



**AMERICAN ACCESS TO
RUSSIAN NUCLEAR WEAPONS STORAGE SITES**

By

Harold P. Smith, Jr.

August 2003

Approved for public release

This work was conducted under contract DTRA01-01C-0036 for the Advanced Systems and Concepts Office of the Defense Threat Reduction Agency. The publication of this document does not indicate endorsement by the Department of Defense, nor should the contents be construed as reflecting the official position of that Agency.

This material may be reproduced by or for the U.S. Government pursuant to the copyright license under the clause at DFARS 252.227-7013 (NOV 95).

PREFACE

Dr. Harold P. Smith, Jr. is Distinguished Visiting Scholar and Professor, Goldman School of Public Policy (GSPP), University of California at Berkeley.

This document was prepared in partial fulfillment of the contract entitled "Study of Russian Nuclear Weapon Storage Sites." The views are those of the author and do not necessarily reflect the policies of either the Department of Defense (DOD) or the University of California at Berkeley (UCB).

ABSTRACT

There are a multitude of reasons why Russia has not allowed American experts to have access to the many sites where non-alert nuclear weapons are stored. Each reason is explored, and it is concluded that access could be granted only by a pronouncement from the highest levels of government, which is exactly what Prime Minister Kasyanov did on 1 April 2002. It is argued that the ascendancy of economic policy and the recognition that the threat of nuclear terrorism applies to Russia, as well as to the United States, overruled all objections.

TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY.....	6
II.	INTRODUCTION.....	8
III.	THE THREAT TO THE UNITED STATES AND ITS ALLIES.....	8
IV.	THE THREAT TO RUSSIA.....	9
V.	WEAPON SECURITY IN RUSSIA TODAY.....	11
VI.	IS COOPERATIVE ACCESS REALLY REQUIRED?.....	14
	a. It's a Russian Problem, Let the Russians Solve It.....	14
	b. Perhaps It Ain't Broke.....	15
VII.	WHO WOULD RESIST AMERICAN ACCESS?.....	16
	a. Intelligence Collection.....	16
	b. Bureaucratic Inertia.....	17
	c. Military Doctrine.....	17
	d. Legal Issues.....	18
	e. Pride.....	19
	f. Economic versus Foreign Policy.....	20
VIII.	THE DECISION.....	22
IX.	THE IDEAL SOLUTION: CONSOLIDATION.....	25
X.	<i>QUO VADIS?</i>	26
XI.	RECOMMENDATIONS.....	27
XII.	ACKNOWLEDGEMENTS.....	28
XIII.	GLOSSARY.....	29
XIV.	APPENDIX: Memorandum by Paul Melling of Baker-McKenzie.....	30

EXECUTIVE SUMMARY

It has long been recognized that Russia's non-alert nuclear warheads represented a dangerous source of devastating power for terrorists bent on wholesale destruction in the western community, especially in the United States. It has been further recognized that it is in the best interests of the United States to assist Russia in securing its nuclear weapons, especially those that are no longer part of the alert force. Little headway has been made, however, because of the multitude of competing forces within the Russian polity. The lone exception has been the construction and operation of the Security Assessment and Training Center (SATC), at Sergiev Posad, near Moscow, where Russian troops are trained and security equipment is tested by American specialists to better secure the warheads that are stored on many tens of sites throughout the Russian hinterland. The conditions at the sites were and are, admittedly, far from ideal, making theft of one or two weapons by terrorists or their agents a dangerously credible scenario. Nonetheless, the Russians had made it clear that under no condition would the American experts have direct access to the sites. Hence, there would be no opportunity to ensure that the equipment and procedures were being correctly implemented, a situation that was not and is not acceptable to the Administration or to Congress. Something had to give.

And give it did on September 11, 2001. Suddenly, many things came into focus. Al-Qaeda, or equivalent, had the resources and the fanatical determination to obtain and detonate a nuclear weapon in a western city. They only lacked the warhead, and Russia had tens of thousands in poorly guarded sites. Furthermore, given the presence of al-Qaeda operatives and soldiers in the Caucasus, a Russian city was almost as likely a target as an American one, and the terrorist operations would be considerably easier. The nuclear threat to Mother Russia was real.

But the competing forces in the Russian government were still in place. Among these were fear of intelligence collection, varied and complicated legal restrictions, lack of action on the Presidential Nuclear Initiatives (PNI), possible military doctrine calling for dispersal and forward deployment of nuclear weapons, resentment that NATO retained its tactical nuclear weapons while the Warsaw Pact removed all of its, strong distrust of US and NATO foreign policy resulting from withdrawal from the ABM treaty and military operations in the Balkans, resentment of American economic policy such as the imposition of tariffs on steel, normal bureaucratic inertia, and not least, offense to national pride by accepting American aid to secure the last remaining symbol of Russia as a superpower, its arsenal of nuclear weapons.

It was recognized early in the research, well before April 2002, that it would be impossible to satisfy all of these concerns with anything approaching near simultaneity. While many could be countered by intensive diplomacy and negotiation, a step-by-step approach simply would not work on a time scale commensurate with the threat. The only way to obtain American access was to convince the Russian leadership to overrule every concern with a single pronouncement. Accordingly, preparations were underway to try to place the topic of access on the agenda for the June summit meeting of the two presidents

when Prime Minister Kasyanov quietly informed the appropriate agencies on 1 April 2002 that some access was to be granted. While hardly comprehensive, it was a good beginning that required understanding and some courage on the part of the prime minister and the president.

The decision was driven by more factors than fear of nuclear terrorism. It is amply clear that Vladimir Putin has decided that Russia must become an economic force commensurate with her resources and her history and that to do so, Russia must turn to the West for investment and markets. Hence, any opportunity to cooperate with the West is welcomed, provided there is no adverse economic impact and provided that the decision does not undermine the ability of the government to maintain order. Granting of access meets all of these conditions. It is an impressive result: with a single stroke, Russia can begin to counter a serious threat, win the approval of the American government, and do so without significant economic or authoritarian impact.

Oddly enough, the next step should not be access to all of the warhead storage sites. What is required is not better security for more sites; rather, it is enhanced security at the most vulnerable sites and the closure of other sites even though this will, in the short term, heighten vulnerability to theft as a result of extensive transport of weapons. Furthermore, access to all sites at once would have been beyond the capability of the Cooperative Threat Reduction (CTR) program and would have led, eventually, to a less secure situation simply because of the large number of storage sites. Extensive access across the countryside is neither necessary nor desirable. The goal is to enhance security by reducing the overall stockpile, protecting the remaining sites according to their vulnerability, and closing the rest.

With two thousand nuclear weapons on alert and without the US as a nuclear adversary, Russia need not fear a massive nuclear attack from any quarter, but until secure consolidation is achieved, Russia should fear theft of a nuclear weapon from as many quarters as there are poorly guarded sites. Accordingly, CTR should assign top priority to closing or enhancing the security of the most vulnerable nuclear weapon storage sites, transporting as many weapons as possible to the least vulnerable sites or to dismantling sites, closing as many others as possible, and finally, seeking access to the remaining sites to enhance security to U.S. standards and to encourage consolidation. It should do so with dispatch.

INTRODUCTION

On April 1, 2002, the prime minister of Russia, Mikhail Kasyanov, stated that American specialists, operating under the Cooperative Threat Reduction Program (Nunn Lugar), would have access to Russian nuclear weapon storage sites in order to assist Russia in improving the security of the weapons stored there. Although unnoticed in the American and Russian press, the decision is one of the major achievements of the Putin-Bush relationship, and if properly implemented, will go far in denying to al-Qaeda or equivalent the weapon of choice in their search for a means to destroy the West; namely, a fully assembled, poorly protected, nuclear weapon. The Kasyanov statement is the culmination of a painstaking negotiation that began early in the Clinton Administration. It has been long in coming and might never have been made had it not been for the specter of nuclear terrorism, the rise of a popular president with the power to overrule a plethora of bureaucracies within the Russian polity, and the development of a Russian foreign policy based primarily on economic considerations.

Well before September 11, it was recognized that the CTR program was enjoying considerable success in assisting Russia to dismantle its arsenal of strategic delivery vehicles, but considerably less success in dismantling or, at least, carefully storing the nuclear warheads that those vehicles were intended to carry. Because it is ultimately the weapon, not the vehicle, that destroys cities, it was only natural to question why the Russians were so resistant to American help in securing those weapons, despite the high degree of trust and cooperation that were the hallmark of the program. There was no question that something had to be done, but little was happening. Why this was so and why the remarkable change was made by the prime minister himself is the subject of this paper.

