal right to sign the 1/95 protocol on the centrifuges, he adds that the minister had displayed some "initiative," since the centrifuge deal would have violated the 1992 accord on cooperation with Iran. The article notes that "Mikhailov was unauthorized to take that step."

Michael Mihalka, *OMRI Daily Digest*, 5/19/95 (12662).

5/18/95

It is reported that Yuriy Vishnevskiy, chief of the Russia State Committee for Nuclear Materials Oversight, says that Russia's Ministry of Atomic Energy will go ahead with

its plan to sell gas centrifuges to Iran.

Turan (Baku), 5/18/95; in FBIS-SOV-95-097, 5/18/95 (12902).

5/22/95

Russian Minister of Atomic Energy Viktor Mikhailov says that Russia will go ahead with its plan to build a 40 MW research LWR in Iran once a contract is signed later in 1995. Mikhailov rejects criticism from the West of Russia's intention to train approximately 20-40 Iranian nuclear experts. Mikhailov says that no final decision has been made on the transfer of gas centrifuges to Iran. Mikhailov also says that agreements for the training of Iranian nuclear specialists in Russia, and for the delivery of gas centrifuges have not been finalized.

Michael Mihalka, *OMRI Daily Digest*, 5/23/95 (12913). Interfax (Moscow), 5/22/95; in FBIS-SOV-95-098, 5/22/95 (12998).

6/1/95

It is reported that close associates of former Iranian President Bani Sadr said that Revolutionary Guards General Sardar Shafagh disappeared while in Moscow for nuclear contract negotiations with the Russian Ministry of Atomic Energy and may have defected to the U.S. Shafagh may have been in possession of documents allowing the U.S. to examine military aspects of Iran's nuclear contracts with Russia, as well as the progress of Iran's uranium enrichment efforts.

Iran Brief, 6/1/95, p. 11 (12883).

6/9/95

Russian Minister of Atomic Energy Viktor Mikhailov says nuclear cooperation between Russia and Iran would actually help to prevent Iran from pursuing nuclear weapons. Mikhailov says that Russia will continue to "make good on [its] agreement [to build the] nuclear power plant in Iran."

Reuter, 6/9/95; in Executive News Service, 6/13/95 (13079).

RUSSIA WITH IRAN AND UKRAINE

5/4/95

It is reported that Russia has reached a preliminary agreement with Ukraine's Turboatom to supply Bushehr with a new

turbine. Bushehr's reactor will be built in Russia by Izhorskiy or Atommmash.

Interfax (Moscow), 5/4/95; in FBIS-SOV-95-086, 5/4/95 (12956).

RUSSIA WITH ITALY

3/24/95

It is reported that a man confessed to authorities in Italy to having thrown 4 g of plutonium that he had smuggled from Russia into the Adige River.

WISE News Communiqué, 3/24/95, p. 5; in *Uranium Institute News Briefing*, p. 2 (12623).

RUSSIA WITH JAPAN

4/10/95

"Investigative sources" report that Japan's Aum Shinrikyo religious cult contacted Russian scientific experts in 1992 and 1993 to obtain nuclear technologies. In 1992, the cult's founder Shoko Asahara met with Russian Nobel Laureate for physics Nikolai Basov. In 1993, the Moscow branch of the cult requested a meeting with Russia's Minister of Atomic Energy Viktor Mikhailov, but the request was denied.

Kyodo (Tokyo), 4/10/95; in FBIS-EAS-95-070, 4/10/95 (12911).

RUSSIA WITH KAZAKHSTAN

3/95

The U.S. Department of Defense issues a report confirming that Belarus, Kazakhstan, and Ukraine are destroying their respective nuclear stockpiles at a faster rate than mandated by START I. By mid-3/95, the three countries had removed 1,555 warheads from missiles and transferred 1,097 warheads to Russia. Kazakhstan has eliminated 440 SS-18 and 370 air-launched cruise missile warheads. Kazakhstan will complete the transfer of its SS-18 warheads by the end of 1995.

Arms Control Today, 4/95, p. 22 (12652).

4/24/95

The last of 104 SS-18 missile warheads is transferred from Kazakhstan to Russia in accordance with the 5/23/92 START I

Lisbon Protocol. Each of the missiles was equipped with 10 "multiple reentry vehicles." The missiles will be destroyed by the end of 1996.

Vladimir Krivomazov, *Krasnaya Zvezda* (Moscow), 4/28/95, p. 1; in FBIS-SOV-95-083, 4/28/95 (12614). Kazakh Radio First Program (Almaty), 5/24/95; in FBIS-SOV-95-101, 5/24/95 (12659). Itar-Tass (Moscow), 4/25/95; in FBIS-TAC-95-003, 4/25/95 (13026). Interfax (Moscow), 5/26/95; in FBIS-SOV-95-103, 5/26/95 (12702).

5/31/95

Russian specialists destroy a nuclear device, which had been located underground since 1991 and caused misgivings with regard to its safety, at Kurchatov, near Semipalatinsk. The device had a yield of 0.3 Kt. The explosion used to destroy the device was not an atomic blast, and no chain reaction occurred. In 2/95, it was reported that three more unexploded nuclear devices remain at the Semipalatinsk test site: a 150 Kt device, which is apparently lodged in a tunnel, and two devices of unidentified yield, both located 500 meters underground.

Itar-Tass (Moscow), 5/31/95; in FBIS-SOV-95-105, 5/31/95 (12747). Vladimir Yelufimov, *Selskaya Zhizn* (Moscow), 3/10/95, p. 2; in JPRS-TAC-95-012-L, 3/10/95 (12747). *Le Monde*, 2/23/95; in *PPNN Newsbrief*, First Quarter 1995, p. 3 (12747). Anatoliy Ladin, *Krasnaya Zvezda*, 6/2/95, p. 3 (13038). Tleuzhan Yesilbayev, *Pravda*, 6/7/95, p. 2 (13029).

RUSSIA WITH MULTI-COUNTRY GROUP

3/2/95

Russian President Boris Yeltsin's 1/25/95 decree to renew construction of the RT-2 reprocessing facility in Zheleznogorsk signals that Russia will continue to import spent nuclear fuel for reprocessing from Bulgaria, Hungary, the Czech Republic, Slovakia, Germany, and Finland despite sharp opposition from environmentalists and the absence of a formal policy on spent fuel handling.

Aleksandr Safronov and Mariya Smirnova, *Kommersant Daily* (Moscow), 3/2/95, p. 3; in JPRS-TEN-95-005, 3/2/95 (12833).

3/7/95

Dmitri Tolmatsky, a representative of Greenpeace in Moscow, says that Russia will return plutonium and uranium from the RT-

2 reprocessing plant as is currently spelled out in contracts with the Czech Republic, Bulgaria, and Iran. Tolmatsky also says that Germany, India, South Korea, Switzerland, and Taiwan have expressed an interest in Russian storage and reprocessing services at RT-2.

Jean-Christophe Peuch, *Reuter* (Moscow), 3/7/95; in *Executive News Service*, 3/7/95 (12933).

3/30/95-3/31/95

The International Science and Technology Center (ISTC) governing board approves 38 peace-related projects that will be supported by \$13.6 million in approved funding. Belarusian and Kazakhstani observers attend the board meeting, and both countries are expected to have functioning branch offices in their capitals by fall 1995. In 5/95, it was reported that, with these newly approved projects, the ISTC now supports 130 projects from a funding base of about \$60 million, and provides employment to more than 8,200 Belarusian, Georgian, and Russian engineers and scientists, the majority of whom have backgrounds in missile technology and weapons of mass destruction research.

Arms Control Today, 5/95, p. 31 (13177).

5/17/95

Negotiations are currently underway for Russia to reprocess spent nuclear fuel from Sweden, Taiwan, Switzerland, and South Korea at Russia's RT-2 facility despite the fact that Russia does not supply these countries with nuclear fuel.

