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**FOUNDER: PIR CENTER FOR POLICY STUDIES
IN RUSSIA**

Moscow, 2005

**On April 20-22, 2006 the PIR Center will host
the Moscow International Security Conference**

**"THE G8 GLOBAL SECURITY AGENDA:
CHALLENGES AND INTERESTS.
TOWARDS THE ST. PETERSBURG SUMMIT"**

The Conference, held in the context of the Russian G8 Presidency, will bring together over 100 decision-makers as well as leading governmental and nongovernmental experts from the G8 states, China, India, Brazil, non-G8 Global Partnership member countries, along with representatives of Russian and foreign businesses and organizations dealing with security issues, including GP practitioners.

The conference is being held in coordination with the Presidential Administration of the Russian Federation and the Ministry of Foreign Affairs of the Russian Federation. The PIR Center also enjoys the active cooperation of several Russian governmental organizations, including the Security Council, the Ministry of Defense, and the Federal Agency of Atomic Energy.

Among the Russian speakers invited to address the Conference are: Aide to the President of the Russian Federation Sergei **Prihod'ko**, Aide to the President of the Russian Federation and Russian G8 Sherpa Igor **Shuvalov**, Minister of Foreign Affairs Sergey **Lavrov**, Minister of Defense of the Russian Federation Sergei **Ivanov**, Secretary of the Russian Security Council Igor **Ivanov**, and Chairman of the Committee on International Affairs of the Russian State Duma Konstantin **Kosachev**.

The goals of the upcoming event are to gather on the eve of the G8 Summit in Saint Petersburg to discuss the most important items on the international security agenda:

- **Energy and International Security;**
- **Biological Safety and Security;**
- **Outer Space as an Arena for International Cooperation or a New Arms Race;**
- **Multilateral Approaches to the Nuclear Fuel Cycle;**
- **Protection of Critical Infrastructure;**
- *Implementation of Global Partnership Programs in the following Areas:*
 - Chemical Weapons Destruction,**
 - Nuclear Powered Submarine Dismantlement,**
 - Strengthening Nuclear Material Protection, Control and Accounting,**
- *Security Situation in such Regions as:*
 - Central Asia;**
 - The Greater Middle East;**
 - East Asia.**

This conference will provide an important platform for an in-depth discussion on national and international responses to new threats and challenges to international security.

*For additional information please contact Conference Director Anton **Khlopkov**
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In January 2006 the PIR Center will publish the English edition of its Guidebook on the Global Partnership

"GLOBAL PARTNERSHIP AGAINST THE SPREAD OF WEAPONS OF MASS DESTRUCTION"

In 2006 Russia will hold the G8 presidency. In the context of this presidency, the Global Partnership will inevitably be an important issue on the G8 agenda. As more than three years have passed since the G8 launched its Global Partnership initiative at the Kananaskis summit in Canada, it is now possible to examine its preliminary results. The PIR Center Global Partnership Guidebook, in both Russian and English editions, provides a "balance sheet" to assist in just such an examination. The books focus on the achievements, problems, and prospects for cooperation within the framework of the Global Partnership and provide a great deal of practical information on how the machinery of the Global Partnership functions on the political, business, and technical levels. The information is presented in user-friendly form with many figures, graphs, images, and tables, making both the achievements and the problems of the Global Partnership clear.

The Russian edition of the Global Partnership Guidebook, published in early 2005, was a very successful project for the PIR Center. It was widely read by Russian-speaking decision-makers and practitioners involved in the G8 Global Partnership. In Russia, the Presidential Administration of the Russian Federation, the Security Council of the Russian Federation, the Office of Prime Minister, the Ministry of Foreign Affairs of the Russian Federation, the Ministry of Defense and the Federal Agency of Atomic Energy all showed great interest in the Guidebook. The PIR Center received many complimentary comments from our readers. For example, Deputy Head of the Russian Federal Agency of Atomic Energy Sergey **Antipov** told the media on March 24, 2005: "I am convinced that the PIR Guidebook 'Global Partnership Against the Spread of Weapons of Mass Destruction' should become the book to have for all people involved in the Global Partnership."

The English edition of the Guidebook is up-to-date as of September 2005. It will have five chapters:

- **Chapter 1:** History of the Cooperative Programs to Eliminate the Legacy of the Cold War
- **Chapter 2:** Spheres of Cooperation
- **Chapter 3:** Cooperation Problems
- **Chapter 4:** Global Partnership Member Countries
- **Chapter 5:** Prospects for Future Cooperation

This book will also provide a Russian perspective on the Global Partnership, which may be especially valuable in the context of Russia's G8 Presidency in 2006.

*To order a copy of the Guidebook please contact **Triologue** company by phone +7 (095) 764-9896 or by e-mail: info@trialogue.ru*

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Editorial

WILL THE IRANIAN ATOM BECOME A PERSIAN CARPET FOR RUSSIA?

In the end of February 2005 Russia and Iran signed a long-awaited protocol on the return of spent nuclear fuel (SNF) from the Bushehr nuclear power plant (NPP), an agreement several years in the making. It's enough to recall that as early as August 2002, Russian Minister of Atomic Energy Aleksandr Rumyantsev announced that the document would be in place in September-October of that year. But news of Iran's secret nuclear facilities became public in the summer of 2002, and for understandable reasons Russia was unable to force events, even though it clearly understood that the light-water power reactor could not be related to a military nuclear program in any way. It was important to preserve the option of freezing construction of the Bushehr NPP, in case the Iranians proved intractable in their negotiations with the IAEA – Russia could then play the very same joker it did in 1995, when discussing the indefinite extension of the Nuclear Non-Proliferation Treaty (NPT) with Iran.

After Iran's nuclear history was (more or less) clarified, thanks to the efforts of the IAEA, negotiations over the return of the spent fuel began. Iran's representatives proved quite resourceful, presenting Russia with a bill for SNF return saying: *if you want to take the fuel back from us, then pay us for it*. In the end, common sense won out, and conditions for the return of the fuel were agreed upon before Aleksandr Rumyantsev, now as head of the Federal Atomic Energy Agency, made another visit to Iran. But Rumyantsev was heading to a country where bargaining until the last minute is an essential part of the local culture. So it is no surprise that the Iranians decided to change the terms a little even after the Russian delegation had already arrived, which meant postponing the date for the signing of the protocol, redacting it on the plane between Bushehr and Tehran (where the heads of the two nuclear agencies were conducting a working meeting), and signing it on their knees before the Russian delegation's flight to Moscow took off.

In fact, the difficulties encountered during negotiations over the return of SNF from Iran were no exception in Russian-Iranian cooperation. Actually, the opposite is the case: they are typical of bilateral cooperation in most areas, a fact that seriously inhibits Russian business from penetrating the country. There is no real growth in trade between the two countries. One should not be deluded by the trade statistics of the past two years: the nearly 50% growth rate, reaching sums of nearly \$2 billion, is the result of the simultaneous delivery of large-scale equipment for the NPP and armaments that were ordered during the last century; such contracts are unlikely to be repeated with the same financial return.

An examination of the best prospects for Russian-Iranian cooperation in the future must pay special attention to the construction of NPPs in Iran. A series of meetings between PIR Center experts and Iranian experts and high ranking officials in Moscow, Tehran and Geneva in January-March 2005 further convinced us that Iran earnestly intends to develop a large-scale nuclear energy program. Yes, Tehran's new plans to build 20 nuclear reactors—confirmed by a decree of the Majlis (Iran's parliament)—look more like a belligerent ploy than a practical plan of action. But we should heed the fact that Iran sees nuclear power as an element of national prestige, and as an attribute of regional leadership in the Middle East, with the utmost seriousness. This is not a question of economic gain (Iran has already paid over 8 billion German marks and about \$1 billion for the Bushehr nuclear reactors) but a question of prestige, which the country's leaders will not give up regardless of who becomes the country's president this June.

Russia has no reason to stay on the sidelines when Iran's nuclear market is divided up. European commercial interests—first and foremost those of the French nuclear industry—have indicated a persistent desire to return to Akhvaz, where they began to build a reactor in the mid-1970s. A noteworthy episode in this regard occurred at

a large international conference devoted to the Iranian nuclear power program in Tehran. At a reception in the name of Secretary for the Supreme National Security Council Hassan Rowhani, high ranking Iranian diplomats brought a man of European appearance to him and introduced him with the words, "This is a man who will greatly help us with the solution to our problems." In point of fact this man turned out to be from the French nuclear industry. And we cannot write off the Americans, either. In answer to quiet questions from the Americans themselves about the possibility of renewing cooperation, the Iranians (true, with cameras turned off) by no means speak about the *great Satan*. They answer quite pragmatically: "Make your proposals, and we will examine them." And one should not doubt that the United States is preparing such proposals. Whether they will be acceptable to Iran is another question.

Therefore, Russia has no reason to hesitate and justify its decision to provide Iran with nuclear technology (Russia is only cooperating in the construction of an NPP and is not undertaking any cooperation on the nuclear fuel cycle). One should remember that in the mid-1970s the United States was ready to agree to nuclear fuel production in Iran and did not object to the reprocessing of SNF in Iran, even expressing its readiness to take part in the construction of an SNF reprocessing plant. Thus it seems that the Islamic revolution, in point of fact, was more of a plus than a minus when it comes to the nonproliferation regime. Otherwise Tehran would already have acquired nuclear arms. Just as America's other ally from this era—Pakistan—has done.

However, we have to be absolutely clear with our Iranian partners that the weaknesses in the Russian export control system have essentially been overcome. So working with Russian enterprises, including those in the defense industry, according to the Persian saying "A thief is a king until he is caught" will have negative consequences for bilateral relations and cause existing contracts to be frozen. Moreover Russia should clearly show Iran that cooperation prospects depend on the positive development of the dialogue between Iran and the IAEA and on how fast will the IAEA consider the Iranian files.

In expanding its cooperation with Iran, Russia must learn from past experience. One of these lessons is that trustfulness, sometimes bordering on naivete, is inappropriate in relations with Iran. In offering to cooperate with Iran in NPP construction, many Russian government experts expected that Iran would tell us about its plans in the nuclear sphere, forgetting yet one more Persian proverb: "If partnership was holy, then God too would take himself a partner."

Having signed the protocol on the return of SNF from the Bushehr NPP last February, albeit on their knees, Russia took upon itself the obligation to supply fresh fuel to Iran, a commitment it must fulfill. If we do otherwise, and forsake Iran in exchange for large-scale cooperation with the United States in the nuclear sphere (and the U.S. continues to probe under what circumstances Russia might refuse to provide fuel to Iran), yet one more Persian proverb comes to mind: "Enemies can be divided into three categories: my enemy, the enemy of my friend, and the friend of my enemy."

Hot Topic**KONSTANTIN KOSACHEV:
'RUSSIAN FOREIGN POLICY
PRIORITIES'**

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Chairman of the Russian State Duma Committee for International Affairs Konstantin Kosachev was interviewed¹ by Yaderny Kontrol editor-in-chief Vladimir Orlov.

YADERNY KONTROL: Konstantin Yosifovich, you have worked in the Russian (Soviet) foreign policy establishment for nearly 15 years and have held leading posts on the State Duma Committee for International Affairs for more than five years, invariably finding yourself in the midst of the nation's foreign policy events. How, in your view, has Russia's foreign policy been transformed during this period? What are the main factors that influenced these changes?

KOSACHEV: There are three major factors determining the course of a state's foreign policy: interests, capabilities, and the international situation—or rather, the assessment of this situation by those who determine foreign policy. The foreign policy of any state is aimed, first and foremost, at the realization of its national interests. Russia, both under President Putin and under his predecessor, is no exception. On the other hand, these interests can be perceived differently.

Our country's capacity varied significantly at different periods of time. One can discern, with many qualifications and reservations, three stages in Russian foreign policy: the "Yeltsin-Kozyrev" period of a weak Russia and a dependent foreign policy; the "Yeltsin-Primakov" period of a weak Russia and independent foreign policy; and the current period, associated directly with President Putin, of a strong Russia and an independent foreign policy.

Finally, the global and regional environment changed quite radically over these years. Assessments of the situation has also

changed. For example, the commitments Russia undertook vis-a-vis the European Union in the early and mid-1990s were clearly excessive, and were based on over-optimistic, romantic assessments. Today, a correction of perceptions regarding the situation in the post-Soviet space is happening just as clearly.

Another problem is that Russia has yet to finish creating a real foreign policy mechanism, which would include the foreign policy of different branches of power and state agencies—the president himself, executive agencies (the Ministry of Foreign Affairs as well as other ministries and agencies), the legislature (parliamentary diplomacy), regional authorities, the Security Council, "think tanks," Russian foreign business activity, NGO activities, etc. A rigid hierarchical structure is not needed here, but the basic coordination present in all countries would be useful.

YADERNY KONTROL: What are the priorities of today's Russian foreign policy?

KOSACHEV: Current Russian foreign policy, in my view, has three priorities. The first, as banal as it may sound, remains the former Soviet states. The second is Europe, the European Union. The third is the growing power in Asia, in particular China and India, as well as Japan and, of course, the Republic of Korea, and in the future, a unitary state on the Korean Peninsula. Someone may ask: and where is the United States in this list of priorities? Without a doubt, Russia's relations with the United States are very important to us. There are two areas that are of equal interest to both the United States and Russia; they are: the fight against terrorism and the nonproliferation of WMD. We are fruitfully working together to solve the problems in these two areas. However, this is the extent of our relations in the big picture. Nothing new or weighty can be seen on the agenda of our bilateral talks in either the strategic or economic sphere.

Russia in the Former Soviet Union

YADERNY KONTROL: You mentioned the correction of Russia's approach to the countries of the former Soviet Union. What are the motivations for these changes by today's Russian leadership? How will national policy be transformed in this area?

KOSACHEV: A reconsideration of Russian policy in the post-Soviet space is overdue, although President Putin, in July of last year, warned that Russia does not have a monopoly over activities in this region. However, Russia's straightforward mobilization policy mostly benefits those countries that are trying to inflate their bargaining position in negotiations with the West (for example, those bargaining over EU accession) and in negotiations with Russia (gaining current economic preferences). The primitive scheme of "pumping out" natural resources, debt cancellations, maintaining relations only with ruling elites, and relying mainly on direct oil and gas diplomacy is not in Russia's interest.

In reality, it is Russia, however strange it may sound, that has yet to determine what exactly it wants from the former Soviet republics. What do we expect from our neighbors in the political sphere, other than demonstrative loyalty, which we have been receiving in doses that directly correspond to preferences granted?

We must now strengthen all of the resources of our policy in this area (organizational and intellectual, first and foremost), and make the existing levers work not towards declarations of friendship, but for concrete projects of integration. If due attention is paid, the Single Economic Area, the Collective Security Treaty Organization, the Eurasian Economic Community, and other structures will be reinvigorated, when their members clearly define for themselves what they are trying to achieve and at the same time get rid of illusions about quick accession to the EU.

Special attention should be paid to forming an "energy bloc" within the CIS framework, which could become not just a powerful economic factor in Eurasia, given the rapid growth of the huge Asian economies and their growing energy demands, but also significantly influence world energy prices. The creation of a single energy and export strategy for Russia and the raw material-exporting countries of the CIS could make them more independent of external influence and free to choose their own partners. If so, the rapid "escape to the West" of the European and "semi-European" CIS states from the ostensibly backward East of the Community could turn out to be a strategic loss for them in the future.

Today Russia is quite capable of radically changing the situation, based not on "spin" but on its neighbors' vital interests. From the point of view of these interests (if we do not pay attention to the growing mythology in neighboring countries about Moscow's supposed imperial ambitions, which are allegedly dealt a heavy blow by each "victory of freedom"), it is not Russia that needs something from these countries, but these countries who have a far greater need of Russia. It may even turn out in the future that the countries most important to Russia will not be the ones that are such objects of contention today. Is it just a coincidence that the United States is so active in Central Asia and the Caucasus at present?

The myth that Russia is blocking democratic transformations in neighboring states should be dispelled as soon as possible. Since it is really a myth, although Russian bureaucrats do have the banal habit of continuing to deal with their counterparts in the CIS. In fact, Russia is more interested in the democratization of its neighbors than any other country, since democratization will make it significantly easier for Russian business to operate there, while today local elites dictate rules that are rigid and far from market-based. True democracy guarantees respect for the rights of Russian-speaking minorities, who are the first to become victims of a society's authoritarian tendencies. Finally, in a democratic society there should be no political decisions that contradict the interests of its citizens. The vital interest of the majority of CIS countries' citizens—the millions who come to earn money in Russia, those working in cooperative enterprises created back in the Soviet era, and those for whom the obvious and sometimes the only export market is the CIS countries, that is, for all these categories of the economically active population—is to preserve stable and close relations with Russia. Refusing to take their opinion and essential interests into account contradicts democratic principles.

YADERNY KONTROL: As a result of the Shanghai Cooperation Organization (SCO) summit, which took place on July 5, 2005 in Astana, a joint Declaration of the Heads of the States Participating in the Shanghai Cooperation Organization was issued. Some experts see this document as evidence that Russia intends to increase its military presence in such post-Soviet coun-

tries as Uzbekistan and Kyrgyzstan. Do you share a similar opinion?

KOSACHEV: You undoubtedly noticed that Russia reacted fairly quietly to the growing U.S. military presence in this region at the time. The reaction was calm not because Russia could not have reacted otherwise, because it was weak. The reaction was calm because at the time we understood the intention of the United States, which was trying to solve its own problems through this region, problems that did not relate to the region itself. Let's say, the problem of Afghanistan, as well as of Iraq. And in this sense Russian and American interests coincided, because the problem of Afghanistan is no less important for Russia than it is for the United States. But no situation is static. We understand that the Afghan problem is far from over; nevertheless, sooner or later it will be concluded. This raises a question for the countries of the region—and not just Russia, but China too—about what will happen to the American military presence after these problems have been solved. I see this question as completely natural. No one is saying that the American military presence in this region must be reduced right away. We are talking keeping our intentions transparent in order to avoid harboring suspicions directed at one another.

As far as Russian military presence in these countries is concerned, probably it is fully possible only as long as the national forces of the states concerned cannot manage their tasks. For example, at one stage Tajikistan declared that it no longer needed Russian border guards on either the Chinese or Afghan sections of the border, since the Tajik border guards had improved and could take on the task themselves. I personally have doubts that this is so. But we respect the sovereign right of Tajikistan to guard its national borders. However, if Tajik border guards do not manage, we will again raise the question of returning to the earlier cooperative regime.

But if we raise the question another way: does Russia intend to strengthen its military presence, for example, in Uzbekistan in order to help maintain the regime existing there? Then I would say this type of behavior is wrong.

YADERNY KONTROL: What content you do include in concept of union relations? Economics, and free trade with bor-

dering union countries? Could there be a military alliance? Do the union relations between Russia and the countries of the former Soviet Union mean that these countries should not join organizations like the European Union? It is difficult to imagine a better thing for the CIS countries than to begin trading energy resources at world prices. Does this trend extend to Belarus?

KOSACHEV: When I talk about allied relations, I use this term more in a philosophical sense than in the sense of the creation of some sort of concrete alliance. For me, philosophically, allied relations indicate a fairly simple thing: I am ready to put even my own national interests at risk if for my strategic ally's needs.

The U.S.-British alliance in Iraq is a classic example. U.K. Prime Minister Tony Blair risked a lot to unconditionally support the United States. A position similar to the German or French one would have been a lot easier and more comfortable for him. He did what he did because he understood that at the time this was critically important for his strategic ally, the United States.

Russia does not have this sort of alliance relationship with a single country in the entire world. Not even with our closest partners, such as Armenia or Kazakhstan. It is sometimes very difficult for us to make agreements with such countries because their own interests, not the interests of the alliance, are their chief concern. However, it is difficult for me to condemn or criticize them for this.

We proposed this type of alliance relationship to Ukraine to the detriment of our own interests, in the late stages of the presidential campaign. We switched over to differentiating payment for energy resources according to the consigning country. Or when we prolonged the period that Ukrainian citizens could stay in Russia without registration to 90 days. This proposal was, as is well known, rejected by Ukraine.

Our difficulties in this sphere are also caused by the fact that we are not very articulate in our relations with neighboring countries. In particular, we often find it difficult to understand why particular relations are developing in a certain way. For example, we supply gas to Estonia and Moldova for the same price: \$80 for 1,000 cubic meters. Our Moldovan friends seem to imagine that this will always be the

case. They think that because gas is supplied to Estonia despite extremely difficult relations, it means that however long or deeply they spoil their relations with Russia nothing serious will happen.

I would like to emphasize once more that for me it is not critical, for example, that Ukraine not join the European Union and NATO in order for us to maintain some kind of a relationship with Kiev. But in this sort of situation Ukraine could behave in several ways. It could take the initiative and come to Russia and say, "we are joining NATO, but don't worry, we understand how important the Black Sea Fleet is to you, and we guarantee you that we are ready to sign any agreement. Nothing will happen to the Black Sea Fleet after our entrance into NATO." This is one way to behave.

There is also a second way: to join NATO without discussing this matter, making enigmatic expressions, and then in the end preparing a very unpleasant surprise for Russia. We understand this well. The first way I would call, although it is stretching it a bit, a version of allied relations, where mutual interests are considered and there is a readiness to give up some of one's own interests in order to maintain these mutual interests. This approach, despite criticisms one might level at the current regime, is the approach I see demonstrated by Belarus. It is ready to sacrifice its national interests, although, unfortunately, not in the manner that Russia would like. And I do not see the conditions for a switch to trading with Belarus on the basis of world prices. We must try to stimulate Belarus in every way possible, including economically, to accelerate the process of mutual integration. But here, in my view, the lack of a clear relationship interferes, just as it does in our relations with the European Union.