THE THREAT TO THE UNITED STATES AND ITS ALLIES

To put September 11 in the context of a nuclear weapon, the energy released in the destruction of the Twin Towers was a kiloton. Any nuclear weapon, worthy of the name is, at least, ten times greater, its size is miniscule, its devastation is both immediate and long-term, and its emotional impact may last forever; witness Hiroshima. Al-Qaeda would like a fully assembled weapon, preferably lacking in protective devices.¹ Kilograms of fissile material such as plutonium or highly enriched uranium, if assembled with great skill and care involving significant amounts of high explosive, would also suffice as a weapon, as would chemical or biological weapons or even explosive dispersal of radioactive material that can cause panic and disruption, but few deaths, also meet their desires.² Their Allah, however, would be best served by a ready-made weapon, perhaps two, and the sooner, the better.

Unfortunately, there are thousands of nuclear weapons in Russia that are stored not on a few, well-guarded, military bases, but rather, on many poorly guarded sites, often in the remote and harsh areas of its enormous landmass. They are guarded by underpaid, under equipped, and under trained soldiers, many of whom are conscripts. The warheads of such weapons are not on alert and are not covered in the treaty signed in Moscow in June nor in any other formal treaty.³ They are the detritus of the Cold War, and the variety is staggering, ranging from “suitcase weapons,” made famous by General Lebed, to those that could be used on the battlefield, so-called tactical nuclear weapons (TNW), to strategic weapons that were once targeted against the United States. Such weapons are vulnerable to smuggling (insider attack) and to theft (outsider attack), and there is no lack of wealthy customers, al-Qaeda being one. The danger is clear (a few weapons out of thousands) and present (the search began years ago). If the West is to avoid nuclear terrorism, denial of access to these weapons must be both comprehensive and immediate.⁴

¹ A variety of safety and security devices are possible and may range from simple blockage of the detonation signal to sophisticated sensors and explosive destruction of the warhead. These are in addition to various arming and fusing devices that dud the weapon if it is sensed that the use is improper, measurement of acceleration during the launch phase being a good example. Over time, these devices have become ever more complicated and effective, thereby suggesting that older weapons are more useful to terrorists than modern ones. Unfortunately, we know little about the status of Russian safety and security devices.

² See also Richard Garwin, “The Technology of Mega Terror,” *Technology Review*, September 2002.

³ Launchers of non-strategic (or tactical) nuclear weapons, but not the warheads themselves, were reduced by the US-Soviet treaty on Intermediate Nuclear Forces (INF) in 1987. Submarine Launched Cruise Missiles (SLCM), but not the warheads, were reduced as part of START I. The existence of these tactical nuclear warheads was acknowledged in the Presidential Nuclear Initiative (PNI) signed by Presidents Bush and Gorbachev in 1991 and strengthened by Presidents Clinton and Yeltsin in 1993. While both nations agreed, unilaterally, to reduce their stock of such weapons by specified amounts, there were no means for verification or enforcement. See, for example, Fedorov, “Sub-Strategic Nuclear Weapons: Russia’s Security Interest and prospects of Control,” *Yaderny Kontrol*; Volume 7, No. 4 Fall 2002. Most scholars are of the opinion that Russia has made, at most, only modest headway in meeting the PNI. See, for example, references by Yost and Potter cited below.

⁴ Thomas Friedman eloquently captured this point in an editorial in the 24Mar02 issue of the *New York Times*. Mr. Friedman called for an “all-out global effort...working with Russia to secure its stockpiles.”

Nor is the threat short lived. While it is the stated intention of Russia to eliminate these weapons, the demonstrated rate of elimination is, at best, a thousand per year with little hope of improvement.⁵ Hence, the period of storage is measured in tens of years. Hence, security improvements in that storage today will provide benefits to the United States and Russia for years to come.

THE THREAT TO RUSSIA

While Islamic extremists portray the United States as The Great Satan, we are not alone. The destruction of any Western city, including those in Russia, would meet the stated goals of al-Qaeda and wreak havoc on the Western economy. Indeed, if a nuclear weapon were stolen from the Russian arsenal, it would be considerably easier to transport it to Volgograd than across borders and oceans to New York or Washington, and the ability to smuggle a weapon into an American port should decrease as the Department of Homeland Security takes hold. Furthermore, Russia is not only a likely source of nuclear weapons; it is closer to the danger. There has been an increasing jihadist presence in Chechnya since 1997, and ample evidence of ties between Chechen militants and al-Qaeda. Russian and (reportedly) Western intelligence services also seem to be convinced that the Chechen forces currently using Georgia's Pankisi Gorge as a staging area include non-Chechen jihadists, some of whom may have fled Afghanistan after the collapse of the Taliban. It is also clear that Chechen separatists have managed to obtain large quantities of conventional weapons from Russian arsenals by bribery and theft, and there have been reports of Chechen reconnaissance of nuclear storage sites along the southern border of Russia.⁶ Chechen-based militants have also reportedly attempted to acquire radioactive material, and indeed claimed credit for burying a radioactive canister

⁵ The rate of dismantlement in the United States is not much better, although storage is far better. Neither country has much reason to increase the rate; dismantlement of nuclear weapons is a dying industry. There are far better places for investment of federal dollars and rubles.

⁶ RF Ministry of Defense Nuclear Directorate Head Valynkin Interviewed CEP20011029000145 Moscow Strana.ru National Information Service WWW-Text in Russian 26 Oct 01 [Interview with Lieutenant General Igor Nikolayevich Valynkin, head of the Ministry of Defense 12th Main Directorate, conducted by Aleksandr Orlov: "Russia May Conduct Nuclear Testing, If the Need Arises"; date and place not given]

[Orlov] Igor Nikolayevich, your main directorate is the only structure in the country that is responsible for the use and safekeeping of nuclear weapons (YaBP) in Russia. What measures have been taken at your facilities in connection with the terrorist acts that occurred in the United States on 11 September?

[Valynkin] Our nuclear engineering storage facilities ("S" facilities, as they are called) are designed to withstand a nuclear strike. So we are not afraid of a direct attack by planes or missiles like those that took place in Washington and New York. In addition well-trained regular mobile subunits with reinforced weaponry have been brought into all of our "S" facilities. They can stand up to terrorist groups like those that are operating in Chechnya. Moreover, we have modified the plans for cooperating with the Federal Security Service, the Ministry of Internal Affairs, and the command of the military districts where our units and subunits are stationed. They would be given instant assistance in the event of an attack or attempts by bandit formations to penetrate our facilities.

[Orlov] And have there been such attempts?

[Valynkin] There has not been even one such attempt at penetration of our facilities, fortunately. But reconnaissance of the facilities was in fact attempted, twice, moreover: somewhere around six and eight months ago. But this activity was immediately stopped.

in a park in Moscow several years ago.⁷ Accordingly, it can be assumed that they would seize any opportunity to acquire a nuclear device by bribery or armed theft. Given the hostage-taking incident at the Moscow theater, it appears that Chechen militants feel that their back is against the wall, and they will, therefore, resort to whatever measures are necessary to turn the Russian public against the war. Thus, the stage is set for nuclear terrorism in Russia. All that is lacking is the weapon.

WEAPON SECURITY IN RUSSIA TODAY

The United States has little insight into the manner by which Russia stores its non-alert weapons.⁸ Estimates of the number of warheads range from 4,000 to 30,000, and depending on the definition of what constitutes a site, the number of sites ranges from 50 to over a hundred.⁹ Neither the locations, nor their contents, nor their types are apparent, and the logic behind such dispersal is obscure.

As a counter-point, however, the Department of Energy (DOE) and the Russian Navy have been working together since 1995 to improve nuclear security at naval bases. Although the effort is neither rapid nor comprehensive, it does include American access to a few nuclear weapon storage sites. Admiral Gromov, Commander in Chief of the Navy of the Russian Federation, began the effort, and his successor, Admiral Kuroyedov, has sought and condoned a remarkably constant team of American and Russian experts in securing naval warheads and highly enriched uranium (HEU) submarine fuel.¹⁰ The US technical specialists deal directly with Kuroyedov and his staff, which has led to a high degree of trust between the Russian and American participants. The independence and authority of a four-star admiral with regard to storage sites far from Moscow is also probably a factor.

Our keenest insight into Russian security is the result of a clever compromise arranged by the CTR program in 1996 (then) under the leadership of Major General Roland Lajoie (USA retired), and the 12th Main Directorate (12th GUMO) under the leadership of Colonel General E. P. Maslin, now retired. While the Directorate stoutly maintained its unwillingness to allow American experts to have access to any storage site, it did recognize the need for assistance in the security of those sites, and proposed that their

⁷ Edward W. Walker, "Chechnya, the Pankisi Gorge, and US Policy," paper presented at the Conference, "Security and Insecurity in Central Asia and the Caucasus: A Regional Challenge with Global implications," September 19-21, 2002, Yale University.

⁸ General Eugene Habiger as Commander in Chief of the Strategic Command (CINCSTRAT) visited a few alert sites as a guest of the Russian Strategic Rocket Force (SRF) and was satisfied with the security of the weapons. However, the concern here is with weapons that are not on alert.