Sergei Leskov, *Izvestiya* (Moscow), 5/17/95; in FBIS-SOV-95-096, 5/17/95 (12930).

5/18/95

Imports of spent nuclear fuel into Russia are now banned by an amendment to the draft law "On State Policy in the Field of Handling Nuclear Waste," which classifies spent fuel as radioactive waste. However, an article in the new amendment contains procedures for bypassing the ban on spent fuel imports, which may allow Russia to continue to net millions of dollars from reprocessing contracts with Finland, Hungary, and other countries with Soviet-designed reactors.

Veronica Romanenkova, *Segodnya* (Moscow), 5/18/95, p. 2; in FBIS-SOV-95-096, 5/18/95 (12947).

RUSSIA WITH NORTH KOREA

See also North Korea section.

4/11/95

South Korean Foreign Minister Kong Nam-yong says that Russia can participate in the KEDO project to supply LWRs to the DPRK by supplying uranium fuel for the planned North Korean reactors.

Yonhap (Seoul), 4/11/95; in FBIS-EAS-95-069, 4/11/95 (12992).

4/14/95

Vyacheslav Sychev of the Russian Ministry of Atomic Energy says that the U.S. offered Russia the opportunity to process waste from the LWRs to be constructed in the DPRK as compensation if it cancels its nuclear deal with Iran. However, Russia rejected the offer on the grounds that it was insufficient compensation.

Anatoliy Yurkin, *Itar-Tass* (Moscow), 4/14/95; in FBIS-SOV-95-073, 4/14/95 (12994).

5/26/95

Russia is willing to provide LWRs to North Korea. Russian Vice Minister of Foreign Affairs Alexander Panov says that an international conference should be held to discuss regulation of the nuclear situation on the Korean Peninsula.

Krasnaya Zvezda (Moscow), 5/26/95, p. 3 (13196).

RUSSIA WITH NORWAY

4/5/95

Norwegian Deputy Foreign Minister Siri Bjerke announces a proposal to establish an international fund to finance construction of nuclear waste storage facilities in north-west Russia. Bjerke also discusses implementation of a Norwegian nuclear security plan for Russia's northwest. Norway has already allotted \$20 million for the plan, which also involves the U.S.

Interfax (Moscow), 4/5/95; in FBIS-SOV-95-066, 4/5/95 (12706).

RUSSIA WITH SLOVAKIA

3/2/95

Russia's bid to complete the two VVER-440s at Mochovce includes plans to reprocess the spent fuel—a provision which is omitted in the competing offer from the European Bank of Reconstruction and Development (EBRD), which only provides for safety upgrades. Slovakia must enter into a nuclear cooperation agreement with Russia before any fuel can be processed. Under the Russian-Slovak agreement, Russia would reprocess Slovak spent fuel at the RT-1 plant at Chelyabinsk, and would return the plutonium and radioactive waste derived from reprocessing back to Slovakia. Plutonium might be returned to Slovakia in the form of mixed-oxide (MOX) fuel if a proposed Russian-German plan to build a \$61 million MOX plant in Chelyabinsk is realized. The RT-1 plant is reportedly reprocessing spent fuel from Bohunice, Slovakia's oldest nuclear reactor, but Slovakia is not receiving any plutonium yielded from reprocessing.

Mark Hibbs, *Nucleonics Week*, 3/2/95, pp. 10-11 (12642).

5/95

Slovakia's Economy Minister Josef Ducky assigns Slovak utility SE the responsibility of holding meetings with Russia, a consortium of Electricite de France and Siemens, and a Czech-Slovak partnership led by Skoda to hammer out a deal for the financing and construction of the first two units of the Mochovce nuclear power station.

Jiri Suchomel, *NucNet*, 5/18/95 (12964).

5/19/95

Russia has concluded a deal with Slovakia to provide \$150 million in credit for the completion of the two VVER-440 reactors at the Mochovce nuclear power plant.

Toshihiko Kaya, *Nihon Keizai Shimbun* (Tokyo), 5/19/95, p. 9; in FBIS-EAS-95-098, 5/19/95 (12953).

RUSSIA WITH SYRIA AND UNITED STATES

3/31/95

Russian Foreign Minister Andrei Kozyrev says that he does not expect the U.S. to object to Russia's agreement to assist in the

construction of a nuclear power plant in Syria. Kozyrev says that the project will be carried out under IAEA supervision.

Dmitriy Gorokhov and Anatoliy Golovastov, *Itar-Tass* (Moscow), 3/31/95; in FBIS-SOV-95-063, 3/31/95 (12910).

RUSSIA WITH UKRAINE

3/95

The U.S. Department of Defense issues a report confirming that Belarus, Kazakhstan, and Ukraine are destroying their respective nuclear stockpiles at a faster rate than mandated under START I. By mid-3/95, the three countries had removed 1,555 warheads from missiles and transferred 1,097 warheads to Russia. Ukraine has eliminated 240 SS-19 and 460 SS-24 warheads. Under the 1/94 Trilateral Statement, Ukraine agreed to remove all its remaining warheads to Russia by mid-1996.

Agence France-Presse International News, 3/15/95; in Executive News Service, 3/15/95 (12612). *Arms Control Today*, 4/95, p. 22 (12652). Radiostantsiya Belarus (Minsk), 3/16/95; in JPRS-TAC-95-012-L, 3/16/95 (12709).

3/6/95

The first train carrying 60 Ukrainian nuclear warheads arrives in Russia, where the warheads will be destroyed.

L. Ioffe, Russian Television Network (Moscow), 3/6/95; in JPRS-TAC-95-012-L, 3/6/95 (12705).

3/23/95

Oleksander Zarubytsky, a spokesman for the Ukrainian Interior Ministry, reports that three glass jars containing 6 kg of pelletized U-235 with U-238 casings were seized during the 3/95 arrests of two former members of the Russian military, a lieutenant-colonel and a warrant officer. The suspects state that the material came from Russia. When the first man was arrested, 2 kg of U-235 granules were discovered inside a container in a bag he was carrying. Another two containers containing uranium were discovered in his apartment. Each of the three half-liter glass containers held about 2 kg of metallic uranium. Each of the pellets, which measured 1 cm in diameter, had holes in the center. The holes suggest that the material was for use "in installations with high-pressure zones." According to the

Ukrainian newspaper *Kievsky Vedemosti*, the material is worth \$250,000 per kilogram. The suspects say they had expected to obtain more than \$1 million for the material. The material is being analyzed by the Ukrainian Academy of Sciences' Institute of Nuclear Research to determine its composition and origin; initial findings seem to indicate that the material may be U-235 and U-238.

UPI (Kiev), 3/23/95; in Executive News Service, 3/23/95 (12609). *Komsomolskaya Pravda* (Moscow), 3/28/95, p. 1; FBIS-SOV-95-060, 3/28/95 (12693). Peter Coryn, *Nucleonics Week*, 4/6/95, pp. 14-15 (12693). *Komsomolskaya Pravda* (Moscow), 3/28/95, p. 1; in JPRS-TAC-95-012-L, 3/28/95 (12703). *Komsomolskaya Pravda* (Moscow), 4/4/95, p. 1; in FBIS-SOV-95-064, 4/4/95 (12703).

4/95

Colonel Oleksandr Serdyuk, head of the Center for Administrative Control of Strategic Nuclear Weapons in the Ukraine's Ministry of Defense, says that if Russia provides fuel for Ukraine's nuclear power stations, the transfer of nuclear warheads from Ukraine to Russia will continue on schedule. Serdyuk says that about 40 percent of Ukraine's 1,500 warheads have been transferred to Russia. Discussions on transferring "nuclear training weapons" and all associated records to Russia are currently underway. Serdyuk says that by the end of 4/95, six SS-19 regiments, comprising 60 of Ukraine's total of 130 SS-19s, will be decommissioned. Foreign assistance from the U.S., Germany, Canada, Japan, the Netherlands, and Norway has solved the technical and financial problems associated with the elimination of nuclear weapons in Ukraine. The U.S. has so far provided \$205 million in assistance.

