Russian Federation

Date of first nuclear explosion- 29 August 1953

1. Amount, Location and Operational Plan of Nuclear Weapons

Strategic weapons

Missile	Name	Yield (kilotons)	Number (warheads)
SS-18	Satan	550-750	1,000
SS-19	Stiletto	550	150
SS-24 M1	Scalpel	550	300
SS-25	Sickle	550	40
Total			**2,270**

Tactical weapons

Missile	Name	Yield (kilotons)	Number (warheads)
SS-N-18 M1	Stingray	200	288
SS-N-23	Skiff	100	384
Total			**672**

Bombers

Missile	Name	Launchers	Number (warheads)
Tu-95 MS6	Bear H6	32	192
Tu-95 MS16	Bear H16	32	512
Tu-160	Blackjack	14	168
Total		**78**	**872**

Total	**3,814**

Deployment Storage Sites
Missile sites (19)
Aleysk, Dombraovskiy, Kartaly, Ushar, Kozelsk, Tatischevo, Bershet, Kostroma, Krasnoyarsk, Drovyanaya, Irkustsk, Kansk, Nizhniy, Tagil, Novosibirks, Teykobo, Vypolzovo, Yoshkar-Ola, Yurya

SSBN sites
Gadzhiyevo, Rybachi, Severodvinsk

The Role of Nuclear Weapons in National Security Strategy
On 10 January 2000, Acting President Vladimir Putin signed the new National Security Concept (NSC) of the Russian Federation, an updated version of the NSC signed by President Boris Yeltsin in 1997. The broad guidelines outlined in the NSC are developed in further detail in the Military Doctrine, approved in May, 2000.

The key articles of the NSC pertaining to nuclear weapons are the following:

1) "The most important task of the Russian Federation is to implement deterrence in the interests of preventing aggression on any scale, including with the use of nuclear weapons, against Russia and its allies."
2) "The Russian Federation should possess nuclear weapons capable of guaranteed infliction of a predetermined damage to any aggressor state or coalition of states under any circumstances."
3) It also upholds the right to "the use of all forces and means at its disposal, including nuclear weapons, in case it needs to repel an armed aggression, if all other measures of resolving the crisis sit-

uation have been exhausted or proved ineffective."

This implies a provision of use of nuclear weapons to deter smaller-scale wars that do not necessarily threaten Russia's existence and sovereignty- a revision from the previous concept outlined in 1997. The new mission also implies a limited use of nuclear weapons in contrast to an all-out nuclear strike in response to a massive attack.
http://www.nti.org/db/nisprofs/over/concept.htm

The cornerstone of current Russian nuclear policy focuses on defending the country from a nuclear attack by NATO. On March 25, 2004, Defense Minister Sergei Ivanov announced that Russia is considering revising its nuclear policy in light of NATO expansion and its "current offensive military doctrine". http://www.interfax.ru/e/B/0/28.html?id_issue=9683208

2. Activities Specifically Undertaken in Accordance with Article VI of NPT

The 2000 NSC confirms Russia's intention to implement arms control agreements, in particular noting its intent to "adapt the existing arms control and disarmament agreements to the new conditions in international relations, as well as develop, as necessary, new agreements, first of all with respect to confidence and security building measures." http://www.nti.org/db/nisprofs/over/concept.htm

Nuclear Weapons Reductions
Under the Moscow Treaty, Russia withdrew approximately 60 ballistic missiles from operational service. Russia also plans to withdraw most of the multiple-warhead SS-18 and -19 missiles, decreasing the total number of ICBMs by nearly 70% over the next five years.

Program Truncations
By 2008, all SS-18 missiles will be withdrawn from service. Remaining heavy missiles, the SS-18/RS-20V, will remain in service for 10-15 years. http://www.russianforces.org/eng/news

Russia will reduce the types of active ICBMs from five to two.
Norris, Robert S. and Hans M. Kristensen, "Russian nuclear forces, 2005," NRDC: Nuclear Notebook. http://www.thebulletin.org/article_nn.php?art?ofn=ma05norris

Nuclear Systems Retired
In 2005, Russia's Strategic Rocket Forces will have completed retiring allSS-24 rail-mobile missiles. http://www.russianforces.org/eng/news

With an increase of SS-27 Topol Ms in the arsenal, the SS-25 will be completely retired, perhaps by 2009.