⁹ For example, Pavel Podvig, editor, *Russian Strategic Nuclear Forces*, MIT Press, 2001, page 114 states "At present, nuclear weapons are stored in approximately 80 locations in Russia, most of them centralized storage facilities." Collina and Wolfstahl in *Arms Control Today*, Volume 32 Number 3, April 2002 refer to 123 storage sites where measures have been taken to improve security, a statement that implies there are more than 123 sites. Matthew Bunn, in his 2000 report *The Next Wave: Urgently Needed New Steps to Control Warheads and Fissile Materials* puts the number between 65 and 80. The wide variation in numbers probably stems from imperfect information and differing opinions as to what constitutes a site. The imprecision, however, adds credence to the belief that the security of the stored weapons is not what it should be.

¹⁰ M. B Maerli, "U.S.-Russian Naval Security Upgrades: Lessons Learned and Future Steps," *Yaderny Kontrol*, Fall 2002.

guards be equipped and trained at a logistics site, built and operated by the Americans and located at Sergiev Posad, a few miles north of Moscow.¹¹ The material assistance runs from simple fences to sophisticated detectors, and the training from exercises to Personnel Reliability Programs (PRP) where the guards are subjected to drug and sobriety testing, polygraphs, and even counseling. The program is a huge success if measured by the improvement in the capability of the teams of guards who attend and then return with the equipment to their actual storage sites. But at those sites, is the training employed or forgotten, is the equipment properly used and maintained or is it set aside, could further improvements or glaring weaknesses be found by American experts working with their Russian equivalents under real conditions? We have few satisfying answers to these questions, and we are not likely to have them until comprehensive access is provided. At least, thanks to Prime Minister Kasyanov, we are a little closer.

It is useful, although hardly precise, to divide weapon storage in Russia into four categories: central storage or S-sites, regional or R-sites, dismantlement storage or D-sites, and weapons in transit. All but the D-sites are under the control of the 12th GUMO, currently commanded by Colonel General Igor Valynkin. The S-sites are fewer in number though larger in capacity and may be compared, loosely, to similar storage facilities in the US. S-sites could be enhanced to meet U.S. standards, but only at considerable expense, a condition recognized by General Valynkin, himself, in conversations with American officials.

Broader evidence has been reported by the National Intelligence Council (NIC),
“An anonymous military officer claimed in a Russian television program interview that security was lax at 12th GUMO sites. The officer outlined a number of problems at the storage sites, including charges that there are personnel shortages and that alarms (sic) systems operate only 50 percent of the time. The officer speculated that a terrorist organization could seize a nuclear warhead.”¹²

The observation by the NIC that

“Russia’s nuclear security has been slowly improving over the last several years,”¹³

while probably true, thanks in part to the DOD and DOE programs, overlooks the increasing difficulty, despite rigorous procedures, of recruiting and retaining competent personnel. Ironically, part of the problem is the reviving Russian economy. The officer corps of the 12th GUMO has been an elite force, skilled in the management of a far-flung and dangerous commodity. These are just the sorts of skills required for business development in Russia today, and indeed, the best officers accept lucrative offers in business rather than serve until mandatory retirement. In short, there is good reason to suspect that all is not well even at the best of the security sites.

¹¹ The site began operation in November 1999 under the formal title of Security Assessment and Training Center (SATC).

¹² “Annual Report to Congress on the Safety and Security of Russian Nuclear Facilities and Military Force,” National Intelligence Council, February 2002

¹³ Ibid

The situation appears to be worse at the regional sites (R-sites), some of which may be located near the Northern Caucasus where Russian control is minimal and the likelihood of armed conflict is high.¹⁴ Why Russia allows itself to be exposed to the risk of theft where no military benefits are apparent is not at all clear, and without access to these sites, we are unlikely to find the answer, assuming there is one. General Valynkin maintains that the S-sites are full and that, therefore, he has no choice other than to keep the weapons at the smaller and more dispersed regional sites, but that begs the question regarding storage of nuclear weapons in turbulent areas. He is well aware that the better approach is to expand the capacity of the S-sites as rapidly as possible, but American aid for such progress is impossible without access to the S-sites, and for reasons to be given below, the Russians are unlikely to do this without American assistance. Ideally, the R-sites would be closed, and the weapons transported to expanded S-sites for secure storage or to the D-sites for dismantlement. In fact, there has been progress: as former alert bases of the Strategic Rocket Forces (SRF) are closed, the CTR program has transported weapons from those bases to storage sites. In all cases, and there have been over 150 shipments, all weapons have been delivered safely and always to larger storage sites or to dismantlement sites.¹⁵ The problem is not the direction of shipment; it is the slow pace.

General Valynkin and his predecessor, General Maslin, have repeatedly stated that the point of maximum vulnerability to warhead theft is during transit. Because access to the sites is not required for transport of warheads and because both the CTR program and the 12th GUMO agree that the vulnerability is high, the program has played a major and increasing role in ensuring security during the transportation phase. Under the aegis of CTR, special railcars have been enhanced with security measures, delivered, and operated throughout Russia - again, with a perfect record. Furthermore, Americans have observed exercises, conducted with CTR funding, of accident response during transit of mock nuclear weapons. Unfortunately, this success, while laudable, is not comprehensive. If warheads cannot be stolen during transit, al-Qaeda will simply look elsewhere; i.e., they will look to poorly guarded storage sites.

Unlike the American system, the 12th GUMO retains custody of the warheads while they are stored at the D-sites awaiting dismantlement. While we know the locations of such sites, we know little about the security of the weapons stored there, nor do we know much about the handoff from the 12th GUMO to the Ministry of Atomic Energy (MINATOM) at some point in the dismantlement process. What we do know is that the Russians seem satisfied with security at the D-sites and that American access to dismantlement facilities will be even more difficult than to storage sites. Security of weapons at the D-sites, and after dismantlement, security of the dismantled fissile material is the responsibility of MINATOM where DOE personnel are responsible for CTR assistance.

¹⁴ Fedorov, see above. Walker, see above.

¹⁵ David Gai, Lt USN, "Russia removes 100th trainload of nuclear weapons," DTRA Connections, Vol. 4, No. 6, June 2002

It is ironic that the more Russia and the United States succeed in reducing the strategic arsenals of alert weapons of the Cold War through treaties and unilateral initiatives, the greater the vulnerability to theft and nuclear terrorism from weapons that no longer have a purpose, that are simply waiting to be dismantled. It should come as no surprise that nuclear weapons are dangerous whether on alert or not. It would seem that the nuclear sword has two edges. We have blunted the one by reducing the alert arsenals, but sharpened the other by increasing the number of resultant, poorly stored, non-alert weapons. We may well find that the other edge can be just as lethal, impossible to deter, and harder to control.

Secretary Rumsfeld has noted the danger in congressional testimony and has called for more transparency and less concern for symmetry with respect to non-alert nuclear weapons,¹⁶ but little headway has been made. The time has come to attack the problem at its core. While no one can question the necessity and success that CTR has enjoyed in assisting Russia in meeting its requirement under START I to dismantle the vehicles that could have carried nuclear weapons to the American homeland, CTR must now find a way to deal with the weapons themselves. If we fail, the jihadists will find a way to use them, and they will not need missiles or bombers to do so.

IS COOPERATIVE ACCESS REALLY REQUIRED?

It's a Russian Problem, Let the Russians Solve It.

If the danger is so clear and present, why does Russia not recognize it and take whatever actions are necessary? After all, a nation that can build a nuclear arsenal certainly has the capability to dismantle it in a safe and expeditious manner. True, if it has the money, and there's the rub. Russia is a poor country and likely to remain so for years to come. It is, therefore, the Russian economy, not its nuclear arsenal on which President Putin will concentrate. As a result, discretionary funds will not be applied to securing retired nuclear warheads; they will be used to rebuild the commercial infrastructure. Furthermore, General Kvashnin, Chief of the General Staff, after considerable debate within the Kremlin, has made it clear that those funds that the MOD does receive will be used to improve Russia's conventional capability, not its nuclear force, and what few funds the nuclear forces receive will be applied to alert weapons, not to the storage of non-alert weapons. When one is very poor, the marginal ruble is applied to ways that improve the quality of life; the ruble is not used to buy an insurance policy. Better to cross one's fingers and hope that others, who are more comfortable, will take care of the problem.

Representative Tauscher and Senator Biden have proposed an interesting approach to providing Russian funds for counter proliferation of WMD; viz., forgiveness of debt to the US so long as the repayment is directed towards counter proliferation.¹⁷ While

¹⁶ "I ... want to see to it that theater nuclear weapons are brought up and talked about, not from a standpoint of (reductions) but of transparency," Secretary Rumsfeld in testimony before the Senate Foreign Relations Committee as reported by Pamela Hess, UPI Pentagon Correspondent, 25 July 2002.