Serhiy Zhurets, *Narodna Armiya* (Kiev), 4/19/95, p. 1; in JPRS-UMA-95-023, 4/19/95 (12699). Interfax (Moscow), 4/17/95; in FBIS-TAC-95-003, 4/17/95 (12802).

4/8/95

It is reported that Volodymyr Mukhin, chairman of the Ukrainian Supreme Council of Defense, said that recent actions in Russia's State Duma, including Russia's failure to continue unilateral reductions of the Black Sea Fleet, amount to threats against Ukrainian national security and could necessitate a Ukrainian Supreme Council decision to

suspend "the withdrawal of nuclear warheads from the territory of Ukraine."

Unian (Kiev), 4/8/95; in FBIS-SOV-95-068, 4/8/95 (12701).

5/26/95

Colonel-General Viktor Yesin, head of Russia's Strategic Missile Troops, reports that 93 strategic nuclear missiles are still in Ukraine and remain under Russian control. The warheads are to be destroyed by 6/96 in accordance with START I.

Interfax (Moscow), 5/26/95; in FBIS-SOV-95-103, 5/26/95 (12702).

5/26/95

It is reported that Ukraine has renewed shipments of spent nuclear fuel to Russia's Krasnoyarsk mining and chemical complex after a two-year interruption. The Russian State Committee for Nuclear Materials Oversight approved the transfer. The spent fuel is expected to arrive by rail in early 6/95. Russia and Ukraine have a spent fuel transfer contract that expires at the close of 1995.

Yuri Khots, Itar-Tass (Moscow), 5/26/95; in FBIS-SOV-95-104, 5/26/95 (13039). *Krasnoyarskiy Rabochiy*, 5/25/95, p. 1 (12919).

RUSSIA WITH UNITED STATES

Early 1995

It is reported that talks between the U.S. and Russia on the implementation of the 6/94 agreement to close three Russian dual-use weapons-grade plutonium-producing reactors at Krasnoyarsk-26 and Tomsk-7 have not been fruitful. The U.S. has been unable to verify Russia's claims that plutonium from these plants has not been used for military purposes since 10/1/94.

PPNN Newsbrief, First Quarter 1995, p. 3 (12603). Dunbar Lockwood, *Arms Control Today*, 7/94-8/94, p. 24 (11722). Wilson Dizard III, *NuclearFuel*, 7/4/94, p. 15 (11722).

2/95

Lawrence Livermore National Laboratory's (LLNL) Laboratory-to-Institute Program has grown considerably during 1994 and currently involves collaboration with scientists at 42 institutes in the former Soviet Union, primarily in Russia and Ukraine. LLNL is also assisting the U.S. in implementing on-site inspections of fissile mate-

rial storage facilities.

Robert T. Andrews and George G. Staele, *Energy & Technology Review*, 1/95-2/95, pp. 4-14 (13022).

3/95

The first shipments of Russian highly-enriched uranium (HEU) that was removed from nuclear warheads are scheduled to arrive in the U.S. The material will be converted to low-enriched uranium (LEU) for use in nuclear reactors.

Lynn E. Davis, *U.S. Department of State Dispatch*, 3/13/95, pp. 192-194 (12867).

3/1/95

In accordance with START I provisions, three U.S. On-Site Inspection Agency teams arrive in Russia to begin a series of 71 inspections at nuclear sites in Russia, Belarus, Ukraine, and Kazakhstan. A team of Russian, Belarusian, Kazakhstani, and Ukrainian inspectors also begins its inspection of 36 sites in the U.S.

Arms Control Today, 4/95, p. 22 (12746). *Washington Times*, 3/4/95, p. A9 (12746).

3/1/95

President Bill Clinton says that the U.S. and Russia are considering making additional cuts to their nuclear weapons arsenals as well as placing 200 MT of fissile material currently in military holdings under IAEA safeguards.

Trust and Verify, 3/95, p. 1 (12935).

Early 3/95

The total value of U.S. equipment transferred to Russia for the dismantlement of nuclear weapons has not yet exceeded \$100 million. This amount represents only "a small part" of Russia's weapons elimination expenditures.

Gennadiy Obolenskiy, *Krasnaya Zvezda* (Moscow), 3/23/95, p. 3; in FBIS-SOV-95-062, 3/23/95 (12745).

3/6/95

The Russian Ministry of Atomic Energy and General Atomics of the U.S. will each spend \$1 million over the next 18 to 24 months on developing a plan to build gas-cooled nuclear reactors capable of using weapons-grade plutonium as feedstock.

Ux Report, 3/6/95, p. 4; in *Uranium Institute News Briefing*, 3/8/95-3/14/95, p. 1 (12620).

3/23/95

U.S. Secretary of State Warren Christopher and Russian Foreign Minister Andrei Kozyrev reveal in a joint statement that the U.S. and Russia will form a "special working group" to examine the status of worldwide nuclear proliferation. The working group will present its findings before the U.S.-Russian summit convenes in 5/95.

Asahi Shimbun (Tokyo), 3/24/95 (13018).

3/28/95

It is reported that Russia signed an agreement with the U.S. worth \$215 million on "the utilization of nuclear munitions."

Ria Novosti (Moscow), 3/28/95; in FBIS-SOV-95-086-A, 3/28/95 (12737).

Late 3/95

The U.S. and Russia unveil an experimental remote video monitoring system that researchers from both countries developed under the U.S. Department of Energy's (DOE) Lab-to-Lab program. DOE officials indicate that the system could become a cost effective method for monitoring weapons-grade materials in both countries. The system has been installed at the Kurchatov Institute and Argonne National Laboratory, both of which house HEU. Recordings are stored on computer and can be accessed via telephone in both the U.S. and Russia. The system will be tested for six months at a cost of \$300,000.

Reuter, 3/31/95; in Executive News Service, 3/31/95 (12869). Kathleen Hart, *Nucleonics Week*, 4/6/95, p. 15 (12830).

4/95

Official statistics of Russian dismantlement under START I are made public in an updated U.S.-Russian Memorandum of Understanding. As of 12/5/94, Russia had dismantled 378 ICBM silos (representing 81 percent of total silos), 230 heavy bombers (61 percent), and 14 ballistic missile submarines (37 percent). In addition, as of 12/5/94, Russia had removed from START I accountability 630 ICBM nuclear warheads (60 percent), 212 submarine-launched ballistic missiles (SLBM) (40 percent), 244 SLBM warheads, and 37 heavy bomber warheads (61 percent).

Arms Control Today, 3/95, p. 32 (13014).

4/3/95

U.S. Secretary of Defense William Perry announces in Moscow that the U.S. and Russia signed four disarmament agreements totalling \$50 million in Nunn-Lugar assistance to Russia. The first agreement increases to \$150 million the \$130 million in assistance the U.S. had promised Russia in eliminating strategic offensive weapons in accordance with START obligations. The second agreement increases to \$35 million the \$25 million originally promised by the U.S. to the International Science and Technology Center in Moscow. The third agreement provides for the disbursement of up to \$17 million to Russia for nuclear weapons transport. The fourth agreement provides for the disbursement of up to \$3 million to "enhance the security of facilities which store nuclear weapons until they are dismantled." This grant brings U.S. total conversion aid to approximately \$1 billion.

Arms Control Today, 5/95, pp. 27, 30 (13174). Interfax (Moscow), 4/3/95; in FBIS-SOV-95-063, 4/3/95 (12751). Viktor Litovkin, Boris Vinogradov, and Aleksandr Sychev, *Izvestiya* (Moscow), 4/5/95; in FBIS-SOV-95-065, 4/5/95 (12661). Stanislav Kuchmer, *Komsomolskaya Pravda* (Moscow), 4/5/95, p. 7; in FBIS-SOV-95-065, 4/5/95 (12619). *Jane's Defence Weekly*, 4/15/95, p. 8 (13013).