The Typhoon-class SSBN was decommissioned at the end of April, 2004, retiring the 10-warhead capable SS-N-20 SLBM.
Norris, Robert S. and Hans M. Kristensen, "Russian nuclear forces, 2005," NRDC: Nuclear Notebook. http://www.thebulletin.org/article_nn.php?art?ofn=ma05norris

3. Location and Capability of Nuclear Facilities

Power Reactors
Operational: 30
Shut down: 4
Decommissioned: 0
Under construction: 4
Planned: 0

Research Reactors
Operational: 57
Shut down: 28
Decommissioned: 11
Under construction: 1
Planned: 0

http://www.iaea.or.at/programmes/a2/ http://www.iaea.or.at/worldatom/rrdb/

Nuclear weapons facilities

Name	Location	Purpose
All Russian Scientific Research Institute for Experimental Physics (VNIIEF)	Sarov	nuclear warhead research and development
All Russian Scientific Research Institute for Technical Physics (VNIITF)	Snezhinsk	nuclear warhead research and development
All Russian Research Institute of Automatics (VNIIA)	Nizhniy Novgorod	nuclear warhead research
Research Institute of Pulse Technology (NIIPT)	Moscow	nuclear warhead research
Design Bureau of Automotive Transport Equipment	Moscow Oblast	nuclear warhead research
Fourth Central Scientific Research Institute of the Strategic Rocket Forces	Moscow	delivery vehicle research and development
Russian Academy of Sciences Institute of Mathematical Modeling	Moscow	computer modeling of nuclear explosions and R&D
Mayak Production Association	Ozersk	weapons-grade fissile material, including tritium, production
Mining and Chemical Combine	Zheleznogorsk	weapons-grade fissile material production
Siberian Chemical Combine	Seversk	weapons-grade fissile material production
Electrochemical Plant	Zelenogorsk	weapons-grade HEU production
Urals Electrochemical Combine	Novouralsk	weapons-grade HEU production
Novosibirsk Chemical Concentrates Plant	Novosibirsk	Fissile material from dismantled warheads storage site
Mayak Fissile Material Storage Facility	Seversk	storage and disposition for HEU and plutonium from dismantled warheads
Avangard Electromechanical Plant	Sarov	warhead assembly
Elektrokhimpribor Combine	Lesnoy	warhead assembly
Instrument-Making Plant	Trekhgornyy	warhead assembly
Start Production Association	Zarechnyy	warhead assembly
Molniya Production Association	Moscow	production of warhead casings and support equipment

Russia also plans to build a new MOX fabrication plant at Seversk, Siberia.
http://www.isis-online.org/global_stocks/separated_civil_pu.html

Uranium Mines

Location	Purpose	Status
Streltsovskoye	mine	operating
Tulukuevskoye	mine	closed
Krasny Kamen	mine	closed
Sanarskoye	mine	closed
Beshtau	mine	closed
Sharadyk	mine	closed
Stepnoe	mine	closed
Bykogorskoye	mine	closed
Krasnokamensk	waste rock deposit	operating
Zauralsky	waste rock deposit	decommissioned
Lermontovsky	waste rock deposit	reclamation underway
Krasnokamensk	mill tailings deposit	operating
Malyshevsk	mill tailings deposit	closed
Lermontovsky	mill tailings deposit	reclamation ongoing
Dolmatovskoye	in situ leach facilities	under construction
Beshtau	in situ leach facilities	closed
Bykogorskoye	in situ leach facilities	closed

Russia may construct new large uranium-mining enterprises in South Yakutia, with production begun by 2015. If exploited, the deposits in these areas will double uranium production from the current 2200-2500 tons to 4000-4500 tons by 2010.
http://www.antenna.nl/wise/

On January 10, 2005, nuclear power minister Alexander Rumyantsev announced that a program on uranium mines development in Kazakhstan, Uzbekistan and Ukraine should be drafted for many years ahead. http://www.bellona.no/en/international/russia/nuke_industry/co-operation/36889.html

