

Ukraine: Missile Production/Dismantlement Facilities

DESIGN FACILITIES

KHARTRON SCIENTIFIC AND PRODUCTION ASSOCIATION

LOCATION: Kharkiv

ACTIVITIES:

In the past, Khartron was involved in developing guidance systems for Soviet ICBMs. Professor Yakiv Ayzenberg, Director of Research and Development, says that the conceptual framework of the strategic weapon control system employed by the Russians is similar to the concepts his Kharkiv-based institute developed. He believes that an R&D facility similar to Khartron could develop codes that would block Moscow-initiated commands, should the President of Ukraine disagree with any action taken independently by Russia.[1,2,3]

Khartron, a former manufacturer of RS-20 [SS-18 'Satan'] and RS-18 [SS-19 'Stiletto'] ICBMs, has converted 95 percent of its production facilities to non-military purposes.[4] In 1994, together with the US company [Westinghouse](#), Khartron created the [Westron](#) joint venture specializing in the production of control systems for Ukrainian NPPs. Westron is the first joint venture set up with the use of [Nunn-Lugar](#) funds.[5] Khartron is also supplying pressurized units for an international space station.[4]

Sources:

[1] Kiyevskiy vedomosti, 15 January 1993, p. 8.

[2] Virginia Foran, "Ukraine's Creeping Nuclear Possession," NNN Bulletin, 30 May 1993.

[3] William C. Potter, "Ukraine's Nuclear Trigger," *The New York Times*, 10 November 1992.

[4] "Kharkovskoye PO 'Khartron' pochti polnostyu pereshlo na proizvodstvo nevoyennoy produktsii," UNIAN, 29 March-4 April 1999.

[5] Interfax, "Ukraine Business Panorama," 27 September-4 October 1999; in "Ukraine Business Panorama," FBIS Document FTS19991004001661. {Entered 9/27/99 SK; modified 10/14/99 CC}

KHARTRON DEVELOPMENTS:

12/18/95: ADMINISTRATION OF KHARTRON PLANT WILL PAY STRIKERS

Approximately 200 workers at the Khartron plant took part in a hunger strike, demanding back-wages. It was reported that as a result the factory administration began to pay the workers.

["Robitnyky Pozpochaly Goloduvannya A Dyrektor Raptovo Zakhvoriv," *Holos Ukrainy*, 18 December 1995, p. 4.]

KHARKIV SCIENTIFIC CENTER (ALSO KNOWN AS MONOLIT)

LOCATION: Kharkiv

ACTIVITIES:

Kharkiv Scientific Center may have been engaged in work on developing enabling codes for nuclear warheads on Ukrainian territory. Reportedly, Monolit was the premier missile control engineering and manufacturing facility in the Soviet Union.

[Wilson Dizard III, "ABB Wins Turbine Pact In Korea Plus Russian, Ukrainian Deals," *Nucleonics Week*, 14 December 1995, p. 4.]

MONOLIT DEVELOPMENTS:

6/27/96: MONOLIT UNDERTAKING CONVERSION PROJECT WITH ABB

In compliance with an agreement reached under the framework of the US Cooperative Threat Reduction Program (CTR) between the Ukrainian Ministry of the Military-Industrial Complex, the Ukrainian Ministry of Machine Building, other Ukrainian parties, and the US Department of Defense (DoD), the United States will allocate \$4.8 million for the creation of a joint venture with the Kharkiv plant Monolit and the US firm ABB-Combustion Engineering. The equipment at Monolit will be converted to produce consumer electronic and power engineering equipment, will supply the US-Russian space station program, and will also produce digital equipment for civilian nuclear power reactors. ABB will invest \$20 million in technology and licenses. According to DoD officials, the US Department of Energy has announced the payment of three contracts to assist Ukraine in converting former military manufacturing plants into commercial joint ventures. In addition to the Kharkiv plant, ABB will also invest an unspecified amount of money in joint Ukrainian-US ventures in Kiev and Smila (Cherkaska Region).

Sources:

[1] "The Realization of Three Conversion Projects," *Narodna Armiya*, 27 June 1996, p. 1, in FBIS Document UMA-96-150-S, 27 June 1996.

[2] Wilson Dizard III, "ABB Wins Turbine Pact In Korea Plus Russian, Ukrainian Deals," *Nucleonics Week*, 14 December 1995, p. 4.