Russia-EU

YADERNY KONTROL: Despite the adoption of the Partnership and Cooperation Agreement with the EU in 1997, quite some time ago, Russia and the EU have yet to develop effective cooperation in even one sphere of cooperation in which they are both interested. How do you explain this fact? And how does Russia plan to develop its relationship if the EU expands?

KOSACHEV: In my view, there are three developments that have influenced Russian-EU relations: internal Russian events, and, to be more precise, the adverse and not always appropriate and fair reaction of the European public to these events; the "velvet revolutions" in the CIS and the active role of the EU, particularly during the events in Ukraine; and, finally, the most recent events in the EU itself—the failure to adopt the EU Constitution and the budget. This is a signal that the EU has reached its natural limits of expansion for the present; to go further would compromise quality.

Russia will base its policy on the realities of the situation, since the EU, as time has shown, is a living and developing organism, with its upswings and crises. To a large extent, the direction in which it develops will determine its relations with Russia. Those EU member states that would like to create a powerful, globally competitive union, to implement the "Lisbon Strategy," will be interested in developing stable relations with Russia. But those that have joined the EU to settle old scores and to get cover for attacks on Russia, who are ready to "censor" EU-Russia relations even at the expense of economic pragmatism, having gained an opportunity to implement their plans, could significantly worsen the climate between us.

However, it will take a lot of effort to convince the people in the EU that distancing themselves from the continent's most resource-rich country, one capable of ensuring the realization of EU economic plans, is beneficial for them. One would have to prove that: a) there are no alternatives to confrontation, and b) that Russia cannot be integrated into either the EU or any other general transitional structures, which would not disturb the EU's internal architecture. That is not likely to be the case.

Thus, we should follow the path of consistent rapprochement, and not let our emotions hamper us. The agreement on a package of road maps for the creation of four Common Spaces has been adopted in an optimal form: on the one hand, they are general enough that they are not a substitute for the more comprehensive and detailed agreement, which we will have to prepare in order to replace the existing Partnership and Cooperation Agreement; on the other hand, they determine the areas to apply our joint efforts quite precisely.

But the European Union itself must solve one difficult dilemma: whether it is jealous of any attempts to create strong economic structures in the CIS, fearing the emergence of a strong competitor and a weakening of its own positions, or it is not ready to expand further and is interested in the CIS states gaining strength and stability on their own, without EU financial support. This would require the creation of new effective structures in the CIS, with Russia inevitably acting as their core (any alternative structure, such as GUAM, will have to be fostered).

The simplest way to overcome this internal conflict is to determine the real prospects for Russia itself, and not simply in a declaratory manner, but in such a way that Russia's neighbors—Ukraine, Georgia, Moldova, Armenia, Azerbaijan, and Belarus—clearly understand that deeper cooperation with Russia will not block their way into the EU, but rather leads in the same direction.

One more important nuance: we have lived with the view that we are surrounded by enemies for too long. Recently, as European and American mass media launch a massive attack, especially on the Russian president, they suppose that this pressure will lead to more democracy, along the lines of Georgia or Ukraine. But in this situation Russians, instead, see that their suspicions that no one in Europe is waiting for them are being proven, and they, out of "habit," begin to mobilize. And Europe welcomes anyone who criticizes them. The condition of Russians in the Baltic States confirms their worries, and Ukraine, Georgia, Moldova are encouraged to think that they can resolve their complex problems with minorities either by force or with massive violations of minority rights (as in the Baltic States).

YADERNY KONTROL: During this June's US-EU summit U.S. President George Bush attempted to demonstrate the U.S. interest in a strong European Union in every possible way. However, many experts believe that in fact the White House does not want the European Union to be a strong competitor on the world stage, and that therefore it is promoting an unstable equilibrium within the EU and a deepening of the contradictions between leading European powers. Do you agree with this theory?

KOSACHEV: The United States pays close attention to trends strengthening the European Union, since this strengthening, obviously, is not in its interest. It is natural that it disturbs them. I think that the United States will always support the entrance of a maximum number of weak and unprepared states into the EU, because this weakens the EU and does not strengthen it, just as the founders of the EU originally thought. But in reality the key to solving this emerging situation lies in the European Union, not in the United States; the U.S. is a passive, not an active player in this game.

As strange as it may seem, the active players today are not so much the founding fathers as the new states, the new ten or some of the states in the new ten that recently joined the European Union.

Here, in my view, Poland has a special role. Last August the Polish press published a programmatic article by then-Minister of Foreign Affairs and now Speaker of the Polish Parliament Włodzimierz Cimoszewicz. It included the statement that until the Ukraine, Moldova, and Belarus enter the EU and NATO, Poland will feel that it is a front-line state. And I imagine that any state now is located on the outer boundary of the European Union will always try to move closer to the center, and to move the border away from itself.

I think that has now entered the consciousness of the European Union's strongest states, Germany, France, and the United Kingdom, that clearly are going to strongly resist further expansion.

And here we find yet another unexpected contradiction in the U.S.-European-Russian triangle. I repeat again: the United States, in my view, will actively promote EU expansion. Russia will actively try to prevent it in this. And inside the European Union itself two opposing groups will collide.

Until this situation is resolved, there are unlikely to be any serious contradictions between the United States and a weakened Europe.

Russia-United States

YADERNY KONTROL: U.S.-Russian relations have always been characterized by a combination of rivalry and cooperation. However, since September 11, 2001, and

thanks to the personal relationship that has been established between the two presidents, the elements of rivalry have been pushed into the background. In spite of this, since that time no new areas for cooperation between the two countries have appeared. What, in your view, are the areas in which Russia and the United States might nonetheless be interested in cooperating in the future?

KOSACHEV: The U.S.-Russian agenda largely depends on how the United States chooses to realize its undisputed lead over other potential competitors: exercising its leadership by dominating through consensus or via a hegemony based on a demonstration of its power. Today, unlike in the second half of the 20th century, the peculiarity of the situation for Russia consists in the fact that the international system concerns it neither more nor less than it does all other states (earlier, everything that happened in the Soviet Union and the United States was first seen in the context of the bipolar confrontation). Thus, new issues and common interests are emerging that bring Russia and the leading European states together (such as a common position on Iraq).

Among the obvious agenda items today are: preventing the proliferation of WMD; fighting international terrorism and organized crime; increasing stability in Eurasia; UN reform; discussing the criteria for interventions in the internal affairs of sovereign states, and criteria for determining what non-democratic regimes, "humanitarian disasters," and "failed states" are; where the G8 is concerned: the prospects for development, and accession of new member states; cooperation in the areas of energy as well as science and technology; developing a US-Russian business dialogue; and supporting Russian accession to the WTO.

U.N. Reform

YADERNY KONTROL: In March U.N. Secretary General Kofi Annan gave a report that presented the basic principles for reforming the organization. How do you evaluate the prospects for the modernization of such a global organization?

KOSACHEV: Of course, there is a long-standing need of reform, caused by global changes that have altered the world greatly since the time when the organization

was created. At the beginning of the new millennium, the traditional views of international law and international relations were severely tried. The attention of both domestic and international politics began to focus not so much on the state, as on individual actors.

However, we should understand that such significant transformations of the basis of international law cannot but cause tensions in relationships based on the fundamental principles of past centuries, upon which the so-called Westphalian order was based: state sovereignty and non-intervention in states' internal affairs. Life, freedom, and personal dignity today are afforded protections that, if not equal to those of states, are at least far greater than those of past centuries.

The UN—the main institution for the coordination of the will of all peoples, created 60 years ago following the agreement of the victorious powers in the most devastating world war of the past century—should not look like an anachronism against the backdrop of the rapid progress of a new century. If the UN does not meet the requirements of the contemporary world, it would simply not be worth the money spent on it – it would be better to donate that money directly to those in need. The key question is: to which trends should the UN adapt? Are all of the current changes so positive and inevitable that they should be embodied in international law? Should the UN "bless" the new changes with its authority, or should it preserve the most valuable things from the past?

These questions require the most careful analysis, since the goal is not to "sink" its status via the reforms but instead to strengthen it, and not weaken it, in the process of transformation. The fact that at present certain countries and organizations sometimes ignore the opinion of the UN, even when undertaking serious actions like military operations against sovereign states, does not mean that this is a norm that should be codified. On the contrary, this is a deviation from the norm, which should be thus evaluated, whatever reforms are implemented and whatever number of countries sits on the new Security Council. If this does not happen, the threshold of what is possible in the world will be further lowered, in contradiction to the goal and mission of the United Nations. And

we should not be ashamed of our determination to stand for justice in international relations, even if not everyone likes this and some see it as "outdated." As Friedrich von Schiller once said, "the truth does not suffer at all, if someone fails to recognize it."

Russia today has a real chance to preserve and to strengthen its status as one of the major powers that not only founded but also reformed the UN. There is no sense in trying to throw its weight behind something that is obsolete: either we lose, if we fail to defend our position, or the UN loses, if we will succeed in defending something that is no longer needed.

Russia-NATO

YADERNY KONTROL: I have to ask a question about Russian cooperation with NATO. What factors, in your opinion, will determine the nature of such cooperation in the near future?

KOSACHEV: The Alliance currently is experiencing a "time of change," the results of which will determine its relations with Russia. If it preserves the obsolete role of a military bloc, existentially in need of a strategic adversary (dispersed international terrorism does not fit this role), then cooperation will be difficult. If it answers current realities, and becomes aimed at responding to new challenges effectively, then interaction with such a structure (and, possibly, joining it) will not only be expedient, but necessary, given increasing national security risks. There are different trends inside NATO, and we will watch them, seeking maximum possible cooperation at each of the stages of the evolution of the Alliance.

If NATO continues to limit itself to concentrating its forces in Europe, then Russia will inevitably become if not a target, then an object of its increased attention. However, NATO may change its geographic priorities, as the Americans want it to; it is not yet clear for us how this will happen, or whether the threat to Russia will grow at its perimeter. One possibility is that NATO will create joint bases in those locations where it (to be more precise, the U.S.) has already received consent from the CIS states. Kyrgyz President Askar Akayev once suggested this himself. Another issue is so-called interoperability, i.e. the possibil-

ity of matching up military equipment and command systems, if necessary.

YADERNY KONTROL: When the Founding Act on Mutual Relations, Cooperation, and Security between NATO and the Russian Federation was adopted, there were loud declarations that we would now be able to affect decision making in the North Atlantic Alliance. However, some seven years have passed and we have seen that this is not entirely true. There is an understanding of the fact that this great expectation was not confirmed. How, in your view, should Russia conduct its relations with this organization in future: sign a new Founding Act or work within the framework of the existing one? Attempt to strengthen our position or recognize that we have exhausted all positive possibilities and should not count on any more, and should let it go, as all existing projects are simply peripheral?

KOSACHEV: I completely agree that these agreements did not lead to a breakthrough in our relations and our cooperation truly is of a peripheral nature. On the positive side, of course, one could note that Russia and NATO, as partners, have become somewhat more transparent to one another. On the other hand, we never found an area where our interests coincide. And this is so because NATO itself has not been able to find its own place in the current, changed world. Both Russia and the United States understand this.

I would not exclude a qualitatively different level of Russia-NATO cooperation, if NATO is transformed into a union with political, and not just military functions, including, however seditious this sounds, peacekeeping cooperation, such as joint operations in Abkhazia or in Transnistria, where, to date, Russian peacekeepers remain under the aegis of NATO. But I would like to emphasize: only in the case of substantial reforms of NATO itself, something that one cannot imagine at present.

For Russia, the formation of some new type of cooperation with NATO currently is not a main priority in view of the changed circumstances. We find it much more interesting and more promising to negotiate bilaterally with the United States and other NATO members like, for example, Germany. This spring, the State Duma ratified a unique agreement with Germany on the transit of NATO troops through

Russian territory into Afghanistan. It is hard to imagine this happening two to five years ago. Nevertheless, it is typical that this was arranged through a bilateral agreement with Germany and not an agreement with the Alliance. I think that if we had attempted to ratify this sort of agreement with NATO it would not have been approved despite all of the administrative leverage that the Kremlin has in the State Duma.

The Multi-Vector Nature of Russian Policy

YADERNY KONTROL: What, in your opinion, should Russia's foreign policy priorities be in the near future?

KOSACHEV: Our policy should not be limited to relationships with the major powers of today, however dominant they currently appear. Creating a multipolar world presupposes maintaining strong relations with the countries that will form its foundations.

By advancing our relations with China and India, as well as with Brazil, Egypt, and all of other powers that are expected to become stronger in the medium-term, we are working for the future, strengthening Russia's position in the complex structure of the emerging world order. It seems that this structure will differ from the current one, with its clear unipolarity, which makes it unstable and largely unjust, and without prospects for the future.

Eliminating the border problem with China allowed us to attain a new level of cooperation, a fact that was demonstrated by the visit of the Chinese leader to Moscow in early June. These are not just an attempt to play the "Asian card" in a "grand bargain" with the West; Russia has its own permanent interest in the region. An illustration of this is the Shanghai Cooperation Organization, which is emerging as a genuinely useful structure for reconciling the interests of countries in the region.

YADERNY KONTROL: If we were to consider the development of cooperation in the Far East, then what, in your view, could Russia propose to the leading countries of the region—to Japan or China—besides oil? Speaking of oil, from your point of view, what is more attractive for Russia: an oil pipeline to Daqing or an oil pipeline to Nakhodka, taking into account the shortage of pipelines in the eastern part of the country? And are you worried that these countries' strong economic activity in Siberia and in the Far East will eventually prove to be counter-productive for Russia?

KOSACHEV: Of course, at the present time we cannot propose anything to our Asian partners that we cannot propose to our European partners or the United States. These are the same energy resources, the same raw material. This is the reality of modern Russia. It is another matter that we can propose fundamentally new projects in this area to our Asian partners, including the construction of the oil pipelines that you mentioned earlier. And I am confident that we can propose that they cooperate in developing Siberia and the Russian Far East in ways that are acceptable to Russia

As far as oil pipelines are concerned, I am undoubtedly a supporter of the plan to build a pipeline to Perevoznaya; there are no longer any discussions on Nakhodka. We made a serious error when we built the Blue Stream gas pipeline and locked ourselves into one end user, who immediately began to dictate conditions to Russia. This time, we are not talking about giving Japan preference over China. We are talking about the choice between a project with several end users and a project with one end user. The first is always better from an economic point of view.

¹ This interview was based on Konstantin Kosachev's speech to the *Trialogue* Club, organized by the PIR Center on July 7, 2005.

Interview**SERGEY KISLYAK: 'IRAN:
THE SITUATION HAS BECOME
CLEARER, BUT NOT ALL
QUESTIONS HAVE BEEN
ANSWERED'¹**

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Abridged version.

Deputy Minister of Foreign Affairs of the Russian Federation Sergey I. Kislyak answered the questions of PIR Center Director Vladimir A. Orlov.

YADERNY KONTROL: One of the critical issues in world politics today is the observance of the NPT. How can we guarantee that some non-nuclear state that has gone far in developing its own nuclear fuel cycle will not at some moment use its right to withdraw from the NPT and create, outside of the NPT and outside of the control of the international community, its own nuclear arsenal? More concretely: how should we deal with Iran? The EU-3 (Britain, Germany and France) have proposed their services in resolving the Iranian issue. How does Russia react to this "European initiative"?

There are two polar-opposite viewpoints: one is that this is a no-lose situation for Russia, as the Europeans will resolve for us those tasks that we would not likely have been able to bilaterally, and this will open the way to easier cooperation with Iran, and will gradually remove the constraints that existed earlier; the other is that this is, undoubtedly, a losing proposition for us, because the Europeans will be in the Iranian nuclear energy market, and they will not leave but will crowd us out. The supporters of this "pessimistic" view say that France has nonproliferation on its tongue, but nuclear exports to Iran on its mind. And after the second glass of red wine, the French themselves admit that their export interests are no less important than nonproliferation, and that they already "beat" Russia in the tender in Finland, and will win in Iran too...

KISLYAK: The medicinal norm is one glass of red wine, therefore, as a rule, I do not have a second. And I look at this situation completely differently. This situation is not a game. Neither for us, nor for Iran, and not for the three European states that have actively taken part in the development of this dialogue. This is not a simple situation. The history of the development of the Iranian nuclear program is that for 18 years, Iran gathered components for the development of its nuclear program without unconditionally informing the IAEA of all of this work. From the IAEA's viewpoint, not all of this is a violation of the rules.

Iran is not only our partner in the construction of the Bushehr NPP, it is a major state with whom we share the Caspian Sea – it is our neighbor. It is a country to which Russia has historically wide economic, cultural and scientific connections. Therefore it is very important for us that our relations with Iran develop on the basis of a mutual understanding of the beneficial nature of these relations, of the potential for these relations, of their legal foundation. The negotiations of the EU-3 with Iran (ceased at the moment - *ed.*) are an independent process of our European neighbors for resolving the problems that they have relating to the history of the development of Iran's nuclear program and the application of the lessons from this history for the future.

YADERNY KONTROL: Speaking of the lessons of history, you said that Iran has gathered the components for its nuclear program for 18 years.

KISLYAK: Yes, they bought one technology in one country, and another in another. Moreover, these actions were not always legal violations. However, Iran did create, unfortunately, an insufficiently transparent program. This is the source of the large number of questions concerning the program as a whole. There have been many conjectures, hypotheses, and tense debates, about this, including at the IAEA.

YADERNY KONTROL: How would you evaluate the documents Iran has provided to the IAEA?

KISLYAK: To date, Iran has delivered a sufficiently detailed, several thousand page report on the goals of its program, what components they bought and where they bought them, for what purposes, and how one component links with the others. Iran's viewpoint is fairly unambiguous in the for-

mation of this report: everything is for peaceful purposes. This is a very large report, and the IAEA has been studying it for several months, not from scratch, but on the basis of a long history of cooperating with Iran. Many questions that originally existed concerning the nature of Iran's nuclear program have, for all intents and purposes, been answered.

YADERNY KONTROL: Is everyone satisfied with Iran's answers?

KISLYAK: Of course not. We know the position of the United States. This position is severe. We often heard proposals to increase the level of the discussion, to take it from the IAEA to the UN Security Council. We think that the path that was chosen a year and a half ago for the resolution of issues relating to the past and future of Iran's program on a cooperative basis is the optimal approach. Moreover, it allows Iran to answer these questions in an atmosphere of cooperation, and not one of confrontation with the rest of the member-states of the Treaty and the Agency. This is the path whose development we have consistently tried to promote in relations between the IAEA and Iran, in the relations between Europe and Iran, and in the relations between the USA and Iran.

YADERNY KONTROL: The Iranian problem continues to be discussed at the bilateral level between Russia and the United States. How would you evaluate the current level of this dialogue?

KISLYAK: We have our viewpoint in the consultations with the United States on Iran, plain and simple.

We are, absolutely against Iran acquiring nuclear weapons, just as we are not interested in any other state going nuclear. In this regard, there are no discriminatory approaches in our relations with Iran. And we tell our Iranian friends that their purposes should be purely peaceful. They affirm that their purposes are purely peaceful. If this is so, we have to enhance cooperation in order to bolster confidence in the character of the Iranian nuclear program. Clearly, after 18 years of lack of transparency in the nuclear sphere on Iran's part, the process of rebuilding trust is not a task for a single day or a single month. We know this from the development of relations with the West after the Cold War. This is not like electricity: even if you have already agreed on everything, one cannot just turn on or

turn off the light. International relations are much more complicated. If doubts have emerged, and especially if doubts have developed over the course of decades, they cannot be removed with a single report.

YADERNY KONTROL: What is your current impression of Iran's nuclear program in brief?

KISLYAK: The current Iranian program is incomparably more transparent and understandable than it was a year and a half ago. However, not all questions have been answered, so the work in this direction will continue. We will help in this.

YADERNY KONTROL: Returning to the question of what is good for Russia, and what is not good for Russia, where Iran is concerned. How will Russia conduct itself in its relations to Iranian nuclear program?

KISLYAK: Iran is our neighbor and Russia stresses the importance of solving the problem politically. Iran needs to find a path to coexist with the rest of the world, with its region, with Europe, in stable, predictable political conditions. We are interested in a stable, socially and economically developed Iran, at peace with other states, as well as with consistently improving relations with Russia.

We will do everything possible so that the peaceful nuclear program in Iran develops cooperatively. This means that Iran should demonstrate transparency and predictability in its program and intentions. This also means that Iran must have confidence that there will be no interference in the delivery of equipment and materials for developing its peaceful nuclear program.

We have been working and will continue to work in this direction. Our friends from Europe have their dialogue with Iran, but we are by no means sitting in our offices waiting to see how it will end. Russia is a very active participant in the multilateral discussion on this issue. And we are also very seriously discussing this issue independently, in a bilateral format, with Iran. I hope that in the end, if we finally answer all of these questions, we will be able to say that Russia played an important role in dealing with these difficulties, and this is fully in Russia's long-term interests.

¹ This interview was taken before the adoption of the IAEA resolution GOV/2005/77 on Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran on September 24, 2005.

Interview

**NIKOLAI SPASSKY:
'COMBATING TERRORISM
MUST HOLD A CENTRAL
PLACE IN THE NEW RUSSIAN
NATIONAL SECURITY
CONCEPT'**

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Deputy Secretary of the Security Council of the Russian Federation Nikolai Spassky gave an interview to Yaderny Kontrol editor-in-chief Vladimir Orlov.