4. Fissile Material Holdings

Military Stocks of Fissile Materials
Plutonium- 70-120 tons
Excess plutonium- 50 tons
HEU- 473-1073 tons
http://www.isis-online.org/global_stocks/bulletin_albright_kramer.pdf

Declared Excess
Plutonium- 50 tons (including 34 tons under Trilateral Agreement- *see Nuclear Weapon States' Compliance chapter, p.7*)
HEU- 300 tons

Unirradiated Civil Plutonium
In country- 37.2 tons
In other countries- 0.6 tons
Total- 37.8 tons

Separated Civil Plutonium (in and out of country)- no firm plans for civil MOX
50 tons (projected through 2020)
http://www.isis-online.org/global_stocks/separated_civil_pu.html

Cumulative Plutonium Discharges from Civilian Power Reactors: 100 tons (end 2002)
http://www.isis-online.org/global_stocks/civil_pu.html#table7

Radioactive Waste Management
Low-level waste: Some LLW are condensed by evaporation and recyled; other waste is solidified and buried in concrete burial units or trenches. Untreated LLW are injected underground into porous rocks surrounded by clay.

High-level waste: Spent nuclear fuel is stored on-site, vitrified or converted into solid form.

Reprocessing takes place at Chelyabinsk-65, with a second facility scheduled for start up at Krasnoyarsk this year.

Russia is currently investigating several regions as potential sites for deep geologic disposal plans.
http://www.ocrwm.doe.gov/factsheets/pdf/doeymp0414.pdf

5. Nuclear Activities

Nuclear Research Centers
Budker Institute of Nuclear Physics
Center for Arms Control, Energy & Environmental Studies
Dubna Joint Inst for Nuclear Research
Federal Nuclear Center Snezhinsk - Chelyabinsk 70
Flerov Laboratory of Nuclear Reactions
IBRAE - Nuclear Safety Inst
INR - Inst for Nuclear Research
IPPE - Inst for Physics & Power Engineering
IPPE Fission, Fusion & Laser Studies Dept.
Khlopin Radium Inst
Kurchatov Inst
Moscow Power Engineering Inst
Research Inst of Atomic Reactors
Russian Academy of Sciences
SIA Radon
St Petersburg Nuclear Physics Inst
Troitsk Institute for Innovation & Fusion Research
VNIIEF - Sarov Inst of Experimental Physics
VNIIT - Inst of Technical Physics
VNIITF
http://www.radwaste.org/research.htm

Nuclear Cooperation
India: Agreement to construct two reactor units at Kundakulam with an option to construct four more.

China: Supply of experimental fast breeder reactor based on Russia's BN-699; completion of enrichment facility.

Syria: Agreement to construct research reactor

Libya: Contract to modrenize Tajurah research reactor
Statement by Igor Khripunov, Associate Director, Center for International Trade and Security, University of Georgia at the Russian American Nuclear Security Advisory Council Congressional Strategic Stability and Security Seminar Series, July 19, 2002, available at:
http://www.ransac.org/Issues/Russian%20International%20Nuclear%20Cooperation/Other/seminar4_writeup2.html

Iran: Agreement to supply fuel for the Bushehr plant, signed February 27, 2005.

Indonesia: On August 16, 2003, cooperation agreement including: development, design, construction and operation of research reactors and nuclear power plants including small power plants that comprise the floating nuclear power units, and R&D; facilities and accelerators for irradiation in medicine and industry; administrative and scientific personnel training and retraining; the state regulation of nuclear and radiation safety. The agreement is to be concluded for 10 years with automatic extension for the next five-year period. http://www.bellona.no/en/international/russia/nuke_industry/co-operation/31260.html

Romania: In March, 2003, Russian Prime Minister Mikhail Kasyanov announced that Russia will provide a loan to Romania for the construction of two nuclear reactors.

http://www.bellona.no/en/international/russia/nuke_industry/co-operation/channel15203n25s0_.html

Bulgaria: Plans to construct a unit at the Belina nuclear power plant.
http://www.bellona.no/en/international/russia/nuke_industry/co-operation/36913.html

6. International Non-proliferation Efforts

In the 2000 National Security Concept, proliferation is included as a separate plank in the list of threats to national security, demonstrating Russia's priority with non-proliferation and arms control. The concept also lists among priorities "measures to ensure international control over the export of military and dual-use products, technologies, and services." http://www.nti.org/db/nisprofs/over/concept.htm

Russia is also a participant in the G8 Global Partnership against the spread of weapons and materials of mass destruction, launched in Kananaskis, Canada 2002.