4/10/95

U.S. President Bill Clinton signs a \$3.1 billion "supplemental appropriations bill" that reduces by \$20 million Nunn-Lugar funding to the former Soviet Union for military officer housing, defense conversion, and the Defense Enterprise Fund.

Post-Soviet Nuclear & Defense Monitor, 4/25/95, p. 4 (12740).

4/18/95-4/21/95

Safeguards, Transparency and Irreversibility (STI) talks held between the U.S. and Russia, bring the countries closer to a cooperation agreement permitting the "exchange of sensitive data related to nuclear weapons." Such an agreement is a prerequisite to closing down three remaining plutonium-producing Russian reactors and to facilitating reciprocal inspections of facilities housing nuclear materials extracted from dismantled warheads.

Arms Control Today, 6/95, p. 33 (13172).

5/95

It is reported that the Russian Ministry of Atomic Energy and General Atomics of the U.S. signed agreements to jointly design and develop a gas turbine/modular helium reactor (GT-MHR). General Atomics and the Ministry of Atomic Energy are each contributing 1 million pounds for the GT-MHR's "conceptual design." The GT-MHR will be designed to consume weapons-grade plutonium, and will replace Russian weapons-grade plutonium-producing reactors at Krasnoyarsk, Tomsk, as well as other facilities. Russian entities participating on the project are the Kurchatov Institute, the A. A. Bochvar All-Russian Scientific Institute of Inorganic Materials, the LUTCH scientific-industrial organization, and the OKMB experimental machine-building design bureau.

Nuclear Europe Worldscan, 5/95-6/95, p. 29 (13178).

5/1/95

Ivan Rybkin, speaker of the Russian State Duma, meets with U.S. Speaker of the House Newt Gingrich and expresses his displeasure with the fact that the U.S. has not provided all the promised aid for decommissioning over a dozen Russian nuclear submarines. Rybkin says that the U.S. had transferred only \$50 million of the promised \$500 million for missile dismantlement and defense conversion projects.

New York Times, 5/2/95, p. A5 (12749).

5/10/95

U.S. President Bill Clinton and Russian President Boris Yeltsin issue a "Joint Statement on the Transparency and Irreversibility of the Process of Reducing Nuclear Weapons" at the conclusion of a summit meeting. The statement declares that fissile material from dismantled nuclear weapons will not be reused in weapons, nor will fissile materials "excess to national security requirements" be used in weapons programs. Additionally, fissile material from the civil nuclear industry and "newly produced fissile materials" will not be used in nuclear weapons. Bilateral information exchanges concerning the quantity, safety, and security of stockpiled fissile material and nuclear warheads will become more frequent, as will

confidence-building measures such as reciprocal monitoring at stockpile sites. According to U.S. officials, the inspections will verify whether Russia is indeed dismantling 2,000-3,000 warheads per year as it has claimed. Inspections will also ensure that extracted nuclear material is not re-used in new weapons. The summit also results in a "Joint Statement on Nonproliferation" that tasks the Gore-Chernomyrdin Commission to develop a report on past and future efforts to ensure nuclear materials security.

Trust and Verify, 5/95, p. 1 (12935). Jeffrey Smith, *Washington Post*, 5/17/95 (13092).

5/16/95

The U.S. recently committed an additional \$26 million in Nunn-Lugar funding to the International Science and Technology Center (ISTC) in Russia (including the branch offices in Minsk, Belarus and Almaty, Kazakhstan) and the Science and Technology Center in Ukraine.

Post-Soviet Nuclear & Defense Monitor, 5/16/95, p. 14 (12942).

6/95

It is reported that the Clemson Technical Center, a technology support arm of the U.S.'s Rust International, signed an agreement with Russia's Scientific and Industrial Association to develop and test Russian "cold crucible vitrification technology" in stabilizing radioactive waste.

Nuclear News, 6/95, pp. 61-62 (12952).

6/7/95

In a letter to U.S. Undersecretary of State for International Security Affairs Lynn Davis, Russian Minister of Atomic Energy Viktor Mikhailov says that Russia remains committed to the 2/18/93 U.S.-Russian HEU deal, but strongly opposes attempts to separate payments for the agreement's feed component and enrichment component. [The LEU to be shipped to the U.S. is essentially considered to consist of natural uranium (the feed component) and separative work units (the enrichment component).] Mikhailov says that the value of the feed component in the LEU would be counted against the \$60 million advance the U.S. has paid. Mikhailov says that unless principles in the agreement are adhered to, Russia will be forced to "stop the imple-

mentation of the agreement after the reimbursement of the advanced payment." Mikhailov proposes that a clause within the agreement be invoked that allows for the use of private funds to pay Russia if the U.S. government is unable to do so. In a 6/8/95 reply to Mikhailov's letter, U.S. Senator Pete Domenici (R-NM) says that he and other senators will go forward with legislation intended to ensure the implementation of the HEU agreement.

NuclearFuel, 6/19/95, pp. 4-5 (12981).

6/8/95

It is reported that the Russian shipbuilding plant "Zvezda," located near Bolshoi Kamen, received the first shipment of a total of \$6 million worth of equipment from Hughes, a U.S. company, to help dismantle nine nuclear-powered submarines annually. Several reactors from dismantled submarines have been converted for use as civilian energy sources.

Andrei Baranovskiy, *Segodnya* (Moscow), 6/10/95, p. 3 (12927).

6/14/95

Vitaly Konovalov, a Russian Ministry of Atomic Energy official, accuses the U.S. of attempting to renege on a 1992 commitment to pay an estimated \$12 billion for 500 MT of uranium obtained from dismantled nuclear weapons. [The HEU deal was initiated in 1992, but signed in 1993.] Konovalov says that the U.S. is trying to reduce the negotiated price "by one-third to one-half."

International Herald Tribune, 6/15/95 (12944).

6/15/95

Russian Minister of Atomic Energy Viktor Mikhailov says that Russia will cancel the deal to sell LEU to the U.S. if the U.S. continues to insist on lowering the price it is willing to pay for it. Mikhailov says that Russia has already delivered 30 MT of LEU to the U.S., and that by the end of 1995, transfers will total \$150 million. Russia wants to be paid \$800 per kg of LEU, while the U.S. insists on paying \$600 per kg of LEU. The U.S. Enrichment Corporation (USEC), the U.S. organization responsible for implementing the agreement, cannot legally sell Russian HEU below market value

under the terms of anti-dumping agreements reached with Canadian and U.S. uranium producers.

Interfax (Moscow), 6/16/95; in FBIS-SOV_95-116, 6/16/95 (13081). Interfax (Moscow), 6/14/95; in FBIS-SOV-95-115, 6/14/95 (13081). Wilson Dizard III and Michael Knapik, *NuclearFuel*, 5/22/95, p. 2 (13081). George Lobsenz, *Energy Daily*, 5/15/95, p. 3 (13081).

6/17/95

The U.S. and Russia have jointly developed the Accounting and Monitoring System (AMS), a nuclear materials accountability system currently operating at the Russian Federal Nuclear Center at Arzamas-16.

Mikhail Rebrov, *Krasnaya Zvezda* (Moscow), 6/17/95, p. 3; in FBIS-TAC-95-014-L, 6/17/95 (13173).