YADERNY KONTROL: The terrorist acts of summer and fall 2004 renewed the very acute question of whether Russia's National Security Concept can meet the challenges currently facing the country. How is the development of a new National Security Concept covering this issue? What are the differences between this document and the 2000 Concept, and has there been a dialogue with the public during the work on this new document?

SPASSKY: In accordance with instructions from President Vladimir Putin, the Security Council staff, in cooperation with interested ministries and agencies, is working on a new National Security Concept. The need for this is obvious: in the five years since the adoption of the current Concept our country and the world have undergone cardinal changes. New threats and challenges have arisen that must be met with appropriate responses. The main danger that currently threatens the global community as a whole, as well as our country in particular, is terrorism. The reality of this is extremely severe. As President Putin has emphasized repeatedly, terrorism is essentially a declaration of war on Russia. Therefore, the problem of combating terrorism must occupy a central place in the new Concept.

But speaking in broader terms, we understand that the new Concept must be an extremely concrete document. In fact, this document must become the political core

on which all Russian government activities of the near future are based. We are trying to write the new Concept in simple, intelligible language. This document must be taken and accepted by Russian civil society. We expect the broadest participation of academic circles in the preparation of the new Concept. To date the work is going well. It is interesting to note that we have already had the first round tables on the new National Security Concept at Moscow State University and the Presidium of the Russian Academy of Sciences, while the Concept is being actively discussed through an Internet conference on the Security Council website.

YADERNY KONTROL: What, in your opinion, should Russia's main priorities be in combating terrorism? What is the Russian Security Council's role in designing a system to warn of a terrorist threat? In your view, how should military and security bodies be reformed in order to increase the effectiveness of anti-terrorist measures?

SPASSKY: Given the seriousness of today's threats, we must completely rethink our approaches to how we go about combating terrorism, both in the international arena and inside Russia. As for our country, President Putin very succinctly formulated the task in his address to the enlarged session of the government on September 13, 2004. We indeed should be creating an anti-crisis management system in Russia. Only with this kind of rigorous approach will it be possible to turn the situation around. This is not a task that can be completed in one day, but designing mature measures can not be delayed either. The first steps have already been taken. The next step is the drafting and adoption of a law on combating terrorism. By the way, we are not going to reinvent the wheel. Even the first draft of this bill echoes the U.S. "Patriot Act," adopted after the tragedy of September 11, 2001. However, the U.S. anti-terrorist legislation, particularly its limitation of democratic freedoms, is actually stricter than ours.

However, while taking measures at the national level, it is important to remember that terrorism is by nature a global danger. Successfully fighting it is only possible through the united efforts of the entire global community. Russia is playing a very active role in the anti-terrorist coalition. Moreover, we know what must be done in

order to radically increase the effectiveness of international anti-terrorist cooperation. In the first place, I would put the necessity of overcoming double standards, because they cannot continue as they have in the past. President Putin is absolutely correct in pointing out this issue. Our Western partners, under our influence, are gradually changing their position, but only very slowly. The adoption of U.N. Security Council Resolution 1566, a Russian initiative, was a serious breakthrough. Next, we must undertake a number of concrete measures, including: supplementary measures to prevent terrorist financing, in particular of bandit formations in Chechnya; the expansion of practical cooperation among intelligence agencies in the sphere of anti-terrorist activities; the adoption of the Russian and Indian anti-terrorist conventions; the growth of anti-terrorist cooperation within the framework of the NATO-Russia Council, in particular with regards to Afghanistan (the plan of action on combating terrorism which has been adopted is a good foundation); and engaging in anti-terrorist dialogue and cooperation between NATO and the CSTO.

Moreover, all of these practical steps must be supplemented by political efforts to stimulate dialogue between different parts of the world, a dialogue between civilizations. We must not allow the fight against terrorism to cause the world to be divided on religious grounds.

YADERNY KONTROL: The most important question of international policy today is the reform of the U.N. Security Council in order to make it more representative and increase the effectiveness of its decisions. What type of United Nations Security Council would most meet Russian interests?

SPASSKY: The report of the high-level panel on threats, challenges and change, the so-called "group of wise men," is a serious and interesting document. Naturally, time will be needed to study it. Often the entire issue of U.N. reform is reduced to one question: Security Council expansion. The issue of reform, of course, is considerably broader. Nevertheless, the question of the composition of the UNSC is truly of fundamental importance. Russia's position on this issue is sufficiently well known and has not undergone any particular changes recently. Russia is ready to consider any reasonable proposals for expansion

with the understanding that any such decision requires the broadest possible agreement inside the United Nations, as close to consensus as possible. For us the most important thing is that expansion not reduce the effectiveness of the Security Council. Therefore, we are proceeding from the need to retain the compactness and efficiency of the council's composition.

For Russia it is critical that the status of the current Security Council be fully retained, particularly its veto powers. As for extending veto power to new members, it would be most expedient to determine this later, when the roster of new permanent members is known. In fact, the report by the "group of wise men" recommends that the veto not be extended beyond the current five.

YADERNY KONTROL: The appearance of new threats and challenges to international security in recent years, at both the global and regional level, has resulted in many new points of contact and areas of real cooperation between Russia and the United States. At the same time, in contrast to expectations, there has been little progress in finding solutions to a whole series of questions and problems that are slowing the development of bilateral relations. What, in your view, is the reason for the fact that our bilateral relations are not realizing their potential? What areas have the most hidden promise for expanding Russian-American cooperation?

SPASSKY: Russia and the United States are two major powers with their own interests that extend across the globe. The term "superpower" is not the most felicitous, but is nevertheless accurate. It reflects today's Russia, despite all of the domestic problems, particularly in the economic area, with which we have to contend. It is clear that the interests of such powers cannot be always, everywhere, and in all ways identical. Common interests must prevail—the maintenance of global stability, the elimination of terrorist threats, averting the proliferation of WMD, and finding coordinated answers to other current challenges. Furthermore, in the fight against international terrorism we are acting as genuine allies. However, differences remain. The reasons for this vary. There are completely normal differences, tied to the differing interests of two great powers. Further, it's no secret to anyone that today's United States very much supports one-sided

approaches to the solution of international problems, particularly within the administration. There is nothing surprising in the fact that this affects our relations as well.

Finally, many countries of the West, including the United States, continue to have an antagonistic, and at times openly hostile, attitude towards Russia that remains from the Cold War era thanks to inertia. This inertia interferes both with improving international cooperation and with building strong bilateral relations with these countries. We still have to contend with the fact that it is very difficult for them to acknowledge our legal right to have security interests. There is a bias that manifests itself in various ways, including anti-Russian campaigns in the Western press, for all sorts of reasons. Here, it is true, we should not misspeak. We ourselves should more actively explain our decisions and approaches to the Western public, in language it understands and to which it is accustomed. Nevertheless, to sum up, one could say that we view our relations with the present U.S. administration as fairly positive. The Russian president, by the way, mentioned this at his year-end press conference. We believe that we can work with the Bush Administration. And in general we view the future of Russian-American relations with optimism.

YADERNY KONTROL: How do the Security Council and Russian president coordinate their work? Have permanent contacts been established between the Russian Security Council and corresponding organizations in other major powers?

SPASSKY: In accordance with the statute on the Russian Security Council, this body prepares proposals for the President of the Russian Federation on all issues related to the provision of national security. In order to fulfill this task, the Security Council staff maintains international contacts, in strict compliance with its legal rights. The closest contacts, including those of a multilateral nature, have been formed with analogous bodies in the CIS states. But these are not our only such contacts. We have working relationships with similar executive bodies in other countries, including the U.S. National Security Council.

YADERNY KONTROL: What is Russia's position regarding the operation by the United States and its allies in Iraq? What are the Russian Security Council's proposals for getting out of this crisis?

SPASSKY: Our evaluation of the American invasion of Iraq has not changed. We continue to believe, as before, that a tragic error was made. As a result of this error, we find ourselves in the situation that we have to deal with today. This situation will have to be remedied by all of us together. Because all of us—Russia, the European states, and the United States—despite all of the differences in our positions, are interested in the stabilization of the situation in Iraq so that Iraq does not become, like Afghanistan under the Taliban, a hotbed of terrorism and religious extremism. The situation is very difficult. The optimism of American analyses, in our opinion, is not justified. We see no real improvements. However, there were a number of important decisions in 2004. Security Council Resolution 1546 was adopted and the International Ministerial Meeting on Iraq was convened in Sharm el-Sheikh. Gradually, though with great difficulty, our way of handling the situation is making some progress. This is occurring through an active political process with the indispensable participation of the United Nations, Iraq's neighbors, and the opposition forces inside Iraq that have not been compromised by involvement in terrorist activities. In our opinion, there is no alternative to this approach.

YADERNY KONTROL: The tragic events of September 11, 2001, would seem to have forced Russia and the European Union to reexamine their security and defense cooperation and to have removed most of the obstacles to developing such cooperation. However, if we look at the results of our cooperation, the majority are no more than political declarations. What, in your view, is the reason for the slippage in the practical realization of these declarations?

SPASSKY: The past year was not an easy one for our relations with the European Union. Through our joint efforts we succeeded in loosening several knots. We expanded the EU-Russia Partnership and Cooperation Agreement to new EU members in a timely fashion. Methods for handling Russian concerns were set down in the Joint Statement on EU Enlargement and EU-Russia Relations signed on April 27, 2004, in Luxembourg. The traditional fall EU-Russian summit occurred, albeit with delay. However, we continue to have serious questions for the European Union.

We are counting on more active attention to the critical task of forming the Common Spaces. We consider this model to be very promising. We await concrete steps in response, such as guarantees of the rights of Russian-speaking minorities in Latvia and Estonia, and on Kaliningrad transit. Russia is ready to go very far in all areas of cooperation with the European Union. We are also ready to cooperate in the formation of a common foreign security space. But to make progress our counterparts must show that they are also interested in this. Lately, this interest has been missing. Sometimes one gets the impression that the EU has not completely recovered from its expansion and cannot decide what type of relations it wants to build with Russia. We see again that "sins are remembered and bias has great inertia," as I noted earlier in speaking about the United States.

YADERNY KONTROL: For India, China, and Russia, combating terrorism is not just being part of an international campaign but a vital national mission. What can you say about the possible role of a Russian-Indian-Chinese triangle in the anti-terrorist coalition?

SPASSKY: Russia, India, and China are influential members of the anti-terrorist coalition. Our states are directly affected by the terrorist threat, which has led to their shared interest in strengthening the anti-terrorist front. The geographical proximity of the three countries is also an important factor. We have a high degree of mutual understanding with India and China regarding the goals and methods of the fight against terror. In our relations with these states there is no problem of double standards in evaluating terrorist acts. We generally pursue our cooperation bilaterally, but also welcome a trilateral format. Thus, combating terrorism was one of the central topics at the discussions between the ministers of foreign affairs of Russia, China, and India that took place in Almaty on October 21, 2004.

YADERNY KONTROL: Russian-Iranian relations play a critical role in Russian national security and in maintaining peace and stability in the region bordering the CIS to the south. Therefore, Russia cannot but worry about the lack of clarity with respect to the research being undertaken in Iran in the nuclear sphere. How serious of an impediment is Iran's "nuclear dossier" to

Russian-Iranian relations? What, in your view, are the prospects for bilateral cooperation if the IAEA completes its examination of this case? It's no secret to anyone that the European states' great interest in Iran is in large part due to these countries' economic interest in Iran.

SPASSKY: We continue to maintain a regular political dialogue with Tehran, including between the two countries' security councils. We encourage Iran to more actively participate in international and regional affairs, particularly where combating terrorism, extremism, and drug trafficking as well as issues related to nonproliferation and export control are concerned. Our main concern, which is shared by the United States and other major global powers, is that Iran not become a nuclear weapon state. This principled position answers our national security interests. At the same time, Russia supports Iran's right, as an NPT member, to the peaceful use of nuclear energy and intends to continue the construction of the nuclear power plant in Bushehr. Decisions regarding the prospects for and scale of this cooperation will take into account Tehran's fulfillment of its international commitments to the IAEA, as well as the issue of the return of spent nuclear fuel from the Bushehr NPP to Russia. Russia has serious economic interests in Iran and will develop mutually advantageous cooperation in all areas where it does not contradict our international obligations.

YADERNY KONTROL: How realistic, in your view, is it to expect that the adapted CFE Treaty will come into force? What are the prospects for its ratification by NATO countries? Is any alternative agreement on the reduction of conventional armaments being considered?

SPASSKY: We need certainty with regards to the CFE Treaty, which is the basis for Russia-NATO relations. Russia made its choice. We ratified the agreement on the adaptation of the CFE Treaty and thereby fulfilled our key Istanbul commitment. However, the issue remains deadlocked. Everyone involved has already had a chance to become convinced of the fact that protracted political maneuvering around the CFE Treaty is hopeless and only complicates the realization of the remaining Istanbul commitments on a bilateral basis. The NATO countries' present linkage policy only serves to push the

authorities of Moldova and Georgia into a deliberately unconstructive approach to these negotiations. Nevertheless, we do not believe that the adapted CFE Treaty is hopeless. We do not intend to promote the idea of an alternative agreement in the area of conventional armament reductions.

YADERNY KONTROL: What is the current stage of Russia-NATO relations? What is their role in maintaining European security?

SPASSKY: Russia-NATO relations are of great importance for European and international security. In general, they are developing well. The tasks posed by the Russia-NATO Rome Summit Declaration have practically been completed, including those related to cooperation to meet new

challenges. Now the transition to the next phase—active cooperation—will be on the agenda. The priorities include anti-terrorist cooperation, eliminating the consequences of emergencies, and the fight against the Afghan drug threat. Russian participation in the operation Active Endeavor is planned. Work on improving Russia-NATO military compatibility continues. The prospects are extremely promising. Why is the need of supplementary measures to increase confidence, transparency, and avert incidents related to military activity along the line of contact between Russia and NATO seen to be so critical? We need convincing assurance that the obligations in the Founding Act that concern military restraint will be fulfilled, particularly in the Baltic countries.

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Analysis

**THE RIGHT TO WITHDRAW
FROM THE NUCLEAR
NON-PROLIFERATION TREATY
(NPT): THE VIEWS
OF TWO NPT NEGOTIATORS**

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Nuclear Non-Proliferation Treaty Art.X.1:
"Each Party shall in exercising its national
sovereignty have the right to withdraw
from the Treaty if it decides that extraor-
dinary events, related to the subject matter
of this Treaty, have jeopardized the
supreme interests of its country. It shall
give notice of such withdrawal to all other
Parties to the Treaty and to the United
Nations Security Council three months in
advance. Such notice shall include a state-
ment of the extraordinary events it regards
as having jeopardized its supreme interests."

This quotation is the "withdrawal clause" from the NPT. It shows that the "right to withdraw" from the NPT is *qualified*. An NPT party may not withdraw unless "it decides that extraordinary events, related to the subject matter" of the treaty "have jeopardized the supreme interests of its country." Even then, it is required by the treaty, *before withdrawing*, to give three-months notice to all the more than 180 other nations belonging to the treaty "and to the United Nations Security Council." The notice must include "a statement of the extraordinary events it regards as having jeopardized its supreme interests." This clearly suggests that the adequacy of the withdrawing party's stated reasons for withdrawal may be judged by the Security Council as well as by the other parties to the NPT.

What can the NPT parties do if they regard the reasons as inadequate? Suppose some NPT parties decide that the "extraordinary events" specified by the withdrawing party do not relate to nuclear non-pro-

liferation as required by the treaty language, or have not, in fact, "jeopardized" the withdrawing party's "supreme interests." If they so conclude, what could they do? If they petitioned the Security Council to take action to prevent or condition the withdrawal, what could the Council do?

This article will look at why this language qualifying the "right to withdraw" from the NPT was included in the treaty, and, how it was intended to limit or condition that right. Does the history of the withdrawal clause negotiations suggest that the parties wanted to inhibit withdrawals by requiring that a statement of reasons for withdrawal by the withdrawing party be sent to the Security Council as well as to the other NPT parties? What powers does the withdrawal clause give to the NPT parties and the Security Council to deal with the withdrawal of North Korea, and perhaps, one day, Iran or some other party?

THE RIGHT TO WITHDRAW

Do NPT parties like North Korea have a right to withdraw from the NPT for any reason? What does the history of the withdrawal clause suggest?

The Vienna Convention on the Law of Treaties says that that a party may withdraw from a treaty "in conformity with the provisions of the treaty..." or with the consent of all the parties.¹ The second of these two justifications for withdrawal is clearly not applicable if some parties object, and some did object to North Korea's withdrawal. The first of these two justifications requires compliance with the NPT's withdrawal provisions. (At the 2005 NPT Review Conference, the United States took the position that NPT parties had a "sovereign right" to withdraw, apparently for any reason.² This is not consistent with the position the United States took in negotiating the NPT or with the generally accepted international law of treaties, quoted at the beginning of this paragraph.)

Did North Korea's withdrawal satisfy the NPT withdrawal clause? The reasons for withdrawal that North Korea gave were two: *first*, a South Korean-U.S. military exercise of 1993 that North Korea said was threatening, and, *second*, the lack of objectivity of IAEA inspectors who, in 1993, had been given authority by the IAEA to conduct a special inspection in North Korea outside the boundary of the research reac-

tor and small reprocessing plant that North Korea had declared open for inspection a few years earlier.³ These two reasons were given in its 1993 notice. This notice was itself withdrawn a day before the withdrawal would have become effective in 1993 because three months-less one day-had gone by since the notice of withdrawal was given. In 2003, however, North Korea reinstated the 1993 notice taking the position that the only notice required in 2003 was one day because all but one day of the NPT three-month period had gone by in 1993 before North Korea retracted its notice of withdrawal that year. Given North Korea's view that it was simply reinstating its 1993 notice of withdrawal, the reasons given in North Korea's 1993 notice to justify withdrawal must be taken as North Korea's reasons for withdrawal in 2003.⁴

In 1993, North Korea had refused to permit IAEA inspectors to inspect beyond the boundaries of the site that it had declared open for inspection. At this site were a nuclear reactor, a plutonium-separation plant and some other nuclear facilities. The inspectors concluded from evidence collected at this site that North Korea had probably separated more plutonium than it had reported to the IAEA. The inspectors wanted to inspect other sites nearby in order to look for other evidence relating to plutonium separation. North Korea refused.⁵ After the IAEA Board of Governors's decision to support the inspectors request to inspect additional sites, North Korea gave its 1993 notice of withdrawal to the other NPT parties and to the UN Security Council. It did not propose to permit any IAEA inspections during the three-month withdrawal period that followed its 1993 notice.

The reasons for withdrawal cited by North Korea in 1993 were two: a U.S.-South Korean military exercise in South Korea called "Team Spirit" that North Korea said was threatening to its security, and the "lack of impartiality" on the part of the IAEA inspectors who asked in 1993 to inspect the new sites that North Korea then refused to let them inspect. Were these reasons "extraordinary events related to the subject matter" of the NPT that "jeopardized the supreme interests" of North Korea, as the NPT withdrawal clause requires? How did one of many U.S.-South Korean military exercises in South Korea and the alleged "lack of impartiality" of the IAEA inspec-

tors "jeopardize" North Korea's "supreme interests"? If North Korea's claim had any merit in 1993, did it still have merit in 2003? In North Korea's 2003 letter to NPT parties, it complained of President Bush's inclusion of it within his "axis of evil" category and it maintained that the United States was targeting it for a preemptive strike.⁶ But, since it did not provide a new three-month withdrawal period, it had to have been relying on its 1993 notice of withdrawal as justification, and that notice did not contain these reasons.

To answer the questions stated above, let us look at the history of the NPT withdrawal clause. The language came, with two important modifications, from the text that the Soviet Union, the United States and the United Kingdom had agreed upon in Moscow when they negotiated the Partial Test Ban Treaty (PTBT) in 1963. The original U.K.-U.S. PTBT draft brought to Moscow by these two delegations had a much more detailed withdrawal clause than what was finally agreed with the Soviet Union. The U.K.-U.S. draft listed several specific reasons that could justify withdrawal, including: "(a) that any other Party has not fulfilled its obligations under this Treaty" or "(b) that nuclear explosions have been conducted by a State not a Party to this Treaty under circumstances which might jeopardize the determining [withdrawing] Party's national security..."⁷ Thus, the American and British delegations to the Moscow negotiations felt that the their countries needed a right to withdraw if another PTBT party [the Soviet Union?] violated its treaty obligations by testing, or if a "State not a party [China?]" conducted tests that might "jeopardize" the "national security" of the withdrawing party.