Treaties Signed and Ratified
Agreement Between the United States of America and the Union of Soviet Socialist
Republics on Notification of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles, 31 May 1988
Antarctic Treaty, 2 November 1960
Certain Conventional Weapons Convention, 10 June 1982
Comprehensive Nuclear Test Ban Treaty, 30 June 2000
Nuclear Non-Proliferation Treaty, 5 March 1970
Outer Space Treaty, 10 October 1967
Partial Test Ban Treaty, 10 October 1963
Sea Bed Treaty, 18 May 1972
Strategic Offensive Reductions Treaty, 6 March 2003
Treaty of Pelindaba Protocol, not yet deposited
Treaty of Rarotonga Protocol, 21 April 1988
Treaty of Tlatelolco Protocol, 8 January 1979

Russia signed the IAEA Additional Protocol on 22 March 2000 but it has not yet entered-into-force.

Multilateral Groups
Conference on Disarmament
Hague Code of Conduct
Missile Technology Control Regime
Nuclear Suppliers Group
Proliferation Security Initiative
Wassenaar Arrangement
Zangger Committee

7. Positions Taken in International Fora on Various Issues of Nuclear Disarmament

Universality: "Despite all the difficulties and growing skepticism, we hould not slacken our efforts toward making the NPT truly universal. We must engage in a joint search for ways and means of bringing the states remaining outside of the Treaty scope in the nuclear non-proliferation regime. I am referring, in particular, to expanding the IAEA verification activity in those states' territoriees, strengthening national legislations in the field of accounting, verification and physical protection of the nuclear materials, as well as export control measures. We expect the governments of those states to realize the great responsibility they bear for the nuclear non-proliferation regime." - **Statement by**

H.E. Anatoly Antonov to the Third Preparatory Committee of the 2005 Review Conference of the NPT, New York, 28 April 2004, available at: http://www.reachingcriticalwill.org/legal/npt/prepcom04/russia27.pdf

General and complete disarmament: "In our view, general and complete nuclear disarmament is a goal to which we should move in a phased manner, on the basis of a comprehensive approach and without putting forward unrealisitic goals or targets. Nuclear disarmament, including non-strategic nuclear arms reductions, may not be pursued in isolation from other types of weapons or outside of the overall political situation in the world...I believe that the relevant provision of the Final Document of the previous Review Conference is worth mentioning, namely, that nuclear disarmament steps should be pursued 'in a way that promotes international stability and based on the principle of undiminished security for all.'"- **Statement by H.E. Anatoly Antonov to the Third Preparatory Committee of the 2005 Review Conference of the NPT, New York, 28 April 2004, available at:** http://www.reachingcriticalwill.org/legal/npt/prepcom04/russia27.pdf

Nuclear Disarmament: "The central role in strengthening the regime of nuclear non-proliferation is played by the NPT. Russia strictly and consistently implements its obligations and initiatives in nuclear disarmament, particularly within the framework of Article VI of the Treaty. Our practical deeds are there to prove it... We believe that a step-by-step advance toward comprehensive and total nuclear disarmament based on a comprehensive approach is needed with no unreal benchmarks and objectives to be proposed. Nuclear disarmament cannot be conducted outside the context of the situation with other kinds of weapons and without taking into account political developments in the world and particularly in Europe including evolution and enlargement of military-political alliances." **- Statement by Ambassador Leonid A. Skotnikov to the 59th session of the General Assembly First Committee, 5 October 2004**.
http://www.reachingcriticalwill.org/political/1com/1com04/statements/Russia.pdf