PIVDENNE (YUZHNOYE) DESIGN BUREAU

LOCATION: Dnipropetrovsk

ADMINISTRATION:

Deputy Director General: S. N. Konyukhov

ACTIVITIES:

Pivdenne Design Bureau designed missiles and missile components, which were constructed and tested in cooperation with Pivdenmash (Yuzhmash).[1] The design bureau is involved in the Sea Launch program.[2] (For more information on the Sea Launch program, please see the [Missile/Silo Dismantlement section](#) as well as the [General Developments](#).)

Sources:

[1] Barbara Starr, "Ballistic Missile Destruction Begins In Ukraine," *Jane's Defence Weekly*, 7 August 1996, p. 8.

[2] "Prisoyedineniye Ukrainy k RKRT dalo vozmozhnost uchastiya v mezhdunarodnom projekte 'Morskoy start' - V. Gorbulin," UNIAN, No. 42, 18-24 October 1999. {Updated 7/25/2000 MJ}

PRODUCTION AND DISMANTLEMENT FACILITIES

PIVDENMASH (YUZHMAH) PRODUCTION ASSOCIATION

LOCATION: Dnipropetrovsk

ADMINISTRATION:

Director-General: Yuriy Alekseyev

ACTIVITIES:

The sole SS-18 missile production facility in the former Soviet Union. SS-18s were deployed in Kazakhstan and Russia. Of the Soviet Union's 20 ICBMs, Pivdenmash developed 12. It also developed the guidance system for the US- Russian Alpha space station, the Zenith rocket, and the Cyclone rocket. According to the START I Memorandum of Understanding, there were eight non-deployed SS-19s at this facility as of December 1994. [1,2]

A dismantlement facility has been opened on the site of Pivdenmash, the largest missile factory in Ukraine. The plant dismantled all of Ukraine's SS-19 ICBMs, including the rocket motors and fuel tanks, at the rate of four per month beginning in 10/95, with the final SS-19 missiles being eliminated in February 1999.[3] Yuzhmash has been involved in the Sea Launch program since 1996.[4] (For more information on the Sea Launch program please see the [Missile/Silo Dismantlement section](#) as well as the [General Developments](#) on this page.)

Sources:

[1] Richard Kaufman, John Hardt, eds., *The Former Soviet Union In Transition*, (New York: M.E. Sharpe, 1993).

[2] Ustina Markus "Ukraine's Aerospace Industry," *Jane's Intelligence Review*, February 1996, pp. 52-53.

[3] M2 Presswire, 3 August 1999; in "United States and Ukraine extend Nunn-Lugar Cooperative Threat Reduction agreement," Lexis-Nexis Academic Universe, <http://web.lexis-nexis.com/universe>.

[4] "Prisoyedineniye Ukrainy k RKRT dalo vozmozhnost uchastiya v mezhdunarodnom projekte 'Morskoy start' - V. Gorbulin," UNIAN, No. 42, 18-24 October 1999. {Updated 7/25/2000 MJ}

PIVDENMASH DEVELOPMENTS:

7/26/96: ICBM DISMANTLEMENT FACILITY OPENED

An ICBM neutralization facility was opened on 7/26/96 at the site of the Pivdenne (Yuzhnoye) Design Bureau and Pivdenmash Production Association for dismantling and eliminating 130 SS-19 strategic missiles. The US government contributed a significant amount of assistance. It is expected that the facility will eliminate at least four missiles every month.

Sources:

[1] ITAR-TASS, 25 July 1996; in "Kiev Unveils New Center for Dismantling Strategic Missiles," FBIS-SOV-96-145.

[2] Barbara Starr, "Ballistic Missile Destruction Begins In Ukraine," *Jane's Defence Weekly*, 7 August 1996, p. 8. {Entered 10/9/96 GN}

5/5/96: UKRAINIAN RADA RATIFIED AGREEMENT ON USING SPACE LAUNCH VEHICLES

The Ukrainian Verkhovna Rada ratified an agreement signed by Ukraine and the United States on 11/22/94 which dealt with research into and use of space launch vehicles. The agreement calls for 20 commercial launches through 2002.

Sources:

[1] "Zakon Ukrainy," *Holos Ukrainy*, 8 May 1996, p. 3.

[2] "Ukraine Ratifies Agreement With United States On Cooperation In Space," *The Monitor*, 6 May 1996.

2/96: PIVDENMASH PARTICIPATING IN JOINT VENTURE

Pivdenmash is part of a joint venture financed in part by Boeing (20%), Norway's Kvaerner (20%) and Russia's Energiya Concern (25%) They are developing the Sea Launch sea-based space launch complex.