6/17/95

It is reported that, of an expected 1995 shipment of 6 MT of HEU from Russia to the U.S., only one shipment of less than 1 MT has been sent. The 0.786 MT shipment was blended down to make 24 MT of reactor fuel. According to William H. Timbers, Jr., president of USEC, Russia agreed to ship 6 MT of nuclear material in 1995, and theoretically agreed to sell 10 MT in 1996 once agreement was reached on the price. On 6/5/95, it was reported that sources in Moscow and Washington said that Russia could justifiably blame the U.S. for scuttling the HEU deal because the USEC is now offering to pay \$68/SWU instead of the \$82.10/SWU USEC offered for the first 6 MT of nuclear material. Russia wants to receive about \$780 per kg of uranium for 4.4 percent LEU (\$82.10 per SWU, and \$28.50 per kg of uranium hexafluoride). On 6/12/95, it was reported that Russian Minister of Atomic Energy Viktor Mikhailov said that Russia would pay what it owed USEC with LEU in 1995 and 1996, and would then end the deal unless better terms could be negotiated. Estimates place Russian weapons-grade holdings at 1,200 MT of uranium and 170 MT of plutonium.

Economist, 6/17/95, p. 48 (13186). William J. Broad, *New York Times*, 6/12/95, pp. 1, C10 (13186). Wilson Dizard III and Michael Knapik, *NuclearFuel*, 6/5/95, pp. 3-4 (13183). William J. Broad, *New York Times*, 6/14/95, p. A8 (13183). *FreshFuel*, 6/12/95, p. 1; in *Uranium Institute News Briefing*, 6/13/95 (13183). *NuclearFuel*, 6/19/95, pp. 5-8 (12982).

6/28/95

It is reported that U.S. Vice President Al Gore and Russian Prime Minister Viktor Chernomyrdin announced an agreement in which USEC will purchase 500 MT of weapons-grade HEU from Russia. The agreement is a revised version of a 1/94 agreement and reportedly involves a \$100 million advance payment.

NucNet News, 7/3/95; in *Uranium Institute News Briefing*, 6/28/95 (12949).

6/30/95

J. Joseph Grandmaison, director of the U.S. Trade and Development Agency (TDA), announces that the U.S. signed six economic assistance grants with Russia during the 6/29/95 Gore-Chernomyrdin Commission meeting. The grants will finance six large defense conversion feasibility studies as well as other projects aimed at improving Russia's infrastructure. Of the \$2,050,000 committed by the U.S., \$800,000 will go to the All-Russian Federal Nuclear Center to support a joint study with the U.S.'s M-C Power Corporation on molten carbonate fuel cell (MCFC) production. Since "converted lithium" from dismantled nuclear weapons is an important element in MCFC production, the project supports disarmament objectives; the work also supports defense conversion objectives since nuclear weapons scientists from Arzamas-16 will be employed by the project.

PR Newswire (Moscow), 6/30/95; in *Executive News Service*, 6/30/95 (13170).

TAJIKISTAN

TAJIKISTAN WITH UNITED STATES

4/18/95

It is reported that Arkadiy Kuks, a U.S. resident from the former Soviet Union, is attempting to broker a \$50 million nuclear waste deal between a private U.S. firm and the government of Tajikistan. Representatives of the firm and the Tajik government

have discussed the possibility of burying the waste in the Leninabad Oblast, located in the northern area of the republic. Svyatoslav Zabelin, a board member of the international organization Socio-Ecological Union, says that reports of the pending deal have been confirmed in the U.S. and Dushanbe. Zabelin also says that U.S. companies have already held negotiations on the burial of radioactive waste in Dagestan. On 4/6/95, Bill Jackson, the U.S. Department of State desk officer in Tajikistan, also confirmed that negotiations had taken place, but denied that the U.S. government was involved.

Oleg Rish, *Nezavisimaya Gazeta* (Moscow), 4/18/95, p. 2; in FBIS-SOV-95-074, 4/18/95 (12868).

UKRAINE

INTERNAL DEVELOPMENTS

3/30/95

It is reported that Vladimir Fux, director of the South Ukraine nuclear power plant, said that the lack of spent fuel storage space could actually force Ukraine's nuclear power plants to close in 1995-96. Ukraine has not been able to remove spent fuel from its nuclear facilities since 1991, when Russia passed a law prohibiting the import of foreign nuclear wastes. Consequently, Ukraine's spent fuel storage facilities have been filled beyond capacity.

Itar-Tass (Moscow), 3/30/95; in FBIS-SOV-95-062, 3/30/95 (12796).

4/95

The Ukrainian government adopts a plan, proposed by the Ukrainian State Committee for the Use of Atomic Energy (Goskomatom), to restructure Ukraine's nuclear power industry.

Interfax (Moscow), 5/5/95; in FBIS-SOV-95-088, 5/5/95 (12798).

4/16/95

Ukrainian President Leonid Kuchma says that Ukraine is ahead of schedule in dis-

mantling its nuclear warheads, and that in 1996 Ukraine will be a nuclear-free state.

Radio Ukraine World Service (Kiev), 3/16/95; in FBIS-SOV-95-052, 3/16/95 (12800).

4/19/95

Acting Ukrainian Prime Minister Yevgeniy Marchuk assigns the responsibility of implementing Ukraine's safeguards agreement with the IAEA to the Ministry of Environment and Nuclear Safety.

Unian (Kiev), 4/22/95; in FBIS-SOV-95-078, 4/22/95 (12704).

4/27/95

Commander of the Ukrainian Navy Rear-Admiral Vladimir Bezkorovainy proposes that the Black and Azov Seas be designated as nuclear-free zones. As a consequence of this designation, all "Black Sea countries" would agree not to deploy nuclear weapons on ships, aircraft, or any naval installations in the coastal areas.

Interfax (Moscow), 4/27/95; in FBIS-SOV-95-082, 4/27/95 (12606).

4/28/95

It is reported that Goskomatom has generated a plan to develop a complete nuclear fuel cycle including tripling uranium mining within the next few years. Ukraine's Zhovti Vody Ore Enrichment Combine (ZVOEC) supports the creation of a nuclear fuel cycle since an increase in uranium mining will eventually lead to higher profits. Ukraine's uranium industry consists of ZVOEC's hydrometallurgical plant for the production of uranium oxide and uranium hexafluoride and two operational uranium mines: the Inhul'ska mine outside of Kirovohrad (which should last 15 years at the current pace of mining), and the Vatutinska mine near Smolino (which should last 25 years). Anatoliy Chernov, deputy head of Goskomatom, said that Ukraine's uranium ore reserves from the two existing mines and the Novokostyantynivske deposit (where mining was halted in 1992) are sufficient to supply all 14 Ukrainian reactors and five additional planned reactors with fuel for 100 years. Reactivation of the mine will cost almost 160 million rubles.

Olena Zvarych, *Ukrayina Moloda* (Kiev), 4/28/95, p. 4; in FBIS-SOV-95-089, 4/28/95 (13181).

4/28/95

It is reported that Ukraine needs a capacity to enrich uranium to complete the closing of its nuclear fuel cycle. Anatoliy Chernov, deputy head of Goskomatom, said that uranium enrichment will be "carried out abroad, possibly in France or [Germany]." Ukraine plans to solicit bids for joint nuclear fuel production programs with companies in the U.S., Sweden, Germany, France, and Russia.

Olena Zvarych, *Ukrayina Moloda* (Kiev), 4/28/95, p. 4; in FBIS-SOV-95-089, 4/28/95 (13181).

5/95

Chairman of Goskomatom Mikhail Umanets says Ukraine hopes to obtain foreign financing for a \$1 billion project for the domestic production of nuclear fuel. The project is intended to decrease Ukraine's dependence on foreign fuel when it is completed in 2010. When completed, the \$1 billion plant will provide 40-45 percent of Ukraine's nuclear fuel needs. Domestically-produced fuel is expected to cost 30 percent less than fuel imported from Russia. The goals of the project include the production of fuel elements, tablets, and fuel assemblies. The project calls for the rate of mining and milling of uranium in Ukraine to increase 300 percent by 2003. Goskomatom, which developed the project, will begin constructing a hexafluoride conversion plant by 1999. By the year 2000, Ukraine will invest at least \$100 million in manufacturing intermediate zircaloy products, and \$135 million in a fuel fabrication facility with a projected capacity of 600 MT. According to Umanets, Ukraine does not plan to enrich uranium, but will instead purchase enriched uranium from Russia, France, Germany, and Kazakhstan. Ukraine currently receives 100 percent of its nuclear fuel and 70 percent of its nuclear reactor equipment and replacement parts from Russia.