¹⁷ House International Relations Committee (Chairman Hyde, R-Ill.) hearing on 25 July 2002

analysis of the ramifications of a “debt swap” is beyond the scope of this paper, one observation can be made. Forgiveness of debt does not create funds in a poor country; it simply ends the need to service the debt. Admittedly, those payments, if they can be generated, could be directed to counter proliferation projects, as the legislators have suggested, but whether they would be is another question. After all, the same forces that exist with regard to the discretionary rubles discussed immediately above also apply to the funds created by ending servicing of the debt. It is not clear that the US would want to have or even would have the ability to influence the actual use of the new discretionary money. Nonetheless, forgiveness of debt is a useful and interesting proposal, certainly one worthy of careful study.

Perhaps It Ain't Broke

Furthermore, from Russia's point of view, the present program works: their guards are trained and equipped at Sergiev Posad and they are effectively putting their skills and equipment to the purposes intended, or so we are told. They could well feel that the problem is lack of trust by the Americans, not lack of effective use by the Russians. The Russians could seemingly invoke “If it ain't broke, don't fix it.”¹⁸

There are a number of problems with applying Mr. Lance's aphorism to the storage of nuclear weapons in Russia. First of all, the responsible agency, the 12th GUMO, is not satisfied with either the pace of the program nor is it convinced that the effectiveness is as good as it needs to be. Hence, the agency in the best position to judge whether American assistance is needed is convinced that it is, but the 12th GUMO is only an input to the decision process. The actual decision is not theirs to make. There is a significant number of ministries, agencies, and centers of power that would argue strongly that it is not in Russia's interest to have American nuclear experts in the vicinity of Russian nuclear weapons. Foremost among these is the FSB, the former KGB, charged with counter-intelligence and formerly led by President Putin, himself. One would think that the FSB would have little difficulty in gaining the president's ear and countering any concerns that may be expressed by the 12th GUMO regarding security of non-alert weapons. It may be broke, but many do not want to fix it if that means granting Americans access.

The other power centers that would wish to deny American access to the actual storage sites will be discussed below, but there are forces within the American polity that will bring even the current program to an end if access is not granted. The CTR program is managed by the DOD and, therefore, operates under the Federal Acquisition Regulations (FAR), a formidable body of instructions that, while not a model of efficiency, does ensure fairness and has served the Pentagon well. Not surprisingly, the FAR requires inspections and acceptances of all goods and services purchased by the DOD, and such inspections require access if the letter and spirit of the FAR is to be maintained. Furthermore, the basic CTR agreement between the US and the Russian Federation, the so-called “umbrella agreement,” calls for audits and examinations of all goods. Artful

entitled: "Loose Nukes, Biological Terrorism and Chemical Warfare: Using Russian Debt to Enhance Security."

¹⁸ Attributed to Bert Lance during the Carter Administration.

measures were taken during the Clinton Administration to satisfy the FAR and the agreement, but these measures were only sufficient to justify equipment purchases – not on-site installation services. These measures associated with the initiation of the program at Sergiev Posad, well before 9/11, were justified, but given the jihadist threat and the need for a full-blown program to ensure security, more scrupulous means are necessary.

It should be noted that the conditions specified in the FAR can be waived and agreements can be amended, but only with considerable effort and loss of time and the assumption of great risk, a price that neither country should be willing to accept in the present era. Therefore, the Administration is unlikely to take this route and, even if it did, Congress would not accept it. We are left, then, with two unpleasant conclusions: (1) Russia will not unilaterally take the necessary steps to ensure the security of the storage sites, and (2) the present approach, using only Sergiev Posad, is not sufficient. American access is essential.

WHO WOULD RESIST AMERICAN ACCESS?

Seemingly, everyone. The impediments to access constitute a broad and powerful base. Counter-intelligence and resentment of NATO nuclear weapons have already been mentioned, but there are many more: bureaucratic inertia, economic considerations, legal issues, cultural aspects, military doctrine, resentment of US and NATO foreign policy and operations, abandoned and unratified treaties, and unfulfilled unilateral initiatives, and these are only on the Russian side. To these, must be added American concerns, many of which are found in high places in the Administration and in the Congress. They are based on a fear that Russia will rise again as the nuclear enemy of the West and that, therefore, any aid to their nuclear forces today will be a nuclear threat tomorrow. Two examples capture the concerns: (1) money is infinitely fungible and (2) much of the equipment has a dual use. With regard to the former, it is argued that American aid simply displaces Russian expenses that can now be applied to the rebirth of the Russian military. Regarding the latter, there is a more direct connection. As a stark example, it is feared that equipment such as trucks, or even equipment for trucks such as tires and batteries, will be used to transport troops not storage gear. The problem is that these concerns, while legitimate, pale in comparison to the threat of nuclear terrorism in the post 9/11 era and, therefore, should be set aside.¹⁹ The Russian concerns are more serious, more difficult to set aside, and obviously beyond the fiat of the American government.

Some of the Russian impediments, while easily predictable, are often beyond the reach of American foreign policy. Among these are bureaucratic inertia, legal restrictions, and simple pride. Some are more subtle, but also more amenable to American actions. Foreign, defense, and economic policy come immediately to mind with economic policy, surprisingly, being the most critical. All are treated, in turn, below.

¹⁹ Susan Eisenhower, "Terrorism and the Nuclear Question," Address to the National Press Club, 11 February 2002.

Intelligence Collection

Thanks to the far-sightedness of General Maslin and the straight-forwardness of General Lajoie, fear of intelligence collection, at least at the level of implementation, was set aside in the early stages of the CTR program. Certainly, the Russians must have expected that various sensing devices would be inserted into the containers and rail cars that were constructed by the Americans and used to transport nuclear weapons from Ukraine, Belarus, and Kazakhstan. Fortunately, such fears were over-ridden by the intense desire of Russia to have control of the weapons, and by the American decision to not, under any circumstance, engage in intelligence collection. The requisite trust was built from the very beginning of the program thanks to the urgency of the operation and the steady determination to not dilute cooperative threat reduction with any other missions. Whether that trust propagated to the upper reaches of the FSB is, of course, an open question, but at least, it is certain that General Maslin carried the message of trust to all who would listen. Moreover, that message was strong enough to survive the revelation of American intelligence devices being employed in UNSCOM operations in Iraq²⁰ and to provide clear evidence to support a decision to overrule the presumed objections of the FSB.

Bureaucratic Inertia

Bureaucratic inertia, like the poor, will always be with us, whether American or Russian. Moving a bureaucracy or even overruling it is often the mark of a great leader. In a democracy, public clamor can have its effect. As Senator Dirkson once said, “When I feel the heat, I see the light,” but Russia is steeped in bureaucracy and new to the ways of public opinion and to an active, investigative, free press. Furthermore, storage of nuclear weapons is hardly the stuff of public excitement or even interest. Its very dullness is, in fact, its greatest virtue: the bureaucracy can be quietly overruled, and the press and the public will not even notice. So long as the president remains generally popular, which is the situation pertaining for the moment, the bureaucrats will remain quiet.

Military doctrine

Despite the rhetoric of the PNI, Russian military writings suggest that the military places great importance on TNW to deter aggression, to signal its intent should conventional operations go awry, and to prevail on the battlefield should deterrence and signaled intent fail to achieve their goals.²¹ If such a military doctrine has been implemented, widespread access by American experts to the TNW storage sites would certainly go far in unmasking the existence of such a doctrine and, thereby, undermining the promises of the PNI²² with consequent embarrassment to the Russian leadership. Better, from the

²⁰ Details of the operations can be found in articles by Barton Gellman in the 2 March 1999 issue of the Washington Post.

²¹ David S. Yost provides a convincing and greatly expanded version of this argument. See “Russia’s non-strategic nuclear forces,” *International Affairs*, vol. 77, no. 3 (July 2001).

²² William Potter and Nikolai Sokov provide a detailed discussion of the PNI in their report, “Tactical Nuclear Weapons, Options for Control,” United Nations Institute for Disarmament Research (UNIDIR/2000/20)

Russian point of view, to have either no access or limit access to storage sites rather than deployed sites. It can be presumed that the military argued for the former and that the prime minister was willing to compromise by choosing the latter, leaving the question of TNW doctrine unanswered for the moment.