For the U. S. negotiators, a right to withdraw from the PTBT was important to gaining the consent of the U.S. Senate for ratification in order to bring the PTBT into force in 1963. Some Senators might insist that the United States have a right to withdraw to resume U.S. above-ground testing if , for example, China soon began testing above ground (as it did in 1964). Such testing would be prohibited by the PTBT, but China was not expected to join the treaty.⁸

In the Moscow negotiations, Soviet Foreign Minister Gromyko took the position that any country had a right to avoid treaty obligations that became contrary to its supreme national interests.⁹ Gromyko offered a for-

mulation about withdrawal based not on any violation of the treaty but on the right of a party to withdraw from it in exercising the party's national sovereignty. Gromyko wanted to formulate the right of withdrawal in a more general way. The Soviet Union had no objection to inclusion in the treaty of a reference to events that might compel a party to decide to withdraw from the treaty in exercising its national sovereignty due to the existence of a threat to its supreme interests. However, Gromyko sought to avoid any formulation that might contain a hint to China that its future actions were considered. Therefore, the compromise formula about "extraordinary events, related to the subject matter of this Treaty" appeared in the text.¹⁰

The compromise was less detailed than the U.K.-U.S. draft, but similar in that it required a statement of reasons justifying withdrawal. The compromise limited the reasons for which withdrawal would be permitted to "extraordinary events related to the subject matter" of the PTBT. Its subject matter was, of course, above-ground nuclear testing. It did not contain U.K.-U.S. proposed language saying that a party desiring to withdraw would be able to request the convening of a conference of all the parties to "assess the significance of the situation."¹¹ It did require, as the U.K.-U.S. draft had, that a party intending to withdraw "give notice of such withdrawal to all other parties to the Treaty three months in advance."¹²

Later, this PTBT language became the basis for the NPT withdrawal clause. The PTBT language was revised in two important respects before it was presented to the other countries represented at Geneva Disarmament Committee by the American and Soviet delegations in 1968. Like the PTBT (which many of these countries had already joined), the NPT draft said that the "right to withdraw" from the NPT could only be exercised if the withdrawing state decided that "extraordinary events related to the subject matter of the Treaty" had "jeopardized the supreme interests of its country." Unlike the PTBT, the notice of withdrawal had to be sent to the Security Council as well as to the other parties, and it had to describe the "extraordinary events" that the withdrawing party thought had "jeopardized its supreme interests." Thus, the draft provided a fairly high standard for withdrawal ("extraordinary events related to

[nuclear nonproliferation] ... jeopardized supreme interests"). Most importantly, it required notice to the Security Council in addition to the NPT parties (because the Security Council had authority under the UN Charter to deal with threats to the peace such as a withdrawal from the NPT might cause). In addition, it required a statement of the reasons to be given to the Council and the other parties. The reasons could then be judged against the standard of "extraordinary events" that "jeopardized its supreme interests."

At the Geneva Disarmament Committee NPT negotiations, this American-Soviet withdrawal language was generally accepted by most delegations. For example, Egypt (then the United Arab Republic) agreed that withdrawal should "not be a matter of absolute discretionary power [of the withdrawing party] but should depend on non-observance of the treaty arising from its non-application or violation by a contracting party, or from the fact that a third State is supplying nuclear weapons to some other State."¹³ Many seemed to agree with Egypt's support for the draft. Brazil, however, wanted to make it *easier* to withdraw by adding more reasons that would justify withdrawal¹⁴. However, it got little support. These negotiations and debates produced no change in the withdrawal language that had been tentatively agreed between the Soviet Union and the United States.

This was the language applicable to North Korea's withdrawal. Did it permit withdrawal for the reasons North Korea gave? North Korea's 1993 reasons for withdrawing from the NPT were a U.S.-South Korean military exercise in South Korea, and the lack of objectivity, in North Korea's view, of the IAEA inspectors who sought a special inspection outside the perimeter of its regularly-inspected nuclear reactor and plutonium separation facility at Yongbyon.¹⁵ North Korea's reasons were hardly "extraordinary events related to the subject matter" of the NPT even in 1993, much less in 2003 when North Korea announced that its 1993 notice of withdrawal, which had itself been ineffective for ten years, would be effective again almost immediately. The 1993 notice of withdrawal had been withdrawn by North Korea a day before the three-month notice period expired. In 2003, North Korea gave notice of withdrawal to be effective in one day, a notice which seemed to reinstate its 1993

notice because it was to be effective in the one day left of the three-month notice period for the 1993 notice.

In a 2003 press statement, North Korea announced “an automatic and immediate effectuation of its withdrawal from the NPT” (effective on the next day). Withdrawal, the press release said, was justified “[u]nder the grave situation where our state’s supreme interests are most seriously threatened.”¹⁶ This quoted conclusion was, of course, based upon the withdrawal clause language. On the same day, North Korea sent a notice to the UN Security Council saying that its withdrawal was effective immediately for these reasons. In North Korea’s view, by its 2003 announcement and a one-day notice period, it had fulfilled the NPT’s three-month notice requirement because it was relying on the 89 days that had gone by after the 1993 notice was given before North Korea announced that the 1993 notice was no longer in effect.

There were reasons in 2003 to challenge whether North Korea could complete a 1993 three-month notice of withdrawal in 2003 with one day’s notice. But many more than three months have gone by since the 2003 North Korean press release and the new notice of withdrawal.¹⁷ Let us turn then to the substantive adequacy of North Korea’s reasons for withdrawal.

First, the 1993 U.S. military exercises with South Korean forces in South Korea that North Korea’s 1993 notice gave as a reason for withdrawal were not “extraordinary” events in 1993 or in 2003. Nor did they appear to relate to the “subject matter” of the NPT, preventing nuclear proliferation. Military exercises had happened in South Korea many times before and after 1993 without causing North Korea’s withdrawal. They did not involve nuclear weapons or relate to nuclear nonproliferation, as required by the NPT’s withdrawal clause. Indeed, U.S. nuclear weapons that once were deployed in South Korea had been withdrawn from that country in 1991. Moreover, a military exercise in 1993 could hardly justify North Korea’s withdrawal in 2003. Thus the exercises did not present a nuclear threat in 1993 or 2003.

Second, the “lack of impartiality” of the IAEA inspectors alleged by North Korea, even if true, did not seem, in 1993 when North Korea claimed the inspectors lacked impartiality, to relate to the “subject mat-

ter” of the NPT. Thus, if the Security Council had taken jurisdiction and made a judgment resolving the dispute in 1993 or 2003, it probably would not have concluded that North Korea had adequate justification for withdrawal based on its notice of withdrawal’s contention that the IAEA inspectors were biased in 1993.

Third, North Korea’s 2003 claim that its withdrawal was justified “[u]nder the grave situation where our state’s supreme interests are most seriously threatened” was inadequate in 2003 to justify withdrawal (even in 90 days rather than one).¹⁸

Why did the Security Council not take action against North Korea’s withdrawal in 1993 or 2003?

In 1993, China could not be persuaded to agree with the other P-5 permanent, veto-holding members of the UN Security Council that the Council should take action to *compel* North Korea to stay within the NPT, at least for the time being while the controversy was being discussed in capitals and in the Security Council. All that was agreed was that the Council would *call upon* North Korea to permit IAEA inspections. North Korea refused to accept this call.¹⁹ The Council took no further action after North Korea refused.

In 1993, after the Security Council failed to act, U.S. Secretary of Defense William Perry and his assistants presented to President Clinton a justification for the use of force to restrain North Korea from acquiring nuclear weapons. During the White House discussion, Clinton received a call from former President Carter, then in North Korea. Carter said that he was sure North Korea would negotiate and that it would probably take back its NPT withdrawal notice. Carter had been talking to North Korea’s then supreme leader, Kim Il Sung. Clinton asked Carter to explore the possibilities with Kim Il Sung and then, based on Carter’s discussions, decided not to use force against North Korea, at least for the time being. Negotiations followed, and, as we have seen, North Korea pulled back its 1993 NPT withdrawal notice just before the end of the three-month notice period.²⁰ The result of the negotiations was the Agreed Framework of 1994 between North Korea and the United States. This restrained North Korea’s plutonium production for weapons, but apparently did not prevent what now appear

to be hidden efforts to enrich uranium, perhaps also to make weapons.²¹

Beginning in 2002, secret negotiations with North Korea by the United States joined by North Korea's neighbors (China, Japan, Russia and South Korea) seemed to produce little beyond North Korea's apparent admission of its uranium enrichment activities.²² In 2003, as we have seen, North Korea renewed its notice of withdrawal from the NPT. Because of China's and Russia's insistence upon negotiations with North Korea rather than the issuance of a Security Council order to North Korea, and because of China's likely veto of an order to North Korea, the Council did not take action to restrain North Korea.²³ What should the Council's role be in a case where all five permanent members of the Council (the P-5) agree that withdrawal might threaten international peace and security, as many believed was true of North Korea's withdrawal in 2003? What is the power of the Security Council in such a case?

Generally, for *bilateral* treaties without any clause on withdrawal, international law permits withdrawal based on the circumstances existing between the two parties. On the other hand, modern *multilateral* treaties (where withdrawal of one party may affect two or more other parties) often contain a withdrawal clause, as the NPT does. The right of withdrawal then depends upon what the agreement says, including what it says about the rights of all the parties.²⁴ As we have seen, the NPT gives a right to withdraw to a party if that party "decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country." Who besides the withdrawing party may then judge if withdrawal is permitted? The NPT says that the withdrawing party must give three months notice of its intention to withdraw to all the other NPT parties "and to the United Nations Security Council..." including a statement of the "extraordinary events" described above. The PTBT did not require notice to the Security Council, only to the other parties. This important addition seems to have been intended to give the Security Council the opportunity to deal with the withdrawal if withdrawal would constitute a "threat to the peace" within the meaning of the UN Charter provisions giving the Security Council wide authority to deal with such threats.²⁵

North Korea's stated reasons for withdrawal apparently seemed inadequate to the permanent members of the Council except perhaps for China and maybe Russia in 1993 and 2003, although the discussions among the P-5 have not been made public. In 1993, China apparently wanted to stimulate negotiations by the United States with North Korea and refused to agree with the United States not to veto a Security Council resolution against North Korea if one was presented to the Security Council. (Thereafter, as we have seen, negotiations did result, ultimately producing the U.S.-North Korea Agreed Framework of 1994. After negotiations had begun in 1993, North Korea prevented its own withdrawal from becoming effective by pulling back its earlier withdrawal notice – on the last day of the three-month notice period.) In 2003, negotiations were going on periodically but, as North Korea apparently saw it, they were not producing enough of value for it to stay within the NPT. So, as we have seen, in 2003, it announced that its 1993 suspension of its withdrawal was now ending, and it did not give another three-month notice. However, North Korea's stated reasons for withdrawal were inadequate to satisfy the standards of the NPT withdrawal clause in 1993 or 2003.

*What is the appropriate role for the Security Council in a case of withdrawal, assuming the P-5 can agree and at least four other Council members do as well?*²⁶

As we have seen, the Soviet Union and the United States followed *some* of the PTBT language in negotiating their proposal for the NPT withdrawal clause. But they added language that showed a change of meaning. One addition was language adding the Security Council as a required recipient of the notice of withdrawal. No reference to the Security Council had appeared in the PTBT withdrawal clause. Secondly, the NPT added language saying that the withdrawing party must include in the notice "a statement of the extraordinary events it regards as having jeopardized its supreme interests." The PTBT contained no such requirement. The requirement was clearly added to give the Security Council notice of withdrawal and a statement of reasons because withdrawal could threaten international security. The UN Charter gives the Council authority to take action to deal with such a threat if nine members including the P-5 agree.²⁷

Toward the end of the NPT negotiations at the Geneva Disarmament Committee, Brazil asked why the draft NPT added, to the PTBT withdrawal language, notice to the Security Council of reasons for withdrawal. Brazil said that the "UN Charter entrusts the Security Council with functions specifically related to the maintenance of world peace and security and not with participating in the mechanism of withdrawal from any treaty."²⁸ The Romanian representative asked a similar question. The American representative replied that it would be "important to have a situation which could affect international peace and security discussed in the Security Council."²⁹ In a more detailed response at the end of the debates, the Soviet representative said:

"[The Security Council] has been entrusted by the States Members of the United Nations with the primary responsibility for the maintenance of international peace and security. [He cited several treaty precedents that required international organizations to give notice or reports to the UN Security Council concerning actions that might create threats to international security.] The appropriateness of the inclusion of such an obligation in the [NPT] treaty derives from the fact that in the event of the withdrawal of any State from the non-proliferation treaty, the other parties to this treaty must receive an explanation of the reasons for withdrawal from the treaty, not from any other source, but from the State itself that withdraws from the treaty. Receipt by the Security Council of such notice together with a statement of the reasons directly from the State concerned would help the Security Council to fulfill its functions [including its "reaction ... to such a notice"] more effectively."³⁰

The final NPT withdrawal clause language, reported to the UN General Assembly by the Geneva Disarmament Committee, was the same as that debated in Geneva. As we have seen, it required notice to the Council together with a statement of reasons for withdrawal. The UN Charter authorizes the Council to take action, if necessary, to maintain international peace and security. Since the Council has such authority under the UN Charter, it could take action to restrain withdrawal in appropriate circumstances, if given the required notice and the reasons for the intended withdrawal. The three-month notice would give Council members time to consult, to acquire further information about the consequences of the party's

withdrawal, and to negotiate a Council action resolution if that was appropriate.

Thus, the NPT withdrawal clause's requirement that the UN Security Council be notified of a withdrawal was intended to provide information to the Council of a withdrawal since it was likely to be based on "security considerations" and clearly could result in a "threat to the peace" within the meaning of provisions of the UN Charter giving the Council authority to act against such threats.³¹ If the Council then found that the withdrawal might foreshadow such a threat, it would have authority to take action to delay or prevent withdrawal, or to require other action by the withdrawing party to keep the peace before it would have permission to withdraw. A withdrawal from the NPT that might constitute or produce a threat to the peace would presumably be the test of whether the UN Security Council should take action to restrain or otherwise deal with the withdrawal.

Did North Korea's withdrawal produce a threat to the peace? A likely reason for North Korea's initial withdrawal was to pursue nuclear weapons without IAEA inspection. By 2003, that had become reasonably clear. China, Russia, South Korea and Japan, North Korea's neighbors, were sufficiently concerned that year that they pushed the United States into serious negotiations with North Korea in the Six-Party talks in which they also participated. They seemed concerned that DPRK's acquisition of nuclear weapons could threaten the peace in their region.

How would the NPT withdrawal provision limit Iran's right to withdraw from the NPT, if that is what it decides to do?

There has been a fear that Iran might withdraw from the NPT if it did not get a right to enrich uranium in its negotiations with the EU-3: Britain, France and Germany. Would the NPT withdrawal clause inhibit Iran's withdrawal from the NPT? If Iran only proposed to enrich uranium for peaceful purposes, its current position, it would not violate the NPT as that treaty has been interpreted for many years. The new idea that enrichment by a non-nuclear-weapon NPT party that does not already engage in it should be prohibited has not, of course, been popular with non-nuclear-weapon NPT parties that do not already have such facilities.³² Germany and the Netherlands, for example, have common ownership with

Britain in Urenco, a multilateral organization which operates a large enrichment plant in the Netherlands. This plant has employees from all three countries. The chance are good that, for example, an employee from the Netherlands would find out if employees from Germany operated the plant to produce highly enriched uranium to use in making nuclear weapons. Moreover, inspections are conducted regularly by Euratom, the nuclear regulatory agency in which some EU members are participants. In addition, there are independent inspections by IAEA inspectors. If this is adequate for Germany and the Netherlands, would the EU-3 and the United States accept something like it for Iran?

When EURODIF, another multilaterally-owned uranium enrichment organization was first created; France, Italy, Spain, Belgium and Iran were participating countries. EURODIF now has one enrichment plant in France. As was the case with some other EURODIF members, Iran was unable to absorb its share of the costs of the enriched uranium produced by the plant in France, and Iran dropped out of EURODIF years ago.³³ Suppose that Iran joined EURODIF again, and that the enrichment plant in France was under Euratom and IAEA inspection as well as observation by employees or observers from the various EURODIF members. Would this satisfy the United States and the EU-3? What if a new multilateral, owning and operating, organization with inspectors from a multilateral organization similar to Euratom as well as independent IAEA inspectors was created by Middle Eastern states and some other countries with nuclear reactors, plus Russia in place of France, EURODIF's nuclear-weapon state? (Russia is to supply Iran's new power reactor and its fuel). Perhaps questions such as these could be considered by the EU-3 negotiators, Russia and Iran.

WHAT IMPORTANT ACTIONS HAVE BEEN PROPOSED TO DEAL MORE EFFECTIVELY WITH WITHDRAWALS FROM THE NPT?

Questions on the minds of many after North Korea's withdrawal were:

How was North Korea's withdrawal from the NPT different from the United States' earlier withdrawal from the Anti-Ballistic Missile (ABM) Treaty?³⁴ The ABM Treaty is bilateral; only Russia and the United States were parties. The negotiations between the

two that took place before U.S. withdrawal from the ABM Treaty were not public. However, negotiation of the Moscow Treaty of 2002 to replace the earlier START II treaty was probably part of the consideration paid by the United States for withdrawal from the ABM Treaty.³⁵ Moreover, the withdrawal clauses of these two treaties and of the NPT are different. The ABM Treaty requires no notification to the UN Security Council, and thus did not suggest Security Council participation in withdrawal decisions.³⁶ Whether U.S. withdrawal from the ABM Treaty was justified by the ABM Treaty language is not therefore relevant to whether North Korea's withdrawal from the NPT could be justified to the Security Council by the NPT's language.

How could a consensus among NPT parties on the power and purposes of UN Security Council action in the event of NPT withdrawals be achieved? Several NPT parties suggested ideas on withdrawal for consideration by the 2005 NPT Review Conference, but the failure of that conference precluded consensus on any of them.³⁷ Are there other ways of achieving such a consensus? We will discuss this in a moment.

Would North Korea's past membership in the NPT inhibit it from using the materials, technology and equipment it had acquired for peaceful purposes while a member of the NPT to make nuclear weapons after it had withdrawn from the NPT? Some of the nuclear assistance that North Korea received, *because* it was a non-nuclear-weapon party to the NPT, could be used to help make nuclear weapons. In the 1950s North Korean engineering students were trained in the USSR on nuclear processes and technology. In 1964, Moscow provided a research reactor with fuel rods. China also provided assistance to North Korea's nuclear activities.³⁸ But North Korea could not be persuaded by Moscow to join the NPT until 1985 and it refused to accept IAEA safeguards until 1992. It became increasingly independent of countries that had provided assistance by learning how to mine and refine its own uranium, and how to build its own reactors and a plutonium separation facility.

How could this third issue be resolved? Nuclear-related exports that could assist a non-nuclear-weapon NPT party to make nuclear weapons are prohibited by the NPT – unless the nuclear facilities are to be under IAEA safeguards.³⁹ As a result,

should not the nuclear materials or components resulting from these exports remain under IAEA safeguards even though North Korea has withdrawn from the NPT? The European Union (EU) has proposed a “yes” answer to this question.

Before the 2005 NPT Review Conference, the 25 European Union (EU) members had agreed among themselves upon a “common approach” to NPT withdrawals.⁴⁰ This approach said:

“[A]s a matter of principle all nuclear materials, equipment, technologies and facilities, developed for peaceful purposes, of a State party to the [NPT] remain, in case of withdrawal from the Treaty, restricted to peaceful uses only and as a consequence have to remain subject to safeguards. ...

[A]s a matter of principle, a State withdrawing from the Treaty should no longer use nuclear materials, facilities, equipment and technologies acquired from a third country prior to withdrawal; and ... such facilities, equipment and materials must be frozen [after withdrawal], with a view to having them dismantled and/or returned to the supplier State, under IAEA control.”⁴¹

These conclusions seem to have been precipitated by North Korea’s withdrawal. Pointing to the importance of Security Council review of NPT withdrawals, the EU proposals also said that NPT parties should affirm “that a withdrawal from the Treaty should in a given case constitute a *threat to international peace and security*.” (Italics added). The italicized language is, of course, from UN Charter provisions describing the circumstances in which the Council may order the use of force.⁴² Thus, the EU is on record as supporting the use of force, if authorized by the Council, when necessary to deal with possible threats to international security posed by a state’s withdrawal from the NPT.

In addition, Australia and New Zealand argued at the NPT Review Conference that “NPT parties should not be able to evade their commitments under the Treaty by withdrawal. ...”⁴³ Japan, like the EU, proposed that the NPT Review Conference “reaffirm that a State party which has withdrawn from the Treaty remains responsible for violations it committed while being a party. [The] Conference [should urge] any supplier country ... to make necessary arrangements entitling it to require the return or neutralization of any

such materials, facilities, equipment etc. transferred prior to their withdrawal.”⁴⁴

The Russian Federation in its national report on the implementation of the Nuclear Non-Proliferation Treaty, presented to the Review Conference, stated: “Recognizing its responsibility as a party to the Treaty as well as its depository, the Russian Federation underlines the exceptional sensitivity of the issue of the withdrawal from the NPT. We consider it necessary to minimize the possibility of situations where States refuse to fulfill their obligations under the Treaty. We believe that enhancing the responsibility of States for making a decision to withdraw from the Treaty in accordance with article X could be one of the ways to strengthen the NPT. This objective could be achieved through the adoption of a number of political measures and procedures which would be applied in such cases. However, such actions should not lead to a revision of the provisions of the NPT.”⁴⁵

Because the NPT Review Conference could not reach consensus on any substantive conclusions, there was no report covering any of these proposals.

Even before this Review Conference, a report by a distinguished panel of 12 former world leaders that the UN Secretary General had appointed to a “High-Level Panel on Threats, Challenges and Change” recognized the power of the Security Council under the UN Charter to deal with an NPT party’s withdrawal if the withdrawal could constitute a threat to international peace. The report proposed that, in such a case, the Security Council should hold a state withdrawing from the NPT “responsible for violations committed while still a party to the Treaty.” It added: A State’s notice of withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons should prompt immediate verification of its compliance with the Treaty, if necessary mandated by the Security Council.⁴⁶

The negotiations of the EU-3 (Britain, France and Germany) with Iran will likely continue. The EU-3 (representing the EU as a whole) have clearly been influenced in their pursuit of negotiations with Iran by North Korea’s withdrawal from the NPT, and the failure of the Security Council or the Six-Party Talks or the NPT Review Conference to deal with that withdrawal effectively. The EU proposals to the NPT Review Conference that we just quoted

seem to have had both North Korea and Iran in mind. The EU-3's negotiating position with Iran would clearly have been strengthened by an NPT Review Conference agreement to these principles.