Interfax (Moscow), 5/5/95; in FBIS-SOV-95-088, 5/5/95 (12798). Peter Coryn, *NuclearFuel*, 5/8/95, pp. 19-20 (12798). Viktor Demidenko, Itar-Tass (Moscow), 4/21/95; in FBIS-SOV-95-078, 4/21/95 (12798). *Yaderniy Kontrol*, 6/95, p. 13 (12921).

5/11/95

The Science and Technology Center in Ukraine (STCU) issues its first call for project proposals from Ukrainian scientists.

Ostap Haweleshka, a Canadian scientist, is the Executive Director of the STCU. The STCU plans to conduct its first governing board meeting "in late summer or early fall [1995]."

Arms Control Today, 5/95, p. 31 (13177). *Post-Soviet Nuclear & Defense Monitor*, 5/16/95, p. 11 (12894).

5/18/95

It is reported that Goskatom introduced a plan to restructure Ukraine's nuclear industry to be a "government-owned holding company operating through branch companies and joint stock enterprises." The new organization, Energoatom, would be responsible for procuring nuclear fuel, coordinating indigenous production of nuclear fuel, addressing waste management and decommissioning issues, carrying out investigations and research, formulating policy, and designing more advanced reactors. According to Goskatom, the partial privatization of the nuclear industry could be completed by the end of 1995. Officials at Goskatom said that after reform is implemented, a single ministry, formed by a merger of the Ministry of Energy and Goskatom, could manage Ukraine's nuclear industry.

Peter Coryn, *Nucleonics Week*, 5/18/95, pp. 16-17 (12799).

6/2/95

Oleksandr Linev, a prominent specialist at the Ukrainian Institute of Nuclear Research of the National Academy of Sciences, says that most nuclear power plants are storing their spent fuel in temporary pools, which are filled to capacity. According to Linev, "There is no room now for storing even emergency fuel reserves." While plans currently exist for the construction of a temporary storage facility at Chernobyl for all of Ukraine's nuclear waste, work on new facilities will not begin until after 2020.

Anatoliy Panov, *Vseukrainskiye Vedemosti* (Kiev), 6/2/95, p. 6; in JPRS-TEN-95-009, 6/2/95 (12897).

6/6/95

It is reported that a group of persons of different nationalities stole 6 kg of "enriched nuclear fuel" from a nuclear power plant near

Kiev and hid the material on the banks off the Dnepr River. However, as the suspects were being arrested, the vessel containing the nuclear material was accidentally overturned. The stolen material was reportedly worth \$100 million.

Grigoriy Nesmyanovich, *Krasnaya Zvezda* (Moscow), 6/6/95, p. 3; in FBIS-SOV-95-108, 6/6/95 (12795).

6/20/95

Yuriy Koshyk, director of Ukrainian Scientific Research Institute of Industrial Technology, says that Ukraine plans to develop its own nuclear energy and fuel complex by the year 2010. The plan calls for uranium ore to be mined and processed in Ukraine and then sent to facilities in either France, Great Britain, or Russia where the ore will be further processed for use in fuel elements. Ukraine will then assemble its own fuel elements using the uranium processed abroad and its own assembly parts. Ukraine plans to construct an assembly plant for this purpose at Zholyty Vody in the Dnieper region. The Prydniprovsky Chemical Plant in Dniprodzerzhynsk will manufacture zirconium alloys for fuel element cladding. The Southern Radio Factory and the Zholyty Vody Elektron Plant will produce assembly parts.

Tetyana Khomych, *Molod Ukrayiny* (Kiev), 6/20/95, p. 2; in FBIS-SOV-95-121, 6/20/95 (12916).

UKRAINE WITH AZERBAIJAN, RUSSIA, AND TURKEY

4/1/95

It is reported that Ukraine and Azerbaijan are the primary transshipment points for smuggling nuclear materials out of Russia. *Der Spiegel* reported that former Russian military officers, KGB agents, and officers of Russia's Northern Fleet are involved in the illicit transfer of nuclear materials and have created the transshipment routes through Ukraine and Azerbaijan. According to a German Bundestag Security Commission report on the disappearance of nuclear materials and the nuclear black market, a nuclear mafia is beginning to take shape, Russian dealers selling to Third World buyers.

N. Medzhidova, *Zerkalo* (Baku), 4/1/95, pp. 1, 8; in FBIS-TAC-95-003, 4/1/95 (13077).

UKRAINE WITH EGYPT, PRC, AND RUSSIA

6/27/95

It is reported that "responsible sources" said that China, Russia, and Ukraine are among a number of Asian and European countries that have established ties with Egypt to help it construct "a number of nuclear reactors for peaceful purposes." On 6/6/95, the Egyptian newspaper *Al-Ahram* reported that Egypt's Nuclear Materials Agency chief Nabil Hazek had received a preliminary "Protocol of Intentions" from Ukraine that calls for peaceful nuclear cooperation in the areas of uranium enrichment, mining, and prospecting, as well as the construction of nuclear power plants.

Itar-Tass (Moscow), 6/6/95; in FBIS-SOV-95-109, 6/6/95 (12697). *Al-Sha'b* (Cairo), 6/27/95, p. 8; in FBIS-NES-95-130, 6/27/95 (13176).

UKRAINE WITH GERMANY

2/5/95

It is reported that in 1994 Germany provided a total of DM 17 million to Russia and Ukraine for disassembling nuclear weapons. The Bundestag has made no decision on how much aid Germany will provide for 1995.

Wolfgang Pollack, *Welt Am Sonntag* (Hamburg), 2/5/95, p. 7; in JPRS-TEN-95-004, 2/28/95, pp. 52-53 (12950).

UKRAINE WITH GERMANY, IRAQ, NETHERLANDS, RUSSIA, AND UNITED STATES

6/8/95

U.S. Customs Service Agents arrest three New York residents, Demetrios Demetrios, Rains Kourtides, and Constantin Zahariadis, for attempting to ship seven tons of Ukrainian-origin zirconium to Iraq via Germany and the U.S. Of the seven tons, two were seized in Cyprus and had been destined for Iraq via Amsterdam. Another source reports that eight tons were seized. According to Customs Service special agent Robert Van Etten, the U.S. government believes the zirconium was stolen from strategic re-

serves in the former Soviet Union. On 6/12/95, Ukrainian Foreign Ministry spokesman Yuri Serheyev says that the zirconium originated in Russia, not Ukraine. Director General Kuri Korovin of the Pridneprovskiy Chemical Plant in Dneprodzerzhinsk, characterizes a Russian report citing Ukraine as the source of the zirconium as "misinformation" aimed at barring Ukrainian exports from foreign markets. Korovin says that the plant, which "holds a monopoly on the production of this highly-refined nuclear material," discontinued zirconium production in 1994.

Grant McCool, *Washington Post*, 6/9/95, p. A16 (12975). Halia Pavlina, *Intelnews* (Kiev), 6/12/95; in FBIS-SOV-95-113, 6/12/95 (12975). Radio Ukraine World Service (Kiev), 6/13/95; in FBIS-SOV-95-114, 6/13/95 (12975). *New York Times*, 6/9/95, p. 1 (13207).