Legal Issues

Russia is not the only country where officials, both private and public, resort to the statement, “it’s the law,” with the hope that a particularly nettlesome request will be dropped. It matters not whether there is such a law. At its most simple, of course there are laws that preclude American citizens from rummaging around nuclear weapon storage sites. How could it be otherwise? But the real question concerns the details. Are they laws, duly enacted by the legislature and upheld by the courts, or executive decrees, or bureaucratic regulations, or international agreements, open or secret, bilateral or multi-lateral? If the “laws” are to be legally set aside or circumvented, the details determine the tactics, and few countries have a more complex set of laws, broadly defined, than Russia.²³ The tortured case, amply reported in the western press, against Grigory Pasko, an investigative journalist focusing on nuclear safety issues in the Pacific Fleet, makes the point handsomely.²⁴

Many channels were explored to uncover the legal details, including the obvious one of asking officials of the 12th GUMO to cite the pertinent law, but their answers were obscure and did not lead to investigable bodies of law. Next, American legal experts from a variety of venues²⁵ were consulted with regard to specific details. Of these, Paul Melling, a partner in Baker & McKenzie, resident in Moscow, assisted by Nadia Urazaeva, provided as clear a view of the situation as is likely without access to classified Russian documents.²⁶ Although they could find no single specific citation, they concluded that Russian laws, decrees, and regulations gives substance to the statement, “Russian law does not allow it.” However, international treaties, in particular, the Agreement On Security of Transportation, Storage and Destruction of Weapons and the Prevention of Dissemination of Weapons, June 17, 1992 could be interpreted as providing legal means for American access. As Melling and Urazaeva state,

“Article II obliges the executive authorities of each party to enter into appropriate agreements for carrying out the goals of this Agreement. Article II further lists obligatory provisions that should be included in such further agreements. In

²³ Thomas Pickering, US ambassador to Russia during the Clinton Administration, was often deeply immersed in navigating the shoals of the Russian legal system. His opinion is unequivocal regarding its complexity (personal communication).

²⁴ See a review article by Jon Gauslaa, which may be found at <http://www.bellona.no/en/international/russia/envirorights/pasko/24748.html>.

²⁵ The venues included the University of California Boalt School of Law, practicing and retired lawyers from established law firms in San Francisco with years of experience with Russian and Soviet law, international law firms such as Baker & McKenzie, and Lawyers Alliance for World Security (LAWS), a not-for-profit organization whose expert in Moscow found the atmosphere “chilling” with regard to this question.

²⁶ See Appendix: “Access to Storage Sites for Nuclear Weapons,” a memorandum to the author by Paul Melling and Nadia Urazaeva, 10 April 2002.

particular, such further agreements shall include *'provisions relating to access of the parties to the facilities... where it is possible, for monitoring and inspection purposes'* (emphasis added)".

The agreement entered into force in 1992 for seven years and was extended by mutual agreement on 15 June 1999 for another seven years. One can conclude that the Agreement provides a basis for the Prime Minister to set aside the law in favor of a treaty and to allow access. Why officials of the 12th GUMO failed to take advantage of this is, of course, another question, but one more likely related to bureaucratic maneuvering than strict adherence to the law.

Pride

No matter how Russia and the US may try to portray Cooperative Threat Reduction, it is easily recognized as a client-donor relationship and probably resented throughout the hierarchy with which the program must deal. Russia is a proud nation with a unique culture and a long history that includes the bloody defeat of Hitler's armies where most Russians believe that Russia saved the West and then rose to be the equal of the United States. Now, Russia is a poor nation needing the assistance of the West in the dismantling the very arsenal that made her a superpower, and worst of all, the US is demanding access to the burial grounds of that proud, if misguided, heritage. It should surprise no one that resistance to that assistance, particularly access to nuclear weapons, can be found at every level. Because of pride, a Slavic shrug, certainly not wild applause, is about the best that CTR can expect for its effort.

On a more personal level, consider the case of the commander of a storage site. As an officer in the 12th GUMO, he was chosen because of superior capability, considers himself to be a member of an elite corps, and knows well that Russian nuclear weapons were guarded effectively for a half-century using Russian equipment and methods. The American approach to the storage of weapons, while different, is not necessarily better in his mind, especially when applied to Russian conditions. All he needs is adequate support from his superiors, and that, of course, is exactly what he is not getting. Instead, he will be asked to embrace American experts who will come, like the IRS, to examine his command and help him do his job. Inevitably, the American experts, no matter how diplomatic, will find fault with his operation, or why else would they be there? In one way or another, the inadequacies of his performance will be reported to his superiors with consequent adverse effects on his career, or so he must think. This is the man upon whom the 12th GUMO depends to carry out its mission and to whom they must listen as they prepare their response to the question of granting access. Conditioned acceptance is probably the heartiest recommendation that will be made in such councils.²⁷

Whether conditioned acceptance or Slavic shrug, matters not, so long as the impediment of pride can be overruled at higher levels. There is a price, of course, for abusing the

²⁷ For a more comprehensive review of the situation in the Russian military see Deborah Yarsike Ball, "The Social Crisis of the Russian Military," Chapter 14 of "Russia's Torn Safety Nets – Health and Social Welfare during the Transition," edited by Mark G. Field and Judyth L. Twigg, St. Martin's Press, New York.

pride of ones subordinates, but a popular president can afford to pay that price.²⁸ Evidently, his prime minister was willing to do just that.

Economic versus Foreign Policy

President Clinton's famous description of the presidential campaign of 1992, "It's the economy, stupid!" appears to have been heard, understood, modified, and adopted by Vladimir Putin; that is, the Russian economy determines Russian foreign policy and not vice versa.²⁹ How else can one explain the Russian reaction or lack of reaction to a variety of initiatives by the United States and NATO? Conversely, whenever American initiatives in foreign policy tend to undermine potential markets for Russian services and products, the Kremlin is far less accommodating. It is thought that Putin, like Peter the Great, sees Russia as joining the West as a matter of foreign policy. It may have been the case in Peter's time, but today, the primary reason that Russia is looking westward is for foreign investment and access to foreign markets. Therefore, strictly as a matter of foreign policy, American access to nuclear storage sites will depend upon its economic impact. If it is positive or even negligible, foreign policy will not be part of the calculus. A few examples should suffice.

NATO now includes countries that were once part of the Warsaw Pact, and further expansions are clearly being considered, one of which would further isolate Kaliningrad from the Russian heartland. According to treaty, NATO is a defensive alliance, one that does not operate outside of its boundaries ("out of area"), which, of course, is exactly what NATO did in the Balkans, and then proceeded to bomb the Slavic forces. The Kremlin complained, but in fact, was part of the operation to remove Milosevic. The economic cost of this acquiescence was trivial and, therefore, acceptable despite the series of misunderstandings regarding NATO intensions.

The United States has now withdrawn from the ABM treaty, considered to be the cornerstone of US-Soviet arms control, and has stated that it will not submit the CTBT to the Senate for ratification; whereas, Russia has already signed and ratified the treaty. Again, the Kremlin complained bitterly and through many channels, but there is no economic cost to acquiescence to the American positions regarding these treaties, and therefore, the hard position taken by the Administration seems to have been accepted, if not applauded.

There is now a US military presence in Central Asia and in Georgia, a fact deeply resented, according to the press, by the Russian military. Supposedly, President Putin, personally, had to overrule his generals, but he did so, and the world will not soon forget it. It cost him no rubles and earned him the gratitude of President Bush.

²⁸ That he is popular is not in doubt. A recent survey showed that those who think 9/11/01 has positively affected US-Russian relations greatly outnumber those who think it had a negative impact, by a measure of almost 8 to 1. A Rosbalt.RU survey of 1,500 Russians. Featured in Johnson's Russia List, September 11, 2002 (www.cdi.org).

²⁹ Andrew Kuchins supports this position: "Putin's foremost preoccupation is the economic recovery and modernization of Russia..." but recognizes that "it would be a serious mistake to conclude that economics are the whole story...". ACT, Volume 32, Number 8, October 2002.

Even symbols of the Cold War are overlooked so long as there is no economic penalty. As noted by Michael Wines,

“The Jackson-Vanik amendment aimed squarely at cold war restrictions on the movement of Soviet Jews, bars the president from giving favorable tariff treatment to nations that restrict free emigration. Congress routinely waived the ban for Russia during the last decade, but Russian officials see its permanent abolition as a symbol that the United States recognizes Russia’s transition toward democracy.”³⁰

President Bush’s willingness to try to remove the amendment, rather than his inability to convince the Congress, seems to satisfy President Putin. He values trade far more than symbols.

Russia is not nearly so accommodating, however, where its potential markets are involved, and unfortunately, many of these include Presidents Bush’s “axis of evil,” Iraq, Iran, and North Korea. Myers and Wines in the New York Times capture the dilemma nicely.

“In recent weeks, Mr. Putin’s government has conspicuously pursued a range of economic and diplomatic accords with all three countries – from proposals to drill for oil in Iraq and to build nuclear reactors in Iran to a warm meeting between Mr. Putin and North Korea’s reclusive leader, Kim Jong Il, in Vladivostok on Aug. 23.”³¹

Peter Baker in the Washington Post states the case even more forcefully.

“The recent dust-up between US and Russian officials over the issue (Iranian nuclear reactors) during meetings in Moscow demonstrated that the single most defining priority governing President Vladimir Putin’s foreign policy is economic. In making concessions on strategic issues once unthinkable for a Kremlin ruler, Putin has shown he expects an economic trade-off from the West and likewise has evinced little willingness to budge in disputes with an economic cost to Russia.”³²

Iraqi debt and trade, nuclear reactors for oil-rich Iran, and rail transport from North Korea circumventing China rather than passing “through the territory of our esteemed and dearly beloved neighbor, the People’s Republic of China,”³³ are the issues that count. *Real Okonomie* could not be more obvious.