Suppose there had been general agreement with the EU's "common approach" to NPT withdrawals which said, among other things, that "all nuclear materials, equipment, technologies and facilities developed for peaceful purposes, of a State party to the [NPT] remain, in case of withdrawal from the Treaty, restricted to peaceful uses only and as a consequence have to remain under safeguards..." Suppose the members of the Security Council could adopt such a principle for their future guidance in dealing with cases of withdrawal. In 1992, the member states of the UN Security Council agreed that the spread of nuclear and other weapons of mass destruction constituted a "threat to international peace and security" within the meaning of the UN Charter.

At their 2005 meeting in Gleneagles, Scotland, G-8 members took a strong position against North Korea's withdrawal from the NPT, even implying that the DPRK was still a member of the Treaty: "We reiterate the necessity for the DPRK promptly to return to full compliance with the NPT, and dismantle all its nuclear weapons-related programmes in a complete, verifiable and irreversible manner." The G-8 affirmed their support for the Six-Party talks between North Korea and China, Japan, Russia, South Korea and the USA to achieve the goal of "full compliance with the NPT."⁴⁷

In the case of Iran, the G-8 statement said: "We remain united in our determination to see the proliferation implications of Iran's advanced nuclear programme resolved." The statement proposed rewarding Iran with "long term...political and economic cooperation" if Iran stayed within the NPT and refrained from uranium enrichment and plutonium reprocessing activities. By its strong support for the EU-3 negotiations with Iran, negotiations which are of course based on assumption that Iran remains a party to the NPT, the G-8 are clearly warning Iran of the serious economic and political consequences of its withdrawal from the NPT.⁴⁸

CONCLUSIONS AND RECOMMENDATIONS

The language and history of the negotiation of the NPT withdrawal clause suggests that the NPT negotiators wanted to

inhibit withdrawals from the treaty by requiring:

- that a statement of reasons for withdrawal by the withdrawing party describing the "extraordinary events" relating to its "supreme interests" that justified withdrawal be sent to all the other NPT parties and to the UN Security Council;
- that when the other parties were unable to persuade a withdrawing party not to withdraw, the Security Council should nevertheless consider whether the withdrawal could constitute a "threat to the peace," and, if so, what action the Council and UN members should take against it.

We agree with the EU conclusion that, if an NPT party insists upon withdrawal and its withdrawal would not threaten the peace, its nuclear facilities that were used for peaceful purposes must nevertheless be restricted to peaceful purposes in the future. Thus, these facilities would remain under IAEA safeguards even after withdrawal. Having acquired them while representing to the world, by its joining the NPT, that it will use them for peaceful purposes, the withdrawing party should be prohibited from using them to make nuclear weapons.

We recommend that the Security Council and the IAEA consider the NPT withdrawal issues raised by North Korea's withdrawal. We urge the adoption of statements by these bodies to provide guidance on the consequences of withdrawal from the NPT and what should be done by the Security Council to inhibit future withdrawals and to deal with that of North Korea.

¹ Vienna Convention on the Law of Treaties, Art. 54.

² See Sally Horn, "NPT Article X", Statement to the 2005 Conference on the Nonproliferation of Nuclear Weapons for the United States, May 23, 2005, <http://www.state.gov/t/vc/rls/rm/46644.htm>, available as of June 1, 2005: "The right to withdraw from the Treaty [NPT] remains a sovereign right."

³ These reasons are discussed in more detail below.

⁴ A view held by some was that the 2003 notice was a new notice of withdrawal that could only become effective three months after it was given. However, more than three months have gone by since the 2003 notice was given. See Jean du Preez & William Potter, "North Korea's Withdrawal from the NPT" (Monterey, CA: Monterey Institute Center for Nonproliferation Studies, 2003), <http://cns.miis.edu/pubs/week030409.htm>, available as of June 9, 2003.

⁵ See George Bunn, "A Brief History of DPRK's Nuclear Weapons-Related Efforts," in Michael May, et. al, *Verifying the Agreed Framework* (Livermore and Stanford, CA: Lawrence Livermore Laboratory Center for Global Security Research and Stanford University Center for International Security and Cooperation, 2001), pp.15-16

⁶ See du Preez and Potter, *supra*.

⁷ See Anglo-American Proposal Submitted to the 18 Nation Disarmament Committee: Draft Treaty Banning Tests in the Atmosphere, Outer Space and Underwater, August 27, 1962, Documents on Disarmament, 1962 (U.S. Arms Control and Disarmament Agency 1963), p.804-805. (This was the draft, already agreed within the U.S. Government and with the United Kingdom, that the two countries offered in Moscow.)

⁸ See George Bunn, *Arms Control by Committee* (Stanford University Press, 1992), p.38.

⁹ *Ibid*.

¹⁰ See Roland Timerbaev, *Russia and Nuclear Nonproliferation, 1945-1968* (Nauka Publishers, 1999), p. 320 (in Russian).

¹¹ Anglo-American Proposal *supra*.

¹² Anglo-American Proposal, *supra*.

¹³ Eighteen Nation Disarmament Committee Provisional Verbatim 245 (March 3, 1966), p.10.

¹⁴ See, e.g., Brazil, Eighteen-Nation Disarmament Committee/Provisional Verbatim 363, Feb 8 1968, par. 17.

¹⁵ See George Bunn, "A Brief History ..." *supra*.

¹⁶ See Claire Applegarth and Rhianna Tyson, *Major Proposals to Strengthen the Nuclear Nonproliferation Treaty: A Resource Guide* (Arms Control Association and Women's International League for Peace and Freedom, 2005), p. 30.

¹⁷ See Jean du Preez and Willam Potter, *supra*.

¹⁸ See Applegarth and Tyson, *supra*, p.30.

¹⁹ See Bunn, "A Brief History..." *supra*.

²⁰ See Ashton B. Carter and William J. Perry, *Preventive Defense: A New Security Strategy for America* (Washington, DC: Brookings, 1999), pp. 129-133.

²¹ See Bunn, "A Brief History..." *supra*.

²² See du Preez and Potter, *supra*.

²³ *Ibid*.

²⁴ The Vienna Convention on the Law of Treaties provides that a right of denunciation may be implied by the nature of the agreement, particularly in the case of bilateral treaties. Art. 56. On the other hand, with multilateral treaties such as the NPT, where termination of its obligations by one party may effect not only a particular other party with whom it has had a dispute but still more parties, the right of withdrawal depends upon what the agreement says, including the treaty rights of other parties. See Articles 57 and 58(1) of the Vienna Convention. Clearly North Korea's withdrawal affected other parties, including its neighbors with whom it was negotiating (South Korea, Japan, China, and Russia) as well as the United States.

²⁵ U.N. Charter, Arts. 1.1, 24, 39, 42.

²⁶ Article 27 of the UN Charter gives the Council power to act on substantive matters by a vote of nine members including all of the P-5.

²⁷ See UN Charter Art. 1.1, 24, 27, 39, and 42.

²⁸ Statement of Brazilian Representative (de Araujo Castro) to the Geneva Disarmament Conference, February 8, 1968, Documents on Disarmament, 1968 (Washington, DC: U.S. Arms Control and Disarmament Agency, U.S. GPO, 1969) p. 56.

²⁹ Statement of U. S. Representative De Palma to the Geneva Disarmament Conference, Feb. 20, 1968, Documents on Disarmament, 1968 (Washington, D.C. U.S. Arms Control and Disarmament Agency, U.S. GPO, 1969), pp. 92, 94.

³⁰ Statement of Soviet Representative Roshchin to the Geneva Disarmament Conference, March 12, 1968 during final explanations before the NPT was reported by the Conference to the UN General Assembly, Documents on Disarmament, 1968 (Washington, D.C. U.S. Arms Control and Disarmament Agency, U.S. GPO, 1969), pp. 177, 181-84.

³¹ UN Charter Art. 24, 39, 41-42,

³² See President George W. Bush's speech proposing to prohibit enrichment by any non-nuclear-weapon country

that does not already have an enrichment plant. "President Announces New Measures to Counter the Threat of WMD," National Defense University, Feb. 11, 2004

³³ See IAEA Expert Group, *Multilateral Approaches to the Nuclear Fuel Cycle: Report to IAEA Director General*, INFCIRC/640 (Feb. 22, 2005), pp. 48-49.

³⁴ See Christer Ahlstrom, "Withdrawal from Arms Control Treaties," *SIPRI Yearbook 2004* (Oxford: Oxford University Press), chapter 19.

³⁵ The Russian Duma had made adherence to the ABM Treaty a condition of its approval of the START II treaty. Thus, U.S. withdrawal from the ABM Treaty had ended the START II treaty. The Moscow (or SORT) Treaty thus replaced the START II treaty.

³⁶ Anti-Ballistic Missile Treaty, Art. XV.2, START II, Art. VI.4.

³⁷ The United States, for example, urged a prompt UN Security Council meeting after any notice of withdrawal to identify steps to deal with the notice and to engage the withdrawing state in dialogue. It also urged the NPT Review Conference to decide that the withdrawing party would remain accountable for any violations of the NPT. "Strengthening the implementation of article X ..." 2005 NPT Review Conference, NPT/CONF.2005/WP.59. The European Union proposed stronger measures some of which are quoted in the text below. The EU also asked the Review Conference to reiterate that the Security Council was the "final arbiter" in maintaining international peace and security. See "Withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons," European Common Approach, NPT/CONF.2005/WP.32. Australia and New Zealand proposed some similar and some stronger measures. See "Working Paper on Article X submitted by Australia and New Zealand" NPT/CONF.2005/WP.16.

³⁸ See Center for Defense Information, "Summary of North Korea's Nuclear Arsenal," May 31, 2005, http://www.cdi.org/friendlyversion/printversion.cfm?documentID=3032&from_page=..progr...

³⁹ NPT, Arts. I, II, III, IV, particularly Art. III.2

⁴⁰ Withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons, NPT/CONF. 2005/WP.32.

⁴¹ *Ibid*.

⁴² See UN Charter, Chap. VII. Useful proposals on NPT withdrawal were also provided by Australia and New Zealand. See Working Paper on Article X (NPT withdrawal) submitted by Australia and New Zealand. NPT/CONF.2005/WP.16. In a statement on NPT withdrawal, the United States said that "The Security Council has made clear that the proliferation of nuclear weapons constitutes a threat to international peace and security. [T]he Council should consider the full range of options provided by the Charter...Withdrawal by a party in breach of commitments freely undertaken - commitments that other Parties based their security calculations on - would further underscore the need for consideration of options by the UNSC." Statement of Sally Horn, Senior Advisor, Bureau of Verification and Compliance, to the 2005 Review Conference, May 23, 2005.

⁴³ See Working Paper on article X (NPT withdrawal) submitted by Australian and New Zealand, NPT/CONF.2005/WP.16.

⁴⁴ Working Paper submitted to NPT Conference by Japan, NPT/CONF.2005/WP 21, www.reachingcriticawill.org/legal/npt/RevCon05/wp/wp21.pdf, available as of June 10, 2005.

⁴⁵ See National Report on the Implementation by the Russian Federation of the Nuclear Non-Proliferation Treaty (NPT/CONF.2005/29, par. 87).

⁴⁶ A/59/565 of Dec 2, 2004, par. 134.

⁴⁷ G-8 Gleneagles Statement on Non-Proliferation, July 2005, par.16.

⁴⁸ G-8 Gleneagles Statement on Non-Proliferation, par. 17.

Analysis**THE RUSSIAN ARMED FORCES IN AN ERA OF NEW THREATS AND CHALLENGES¹**

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Russian military reform cannot be separated from the issue of pan-European security, questions of defense planning, and other aspects related to the provision of an adequate response to new threats and challenges.

I am certain that it will come as no surprise if I begin by asserting that the Cold War era is in the past and that the world has begun, if slowly, to forget the stereotypical thinking of that time of confrontation.

The world has become very different. We have all begun to understand better that we live in a complex, interdependent, and brittle world with new challenges and new threats. There is also a general understanding that the current global challenges require an adequate response, first and foremost through the united efforts of the entire global community.

In other words, the task before us is to identify the diplomatic, economic, financial, and military levers that will enable us to counter any regional or global security threats.

The global military situation in particular is strongly influenced by the new challenges and threats to international security.

First, the new threats stirred up by the processes of globalization must be countered. These challenges include: the proliferation of weapons of mass destruction and means of their delivery, international terrorism, the activities of radical religious associations and groups, drug trafficking, and organized crime. The nature of these challenges is such that it is impossible for individual

states to address them effectively on their own. Therefore, the importance of international cooperation between military organizations, including intelligence agencies and the armed forces, has been sharply increased.

Second, the use of force via international operations is becoming more and more common. Instead of traditional military organizations, military force is being applied by temporary coalitions. This practice is likely to expand even further in the future, as it reflects the current international situation. However, Russia believes in the strict observance of international norms during the formation of such coalitions, particularly if the use of military force is involved, and will only join them if it meets Russia's foreign policy interests.

Third, domestic and international terrorism has become intertwined. Given the current international situation, where an international anti-terrorist coalition has become a reality, it is senseless to attempt to separate terrorist activity between domestic and international. This concerns both political approaches to preventing terrorist activities and military measures to neutralize such activities. It is clear that terrorism has been transformed from a political to a military threat, and the responsibility of the military, particularly the Russian Armed Forces, to fight it has been significantly enlarged.

Fourth, nongovernmental participants in the international system have an increasingly important role in determining the foreign policy priorities of various states. Nongovernmental organizations, international movements and associations, intergovernmental organizations, and informal "clubs" are exerting broad, and at times contradictory, influence on the policy of individual states. Russia is striving to participate actively in the main intergovernmental and international organizations in order to ensure its security interests.

Approaches to the Formation of Foreign Defense Policy

Given the above, Russia's military and political leadership primarily bases its foreign defense policy on:

- respecting and strictly observing the basic principles and standards of international law;

Figure 1

- retaining the status of a nuclear power, in order to deter (prevent) aggression against it and (or) its allies;
- placing a high priority on strengthening the Commonwealth of Independent States collective security system, as well as developing and strengthening the Collective Security Agreement;
- considering as partners all states whose policy does not harm Russian national interests and security or violate the UN Charter;
- preferring political, diplomatic, and other non-military means over military means to avert, localize, and neutralize military threats at the regional and global level;
- strictly observing international agreements on the limitation, reduction, and elimination of armaments;
- universalizing the regime for the non-proliferation of weapons of mass destruction and means of their delivery and decisively increasing the effectiveness of this regime through a combination of prohibitive, monitoring, and technological measures and the curtailing of testing and establishment of a comprehensive nuclear test ban;
- assisting in the broadening of confidence-building measures between states in the military sphere, including mutual exchanges of military information, agreements on military doctrines, plans, and construction, and other military activities.

The Russian Military's Main Missions Today

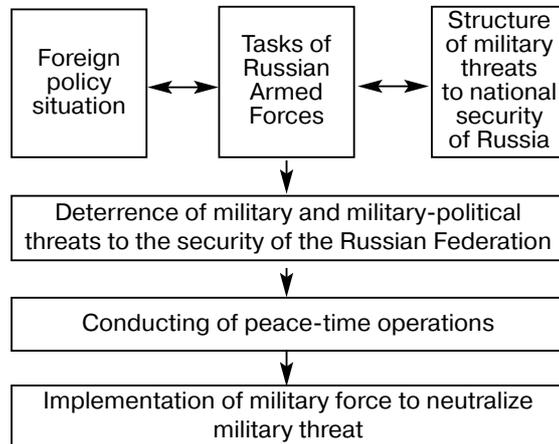
The changes in the international political system of the past few years and the structure of military threats to Russian security determine the missions of Russia's armed forces (see Figure 1).

We have grouped them into three main areas:

Deterring military threats to Russian security, including guaranteeing strategic stability and national defense.

Undertaking peace-time military operations, including fulfilling Russia's alliance obligations, the fight against international terrorism, political extremism, and separatism, and carrying out peacekeeping activities under UN or CIS mandates.

MAIN OBJECTIVES OF THE ARMED FORCES OF THE RUSSIAN FEDERATION



As for Russian engagement in “preventive strikes against terrorists,” Russian Minister of Defense Sergei Ivanov noted at a conference on security that took place in Munich, Germany on February 11-13 of this year that we did not invent this form of military activity. “Yes, we will carry out such strikes using all available means (of course, excluding weapons of mass destruction) against bandit camps and individual terrorist groups if we reliably learn of their intent to perform terrorist acts against a facility or facilities on Russian territory.”²

The use of military force to eliminate a military threat, including the use of weapons of mass destruction.

I would like to note that in 2005 we formed a separate motorized rifle brigade within the army to participate in international peacekeeping operations. It is currently being equipped with special arms and military equipment.³

Current Russian Military Organization

Russian military organization has been actively undergoing reforms for just over ten years now, due to the fundamental changes in global geopolitics and the establishment of the new Russian nation. The organization of the military underwent large-scale structural and quantitative changes to meet the new realities of limited funding and incomplete social and economic reforms.

At present, the renovated Russian military is made up of the country's armed forces, other troops, military formations, and

organizations that undertake national security missions using military methods. In addition, Russia's military includes the portion of the country's industrial and scientific complex that is involved in national security.

Russia's armed forces, after a long period of reform and recovery from crisis, are becoming qualitatively better, both in military preparedness and effectiveness, and in the ability to defend Russia's political and economic interests.

The Russian armed forces' maturity and the fact that the most difficult period in its development has been overcome is also indicated by force development and military planning, which is now based on Russia's geopolitical needs and the principle of sufficient defense, instead of available means.

As for *military reforms*, one can say that *fundamental reform of the armed forces has been completed*. The positive results that have been achieved make it possible to commence *the full-fledged, systematic development of military capabilities*.

The basis for elaborating force development priorities is a realistic understanding of the features of the global geopolitical situation, which is very complex and dynamic. As in the past, the military remains in high demand as an instrument of foreign policy and for ensuring the national interests of a particular state. Russia has consistently called for the creation of an international system in which the role of the military is minimized and its functions concentrated on the task of deterring armed conflict.

The main result of the reorganizations that have been carried out is the *conversion of the armed forces into three main branches*: the Ground Forces, the Air Force, and the Navy; and three armed forces services: the Strategic Rocket Forces, Airborne Troops, and the Space Troops, as well as troops not included in the main armed forces branches, military logistics, and units and organizations engaged in military construction and equipping (see Figure 2).

This structure, in our opinion, meets today's demands and permits the effective interaction of related armed forces components, while simplifying the system for command and control of troops (forces).

Figure 2



At the same time, *the legal basis for the development of the armed forces was created* over the past few years: laws determining the role and position of the armed forces in the country's military organization and ensuring Russia's domestic and foreign security have been adopted.⁴

A system for political control over the activities of the armed forces has been created, and the basis for public control has been put in place.

This is the most important element in the development of the armed forces in the context of strengthening the rule of law in Russia and the formation of civil society. The defense budget has become far more open as well.

Fundamental reductions in Russian military forces have also been completed. It has to be admitted that this process was painful. This was not only due to the scale of the reductions, but also because of the general national economic crisis at the time. However, the Russian military survived this test too with honor.

As of January 1, 2005, the Russian Federation Armed Forces, including the Railway Troops, totaled 1.207 million troops.

*There have been significant changes in the system of military staffing. The transition to staffing soldiers and sergeants' positions through the use of contracts has been actively begun. But at the same time, we adhere to the principle of mixed-manning, particularly of units that are in constant combat readiness.*⁵

The prerequisites for developing a modern system for the welfare of servicemen have been created. In particular, real solutions to the most difficult problems related to the level of pay received by servicemen have begun, through planned raises and the monetization of benefits, as well as by providing housing—via mortgages, the cumulative system, and the creation of a fund for service housing.

The Adaptation of Military Policy to the Current Situation

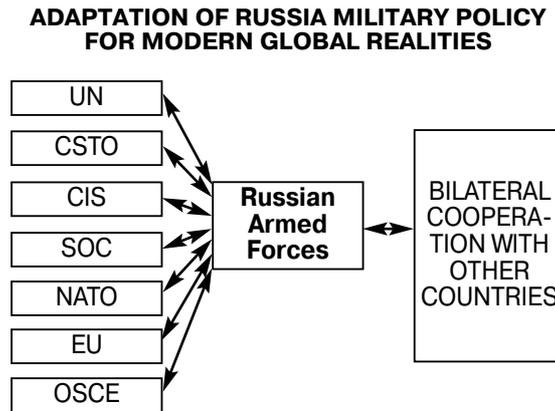
Russian military policy has been adapted to current global realities. At the same time as the armed forces and the entire organization of the military in Russia were being reformed, new principles of Russian military security policy were being developed, taking into account political relations with the United States and the industrially developed nations of Europe. Several of the earlier foundations of military planning were re-examined. In particular, global nuclear war and large-scale wars using conventional arms with NATO or another coalition headed by the United States were excluded from the list of most probable conflicts for which the nation's armed forces had to be prepared. This permitted significant reductions in nuclear and conventional capabilities without harming national security.

Finally, a new system was created to govern Russia's relations with its allies and partners. This system is primarily based on the principles of mutual respect for sovereignty and transparency of military obligations (see Figure 3).