UKRAINE WITH HUNGARY AND SLOVAKIA

4/19/95

Slovak police arrest four Slovaks, three Hungarians, and two Ukrainians in the Slovak cities of Poprad and Kosice and confiscate a 52 kg "steel-plated lead container" containing 18.39 kg of U-238 from the back of a car. Other sources report that only 17 kg of radioactive material was confiscated, that all the arrests occurred in Poprad, and that the material was seized in Bratislava. The uranium originated in Ukraine and was supposed to be transported through Poprad to Hungary. According to Slovak Ministry of Internal Affairs spokesman Peter Ondera, police began trailing a Ford Escort with Hungarian plates on 4/13/95 after it crossed the border from Ukraine into Slovakia. Following the seizure, an IAEA spokesman says that the uranium, which was determined to be spent fuel, originated from an "older" nuclear reactor and was not weapons-grade. A subsequent "expert analysis" indicates that although the material was of a quality sufficient for use in a "three-phased nuclear weapon," there was an insufficient quantity. The nine arrested smugglers, six men and three women, intended to sell the uranium for \$200,000. The group to which the smugglers belonged has been sought since 1994 by a coalition of Slovak, Hungarian, and Ukrainian police, as well as Interpol

and the U.S.'s Federal Bureau of Investigation. The "uranium path" between Ukraine, Slovakia, and Hungary has been under observation by authorities since 1993.

Pravda (Bratislava), 4/26/95, p. 21; in FBIS-EEU-95-082, 4/26/95 (12607). Christine Spolar, *Washington Post*, 4/22/94, p. A25 (12610). Jane Perlez, *New York Times*, 4/22/95, p. A4 (12801). *Financial Times*, 4/22/95-4/23/95, p. 3 (12970). *Pravda* (Bratislava), 4/26/95, p. 2; in FBIS-TAC-95-003, 4/26/95 (12977). *Pravda* (Bratislava), 5/16/95, p. 4; in FBIS-TAC-95-014-L, 5/16/95 (13195).

UKRAINE WITH IRAN AND RUSSIA

5/4/95

It is reported that Russia has reached a preliminary agreement with Ukraine's Turboatom to supply Bushehr with a new turbine. Bushehr's reactor will be built in Russia by Izhorskiy or Atommas.

Interfax (Moscow), 5/4/95; in FBIS-SOV-95-086, 5/4/95 (12956).

UKRAINE WITH IRAQ, LIBYA, AND NORTH KOREA

4/95

It is reported that Valeriy Andreyev, head of the Ukrainian Strategic Missile Force's Military Counterintelligence Main Department, said that several countries including Iraq, Libya, and North Korea are prepared to hire Ukrainian nuclear specialists. Andreyev said his department's task of preventing the leakage of Ukrainian technology and strategic secrets is being complicated by the reduction of strategic forces; experts must now seek employment elsewhere, and may be looking abroad. Currently, there are no laws forbidding Ukrainian specialists from seeking employment at a foreign nuclear facility.

Viktor Melnyk, *Molod Ukrayiny* (Kiev), 4/13/95, p. 2; in FBIS-SOV-95-073, 4/13/95 (12996).

UKRAINE WITH JAPAN

3/24/95

Yuri Kostenko, head of Ukraine's Ministry of Environmental Protection, and officials

of Japan's Committee on Cooperation in Elimination of Nuclear Weapons sign a cooperation agreement to control the export and import of nuclear materials. The Japanese committee will provide Ukraine, free of charge, equipment and services necessary for more effective safeguards over the transfer of nuclear materials. Japan will also provide Ukraine assistance in upgrading its nuclear materials control and accounting system.

Interfax (Moscow), 3/24/95; in JPRS-TAC-95-012-L, 3/24/95 (12803).

UKRAINE WITH MULTI-COUNTRY GROUP

3/25/95

The Ukrainian State Committee for the Use Atomic Energy (Goskomatom) is accepting bids from foreign companies to build a nuclear fuel production facility in Ukraine. Ukraine currently purchases \$300 million in nuclear fuel from Russia each year. Oleksandr Zenyuk, spokesman for Goskomatom, says tender notices have been sent to two U.S. firms, Westinghouse (which is considered the front-runner for the contract) and ABB-CE; the Russian enterprise TVEL; and a French-German consortium. Although Western countries have expressed concern over Ukraine's intent to complete a closed nuclear fuel cycle, Goskomatom has indicated that Ukraine has no "programs of enriching uranium and processing nuclear fuel involving uranium and plutonium extraction" and is not planning to develop any. Mikhail Umanets, chairman of Goskomatom, says that Ukraine only hopes to be able to assemble its own fuel elements, not to acquire a fuel cycle that would include enrichment and reprocessing capability.

Viktor Zubanyuk, *Kommersant Daily* (Moscow), 3/25/95, p. 5; in FBIS-SOV-95-058, 3/25/95 (12696). Yanina Sokolovskaya, *Izvestiya* (Moscow), 6/2/95, p. 5; in FBIS-SOV-95-109, 6/2/95 (12695).

UKRAINE WITH RUSSIA

3/95

The U.S. Department of Defense issues a report confirming that Belarus, Kazakhstan, and Ukraine are destroying their respective

nuclear stockpiles at a faster rate than mandated under START I. By mid-3/95, the three countries had removed 1,555 warheads from missiles and transferred 1,097 warheads to Russia. Ukraine has eliminated 240 SS-19 and 460 SS-24 warheads. Under the 1/94 Trilateral Statement, Ukraine agreed to remove all its remaining warheads to Russia by mid-1996.

Agence France-Presse International News, 3/15/95; in Executive News Service, 3/15/95 (12612). *Arms Control Today*, 4/95, p. 22 (12652). Radiostantsiya Belarus (Minsk), 3/16/95; in JPRS-TAC-95-012-L, 3/16/95 (12709).

3/6/95

The first train carrying 60 Ukrainian nuclear warheads arrives in Russia, where the warheads will be destroyed.

L. Ioffe, Russian Television Network (Moscow), 3/6/95; in JPRS-TAC-95-012-L, 3/6/95 (12705).

3/23/95

Oleksander Zarubysky, a spokesman for the Ukrainian Interior Ministry, reports that three glass jars containing 6 kg of pelletized U-235 with U-238 casings had been seized during the 3/95 arrests of two former members of the Russian military, a lieutenant-colonel and a warrant officer. The suspects state that the material came from Russia. When the first man was arrested, 2 kg of U-235 granules were discovered inside a container in a bag he was carrying. Another two containers containing uranium were discovered in his apartment. Each of the three half-liter glass containers held about 2 kg of metallic uranium. Each of the pellets, which measured 1 cm in diameter, had holes in the center. The holes suggest that the material was for use "in installations with high-pressure zones." According to the Ukrainian newspaper *Kievsky Vedemosti*, the material is worth \$250,000 per kilogram. The suspects say they had expected to obtain more than \$1 million for the material. The material is being analyzed to determine its composition and origin by the Ukrainian Academy of Sciences' Institute of Nuclear Research; initial findings seem to indicate that the material may be U-235 and U-238.

UPI (Kiev), 3/23/95; in Executive News Service, 3/23/95 (12609). *Komsomolskaya Pravda* (Moscow), 3/28/95, p. 1; FBIS-SOV-95-060, 3/28/95 (12693). Peter Coryn, *Nucleonics Week*, 4/6/95,

pp. 14-15 (12693). *Komsomolskaya Pravda* (Moscow), 3/28/95, p. 1; in JPRS-TAC-95-012-L, 3/28/95 (12703). *Komsomolskaya Pravda* (Moscow), 4/4/95, p. 1; in FBIS-SOV-95-064, 4/4/95 (12703).

4/95

Colonel Oleksandr Serdyuk, head of the Center for Administrative Control of Strategic Nuclear Weapons in the Ukraine's Ministry of Defense, says that if Russia provides fuel for Ukraine's nuclear power stations, the transfer of nuclear warheads from Ukraine to Russia will continue on schedule. Serdyuk says that about 40 percent of Ukraine's 1,500 warheads have been transferred to Russia. Discussions on transferring "nuclear training weapons" and all associated records to Russia are currently underway. Serdyuk says that by the end of 4/95, six SS-19 regiments, comprising 60 of Ukraine's total of 130 SS-19s, will be decommissioned. Foreign assistance from the U.S., Germany, Canada, Japan, the Netherlands, and Norway has solved the technical and financial problems associated with the elimination of nuclear weapons in Ukraine. The U.S. has so far provided \$205 million in assistance.