[Ustina Markus "Ukraine's Aerospace Industry," *Jane's Intelligence Review*, 2/1996, pp. 52-53.]

12/2/95: PIVDENMASH IS PRODUCING TROLLEYBUSES AND STREETCARS.

["Viyna I Myr Pivdenmashu," HOLOS UKRAINY, 12/2/95, p. 1.]

2/94: PIVDENMASH CONVERTS TO PERFUME MACHINES

According to a TACIS Report, Pivdenmash is now making machines to dry rose petals for perfume.

[G. Niehus, D. Larsimont, and H. Slotboom; "Activities In Ukraine," Report from the TACIS Information Office, 2/94, p. 25.]

PAVLOHRAD MECHANICAL PLANT

LOCATION: Pavlohrad

ADMINISTRATION:

General Director: Vitaliy Mikhailovich Shkurenko

ACTIVITIES:

Pavlohrad Mechanical Plant was the sole RS-22 [NATO designation SS-24 'Scalpel'] assembly plant in the former Soviet Union. According to the START I Memorandum of Understanding (MoU), as of December 1994 one SS-25, five SS-24 (silo-based), and eight SS-24 (rail-based) non-deployed missiles were located at this facility.[1] As of 1 July 1998, the MoU only listed one non-deployed SS-24 (rail-based) at the facility.[2]

Sources:

[1] Richard Kaufman, John Hardt, eds., *The Former Soviet Union In Transition*, (New York: M.E. Sharpe, 1993).

[2] START Treaty Memorandum of Understanding Data for Ukraine, US Department of State web site, <http://www.state.gov/www/.../ukmoutoc.html>

PAVLOHRAD CHEMICAL PLANT

LOCATION: Pavlohrad

ADMINISTRATION:

General Director: Leonid Shiman

[Sergey Zgurets, "Strategicheskoye raket SS-24 dolzhny byli vzorvat Ameriku. No budut vzryvat rudu," UNIAN, No. 46, 15-21 November 1999.] {Entered 12/17/99 SK}

Technical Director: Yevhen Ustymenko

[Dinaw News Agency, 1 July 2000; in "Ukraine to Use US Technology for Recycling Nuclear Missiles," FBIS Document CEP20000701000108.] {Entered 5/17/01 RG}

ACTIVITIES:

The plant was responsible for the production of all three stages of the RS-22 [NATO designation SS-24 'Scalpel'] ICBM. It was selected as the site for extracting solid rocket fuel from RS-22 missiles and converting it to industrial explosives. This project is being funded by the [Cooperative Threat Reduction](#) program. The plant has an on-site storage facility where disassembled ICBM stages are stored pending fuel extraction and dismantlement.[1] Fuel extraction and conversion is scheduled to begin in 2002.[2] (Please see also the [Ukraine: Nuclear Weapons: Missile Silo Dismantlement](#) section.)

Sources:

[1] Sergey Zgurets, "Raketnyye voyny mestnogo masshtaba," *Den* online edition, <http://www.day.kiev.ua/>, 9 December 1999.

[2] Dinaw News Agency, 1 July 2000; in "Ukraine to use US Technology for Recycling Nuclear Missiles," FBIS Document CEP20000701000108. {Entered 12/17/99 SK} {Updated 7/24/00 MJ}

PAVLOHRAD CHEMICAL PLANT DEVELOPMENTS:

3/6/2001: CITY COUNCIL ORDERS HALT TO OPERATIONS AT PAVLOHRAD MISSILE DISMANTLEMENT PLANTS

The Pavlohrad [Mechanical](#) and Chemical Plants have halted RT-23UTTKh [NATO designation SS-24 'Scalpel'] missile elimination activities. The Pavlohrad City Council ordered the operations halted on 6 March 2001, citing a lack of environmental safety guarantees from the plants. The City Council also sent a recommendation to the Cabinet of Ministers to declare Pavlohrad an environmental emergency zone and conduct an official evaluation of the situation. Beginning in December 2000, various local organizations announced intentions to organize a referendum prohibiting project implementation.[1] Local branches of the Green Party and Rukh are against the dismantlement project and claim that it will be harmful to the environment. Citing a lack of funds, however, the city turned the issue over to the local council without a referendum. Pavlohrad Chemical Plant Technical Director Yevhen Ustymenko stated that there have been no negative environmental effects related to the plant's operation, and that the shutdown will have detrimental effects on the local economy. US and Ukrainian health, military, and environmental experts are expected to provide assessments to guarantee that the project is environmentally safe.[2]

Sources:

[1] "Sessiya gorsoveta Pavlograda reshila priostanovit realizatsiyu programmy likvidatsii strategicheskikh raket SS-24 v gorode," UNIAN, No. 10, 6 March 2001.