The Partnership for Peace between the Russian Armed Forces and NATO resulted in partnership relations that matched the new level of political relations, and permitted the creation of additional organizations and institutions to ensure global stability. Russia's cooperation with NATO is continuing, despite differences of opinion regarding the expansion of the bloc in the east and NATO's military activities in regions of armed conflict. One of the highest priority

projects within this cooperative framework was the establishment of the Russia-NATO Council (RNC). RNC activities made it possible to work out a fuller system of communications and consultations between Russia and NATO in crisis situations.

Figure 3



We would like to discuss the further development of our relationship in more detail:

First, the war on terrorism.⁶ Second, *crisis management*.⁷ Third, *nonproliferation of weapons of mass destruction*.⁸ Fourth, arms control and confidence-building measures.⁹ Fifth, *theater missile defense*.¹⁰ Sixth, search and rescue at sea.¹¹ Seventh, military-to-military cooperation and cooperation related to military reforms.¹² Eighth, *new challenges and threats*.¹³

However, it should first be noted that not all problems in Russian-NATO relations have been remedied.

Most obvious is the process of alliance expansion without any attempts to transform the military alliance in accordance with the new European security situation. The transformation is basically occurring via the optimization of the command structure of NATO military command, an increase in participating states' defense budgets, the standardization of armed forces and armaments, and the reconfiguration of military groupings. As a result, the military capabilities of the defensive alliance, to which Russia is not a party, are increasing on Russia's western borders.

Russia's own goal is simple and clear, and therefore should be understood by all: to provide for the security of states and peoples through cooperation on the basis of international norms.

Russian political and military officials view NATO as an important actor in the European security system. But we also recognize that despite the transformation of the North Atlantic alliance “under the enormous influence of the turbulent changes” of the past decade and “NATO modernization,” NATO remains, first and foremost, a military bloc.

Russian continues to consider NATO expansion to be a mistake. This process is affecting the general architecture of European security and affects the security interests of a large group of states. Taking the responsibility for this decision upon itself, NATO should also take responsibility for maintaining the positive aspects of the Rome summit, in fact and not just in words, to demonstrate that expansion is not aimed against the interests of other states.

The arms control process is the most important way to ensure regional and global security. Its urgency has grown since the end of the era of global confrontation, since freeing the world from the burden of these weapons and strengthening trust between countries that were previously opponents are clearly worthy goals. But this too cannot be managed without difficulties.

The Cornerstone of European Security (The Treaty on Conventional Armed Forces in Europe)

Today there are real, not contrived, worries regarding the adaptation of the CFE Treaty too, since several countries that have begun the process of ratifying the Agreement on Adaptation are, in our view, artificially slowing the process. And NATO claims that it will only consider ratifying the agreement after Russia has fulfilled its Istanbul commitments, even though these commitments are shared by Russia, Georgia, and Moldova as well.¹⁴

One should realize that the CFE Treaty currently in force is slowly “dying” and cannot maintain the stability and balance of interests of member states. The recently changed “geometry” of NATO does not, to put it mildly, “fit” into the treaty’s area of application in the least. Its zone basis, which in its day skillfully concentrated on the balance of NATO and Warsaw Pact heavy armaments, has completely collapsed. The reality is that we now see countries

on the map of Europe that are NATO members but are not covered by the treaty regime.

But the most important thing to realize is that this state of affairs cannot continue indefinitely. Russia has been exercising the utmost restraint in this situation for just one reason: the European arms control regime should remain one of the key tools for maintaining stability, building confidence, and developing cooperation, as well as serve as an instrument to test the military and political intentions of members of the transatlantic alliance.

Another seriously destabilizing factor, from the point of view of international law, is the fact that the Baltic countries are not members of the CFE Treaty. This means that the alliance can deploy any types of armed forces on their territory and subsequently increase them to any number, without any limits being placed on it by the CFE regime.

Russia took an important step towards strengthening European security when it ratified the Agreement on Adaptation of the CFE Treaty on schedule, in essence on the threshold of NATO’s “second wave” of expansion. We remain ready to conduct an open and constructive dialogue, but not to the detriment of our security interests.

Joint Exercises

Today, we not only participate in joint exercises, but also conduct joint peacekeeping operations. Military and technical cooperation with interested states, including NATO, has become a reality, and is being carried out on a long-term basis, with the joint development of various military goods. The problem of increasing the operational compatibility of Russian and NATO armed forces is being solved. This is a necessary condition for the successful realization of joint operations.

Here I would like to note that along with missions related to their primary purpose, the armed forces continue to fulfill peacekeeping functions, including those involving special operations to support and restore peace in various regions and, primarily, on the territory of the Commonwealth of Independent States.

Our divisions have successfully functioned as part of the Joint Peacekeeping Forces in Moldova’s Dniester region, in the Collective

Peacekeeping Forces in the Georgian-Abkhaz zone of conflict, and in the Mixed Peacekeeping Forces in the Georgian-Ossetian conflict area.

Great progress was made in the Russian Navy's combat readiness through the conduct of a whole series of large-scale military exercises, including some conducted jointly with NATO navies:

- *the Russian-Italian exercise "IONIEX-2004" in the Ionian Sea*, with the participation of ships from the Black Sea fleet led by the missile cruiser *Moskva*;
- *the Russian-French exercise in the North Atlantic*; after the conclusion of this exercise the nuclear-powered submarine *Vepr* paid an unofficial visit to France's naval base in Brest;
- *the U.S.-Russian maneuvers "Northern Eagle 2004,"* in which the large anti-submarine warships *Severomorsk* and *Admiral Levchenko* took part.

I would like to call particular attention to the *special tactical exercise "Avaria-2004,"* which was carried out at a Ministry of Defense facility in Murmansk oblast, another key event in 2004.

Its main aim was the practical workup of questions related to defending nuclear warheads against attempts at unauthorized access, as well as the elimination of the possible consequences of an accident were terrorist acts to occur. There were 45 representatives from 17 NATO countries who participated in the exercise as observers.

An analysis of the results of these exercises allows us to state with confidence that at the present time we have everything we need to reliably defend nuclear weapons from any type of unauthorized access and to avert possible emergencies.

In accordance with a decision of the Council of Ministers of Defense, the Collective Security Treaty Organization (CSTO) carried out a *joint exercise of the Collective Rapid Deployment Forces of the CSTO member-states called "Rubezh-2004" (Frontier-2004).*

Command post exercises with command echelons and stand-by forces of the integrated air-defense system of CIS member states were also held. These multilateral exercises were held in accordance with the plan for joint activities in 2004. In addi-

tion to Russia, the air-defense command of Armenia, Belarus, Kazakhstan, Uzbekistan, and Ukraine took part, along with the air-defense forces of these states that have been detailed to the integrated system.

In addition, as a permanent member of the U.N. Security Council, Russia actively participates in peacekeeping operations conducted under the aegis of this and other legitimate international organizations.

The Main Priorities for Russian Force Development

In discussing the prospects for force development, I would like to emphasize that 2005 marked the completion of a five-year military construction plan. The development of conceptual long-term planning documents built on the successful conclusion of this plan has already begun.

Based on an understanding of the global military situation and the missions of the Russian Armed Forces, one can determine the basic priorities for their future development, which are set by the type of national security missions they must carry out and the country's geopolitical priorities. I will only dwell on some of them.

Maintaining the Strategic Forces' deterrent capability

The main objective of Russian policy in the area of strategic deterrence is to not allow any type of coercion or aggression against Russia or its allies, and to ensure the defense of sovereignty, territorial integrity, and other vitally important interests of Russia or its allies.

Increasing the number of military formations in constant combat readiness, and using them as a basis for the formation of groups of forces to ensure that current and potential military threats can be countered

As President Vladimir Putin noted at a conference of the Russian military leadership in October 2003, "The main foundation of Russia's national security remains, and will remain for a long time, the nuclear deterrent forces. They are in good combat order, there are plans to develop them, and these plans are being carried out."

Our long-term goal, taking combat experience into account, is the creation of force groupings that are united under a single

administration and capable of carrying out combat missions with peace-time contingents. These groupings will be based on the military formations kept in constant combat readiness.

Such military groupings are being created in all strategic areas. Their composition varies, depending on the level of threat to Russia's national security. Moreover, they are designed to be fairly mobile, that is, they can regroup in any region if needed to localize possible armed conflicts and defeat an enemy. Increasing the number of military formations in constant combat readiness and expanding their ability to be transferred great distances is the central priority for the development of Russia's armed forces in the next few years.

Improving military training

Operational and combat training of armed forces will also take into account changes in the military and other threats facing Russia, guaranteeing that missions affecting national security can be accomplished. They will also bear in mind new trends in the nature of armed struggle and methods of troop operations, tactical groupings, and the special features of the theater of military actions as well as the potential enemy.

The further transitioning of the armed forces to contractual staffing

The conversion of military forces to contractual staffing is seen not as an end in itself, but as a means to maintain Russia's defense capability and increase the combat readiness of the armed forces. The decision to transition to contractual staffing is not a political declaration. It has been well-thought out from a financial and organizational point of view and was the result of sustained work to evaluate the country's capabilities.

The fulfillment of the program for the modernization of armaments and military and special equipment, and maintaining them in a combat-ready state

At the present time, the armed forces have the required level of basic types of armaments, military equipment, and other materiel. At the same time, troops have begun to receive new and modernized models of armaments and military equipment. In total, plans call for preparing for the adoption of about 300 new and mod-

ernized models of armaments and military and special equipment this year.

The improvement of the technical equipment system will be based on the balanced development of the Strategic Forces, combat control systems (information support), and the General-Purpose Forces.

One of the most important areas of military development is the *improvement of the military education system*.

A federal program for the reform of the military education system through 2010 is being realized to solve the most difficult problems in this area.

The realization of this and other development tasks, particularly the purchase of new military equipment and the support of promising scientific and development activities, will enable us to create a truly modern military.

Conclusion

In conclusion, I wish to emphasize that the leadership of the Russian Armed Forces has a clear program to develop them and increase their effectiveness, based on a realistic understanding of the nation's capabilities and the tasks that Russia faces in the process of integrating into the current international system.

We can now state with confidence that our armed forces are making an important contribution to the strengthening of European security.

¹ This article is based on a presentation by Alexander Rukshin and his answers to questions during the seminar "Russian Military Reform" at the Geneva Center for Security Policy in February 2005.

² A question regarding the possibility of preventive action by states to fight terrorists and their infrastructure was broached at the Munich conference by U.N. General Secretary Kofi Annan. In his opinion, this should be resolved within the framework of the upcoming debates on U.N. reform. In addition, the report by the "group of wise men" includes a recommendation to refine the criteria that determine the "direct threat" that a state has a right to respond to with the use of force.

³ The organization of the brigade, which numbers just over 2,000 men, was developed in order to undertake peacekeeping missions. It is made up of three separate motorized rifle battalions and a reconnaissance battalion. In addition, in contrast to standard brigades, it does not have tanks or artillery.

Brigade personnel staffing is mostly done using military servicemen who are on contracts. Training and education is based on current military training programs, with the inclusion of peacekeeping topics.

⁴ The Russian president has affirmed the following programs, which are now being realized: the Fundamentals of Russian State Policy on Force Development in the Period

up to 2010; the State Armaments Program for 2001-2010; and the Plan for the Construction and Development of the Russian Federation Armed Forces for 2001-2005.

⁵ The Russian president has approved and the Russian government has affirmed a federal program for the transition of several combat formations to contractual staffing. In order to achieve this goal, about 16,000 men were chosen to serve as privates and sergeants in 2004. This made it possible to convert the 42nd motorized rifle division deployed in Chechnya to contractual staffing. Together with the 76th airborne division, this division—the second in the Russian army—is completely staffed by military professionals. This year, approximately 40 combat formations will be converted to contractual staffing. In sum, the number of servicemen on contract, including the officer corps, is today more than 55%. We estimate that in 2008 this number will grow to 70%.

⁶ On February 4, 2002, at the NATO Defense College in Rome, on December 9, 2002, at the Russian Federation Ministry of Defense, and on April 5, 2004, at NATO's Allied Command Transformation in Norfolk (U.S.), the Russia-NATO Council held joint conferences on the role of the military in combating terrorism. The conference results indicate that both Russian and NATO participants were very cognizant of the fact that it is better to forestall or prevent terrorist acts than to work on the elimination of their consequences.

On December 9, 2004, at the Russian-NATO Council an exchange of letters was undertaken at the level of ministers of foreign affairs determining the parameters for Russian Navy participation in operation Active Endeavor. This operation was organized at the request of the United States in October 2001 in order to get help in the struggle against international terrorism. Its missions include interception, detention, and inspection of ships suspected of involvement in terrorist activities.

⁷ The main focus of the Russia-NATO Council Working Group on Peacekeeping is on developing a document that reflects the military aspects of the basic concept for Russia-NATO joint peacekeeping operations.

Cooperation between Russia and NATO in the sphere of military transport aviation is aimed at drawing up a joint program of maneuvers, comprising missions for military transport aviation during peacekeeping operations. In September 2004, there was yet another meeting between Russian and NATO experts on the draft agreement and Framework Agreement between the Government of the Russian Federation and the North Atlantic Treaty Organization on Cooperation in the Area of Heavy Lift Transport Aircraft. Negotiations will continue this year.

⁸ Cooperation in countering the proliferation of weapons of mass destruction and means of their delivery is aimed at assistance in strengthening existing agreements in the sphere of nonproliferation on the basis of a structured exchange of opinions leading to the development of joint estimations of global nuclear, biological, and chemical weapon proliferation trends, and the exchange of experiences in order to study the possibilities for activating practical cooperation to protect against nuclear, biological, and chemical substances. On August 2-5, 2004, a demonstration exercise dubbed Avaria-2004 (or "Accident 2004") was held in Olenogorsk (Murmansk oblast). The exercise focused on the elimination of the consequences of accidents and emer-

gencies involving nuclear weapons. There were 45 NATO representatives who attended the exercise as observers.

⁹ Cooperation in this sphere is aimed at the ratification by member states of the Agreement on Adaptation of the Treaty on Conventional Armed Forces in Europe (CFE Treaty) and on its entry into force (this would make it possible for states that are not yet CFE members to join the treaty); as well as at continued consultation on the CFE Treaty, the Open Skies Treaty, and the 1999 Vienna Document, etc.

¹⁰ At the current time, a mandate and work program have been adopted for the special working group on theater missile defense, as well as a glossary of terms and definitions in the area of theater missile defense and an experimental concept for Russia-NATO cooperation in this area. The following spheres of cooperation have been designated: theater missile defense terminology, a theater missile defense concept, the preparation and conduct of studies, and theater missile defense systems and their possibilities. There are proposals to continue military training and studies on non-strategic missile defense under the aegis of the RNC in future.

¹¹ The February 8, 2003, signing of the NATO-Russia Framework Document on Submarine Crew Rescue did not simply provide a legal basis for the further development of cooperation in this area, but also contributed to a very rich experience of joint work in the spirit of transparent NATO-Russia relations. The work program for 2005 includes working group sessions on equipment and tactics of combat swimmer activities, as well as search and rescue at sea.

¹² The training of Russians servicemen at NATO educational institutions is developing in a positive direction. Operational compatibility is being achieved through joint preparation and training. Russia is receiving help to destroy PFM-1 antipersonnel mines, and cooperation in the area of military reforms and their economics aspects, including military conversion, is deepening.

¹³ Cooperation in this sphere is focused on studying ways to counteract the new challenges and threats to security in the Euro-Atlantic region within the framework of the NATO Committee on Challenges of Modern Society (CCMS); interactions in the area of civil and military coordination of air traffic management; and the broadening of scientific cooperation.

¹⁴ At the February 11-13, 2005, Munich conference on security, Sergei Ivanov explained that we have fulfilled all of our CFE Treaty obligations, and that the bases and presence of our troops on Georgian territory is a bilateral concern that has remained deadlocked through the fault of Tbilisi.

We made yet another attempt to resolve the issue on February 19, during Russian Foreign Minister Sergei Lavrov's working visit to Georgia, but unfortunately it too was unsuccessful.

As for Moldova, Russia met its Istanbul commitments associated with the CFE Treaty—for withdrawal of its troops from Moldovan territory, and on-site destruction of the armaments and technology that are limited under the treaty—fully and ahead of schedule (in mid-November 2001). The withdrawal and arms destruction was documented as required and confirmed by OSCE observers.

At present, the Istanbul decisions unrelated to the CFE Treaty are being realized. These consist of the withdrawal from Moldova and on-site destruction of military property and munitions.

Analysis

**NUCLEAR WEAPONS
SECURITY – RUSSIA’S TOP
PRIORITY IN THE LONG
TERM**

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The 1997 signing by top government officials of the Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation, which aimed to strengthen mutual trust and cooperation, initiated Russian-NATO cooperation in many areas of mutual interest. For instance, there has been cooperation in the prevention of proliferation of weapons of mass destruction, as well as in the area of nuclear security and arms control, including nuclear weapons.

The Rome Declaration of May 2002 gave new impulse to this cooperation, and opened a new page in Russia-NATO relations with the goal of creating universal, comprehensive security in Europe in the interest of all member states, based on the adherence to common values, principles, and commitments. However, if we recall the history of the beginning and development of Russia-NATO cooperation in the area of nuclear weapons, we must note that this cooperation was conceived with difficulty, and did not always proceed smoothly.

To a significant degree, the constructive forward progress of this process initially has not been helped, and today is being harmed, by the negative view of several organizations and officials who cast doubt on Russia’s ability to ensure the security of its nuclear weapons. However, as a rule these individuals are not specialists in this sphere, and frequently their assertions are based on insufficient knowledge.

Nonetheless, for many years Russia, together with its foreign partners, has been undertaking a great deal of work to solve

the problems of nuclear security, relying on the knowledge of foreign specialists with much practical experience in this area – both at the highest political levels, and at the level of technical questions.

It is appropriate to remember here the evaluations voiced by a variety of foreign political and military figures during their visits to Russian nuclear facilities (including U.S. Senator Richard Lugar, former [in 1998] Commander-in-Chief of U.S. Strategic Command General Eugene Habiger, and Executive Secretary of the Preparatory Commission for the Comprehensive Test Ban Treaty Organization Wolfgang Hoffman). Their assessment of the state of the security of nuclear facilities in Russia is very objective and reflects the true state of affairs.

Foreign assessments of the security of Russian nuclear facilities

In 1998 on a visit to Saratov, for example, an American delegation headed by General Habiger was shown the national nuclear weapon storage facility, which houses not only strategic, but also tactical ordnance in five storage depots. “They were very open in every respect. And at no time did I ask a question and then not have a very thorough answer... I don’t have any serious concerns [about Russian nuclear weapons programs and security]. ... One of the reasons why I think we’ve done so well with the Russians is that our relationship, at least at my level, is based upon just open, you know, very frank dialogue. And it’s not one of these things where you probe, trying to get answers to technical questions. ...we had never had access to anybody that had ever worked at one of those facilities that I’m aware of. And so, for them to take me in there ... and to take me into the areas where they have the national bunkers, that’s revolutionary,” said General Habiger at a July 16, 1998 press conference on his recent trip to Russia.

In Secretary Hoffman’s letter on the results of his visit to Russia in 2003, addressed to the Russian Deputy Minister of Foreign Affairs, he indicates his appreciation for Russia’s honest fulfillment of its obligations under the Comprehensive Test Ban Treaty, notes the openness of his Russian counterparts regarding questions of nuclear disarmament, and recognizes that the work carried out at Russia’s Central Nuclear Test Site does not violate the Treaty. NATO

nuclear experts who took part in the August 2004 "Avaria-2004" exercises as observers also gave the security of Russia's nuclear arsenal high marks.

"The qualifications of the Russian specialists impressed me. They showed a high level of professionalism. We observed various operations involving nuclear weapons. We thank our Russian counterparts for the opportunity to attend these exercises. We hope that this sort of activity will become a regular event," said Robert Irvine, director of NATO's Nuclear Policy Directorate and head of the NATO delegation to the Avaria-2004 exercises.²

"If we are talking about the technology used in the Avaria-2004 exercises, then I'd like to note that it is very similar to the technology used in the United States to meet these objectives. In addition, there was a great similarity in the tactics used to monitor the situation, and the operational techniques were also of a similar level," said Michael Hodkin, head of the U.S. Defense Threat Reduction Agency Emergency Management Division, in reaction to what he had observed.³

Today we can state that cooperation within the framework of the Russia-NATO Council in the nuclear sphere, particularly in the area of nuclear weapons security, is bringing practical results.

The results of the Avaria-2004 exercises

Russia's actions to significantly deepen openness in our cooperation with our partners during Avaria-2004 were truly unprecedented, and not only because 48 representatives from 17 NATO nations took part as observers.

During these large, full-scale exercises carried out by the Russian Federation Armed Forces and Federal Atomic Energy Agency, practically the entire complex of measures and tasks needed to ensure the security of nuclear weapons were rehearsed and demonstrated to the world. The development of practical measures within the NATO-Russia Council framework in the very "sensitive" and closed sphere of nuclear weapons and the provision of their security began during these exercises as well.

The exercises were carried out in August 2004 in Murmansk Oblast under the code name "Avaria-2004" (Emergency-2004). The primary objective of the exercise was to

practice providing reliable nuclear weapons security at nuclear weapons storage depots and transport routes. In addition, joint actions to eliminate the consequences of possible incidents (accidents) involving nuclear weapons were also refined. Exercise preparations were carried out under the close supervision of the Russian Minister of Defense, Russian Minister of Foreign Affairs, and the head of the Russian Federal Atomic Energy Agency. Colonel General Igor Valynkin, head of the Ministry of Defense 12th Main Directorate, personally directed the course of the exercises. The exercise plan was worked out in detail by the Russian Armed Forces General Staff and confirmed by Colonel General Yury Baluyevsky, chief of the General Staff.