Serhiy Zhurets, *Narodna Armiya* (Kiev), 4/19/95, p. 1; in JPRS-UMA-95-023, 4/19/95 (12699). Interfax (Moscow), 4/17/95; in FBIS-TAC-95-003, 4/17/95 (12802).

4/8/95

It is reported that Volodymyr Mukhin, Chairman of the Ukrainian Supreme Council of Defense, said that recent actions in Russia's State Duma, including Russia's failure to continue unilateral reductions of the Black Sea Fleet, amount to threats against Ukrainian national security and could necessitate a Ukrainian Supreme Council decision to suspend "the withdrawal of nuclear warheads from the territory of Ukraine."

Unian (Kiev), 4/8/95; in FBIS-SOV-95-068, 4/8/95 (12701).

5/26/95

Colonel-General Viktor Yesin, head of Russia's Strategic Missile Troops, reports that 93 strategic nuclear missiles are still in Ukraine and remain under Russian control. The warheads are to be destroyed by 6/96 in accordance with START I.

Interfax (Moscow), 5/26/95; in FBIS-SOV-95-103, 5/26/95 (12702).

5/26/95

Ukraine has renewed shipments of spent nuclear fuel to Russia's Krasnoyarsk mining and chemical complex after a two-year interruption. Russia's Gosatomnadzor approved the transfer. The spent fuel is expected to arrive by rail in early 6/95. Russia and Ukraine have a spent fuel transfer contract that expires at the close of 1995.

Yuri Khots, Itar-Tass (Moscow), 5/26/95; in FBIS-SOV-95-104, 5/26/95 (13039). *Krasnoyarskiy Rabochiy*, 5/25/95, p. 1 (12919).

UKRAINE WITH UNITED STATES

2/95

Lawrence Livermore National Laboratory's (LLNL) Laboratory-to-Institute Program has grown considerably during 1994 and currently involves collaboration with scientists at 42 institutes in the former Soviet Union, primarily in Russia and Ukraine. LLNL is also assisting the U.S. in implementing on-site inspections of fissile material storage facilities.

Robert T. Andrews and George G. Staele, *Energy & Technology Review*, 1/95-2/95, pp. 4-14 (13022).

3/95

Discussions between Ukrainian Ministry of Defense representatives and U.S. government and military officials on Nunn-Lugar funding allocations for nuclear disarmament result in the signing of \$2.8 million in contracts for the "safekeeping of nuclear weapons," the construction of a missile-fuel storage complex, and the transportation of nuclear warheads out of Ukraine. Under the Nunn-Lugar program, the U.S. has allocated \$185 million for Ukrainian nuclear disarmament, \$50 million of which is for dismantling 46 SS-24s that were constructed in Ukraine. Ukraine has not made a final decision on the fate of these missiles, however, since they are not required to be destroyed under START I. The U.S. has already delivered \$4 million in hardware and equipment for missile dismantlement, and U.S. firms have been contracted to deliver additional hardware and equipment worth over \$100 million.

Serhiy Zhurets, *Narodna Armiya* (Kiev), 3/10/95, p. 1; in JPRS-UMA-95-016, 3/10/95 (12700).

3/1/95

In accordance with START I provisions, three U.S. On-Site Inspection Agency teams arrive in Russia to begin a series of 71 inspections at nuclear sites in Russia, Belarus, Ukraine, and Kazakhstan. A team of Russian, Belarusian, Kazakhstani, and Ukrainian inspectors also begins its inspection of 36 sites in the U.S.

Arms Control Today, 4/95, p. 22 (12746). *Washington Times*, 3/4/95, p. A9 (12746).

4/95

A government-to-government communication link (GGCL) via satellite between Kiev and Washington, D.C. has been set up using \$2.4 million in Nunn-Lugar funding. The GGCL will be used to "exchange notification information required by the START and Intermediate-Range Nuclear Forces treaties" and other developments related to nuclear weapons dismantlement and inspections.

Asian Defence Journal, 4/95, p. 91 (13098).

4/1/95

U.S. Secretary of Defense William Perry signs an agreement providing Ukraine approximately \$20 million in disarmament assistance, bringing total U.S. disarmament assistance to Ukraine to \$205 million. On 3/31/95, Perry says Ukraine had removed all of the warheads from its 46 SS-24 missiles, and half of the warheads from its 130 SS-19 missiles, which puts Ukraine well ahead of schedule for nuclear weapons dismantlement. Perry says that, in his opinion, Ukraine would be a non-nuclear weapon state by mid-1996.

James Rupert, *Washington Post*, 4/2/95; in Executive News Service, 4/2/95 (12650). Charles Aldinger, Reuter (Kiev), 3/31/95; in Executive News Service, 3/31/95 (12650). Bill Gertz, *Washington Times*, 4/1/95, p. A2(12650). Voice of Russia World Service (Moscow), 4/2/95; in FBIS-SOV-95-063, 4/2/95 (12635).

4/24/95

According to Russian Deputy Defense Minister Yevgeniy Maslin, Nunn-Lugar funds have aided in the removal of 600 nuclear warheads from Ukraine, 80 percent of which have been destroyed.

Post-Soviet Nuclear & Defense Monitor, 5/16/95, p. 3 (13026).

5/95

During a two-day visit to Ukraine, U.S. President Bill Clinton says that the U.S. will offer Ukraine an assistance package of \$350 million to facilitate the dismantling of its nuclear weapons, including \$27 million in Nunn-Lugar funding.

Ju Mengjun, *Renmin Ribao* (Beijing), 5/23/95, p. 6; in FBIS-CHI-95-101, 5/23/95 (12698). Nikolai Zherebtsov, Andrei Petrovskiy, and Vladimir Shishlin, Interfax (Moscow), 5/12/95; in FBIS-SOV-95-093, 5/12/95 (12905).

5/16/95

The U.S. recently committed an additional \$26 million in Nunn-Lugar funding to the International Science and Technology Center (ISTC) in Russia (including the branch offices in Minsk, Belarus and Almaty, Kazakhstan) and the Science and Technology Center in Ukraine.

Post-Soviet Nuclear & Defense Monitor, 5/16/95, p. 14 (12942).

5/26/95

Deputy Foreign Minister of Ukraine Kostyantyn Hryshchenko says that U.S. assistance to Ukraine for defense conversion and the destruction of nuclear missiles totals approximately \$300-350 million. Hryshchenko says that equipment and technology deliveries for nuclear disarmament are generally proceeding as planned, and that it is hoped that other Western nations will provide additional aid in recognition of Ukraine's NPT accession. Hryshchenko says that Ukrainian military observers are stationed at Russian dismantling facilities and are able to ensure that fissile material obtained during dismantling in converted into low-enriched uranium, some of which is sold to the U.S.

Tetyana Silina, *Kievskiy Vedomosti* (Kiev), 5/26/95, p. 4; in FBIS-SOV-95-104, 5/26/95 (12804).

UZBEKISTAN

UZBEKISTAN WITH UNITED STATES

3/13/95

It is reported that Kazakhstan and Uzbekistan have protested the U.S. Department of Commerce (DOC) requirement that, as part of the uranium suspension agreement, Kazakhstan and Uzbekistan must report the countries to which they have exported uranium. The DOC has stated that it wants information on the consumers of the uranium, rather than on "intermediate processing." Kazakhstan's legal representative, the firm Shearman & Sterling, stated in a letter to DOC that, under the terms of the suspension agreement, Kazakhstan is not obligated to identify those who purchase uranium after it has been enriched. The letter explains that it is unreasonable for DOC to expect Kazakhstan to report the consumers of its uranium two years after the agreement was implemented, especially since previous reports that omitted final users elicited no such criticism from DOC.

Michael Knapik, *NuclearFuel*, 3/13/95, pp. 1-2, 18 (12651).