On this basis, economic directives by President Bush, rather than those involving strictly foreign policy, are more likely to undermine the Russian-American relationship. Tariffs on foreign steel and subsidies to American farmers are two cases in point. Fortunately, access to nuclear weapons storage sites is a political decision with little economic impact and quiet appreciation by the American government. The Russian bureaucracy, broadly

³⁰ Michael Wines, “Bush Heads for Russia, Hopes for an Investment Plan Fade,” New York Times, 22 May 2002.

³¹ Steven Lee Myers with Michael Wines, “Russia’s Overtures to ‘Axis of ‘Evil Nations Strain Its Ties With U.S.,” New York Times, 1 September 2002.

³² Peter Baker, “Putin’s Concessions To U.S. Are Limited By the Bottom Line,” Washington Post, 16 August 2002.

³³ Vladimir Putin as reported by James Brooke, “Putin Greets North Korean Leader on Russia’s Pacific Coast,” New York Times, 23 August 2002.

defined, may not have liked the decision but must have recognized that it is consistent with the overall policy of a very popular president. It was not worth opposing.

THE DECISION

Well before the announcement by Prime Minister Kasyanov, the research team informed appropriate officials at DTRA that a step-by-step approach to seeking broad access to nuclear storage sites by American experts was unlikely to succeed. There were simply too many centers of power in Russia that needed to be persuaded simultaneously. Resolution, if it were to come at all, had to come from the top of the Russian government, but was the top strong enough to impose a favorable decision regarding American access?

Professor Breslauer has provided a clear and positive answer.

“Among Russia specialists, there is disagreement about just how much power Putin possesses---or, put differently, about the extent to which he has consolidated his power. Nonetheless, I am firmly of the opinion that the powers of his office are substantial, that he has used them already many times to overcome actual and potential opposition, and that only his innate caution has prevented him from using or expanding those powers even more than he has. He marginalized the Parliament by changing its rules of representation; he intimidated rivals into withdrawing from the presidential race against him; he drove into exile two of the wealthiest "oligarchs"; he has redesigned the federal structure; he has strengthened institutions like the coercive tax police, even as he pushed through a flat tax, and thereby increased tax collection; he has pushed through legislation legalizing private ownership and sale of agricultural land; and, of course, he personally announced and enforced a pro-American policy after 9/11, despite some vociferous criticism by his top military commanders. To be sure, there have been times when he has backtracked or been sabotaged. But the above list is still impressive. I have no doubt, therefore, that he had the power to decide to be cooperative on the decision of importance to CTR. And he had the will, to the extent that he viewed it as important to both Russian homeland security against domestic terrorism and to sustaining the rapprochement with the United States.”³⁴

The central question, therefore, was how to gain the attention of President Putin. There were a number of paths available including public persuasion through the press where articles such as those by Thomas Friedman carried a strong message that could not be and probably was not overlooked. More direct channels, all related in one way or another to the (then) forthcoming summit meeting in Moscow in June 2002, were under consideration, but competition among issues for discussion at the summit were even more intense than the bureaucratic forces associated with denying access. Furthermore, all issues were dominated by considerations relating to the treaty effecting alert warheads and what to do with them, rather than on non-alert weapons that simply required storage, hardly a heady issue for a summit meeting.

³⁴ Personal communication.

All this was resolved favorably and ahead of time, by the unilateral action taken very quietly by the prime minister on 1 April 2002. It must be assumed that Kasyanov was acting on instructions from Putin and that Putin had decided that the granting of access would reduce the vulnerability of Russia to its real threat to national security, nuclear terrorism, and that access would not significantly impact his major political goals of enhancing the economy and maintaining control.

But why was the decision announced so quietly, and why was it not announced by the president, himself? It is an ironclad rule of government that chief executives announce good news, and their deputies announce the bad or the uninteresting, and the news regarding American access could hardly be described as good. It demonstrated that Russia needed help with its one remaining vestige of international prestige, its nuclear weapon arsenal, and worse yet, it needed that help from its former nuclear adversary. There is, as yet, no public evidence that the announcement was ever made. Appropriate American officials at a level suitable for action were simply informed. However, official action emanating from the General Staff confirmed that the decision had been taken.

Given the nature of the threat, the decision was less sweeping than desired. Rather than immediate and comprehensive access to all storage sites, the Americans will be given access only to those areas of those sites where CTR is paying for the effort; i.e., the Russians will allow only what the American FAR demands. Clearly, the prime minister balanced a variety of interests and decided to offer only what was necessary to continue the financial support – yet another example of *Real Okonomie*. It should be noted, however, that the initial sites, which were identified by proximity to specified cities,³⁵ were judged to be among the most important according to criteria developed by Russian and American experts. Furthermore, it is doubtful that the CTR program could have moved comprehensively even if full access had been granted because of the limited number of cleared Russian subcontractors who can perform the on-site work. A full-court press was simply not in the playbook, no matter how urgent the game.

The next question to be considered is how many sites should we attempt to secure. Common sense and American experience suggest that there should be about a handful of sites where non-alert weapons are stored rather than the large numbers of sites where they are currently stored. When the target is theft of a single weapon among thousands, an economy of scale, which gives preference to a few large sites, surely pertains. Simply put, the calculus began to change with the fall of the Soviet Union and was totally changed by 9/11. The Russians no longer need to disperse their nuclear weapons as a means to reduce the effectiveness of an American nuclear attack; rather, they need to consolidate them to reduce the likelihood of theft by terrorists. It may well be that the Kremlin understands this and is biding its time in announcing a consolidation of sites. However, it could also be true that Liddell Hart was right, “The only thing harder than getting a new idea into the military mind is to get an old idea out.”³⁶

³⁵ The cities are Khabarovsk (Far East), Saratov (Urals), and Ishevsk (Urals). A few others will be named.

³⁶ Robert Debs Heinl, Jr., “Dictionary of Military and Naval Quotations,” US Naval Institute, 1966.

There is one item, however, that cannot be overlooked; viz., inventory control, and this point appears to be recognized by the letter of implementation from the General Staff. Fortunately, the need for modern inventory control was recognized early by CTR, and the program is providing the hardware, software, and training necessary for modern inventory control of stored weapons. The effectiveness of the effort, particularly the centralization of information, is critical to maintaining control. To measure effectiveness and to modify the system as experience is gained, requires access not only to the CTR equipment and programs, but also at the headquarters of each storage site. At first glance, one would think that access to the headquarters would be the last step in bringing the American experts on board, but access to the headquarters does not mean access to the weapons, and this may be the key point of concern for the Russians. If the ensuing negotiations can produce an effective partnership with regard to maximizing the security that CTR provides and to ensuring inventory control, a great step will have been taken. Direct access to the weapons themselves is a secondary consideration.

It must be admitted that the highest level of Russian civilian and military leadership, the prime minister and the General Staff, has shown understanding, courage, and a strong sense of priority in the decision of 1 April 2002 and in its implementation. It could not have been easy to overrule a plethora of entrenched bureaucratic forces and to take such a sensitive step. Furthermore, that step, while small, is truly significant: CTR has been invited to work directly at critical areas within a few key installations with a hint that inventory control would follow. The decision was hardly comprehensive, but Russia and America are now on the right road to better control of the nuclear legacy of the Cold War and to more assurance that these weapons will not be used against either of us. Now, the hard work begins. The decisions taken at the top of the Russian government must be propagated to the working level, and the Americans must respond quickly, effectively, and diplomatically to the opportunity.

The Administration did just the opposite. Within days of the Prime Minister's decision, it announced that Russia would not be certified as being in compliance with the BWC and CWC and, therefore, not eligible for new CTR funding under the DOD program, which includes the funds for storage of nuclear weapons.³⁷ In prior years, the annual congressional certification was provided through a carefully worded and highly coordinated message that sidestepped the difficulty of measuring compliance with complicated treaties by a foreign nation. Such an approach was anathema to the Bush Administration, which desires simple treaties, if treaties at all, unencumbered by complicated protocols for verification. As a result, the Administration decided to take the straightforward approach and asked Congress for a waiver of the amendment, which was tantamount to giving executive control to the legislative branch where control is a scarce quantity. Nonetheless, the Administration is to be congratulated: a difficult four months later, Congress acceded to the request by granting waiver authority through 30 September 2005. Funds to enhance weapon security should begin to flow.

³⁷ The requirement for certification was inserted as an amendment to the original Nunn-Lugar legislation by Senator Helms. It applies only to the funds allocated to the DOD and does not apply to similar programs administered by the DOE.

THE IDEAL SOLUTION: CONSOLIDATION

It seems obvious that the correct way to store non-alert, nuclear weapons, while they await dismantlement, is to build a few good storage sites and consolidate the weapons at those sites.³⁸ Such consolidation and centralization of warhead storage would have two clear benefits: first, it would simplify security and, second, the economies of scale would reduce the cost of operations to the Russians. So why, if consolidation offers more security for less money, has Russia not already done so?