More than 2,000 people and over 500 pieces of equipment from the Russian Ministry of Defense and Russian Federal Atomic Energy Agency were active in the exercises. Russian Minister of Defense Sergey Ivanov, Russian Deputy Foreign Minister Sergey Kislyak, Leningrad military district commander Army General Valentin Bobryshev and Northern Fleet commander Vice Admiral Mikhail Abramov were present at the exercises.

The coordination of different types and branches of the Russian Armed Forces providing for the security and defense of nuclear armaments, as well as the liquidation of the consequences of possible incidents involving nuclear weapons either in storage depots or being transported on Russian territory by road or by rail, were rehearsed during Avaria-2004. According to the exercise scenario, the Russian Armed Forces, fulfilling the obligations of the Treaty on Strategic Offensive Reductions, were removing strategic nuclear warheads from launch vehicles for their subsequent transport to storage depots and eventual destruction, under peacetime conditions.

Phases of the Avaria-2004 exercise

A logically deduced chain of possible threats and emergencies, and appropriate response measures to be taken by military personnel, was the red thread that passed through all of the phases of the exercise:

- the transfer of decommissioned nuclear munitions by various modes of transportation;

- the repulsion of a terrorist attack on a special tactical task force;
- the conduct of a set of special measures involving the nuclear munitions concerned in the emergency;
- the realization of a set of special measures for the recovery of these nuclear munitions.

Proceeding from the assigned tasks, the exercises were carried out as follows.

The tactical group began by transporting the nuclear munitions on a rural road. Special attention is paid to the protection of such tactical groups. Their route is reconnoitered in advance, reconnaissance is conducted along the route, and the group is guarded by fixed guard posts. In addition, the convoy includes specially trained guard units from the Main Directorate traveling on armored combat vehicles (ACVs), who are armed with a variety of weapons. Thus, the composition of the tactical group includes, in addition to nuclear armaments transport, specially trained guard units in armored vehicles. The tactical group is headed up by a combat reconnaissance patrol. It is followed by the advance guard, which is in a state of constant readiness to defend the patrol through firepower, if necessary.

From the air the tactical group is protected by helicopter gunships that have forces on board whose mission is to observe from the air and, in cases of attack, participate in repelling the assault. Under the exercise scenario, the tactical group came under terrorist attack.

The guard units engaged the terrorist groups. The basic tactic of the terrorists was to blow up the first and last vehicles in the convoy and subsequently shoot the vehicles they are blocking. In this situation, the tactical group commander's chief task is to extricate the group from the assault. The helicopter gunships drop off their assault forces, whose task is to outflank the terrorists. The assault force disembarkation occurs some 150-200 meters from the site of the assault. The primary task of the landing force is to concentrate on mopping up the area and physically destroying the terrorists. Subsequently, the helicopter gunships assist in holding off the attack through fire and maneuver tactics.

Two guard units engaged the terrorists in battle. The units are deployed in battle formation. The armored combat vehicle troops dismount on the deployment line.

In accordance with the provisions of the exercise, the four vehicles with nuclear armaments incur fire damage. This element of the exercise was practiced without the use of arms. Only simulants were used here. This phase concentrated on the interaction of guard forces. However, in order to conduct scientific and technical research on the question of the ability of nuclear munitions to withstand fire and explosions, each of the four vehicles (loaded with dummy nuclear weapons) were subjected to various attacks, by explosives and gunfire.

The first vehicle was blasted by two anti-tank mines.

The second vehicle was set on fire; this modeled the situation wherein a nuclear charge is in the center of a sizeable conflagration.

The third vehicle was fired upon from a grenade launcher and small-arms weapons, resulting in the deflagration of the chemical explosives in the nuclear charge, and the simulated radiological contamination of the site.

The fourth vehicle was also fired upon by grenade launcher and small-arms weapons.

All of this occurred in the presence of NATO observers.

In other words, various emergency situations (out of the spectrum of all possible emergencies) were modeled, approximating as closely as possible what might happen to nuclear munitions if they were subjected to gunfire and fire in reality.

Before nuclear munitions are transported within the Russian Federation, they are all brought to a special state of preparedness, in order to completely eliminate the possibility of their being triggered.

After each training operation, specialists from the Ministry of Defense and the Federal Atomic Energy Agency analyze the results of the operation in order subsequently to improve the technical design of the protective features of real nuclear charges.

The NATO observers personally observed and were able to evaluate the condition of

the nuclear armaments after they were subjected to explosives and fire. During the training exercise the lead vehicle – which was carrying a supercontainer in which the dummy nuclear munition was packed – fell into a small river. A firefighting squad that included some specialists trained in special centers set up by the Ministry of Defense 12th Main Directorate and the Federal Atomic Energy Agency exterminated the fire in the damaged vehicle. All of the specialists were authorized to fight the fires engulfing the nuclear material. In order to decrease thermal levels, the container with the burning armament was subjected to prolonged and abundant irrigation. After the fire was extinguished, professionally trained specialists examined the heat impact on the weapon, and evaluated the condition of the automated systems as well as the explosion risk of the armament at that time. It should be noted that Ministry of Defense and Federal Atomic Energy Agency specialists devote continuous attention to research on armaments affected by various types of accidents. Based on the analysis carried out as a result of these exercises, the exercise leadership was able to make decisions regarding routines and operating procedures to be used with armaments that have been damaged.

A special helicopter is called to an accident site to perform a radiation analysis of the site where an incident has occurred. The helicopter is outfitted with specially trained personnel and the equipment needed to carry out radiation analysis. The equipment on the helicopter makes it possible to determine whether radiation has escaped, and if so the scale of the radiation accident. In order to determine if radiation has escaped into the environment, the helicopter hovers above the damaged vehicle at a predetermined height, and then circles around the accident site along a spiral path. The helicopter then continues by tacking in the direction in which the radioactive cloud is spreading. The reconnaissance results are sent to an information analysis center, which is located at a unified Ministry of Defense and Federal Atomic Energy Agency command post.

The information received by the command post is used further to forecast the scale of the accident and to decide what measures are needed to liquidate the consequences of the accident.

In order to perform ground-based radiation reconnaissance, another special helicopter is sent to the site of the accident. This helicopter is outfitted with specially trained units from the Ministry of Defense and the Federal Atomic Energy Agency, equipped with the gear and instrumentation needed to carry out radiation analysis.

Two methods to drop off the specialists were practiced and demonstrated to the NATO representatives at the exercises:

Variant 1: using special devices, needed if the territory does not allow a helicopter landing;

Variant 2: landing the helicopter.

The radiation detection squads move along fixed routes, measuring radioactive contamination and determining the borders of the contaminated zone with the aid of special instruments, and marking them at the site. The results of ground-based radiation reconnaissance are sent to the command post in real time, so that the size of the accident can be determined. Mobile medical groups that have been specially trained to perform under conditions of radioactive contamination are sent to provide medical assistance to the wounded. After rendering first aid at the site of the accident, the injured are evacuated to specialized medical facilities.

Professionally trained divisions of the Russian Ministry of Defense, equipped with special *Pomoshchnik* (“assistant”) vehicles, are sent to accident sites to work on the nuclear munitions affected. Each *Pomoshchnik* vehicle has a trained crew from the Main Directorate’s Special Emergency Command and state-of-the-art equipment, allowing them to carry out the entire range of measures needed to eliminate the consequences of an accident. Naturally, actual radioactive contamination of the site was not envisaged during the conduct of the training exercises.

In accordance with the exercise plan:

- the prevailing situation was analyzed and suggestions were drawn up for the exercise leadership’s further work strengthening the protection of nuclear munitions and overcoming the consequences of accidents;
- the “damaged” nuclear munitions were loaded in railcars and sent for subse-

quent work-up to a Federal Atomic Energy Agency (FAEA) plant;

- the rail convoy, which was traveling from the accident site towards the FAEA plant, was attacked by terrorists.

The blowing up of the rail bed under the railcars was demonstrated to the NATO observers first hand, as were the complex of measures undertaken to recover the weapons from the special vehicles and railcars that were attacked:

- deploying the *Pomoshchnik* vehicles and bringing them into "combat" readiness;
- evaluating the conditions of the munitions involved in the accident (by analyzing the equipment attaching the supercontainer to the vehicle, measuring its surface temperature, and evaluating the condition of the weapons with the aid of a videoendoscope) and recovering them with the use of special equipment.

One of the most important measures to be carried out in the case of accidents involving nuclear weapons involves operations related to radiation and chemical protection, which are carried out by the Radiation, Chemical, and Biological Protection (RKhB) Troops. In managing the consequences of the radiation accident supposedly created during the exercise, the troops underwent decontamination, as did the local terrain, road, military assets and equipment. The decontamination of these items was carried out in order to remove radioactive contamination and eliminate the possible injury of personnel as a result of contact with contaminated equipment, materiel, and other items.

In order to organize the decontamination of equipment, armaments, and personal protective equipment, as well as the sanitization (hygienic bathing) of personnel, an entire decontamination area is set up. One of the key elements of this area is the special decontamination center (PuSO), intended for the complete decontamination of armaments and military equipment, personal protective equipment, as well as the sanitization of personnel.

A PuSo was set up at an uncontaminated site that included the location where the RKhB Troops were deployed. Armaments and military equipment, small-arms

weapons, personal protective equipment and other materiel were decontaminated, and the sanitization of personnel carried out.

Data from the exercises indicate that the PuSO capacity was as follows:

- treatment of military equipment – 60-80 items per hour;
- treatment of personnel – 50-60 individuals per hour.

NATO observers were shown the PuSO treatment of the military unit that came from the location where the radiation emergency was being eliminated.

In accordance with the exercise plan, methods to search, inspect and raise the supercontainer with nuclear munitions that had fallen in the water together with the vehicle (after it was hit with explosives) were rehearsed.

The container was submerged at a depth of five meters.

The first stage at this point in the exercise was the performance of a search for the submerged vehicle with the aid of a helicopter with monitoring and detection equipment on board. A buoy was dropped from the helicopter upon the detection, by physical characteristics, of the nuclear munition in the lake aquatory. Subsequently, a definitive search and inspection of the river was performed by divers brought to the accident site by helicopter. The regulations of the Russian Navy diving service allow for several methods of deployment from helicopters (jumping into the water while hovering, and in exceptional cases jumping while the helicopter is in motion at low speeds from a height of no more than five meters when the submerged depth is no less than three meters). In the case in question the decision was made to deploy the divers to the shore by rappel – in order to provide for the safety of the divers in conditions of zero visibility underwater and the presence of submerged trees.

After locating the submerged vehicle and briefly inspecting it (determining its position on the river bottom and the condition of the bottom), and evaluating the condition of the supercontainer holding nuclear munition and the soundness of the equipment attaching it to the vehicle platform,

a diver fastened a buoy to the sunken vehicle in order precisely to mark its location.

Next, a unit from the information analysis center field team conducted a radiological survey of the aquatic region of the accident site with the aid of immersible detectors. This reconnaissance was conducted in order to determine the amount of damage. If the water exceeds natural background radiation levels, it means that the casing of the nuclear munition has damage through which water is penetrating, and nuclear particles are escaping. Simultaneously, the protection of the submerged vehicle was arranged.

During the exercise, this is the point when an operation by Engineering Corps units (pontoon depot) to raise the supercontainer using flexible lifting pontoons was arranged.

Since the sunken vehicle was located at a considerable distance from shore, the decision was made to deploy the diving station, consisting of two river and one shore units of the Engineering Corps pontoon depot with a combined load capacity of 50 metric tons, on a ferry. The diving station and diving post were deployed on a base with a portable recompression chamber. Simultaneously, the ferry was set up and anchored next to the submerged vehicle.

Next, surveys and inspections were conducted of:

- the aquatory and bottom in the vicinity of the submerged vehicle;
- the bottom, for the presence of foreign objects in the area near the submerged vehicle, the thickness of bottom sediments, and the depth to which the vehicle had sunk into the sediments;
- the submerged vehicle, its position on the bottom, whether the chassis or platform had been damaged, and the state of the hood and the cab (in order to access the supercontainer a hole is cut in the vehicle hood);
- the submerged container, in order to determine damages.

As a result of the inspection the procedure for lifting the container out of the water was chosen.

The results of the inspection of the submerged vehicle made it possible to deter-

mine that the vehicle was resting on its wheels and had sunken one and a half meters into the bottom sediments. The decision was made to raise the container with the use of flexible lifting pontoons with a lifting capacity of up to 10 metric tons (to lift the container off the bottom and raise it to the surface), tow it to shore, and use a truck crane to lift it and position it at a prepared site.

In this case the lifting method was determined by the existence of a large layer of bottom sediments (at the site where the submergence occurred, the sediment layer reached three meters thick). All underwater operations involving the nuclear armament were carried out by officers of the Ministry of Defense 12th Main Directorate special emergency unit who had undergone special training.

Operations to lift a container are carried out in several stages:

- a diver removes the vehicle hood, cutting it off if necessary;
- a diver removes all equipment attaching the supercontainer to the vehicle platform, using a hydraulic tool that is part of the rescue equipment to cut this equipment if needed;
- divers prepare and attach pneumatic pontoons to the supercontainer, inflate the pontoons and raise the supercontainer to the surface;
- the raised supercontainer is towed to the location where it will be extracted from the water, and is then lifted and positioned at the prepared site. The extraction of the supercontainer is accomplished with the use of a truck-mounted crane. Next, the interior of the container is examined with the aid of a videoendoscope, and the condition of the nuclear weapon is evaluated. After that, a squad from special emergency command evacuates the container to the location where the final operations are carried out and raises the supercontainer.

The exercises were carried out with the cooperation and joint leadership of all command agencies engaged in the exercises. The operations were directed from a unified Ministry of Defense and Federal Atomic Energy Agency command post.

This command post was the primary center for analysis and decisionmaking related to liquidating the consequences of the accident.

Exercise leadership

The deputy head of the Ministry of Defense 12th Main Directorate headed the unified command post; there was a clear division of operational responsibilities between the Ministry of Defense and the Federal Atomic Energy Agency. Defense Ministry forces generally were tasked with the rougher jobs, related to the organization and administration of forces and facilities active near the accident site.

The FAEA carried out the more intricate, detailed analysis of the damaged nuclear devices, developed recommendations for Russian Ministry of Defense specialists on further actions to liquidate accident consequences, and made the proposals needed for decisionmaking. The unified command post was composed like all Ministry of Defense command posts. Its main units were a tactical division and a field communications center. In addition, combat (security, guard details) and rear guard (supply and personnel leisure) units were deployed and equipped.

A distinctive feature of operations to liquidate the consequences of an accident is the fact that the only Defense Ministry forces that take part in the initial stage are the 12th Main Directorate emergency rescue forces (in order not to aggravate accident consequences). Subsequently, the sphere of tasks, depending on the type of accident, may widen considerably and may then require the involvement of additional forces and facilities.

In order to organize cooperation, prompt data collection, and the sound management of the forces and facilities of the Ministry of Defense and the other ministries and agencies involved, the command post was outfitted with locations supplied with all necessary equipment for the work of task groups.

The joint operation of the Defense Ministry and FAEA command post allowed for close collaboration, organizing and undertaking operations at various stages of the effort to liquidate the consequences of the accident in minimal time. Critical tasks include: the nonaggravation of accident consequences; evaluation of damaged nuclear munitions; implementation of urgent measures to reduce the risk

of explosion; transportation to a storage site or destruction and others.

During the exercises the command post's use of various supplementary information sources (besides the reports and dispatches that were received) was rehearsed: video data from the accident site through the use of special equipment produced on the basis of scientific research of materials by a computational analysis support group, as well as the deployment of dummy nuclear weapons that made it possible to analyze the damage to nuclear munitions, determine operational procedures, and make recommendations for emergency rescue squads.

The computational analysis support group that was deployed, which is a mobile detachment of the 12th Main Directorate nuclear armament emergency decision informational analysis support center, provided scientific and computational support to accident consequence mitigation operations.

The group carried out the following tasks:

- developing scenarios and forecasting the possible developments at the scene of the accident, estimating the range of possible consequences, including a forecast and assessment of the radiological situation at the accident site, and developing proposed measures to protect the public and proposals related to the arrangement of personnel operations;
- conducting spectrometric research of samples from the ground and water, as well as the identification of fragments of special materials that had exploded;
- conducting other real-time analyses in accordance with directives from the leadership of the emergency consequence elimination team.

Personnel from the units and detachments taking part in the exercises were stationed at a field camp. The arrangement and equipping of the field camp was carried out in accord with the requirements of normative documents regulating the establishment of armed forces afield.

The field camp consisted of:

- *a tent division*, designed for the accommodation of personnel of all units and detachments, as well as rear guard equipment;
- *a field depot*, designed for the storage, technical servicing, repair, and prepara-

tion for designated use of the armaments and military hardware of the Operational Mobile Group and forces and facilities assigned to it in the emergency consequence management area.

In order to ensure that personnel operate per regulations, a daily routine was maintained that included morning and evening activities, aimed at the acclimation of servicemen, the enhancement of their physical resistance to sudden changes in the physical environment and to the conditions of combat operations, as well as the maintenance of personal and public hygiene. The guarding and defense of the field camp was performed by a temporary guard detail and reinforcement units. A psychological treatment post was deployed to restore the mental and physical state and alleviate the stress of personnel.

Conclusion

The exercises demonstrated that Russia's procedures for responding to the extremely complex problem of eliminating the consequences of an accident involving nuclear weapons have been developed to a very high scientific level. They are systematic, and take everything into account, including minutiae. All components of this work in one way or another affect the general state of nuclear safety and security.

According to the official testimonials of our partners, the exercises were given very high marks. Russia hopes that the first serious step in the strengthening of cooperation has been taken, and that new steps in this direction will be made. There is every reason to believe that this is so.

According to the preliminary agreement reached at NATO staff headquarters in Brussels, the first such exercises were to be carried out on Russian Federation territory. Henceforth, beginning in 2005, they will be conducted both on the territory of NATO member states that possess nuclear weapons, and on the territory of one of the NATO countries where American nuclear weapons are based. At all exercises the parties will participate as observers.

This step, taken by the Russian Federation in such a "sensitive" area, was called for to dispel doubts and simultaneously strengthen our partners' confidence in their knowledge that Russia has undertaken the responsibilities and made the necessary exertions to maintain the security of nuclear weapons in

storage and during transport, and know that Russia is ready to act quickly if there are any incidents involving them.

In future, the parties plan to move from observing exercises to the undertaking of joint operations by specialists from member countries. Of course, in doing so the conditions of the Nuclear Non-proliferation Treaty will be observed. The participation of NATO representatives as observers at the exercises is the first step in this cooperation. At this stage exchanging the experience in this area that countries possessing nuclear weapons have accumulated is important. This must be done with the greatest possible transparency, as Russia did during the Avaria-2004 exercises.

In future, the second stage of cooperation could shift to joint actions by specialists from various countries possessing nuclear weapons in the liquidation of the consequences of incidents (accidents) involving nuclear weapons.

The specialists believe that this is extremely labor-intensive work that does not provide the luxury of making a mistake and demands full mutual understanding and accountability. The concerted action of the personnel squads dedicated to the elimination of accident consequences, who will work together in emergency situations (to liquidate the consequences of those emergency situations), is extremely important here.

I would like to emphasize once again that the primary task of the specialists working in Russia's nuclear weapons complex is the realization of a system of scientific, technical, and organizational measures maximally to prevent the possibility that incidents involving nuclear weapons may arise at all stages of their life cycle.

I can also completely responsibly state that the standards of Russia's nuclear reserves, judged by all criteria for nuclear security used in nuclear weapons states, are in no way inferior to world standards, and by some measures (for instance, in the ability to prevent unauthorized operation) exceed them.

¹ The 12th GUMO (Main Directorate) of the Russian Ministry of Defense is in charge of the safe and secure storage and transportation of nuclear warheads.

² Irvine's statement has been re-translated from Russian.

³ Hodkin's statement has been re-translated from Russian.

Analysis**U.S. NUCLEAR POLICY
BEYOND GEORGE W. BUSH¹**

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U.S. nuclear policy is at the top of the international agenda. Doctrinal documents that allow for the use of nuclear weapons; development of earth-penetrating weapons designed to destroy hardened, deeply buried targets; and possible new weapons designs and the associated renewal of nuclear testing—all these developments are being widely discussed. In fact, however, only very modest practical steps have been taken in recent years (at least, as far as budget requests are concerned), and even these have met with serious resistance in the U.S. Congress as well as opposition on the part of experts and the political elite. One might say that the global community is reacting not only to actual steps, but to its own expectations regarding future U.S. policy trends.

Nevertheless signs of a policy shift, even if modest so far, raise a number of questions. First, whether the ongoing discussions and the extremely modest budgetary appropriations represent the beginning of a long-term shift in U.S. nuclear policy, or whether current policy will change along with a change of administration in 2009. Second, is the new nuclear policy a purely American phenomenon or does it reflect a broader shift?

The answers to these questions and conclusions are the subject of this article. They are not comforting.

First, the evolution of U.S. nuclear policy is not so much the product of the current administration's views, as a reaction to the emergence of a new international system, and is therefore likely to stay in place for a fairly long time. The policy may be

adjusted but is unlikely to be reversed, whether the next administration is Republican or Democratic.