[2] Television UT2, 17 March 2001; in "Ukraine: Recycling of missiles halted under pressure from centrist parties," FBIS Document CEP20010318000048. {Entered 4/23/01 RG}

10/4/2000: UKRAINE TO RECEIVE US FUNDS FOR PILOT FUEL CONVERSION

On 4 October 2000, Interfax reported that the US Congress had approved \$24 million for construction of a pilot solid rocket fuel conversion plant at the Pavlohrad Chemical Plant. For more information see the [10/4/2000](#) entry in the [Ukraine Missile/Silo Dismantlement Section](#).

{Entered 11/29/2000 RG}

7/1/2000: PAVLOHRAD TO COMMENCE SS-24 ELIMINATION IN 2002

For more information see the [7/1/2000](#) entry in the [Ukraine Missile/Silo Dismantlement Section](#).

11/95: PAVLOHRAD PLANT WILL USE CTR FUNDS

CTR Strategic Nuclear Arms Elimination funds (\$1 million) will be used to help the Pavlohrad Plant as it studies technologies to dismantle SS-24 missile motors and recover valuable materials to recycle for peaceful uses. The Global Environmental Solutions Company in Utah will also work on this project.

["Environmental Work," *Jane's Defense Contracts*, 11/95, p. 11-12.]

GENERAL MISSILE FACILITY DEVELOPMENTS

(Please see also the [Ukraine: Nuclear Weapons: Missile Silo Dismantlement](#) section.)

3/13/97: UKRAINE AND RUSSIA PLAN TO USE DECOMMISSIONED SS-18s IN SPACE LAUNCHES

For more information, see the [3/13/97](#) item under [Missile/Silo Dismantlement](#).

5/21/96: UNITED STATES CONCERNED ABOUT RUSSIA AND UKRAINE SELLING TECHNOLOGY TO CHINA

The United States recently warned Ukraine and Russia against selling strategic missile technology to China after information surfaced that China was attempting to obtain SS-18 missiles or components from those two countries. Ukraine and China signed an agreement on the peaceful exploration of space in 12/95 and in early 5/96 signed a contract to sell the \$1 million research station IMITATOR to China.

Sources:

[1] Steven Erlanger, "United States Warns Three Nations On Missile Technology Sale," *New York Times*, 22 May 1996, p. A9.

[2] IRNA, 20 May 1996; in "Iran: Tehran, Kyiv Explore Areas Of Technical Cooperation," FBIS-NES-96-101, 20 May 1996.

[3] UNIAN, 6 June 1996; in "Ukraine: PRC To Buy Ukrainian-Made Equipment For Space Exploration," FBIS-SOV-96-089, 6 June 1996.

5/20/96: MINISTRY OF INDUSTRY CALLS FOR COOPERATION WITH IRAN AND CHINA

Deputy Prime Minister for Industry Anatoliy Kinakh called for increased cooperation with Iran in the fields of space activity and rocket manufacturing. Ukraine and China signed an agreement on the peaceful exploration of space in 12/95 and in early 5/96 signed a contract to sell the \$1 million research station IMITATOR to China.

Sources:

[1] TEHRAN IRNA, 20 May 1996, in "Iran: Tehran, Kyiv Explore Areas Of Technical Cooperation," FBIS-NES-96-101, 20 May 1996.

[2] UNIAN, 6 June 1996, in "Ukraine: PRC To Buy Ukrainian-Made Equipment For Space Exploration," FBIS-SOV-96-089, 6 June 1996.]

1/96: UKRAINE HAS POTENTIAL TO BUILD NUCLEAR WEAPON

According to a recent study, Ukraine has the technical, engineering, and scientific personnel needed to design and build a nuclear weapon. In addition, it has the available, secret and international information about physical principles of first and possibly second-generation nuclear weapons.

[Valentin Zakharov, Andrey Sviridov, and Ildar Akchurin, "Sostoyanie Oruzheynogo Kompleksa V Stranakh Blizhnego Zarubezhya," *Yadernyy kontrol*, January 1996, p. 15-23.]