As usual, money, or the lack of it, is the reason. Savings over the long run, in this case, can only be realized by investment in the near term, and that investment in new and/or greatly improved S-sites is beyond the reach of the Russian economy, given the many other demands for discretionary rubles as discussed above. Although it seems unlikely, there may be a related financial issue associated with the economic impact on the local communities of closing the regional sites. However, the economic impact of closure of a storage site cannot be compared to closure of a major military installation. In fact, the mere presence of the storage sites is probably not freely admitted within the local community.

Aside from financial considerations, it must be recognized that any attempt to reduce the number of nuclear warhead storage sites encounters a long-standing element of military doctrine; namely, dispersal of forces wherever possible and whenever not needed. Furthermore, dispersal of nuclear weapons reduces the effectiveness of that great bogeyman of the Cold War, the disarming first strike. Russia may lack many things, but what it has in spades is size. To consolidate storage, then, would eliminate this natural advantage, and make Russia more vulnerable to a strategic and crippling first strike. In the minds of those Russian strategists who were trained by the Cold War, these concerns are not easily ignored.

In addition to strategic nuclear doctrine, Russia could invoke the tactical nuclear doctrine of NATO during the Cold War when Western Europe was faced with what was thought to be the overwhelming conventional power of the Red Army. In this case, tactical nuclear weapons were also dispersed and their intended first use in the event of invasion was made amply clear. Today, it could be argued that Russia feels compelled to have a similar, indeed, magnified deployment of tactical nuclear weapons along those borders where it could face superior conventional military force.³⁹ The fact that NATO continues to deploy its nuclear weapons in various sites further supports this doctrine. Conversely, if NATO were willing to consolidate its nuclear weapons on American soil or at sea, as the British have done, Russia might be more willing to explore consolidation on its soil. Russian officials on more than one occasion have stated that American access, let alone consolidation, will be denied until there are no nuclear weapons on NATO soil, just as there are none in the former Warsaw Pact.

³⁸ Robert L. Rinne has provided a thoughtful approach to the construction and procedures required for securing nuclear weapons and material. See "An Alternative Framework for Control of Nuclear Material," Center for International Security and Cooperation, Stanford University, May 1999.

³⁹ This point is argued at length by David S. Yost referenced above.

Fortunately, many in Russia, including the present and former Chiefs of the General Staff, argue that there is no military use for these far-flung weapons,⁴⁰ which, of course, brings the argument back to the lack of money. While the CTR program may be provided with the funds and authority to secure nuclear weapons in Russia on a hundred sites, simple logic suggests that less than ten would provide better security. This would require, however, that CTR undertake an approach that would seek to underwrite construction of a few central storage sites, suggesting that the correct approach calls for access today at what will become the central storage sites of tomorrow with consolidation within those sites to follow.

QUO VADIS?

The road ahead is clear, but safe passage is, by no means, assured. In principle, direct American access to Russian storage sites has been agreed, but whether the principle can be satisfactorily implemented is a question that only time will answer. If it is assumed, however, that an effective *modus operandi* can be developed at a few important sites, the next question is not which sites are next. It is, rather, can a few sites be made highly secure and can the others be divested of weapons; i.e., can the Russians be convinced to consolidate their storage sites, and if so, how?

The question is particularly perplexing because we do not understand why the storage sites are so dispersed in the first place, nor have the Russians been forthcoming in answering the question, real or implied. Obviously, it would be well to have an answer or, at least, a working hypothesis before beginning serious discussions of such a sensitive matter. Hence, the first order of business is to develop that hypothesis and then to develop a plan of attack consistent with it. At that point, a negotiating strategy can be developed based to a considerable extent on the lessons learned in gaining access where the overwhelming importance of developing the Russian economy must be foremost in the minds of the strategists. We have learned much, but there is much to learn, and it must be learned quickly. Nuclear terrorism is alive and well.

⁴⁰ Federov summarizes the situation admirably; see above.

RECOMMENDATIONS

1. Assign highest priority and proceed at maximum speed to:
 - a. Improve the security at the locations cited by General Kvashnin.
 - b. Explore as forcefully as possible improvements to the inventory control of those sites, keeping in mind that the ideal solution suggests that these locations should be considerably expanded under a recommended program of consolidation.
 - c. Transport as many weapons as possible to these sites or to dismantling sites giving priority of transportation to removal of those weapons that will result in closure of small sites.
 - d. Concern regarding dual use of American assistance should be compared to the dangers to the US resulting from theft of a Russian weapon by jihadists.
2. While gaining access to additional storage sites beyond those granted by the Russian General Staff, develop a plan to assist Russia in consolidating all of its non-alert nuclear weapons at a few sites.
 - a. The first step in such a plan is to try to understand why Russia seems content to store its weapons so diversely. The possible reasons may include, but not be limited to: military doctrine, insufficient funds, inability to develop such a plan including estimation of its cost, local resistance to closure, and dangers of the resultant major transport of weapons to the consolidated sites.
 - b. Develop the plan, including costs, for such consolidation where American assistance will be provided as necessary.
 - c. Attempt to engage appropriate Russian officials and opinion makers on consolidation, noting that Russian foreign policy for the immediate future will be driven by the economic goals of a popular president.
 - d. Ensure that the plan provides for constancy of American experts and, hopefully, Russian experts in order to achieve the desired benefits.
3. Study sources of funding and coordination for this effort based on:
 - a. Forgiveness of debt by the US and other members of the G-8, and
 - b. Promises by the G-8 to provide \$10B over 10 years in addition to the US commitment of \$10B over the same period of time.
4. Consider the advantages and disadvantages to US-RF and US-NATO relations associated with removal of US nuclear weapons from NATO countries, perhaps offering in return a sea-based force similar to the UK.

ACKNOWLEDGEMENTS

A study of this scope required a broad, interdisciplinary and inter-institutional team, which was precisely what was formed. The major players, who came to be referred to as the Posad Eight, are:

1. Dr. Deborah Yarsike Ball, National Security Analyst, Lawrence Livermore National Laboratory (LLNL),
2. Dr. George Breslauer, Dean of the School of Letters and Sciences, UCB,
3. Dr. Patricia Falcone, Manager of Systems Studies, Sandia National Laboratories (Livermore),
4. Dr. Todd LaPorte, Professor of Political Science, UCB,
5. Dr. Michael Nacht, Aaron Wildavsky Professor and Dean of the Goldman School of Public Policy (GSPP), UCB,
6. Dr. Per Peterson, Professor and Chairman of the Department of Nuclear Engineering, UCB,
7. Dr. Harold Smith, Distinguished Visiting Scholar and Professor, GSPP, UCB,
8. Dr. Edward Walker, Executive Director of the Program in Soviet & Post-Soviet Studies and Adjunct Associate Professor of Political Science, UCB.

The team was ably supported by two graduate students, Andrew Hill of the GSPP and Jonathan Essner of the Monterey Institute of International Studies.

None of this work would have been possible without the cooperation and insight of William Moon, who directs the CTR program to assist Russia in the storage of their non-alert nuclear weapons, and Dr. Thomas Graham, Director for Russian Affairs for the National Security Council. The guidance of the project managers, Dr. Anthony Feinberg and his very able successor, LTC Donald Culp (USAF) is gratefully acknowledged.

GLOSSARY

Acronym	Definition
A&E	Audits and Examinations
ABM	Anti Ballistic Missile
ASCO	Advanced Systems & Concepts Office
BWC	Biological Weapons Convention
CA	California
CTBT	Comprehensive Test Ban Treaty
CTR	Cooperative Threat Reduction
CWC	Chemical Weapons Convention
DOD	Department of Defense
DOE	Department of Energy
D-site	Dismantlement site
DTRA	Defense Threat Reduction Agency
FAR	Federal Acquisition Regulations
FSB	Federal Security Service (counter-intelligence)
G-8	Eight leading national economic powers
GSPP	Goldman School of Public Policy (University of California at Berkeley)
GUMO	Russian acronym for “Main Directorate”
INSCOM	Inspection Command (United Nations inspections Iraq
IRS	Internal Revenue Service
KGB	Russian acronym for the counter-intelligence agency of the USSR
LLNL	Lawrence Livermore National Laboratory
LTC	Lieutenant Colonel
MINATOM	Ministry of Atomic Energy
MOD	Ministry of Defense
NATO	North Atlantic Treaty Organization
NIC	National Intelligence Council
NM	New Mexico
PNI	Presidential Nuclear Initiatives
PRP	Personnel Reliability Program
RF	Russian Federation
R-site	Regional storage site
SRF	Strategic Rocket Force
S-site	Central storage site
TNW	Tactical Nuclear Weapons
UCB	University of California at Berkeley
UK	United Kingdom
US	United States of America
USAF	United States Air Force
USSR	Union of Soviet Socialist Republics
WMD	Weapons of Mass Destruction

APPENDIX

MEMORANDUM

ACCESS TO STORAGE SITES FOR NUCLEAR WEAPONS

This memorandum responds to the issues raised in Dr. Harold Smith's email to Paul Melling of March 9 2002.

Underlying facts

The Goldman School of Public Policy of the University of California, upon request of the US Defense Threat Reduction Agency (the "DTRA"), is conducting a research project directed by Dr. Harold Smith (the "Project"). The Project is aimed at studying the means and methods by which the security of Russian nuclear weapons could be enhanced and accelerated within the structure of the Cooperative Threat Reduction Program.

According to the Draft Proposal to the Advanced Systems & Concept Office of the DTRA submitted to us by Dr. Smith, the Project is focused solely on nuclear weapons storage, rather than on storage of nuclear components or special nuclear materials associated with the manufacture of nuclear weapons. The Project is also not intended to investigate the advantages of decreasing the number of Russian weapon sites. One of the Project's principal goals is to assess the reasons for the reluctance of the Russian authorities to allow even minimal American access to its nuclear weapons storage sites. One of the reasons cited for denial of access has in the past been that "the law does not allow it" and this memorandum will, therefore, endeavor to establish whether that reason has any substance.

Russian legislation

We have reviewed for the purposes of this memorandum the following items of Russian legislation:

- The Law No. 3297-1 *On Closed Administrative-Territorial Establishments*, dated July 14, 1992 (as amended December 30, 2001) (the "**Law on Closed Administrative-Territorial Establishments**");
- The Federal Law No. 5485-1 *On State Secrets*, dated July 21, 1993 (as amended October 6, 1997) (the "**Law on State Secrets**");
- The Decree of the President of the Russian Federation No. 1203 *On Approval of a List of Information Classified as State Secret*, dated November 30, 1995 (as amended September 10, 2001) (the "**List of State Secret Information**");

- *The Regulation on Access of Persons of Dual Citizenship, Persons without Citizenship, Foreign Citizens, Emigrants and Re-emigrants to State Secrets*, approved by the Ordinance of the Government of the Russian Federation No. 1003, dated August 22, 1998 (the “**Regulation on Access of Foreign Citizens to State Secrets**”);
- *The Regulation on Providing a Special Regime in Closed Administrative-Territorial Establishments on which Objects of the Ministry of Atomic Energy of the Russian Federation are Located*, approved by the Ordinance of the Government of the Russian Federation No. 693, dated June 11, 1996 (the “**Minatom Regulation**”);

There is no one legal act in Russia regulating all aspects of nuclear weapons (i.e. utilization, storage, security), except for the Draft Law *On Establishment, Exploitation, Liquidation and Security of Nuclear Weapons* that is still being considered by the Russian legislature. Most legal acts only indirectly relate to the security of nuclear weapons, however their content is still significant.

(i) State Secrets

Among the main legal acts regulating security of nuclear weapons in Russia is the Law on State Secrets. The Law on State Secrets, which applies to any person and/or organization within the territory of the Russian Federation, lists information that is considered as state secret. According to Article 5, information as to the development, technology, manufacture and volumes of manufacture, as well as the storage and utilization of nuclear weapons falls under the category of information classified as state secret.

The List on State Secret Information supplements the Law on State Secrets. According to Article 10 of this List, information classified as state secret includes, inter alia, information as to the design, construction, use and security of nuclear weapons sites.

The classification of information as “state secret” implies that such information is protected by the State from any unsanctioned access.

(ii) Access of Foreign Citizens to State Secrets

Article 6 of the Regulation on Access of Foreign Citizens to State Secrets stipulates that foreign citizens are only to be allowed access to state secrets when there is an international treaty providing for obligations of the relevant country of which they are a citizen to protect the transferred information classified as state secret.

The only bilateral agreement between the USA and Russia that we have been able to find that contains any provision as to state secret information is the Agreement *On Utilization of Plutonium, Declared as Plutonium that is No Longer Required for Defense Purposes, on the Manner of its Use and Cooperation*, signed by Russia on August 29, 2000 and by the USA on September 1, 2000 (not yet ratified by Russia). Though only indirectly related to nuclear weapons, this Agreement provides that no exchange of information classified as state secret may occur thereunder.

(iii) Closed Territory

Another legal act relating to the security of nuclear weapon sites is the Law on Closed Administrative-Territorial Establishments. Under this Law, territorial establishments within which industrial plants for the development, manufacture, storage and utilization of weapons of mass destruction are situated must be recognized as “closed administrative-territorial establishments”. Closed administrative-territorial establishments enjoy a special legal regime designed to ensure their secure operation and the protection of state secret information. In the context of nuclear weapon storage sites, this special regime is established by the Minatom Regulation.

Under the Minatom Regulation nuclear weapon storage sites have limitations on access. In particular, Article 18 provides that “entry of citizens, either for permanent residence or for a temporary stay, must be coordinated with the Federal Security Agency of the Russian Federation (the “**FSB**”).” “Coordination” with the FSB implies that only individuals with permission to access state secret information will be allowed access to such sites.

The Minatom Regulation also provides that access to such sites for foreign citizens “on private business” is prohibited and, if “official business”, foreign citizens shall have access only on the basis of regulations issued by the Government of the Russian Federation. We are aware of no such regulations having been issued, other than those already referred to above.

Consequently, in the absence of a treaty between the USA and Russia specifically addressing the issue of access by US citizens to nuclear weapons storage sites, we consider a claim that “Russian law does not allow it” to be a justified claim.

International Treaties

International treaties between the USA and Russia relating to nuclear weapons security do, of course, exist.

(i) *Agreement On Security of Transportation, Storage and Destruction of Weapons and the Prevention of Dissemination of Weapons, June 17 1992*

This Agreement is aimed at regulating the safe transportation and storage of nuclear, chemical and other weapons subject to further destruction in Russia.

Article II obliges the executive authorities of each party to enter into appropriate agreements for carrying out the goals of this Agreement. Article II further lists obligatory provisions that should be included in such further agreements. In particular, such further agreements shall include “provisions relating to access of the parties to the facilities... where it is possible, for monitoring and inspection purposes”.

According to Article V of this Agreement, the Russian Federation is obligated to allow the entry of US officials into Russia. It is also provided that these US officials enjoy the

right to inspect reports and documentation related to the safe transportation and storage of weapons.

Under Article XIV, this Agreement entered into force from the date of its signing [July 17, 1992] and was valid for 7 years. The prolongation of this Agreement is provided for, however we have been unable to find any legal act confirming that prolongation of this Agreement has taken place. We therefore assume it is no longer in force.

(ii) START II Treaty, January 3 1993

START II stipulates the obligations of the parties for reduction of particular nuclear arms. For this purpose, START II provides for a right of the parties to conduct demonstrations and inspections of nuclear weapons that are subject to destruction and/or reduction. The peculiarity of START II is that it concerns particular nuclear weapons and indicates exact parts of nuclear weapons that are subject to inspection.

(iii) Other international treaties

There appear to be two other international treaties between the USA and Russia regarding security of nuclear weapons that may include provisions on access of US citizens to Russian nuclear weapons storage sites. However, one may find only references to these agreements, as their texts are not available to the public in Russia.

The first act is the *Agreement On Exchange of Technical Information in the Field of Security of Nuclear Weapons* of December 16, 1994 (the “**Nuclear Weapons Security Agreement**”). The only information publicly available about this Agreement concerns its proposed prolongation. By an Ordinance of the Government of the Russian Federation No. 191 of March 7, 2002 prolongation of this Agreement through to June 1, 2005 was approved.

The other “secret” treaty is the *Agreement On Cooperation in the Field of Security of Nuclear Weapon Storage*, signed between the Ministry of Defence of the Russian Federation and the US Department of Defense, dated April 3, 1995 (the “**Nuclear Weapons Storage Agreement**”). The Ordinance of the Government of the Russian Federation No. 744 of June 24, 1996 *On Implementation of International Treaties in the Field of Nuclear Weapons Storage and Transportation Security in the Russian Federation* approved the Nuclear Weapons Storage Agreement and appointed the Ministry of Defence of the Russian Federation as the governing executive body responsible for implementation of this Agreement.

The Ministry of Defence of the Russian Federation has refused to make any comment to us, either as to the status of the Nuclear Weapons Storage Agreement or as to the possibility for us to review its text, claiming that information contained therein concerns state interests of a military nature, the disclosure of which is restricted to the public.

Conclusion

We have been unable to identify any treaty provision that would specifically grant US citizens a right of access to nuclear weapons storage sites. Absent such a treaty provision, domestic Russian law applies which also prohibits such access unless there is a specific legal provision to the contrary. We have been unable to find any such specific legal provision.

It may be considerably easier for our colleagues in the USA to review the relevant treaties referred to above than it is for us here in Russia. Subject however to that review, our conclusion is that the claim in respect of access that “Russian law does not allow it” is almost certainly correct.

Respectfully submitted,

PAUL MELLING/NADIA URAZAEVA
Baker & McKenzie

April 10. 2002