Second, since the current evolution of U.S. nuclear policy is driven by the new international system, similar changes will occur in other countries as well. Indeed, some signs of this evolution can already be found in Russia.

These changes are not irreversible, but altering them will require more than the criticism of the global community. A return to the disarmament agenda of the 1990s is not likely. New times require new approaches, and nuclear weapons are no longer the defining element of international security.

**The New System of International
Relations and the Role of Nuclear
Weapons**

After the Cold War ended many thought that nuclear weapons would fade away—maybe not necessarily eliminated, but at least lose their military and political significance. Since the late 1990s, however, a sort of nuclear renaissance could be observed in a number of countries. U.S. and Russian nuclear policy has changed, India and Pakistan joined the “nuclear club” in 1998, North Korea announced its nuclear status, and there are reasons to believe that Iran is working on a nuclear weapons program of its own. Some significant conclusions can be drawn, even if they are only preliminary.

First of all, it is now possible to confidently say that nuclear weapons and the Cold War were not causally related. Nuclear weapons helped shape the Cold War, but the Cold War was not the result of the nuclear arms race, and therefore its end could not end nuclear weapons' military value. While many understood this even earlier, the “nuclear renaissance” of the past seven years removed any remaining doubts.

Second, and perhaps even more important, the transition period of the 1990s, which has often been described as the “post-Cold War period,” is over. A new international system is emerging, whose features are not yet entirely clear. It would seem, however, that nuclear weapons will have a fairly significant role in it.

Events that signaled the end of the transition period were the 2000 elections in Russia and the United States (the governments of the 1990s were basically engaged in drawing the line under the Cold War, while new leaders began to form new agendas), the terrorist attacks in Russia and the United States in 1999-2001, the 2003 war in Iraq, and North Korea's acquisition of nuclear status in late 2003. One might add a "non-event"—the gradual building of a "containment belt" around China in the first half of 2001. This policy was interrupted by the events of September 11, but recently has been resumed.

The "disarmament illusions" of the 1990s and progress in the reduction of nuclear arsenals both resulted from the fact that the primary Cold War mission of nuclear weapons had exhausted itself. Until the new international system began to take shape, anti-nuclear sentiment was on the rise. Today, unfortunately, we are witnessing the opposite process, and it is not yet clear whether it can be stopped or slowed.

The place and role of nuclear weapons in the new international system will likely be determined by the following factors:

- Paradoxically, the erosion of the rigid bipolar system (along with the equally well-defined group of non-aligned states) has decreased the system's "manageability" and led to a relative increase in the degree of freedom states have in foreign and security policy decision making. In addition—largely as a result of the United States' own actions—the role of international institutions and international law has been weakened.
- Although the new international system that is taking shape has all of the signs of unipolarity, the United States clearly does not possess sufficient power to control the course of events while support of allies cannot be guaranteed. This has been further complicated by the explosion of international terrorism. If key states are able to establish a steady, cooperative relationship, the new system may eventually stabilize, but if not, one can expect the evolution of the system toward multipolarity—complete with its traditional negative features, such as unstable, rapidly changing coalitions and the general unpredictability of the situation.

- The stable, easy predictability of threats is now a thing of the past. The sources, scale, and very nature of future threats are unknown. While reasonably reliable assessment of near-term threats is possible, it is virtually out of the question to foresee what threats states will have to deal with in ten or twenty years. Therefore, states have to be prepared for unforeseen threats arising from unexpected directions. In the United States, this is called "capabilities-based planning" (in contrast to traditional "threat-based planning").
- The perception that *any* use of nuclear weapons could lead to a global catastrophe is part the past as well, since large-scale conflicts between leading military and nuclear powers are no longer deemed likely. Paradoxically, the sharp decrease (or possibly, the disappearance) of the threat of World War III has made the use of nuclear weapons theoretically feasible for the first time in four decades (the view that nuclear war would mean the "end of the world" was fully formed in the late 1950s-early 1960s).
- The uncertainty of the international system provides new incentives for a growing number of states to acquire nuclear weapons, while the ability of the international community to prevent proliferation is decreasing. This is true not just for potential U.S. enemies but even for its allies and partners, many of which might be reluctant to unquestionably rely on the American "nuclear umbrella" in the long term. Doubts about the durability of the nuclear nonproliferation regime are forcing the nuclear states to take measures against the possible increase in the number of nuclear weapon states, including by slowing disarmament activities.

A response to these changes is the emergence of a new mission for nuclear weapons: limited use in the context of limited, predominantly conventional wars. The traditional mission, the mutual deterrence of the world's major nuclear powers (particularly, of course, the United States and Russia), remains in place but has been relegated to the background as a "just-in-case" scenario as neither Washington nor

Moscow believes that a large-scale conflict is likely. Current disagreements are neither as deep nor as fundamental as they were during the Cold War, when each believed that the survival of their economic and political systems was at stake.

The thesis about the limited use of nuclear weapons requires further explanation. After all, plans to use nuclear weapons on the battlefield or in the military theater to support conventional armed forces existed during the Cold War as well. However, this mission was largely assigned an auxiliary role within the context of a global war or of a regional conflict fraught with the possibility of escalating into a global war. Limited use was likely to be part of large-scale strikes that used strategic weapons. It is well known that the United States paid considerable attention to developing plans for preventing escalation of a conflict from the theater to the global level (this issue attracted close attention in the first half of the 1980s in connection with the issue of intermediate-range nuclear weapons in Europe; there were also similar studies in the early 1960s that have recently been declassified), just as the essential weakness of all of these plans is similarly well known.

The current views are quite different. First, because the likelihood of a global war is practically zero, it has become theoretically possible to separate the missions of strategic deterrence and limited use and for the first time consider the possible use of nuclear weapons with relative "impunity" (impunity in the sense that their use will not lead to nuclear escalation). Second, the use of nuclear weapons against third countries has also become theoretically possible for the first time. While in the 1950s and 1960s ideas about using nuclear weapons in limited wars (such as Korea and Vietnam) were rejected, in part due to the fear that this might legitimize their use (and *de facto* "sanction" their similar use by the Soviet Union), the current U.S. political and military leadership clearly is not worried about the same risks. Russia is no longer seen as an enemy or a global competitor and, therefore, this kind of "sanctioning" is no longer a problem. Of course, there are other types of obstacles, such as the proliferation of nuclear weapons and the condemnation of a significant number of countries, including allies, but these are problems of another order entirely.

It's worth noting here that the process of developing new missions is at a very early stage. Many details remain unclear, as is the shape of the new international system that is giving rise to the new view of nuclear weapons. The practical implementation of these ideas is in an equally early stage and is encountering serious political obstacles: the U.S. Congress has blocked appropriations for preliminary studies on low-yield nuclear weapons (and there is as yet no information on Russian work in this area).

There are certain differences between the U.S. and Russian approaches to the concept of limited use. As far as one can judge, the United States sees them as an instrument of solving practical tasks in limited wars such as the recent war in Iraq—primarily the destruction of facilities where weapons of mass destruction are being developed, produced, and stored (proposals to create earth-penetrating weapons emphasize this mission). Official Russian documents adopted in 2000-2003 indicate that it views limited use primarily in the context of de-escalation—deterring a large-scale non-nuclear attack by a militarily superior foe (particularly the United States and its allies). In both cases, nuclear weapons are expected to compensate for the inadequacy of conventional arms—their inability to reliably destroy hardened, deeply buried targets or to deal with a quantitative and, especially, a qualitative imbalance.

It is important to note that the emergence of a new, limited-use nuclear mission does not lead to an increase in nuclear arsenals, in contrast to the familiar trends of the Cold War era. On the contrary, nuclear arms reductions are likely to continue: under the 2002 Strategic Offensive Reductions Treaty (also known as the Moscow Treaty), Russia and the United States will reduce their strategic arms to a level of no more than 2,200 deployed warheads, and in future may make even greater reductions. Stockpiles of nonstrategic weapons are also being reduced. It is possible that over time other nuclear states will join this process in one form or another, at the very least committing not to increase their nuclear arsenals. This is because the new mission does not require large stockpiles of nuclear weapons; to date, all scenarios that have been discussed in both countries involved the use of weapons in single digits.

Therefore, arms reductions should not be confused with disarmament. It is more correct to speak of the optimization of arsenals and the elimination of surplus weapons accumulated during the decades of the Cold War. The absence of any system to monitor the implementation of the 2002 Moscow Treaty also suggests that its focus is really optimization, not disarmament. This trend is really quite clear, and non-nuclear states display an understanding of that trend when they declare that the Moscow Treaty cannot be classified as implementation of Article VI of the NPT and condemn increasing attention nuclear weapons. In the view of non-nuclear weapon states all this shows that disarmament is not on the agenda at the present time.

Trends in the Development of the U.S. Nuclear Doctrine

The new view of nuclear weapons is part of a broader process of transforming the U.S. military in ways that are supposed to enable it to fight limited wars. Nuclear weapons are just one of the elements of this transformation, and a secondary one at that. The role and place of nuclear weapons is determined in the 2002 *Nuclear Posture Review* as part of the “new triad” – a rather inadequate term, which is used to designate the integration of three elements of military power: offensive weapons, defensive weapons, and responsive infrastructure, which can design and produce new types of equipment rapidly and in small quantities. It is worth nothing that this infrastructure is viewed not just as a supporting element, but as an integral part of military power alongside the services and branches of the armed forces. All three elements are integrated by C4ISR—command, control, communications, computers, intelligence, surveillance, and reconnaissance.

Nuclear weapons are included in the category of offensive weapons, and can be used when conventional weapons cannot meet specific objectives. It is important to emphasize that the use of nuclear weapons is considered to be an extraordinary measure that may never be taken. Even when the enemy has weapons of mass destruction at his disposal, the use of conventional arms remains preferable. The modernization of conventional weapons, including the equipping of strategic missiles (including ICBMs) with non-nuclear warheads, should significantly enhance their military value. Nevertheless, it remains important to

maintain the “nuclear option” in reserve in order to ensure maximum flexibility for both planning and operations.

The limited use of nuclear weapons primarily has been considered in the context of regional wars, such as the recent war in Iraq, particularly against WMD-related targets. The most likely scenario is that U.S. Strategic Command will launch nuclear weapons at the request of combatant commanders. However, one cannot exclude the possibility that combatant commanders may be authorized to use specific Strategic Command assets.

Issues of command and control are as yet unclear. Although the president will retain the exclusive prerogative to authorize the use of nuclear weapons, one cannot rule out that operations against specific targets may be “pre-authorized” in the planning stage, or that the commander may be given permission to use nuclear weapons at his own discretion in specified situations without additional authorization.

To the extent that nuclear weapons can deter the enemy’s use of WMD, the principle of limited use may promote nonproliferation. If states that plan to acquire WMD conclude that they will not be able to use it to further military or political goals against the United States or its allies, the incentive to obtain these weapons should weaken. In the case they try to use WMD, the United States should be able to destroy both the weapons and related infrastructure. This is the reason for the strong emphasis on earth-penetrating weapons capable of destroying hardened, buried targets.

A new phenomenon is the possibility of using strategic forces independently of other services. In 2004, the media reported the adoption of the *Interim Global Strike Alert Order*, which directed Strategic Command to be prepared to use strategic aircraft to strike nuclear sites in North Korea and Iran. The *National Military Strategy* and *National Defense Strategy*, both adopted in 2005, officially provide for the possibility of preventive strikes, even in cases where there is no direct threat to the United States.

As in the more general case, the possible strikes on North Korea and Iran do not have to be (or rather, should not be) nuclear. However, some types of targets are apparently thought to require the use of nuclear weapons. The possibility, in princi-

ple, of using nuclear weapons in “non-contact” military action at great distances is of particular interest here. Attention to scenarios of this kind may be caused by the fact that at present U.S. forces are simply not capable of engaging in additional conventional military activities—they are already occupied, and even overloaded, by the missions in Afghanistan and Iraq.

The fact that the *Nuclear Posture Review* contemplates the possible use of nuclear weapons against states with *any* type of WMD represents a partial revision of negative security assurances, adopted by the United States in connection with the NPT (these assurances require that nuclear states—including, but not limited to, the United States—not use nuclear weapons against non-nuclear weapon states, a provision that eliminates the threat to states that may have, for instance, chemical but not nuclear weapons). Proposals to weaken negative security assurances initially appeared in the 1990s, after the signing of the *Chemical Weapons Convention*, when the only weapons of mass destruction remaining in the U.S. arsenal would be nuclear weapons. Officially, the new formulation, however, was first adopted by Russia in 2000. The United States followed suit nearly two years later.

It is clear that adopting the principle of the limited use of nuclear weapons in the context of limited conflicts is fraught with the risk of expanding the missions of these weapons even further. Although the main mission remains the enemy’s WMD and related sites, it will be difficult to avoid the temptation to assign additional missions, such as the destruction of fixed or mobile targets, or the penetration of enemy defenses, particularly when military developments are unfavorable.

Finally, it is worth noting that the dividing lines between different types of nuclear weapons are being erased, particularly those between strategic and nonstrategic weapons. The use of short-range nuclear weapons seems extremely improbable. On the contrary, as noted above, it is more likely that strategic or, at a minimum, intermediate-range forces under the control of Strategic Command, such as the B-2 heavy bomber, will be used.

This is very different from Cold War-era planning, where tactical weapons were predominantly given the mission of combat

support and strategic weapons were used for strategic deterrence. The new state of affairs is primarily caused by the reduced role of strategic deterrence, along with low requirements for limited use (as noted above, these requirements are in single digits). As a result, strategic nuclear weapons have become available for new missions. Strategic weapons have a number of advantages over tactical and intermediate-range weapons, primarily thanks to their nearly unlimited range. This is particularly true of air-launched cruise missiles and short-range weapons deployed on long-range aircraft. They can be used in practically any military theater without having to spend time transferring delivery systems, they are highly accurate, and have dual capabilities—that is, they can be used with both nuclear and non-nuclear warheads.

Given the above, the close attention of non-weapons states at various multilateral fora (the NPT Review Conference, U.N. General Assembly First Committee, etc.) to tactical nuclear weapons seems at odds with the trends in nuclear arsenals. Most likely, short-range nuclear weapons will gradually disappear. Similarly, the traditional framework of the bilateral disarmament process, which has concentrated on strategic and nonstrategic weapons separately (the Moscow Treaty is just the most recent example of this tradition), does not make much sense either.

New Missions and Trends in Modernization

The credibility of the new missions—including the limited use of nuclear weapons if needed—depends on the availability of the appropriate assets. The following characteristics are critical:

- transferring technological advances in precision guidance and rapid retargeting of nuclear weapons (to date these advances have mostly been concentrated in high precision conventional armaments);
- low yield: the yield of warheads inherited from the Cold War is generally hundreds, or at the very least, dozens of kilotons, which is not only excessive but unacceptable for the purposes of limited use during a predominantly conventional conflict. It is critical in this case to avoid excessive damage, the

long-term radioactive contamination of large areas, and significant civilian losses (“collateral damage”);

- earth-penetrating capability in order to destroy deeply buried, hardened targets;
- capability to tailor effects, including the ability to choose the appropriate mix of various factors (such as shock wave, radiation, etc.);
- ability to reliably destroy chemical and biological weapons;
- improved reliability and simplified maintenance.

It is a widely shared belief that the existing (“legacy”) arsenal does not have the necessary assets. Consequently, there is considerable pressure to upgrade existing weapons and possibly develop new ones.

Even a quick overview of the current state of efforts to improve nuclear weapons allows one to point at some key variables. The scale of budget allocations, pace of activities, and modesty of the existing tasks stands in stark contrast to U.S. policy in this area. U.S. plans and statements have resulted in sharp criticism from both the global community and Bush administration critics. In reality, the new doctrine will not be supported by appropriate assets for at least 10-15 years, and given the recent sharp increase in Congressional resistance, possibly far longer.

Weapons modernization work consists of two main elements:

The first element is the creation of a new robust nuclear earth penetrator (RNEP). This does not require the creation of a new physics package: the current B61-11 RNEP, adopted in 1997 (and derived from an earlier model, the B61-7, which entered production in 1985), should be fit with a new casing. Like the B61-7, the B61-11 has a variable yield of between 0.3 and 340 kt and can penetrate into rock up to 6 ft, which is not considered sufficient; the new casing should allow deeper penetration. Work on the new version began in 2003, one year later than originally planned, and at the current stage is basically devoted to determining whether the existing B-61 and B-83 warheads could be modified to ensure deeper penetration.

During the first two years, funding amounted to \$15 million per year. Plans

provided for an additional \$27.6 million in 2005 and \$95 million in 2006. After the completion of the current tasks, budget allocations—given a decision to move from design definition to full-scale development—were expected to increase to \$145.4 million in 2007, \$128.4 million in 2008, and \$88 million in 2009. Completion of development engineering was scheduled for 2009.

However, Congress eliminated the program from the FY2005 budget request; funding for 2006 was partially restored, but only at the level of \$4 million (compared to the original plan of \$95 million or the \$8.5 million administration request). Furthermore, the money was transferred from the Department of Energy to the Air Force, under the assumption that the Air Force is better equipped to decide if it actually needs such weapons. However, since Strategic Command and the Air Force have long said that they needed a new RNEP with better performance than the one already in the arsenal, it is easy to predict the results of the feasibility study. Additionally, \$4.5 million was allocated to fund a study on deploying the new weapons on B-2 bombers.

The two most important facts to keep in mind are that program funding was restored, and that program implementation has radically slowed down.

The second element is (or was) known as the Advanced Concepts Initiative (ACI), a program which was supposed to determine whether new types of warheads (physics packages) were necessary or feasible, to replace those developed during the Cold War. It is this program that dealt with the issue the current administration is being criticized for: creating new types and versions of nuclear weapons. Simultaneously, this program was supposed to answer questions about the feasibility of modifying existing physics packages in order to extend service lives and produce a weapon that was more reliable, simpler, and cheaper to maintain.

Initial funding amounted to \$6 million per year, but in 2005 the program was ended (the administration request was \$9 million for 2005 and \$4.4 million for 2006). Plans had called for the preliminary research stage to be completed in 2006 and, given a decision begin to full-scale development efforts, funding was supposed to increase

dramatically: to \$14.9 million in 2007, \$14.6 million in 2008, and \$29.5 million in 2009. The initial budget allocations were quite modest and indicated a slow pace of work even while funding was still available.

Unlike the RNEP program, ACI funding was not renewed. Instead, Congress initiated a different program, the Reliable Replacement Warhead (RRW) program, which replaced the previous Life Extension Program. Under the RRW, new replacement parts are supposed to be developed for legacy warheads to make it possible to increase their service lives, simplify design, and improve reliability. In other words, the new program is expected to achieve some of the aims of the ACI. In addition, plans call for examining the possibility of decreasing the yield of legacy warheads, and operationalizing the principle of tailored effects. In 2005, the Department of Energy budget request for the Advanced Concepts Initiative was simply reassigned to the new program, and in 2006 Congress allocated \$25 million—\$15 million more than the administration request. However, the law banned the development of new capabilities that would enable new missions; thus, not all of the Advanced Concepts Initiative program's initial aims can be met under the RRW program.

According to the Department of Energy, approximately 10,000 warheads require replacement: they are already beyond their original warranty periods and have had their service lives extended through replacement of parts. The replacement of old physics packages with new and better designs could help to reduce the overall number of warheads in the stockpile to about 6,000 (an approximately 40 percent reduction), simply by making the warheads more reliable and extending their service lives from 15 to 20-30 years. Upgrading these warheads will cost an estimated \$2 billion between 2007 and 2017. The first batch of "new" warheads is expected in 2012-2015. According to some reports, the first candidate for replacements is the W-76, an SLBM warhead, and it would entail, in effect, designing a new warhead, although observing the Congressional restrictions as well as the impossibility of full-scale testing.

To sum up, one might say that the current administration has suffered a political defeat as it is not even able to carry out

a program of preliminary research on the creation of new warheads. Nevertheless, some tasks can be undertaken under the more limited programs to develop new components for legacy warheads. Thus, some movement in the initial direction continues, but far more slowly than and not at the same scale as originally planned.

One basic task, which some view as critical, is the rebuilding of industrial infrastructure for the production of nuclear weapons. Their production ceased at the end of the Cold War and a substantial proportion of production capacities was dismantled.

In 2002 tritium production was renewed and in 2003, for the first time since 1989, a plutonium pit was produced. In future, construction of a plutonium pit production facility is planned (commencement of construction is tentatively planned for 2020; until that time pit production will continue at the Los Alamos National Laboratory). However, Congress sharply reduced funding for construction preparations and banned the expenditure of funds on site selection for the future plant.

The program that naturally is attracting the greatest attention is the one on test readiness at the Nevada Test Site, reducing the time from 36 to 18 months; traditionally this sort of program is seen as evidence of preparations for testing. According to official U.S. policy, however, the United States does not plan to resume testing and has not even examined this issue. The official statements should probably be believed since there quite simply will be nothing ready to test in the next few years: the Department of Energy and national laboratories do not believe that existing warheads require testing and no new ones are yet under development. In addition, the political costs of renewing tests would be so high that it would be irrational to expect any such activities with regard to existing warheads; such a serious measure would only be taken for equally serious reasons. An alternative explanation, offered by officials, is more logical: at 1990s funding levels test site degradation might have become irreversible. Additional funds are required to maintain the site at a stable level and restore some infrastructure that has been damaged.

However, the administration has failed as well. Congress only funded the first two

years of the three-year program, and refused further allocations. It seems likely that gradually all of the program aims will be met, but more slowly than initially assumed.

The Prospects for Post-2008 Nuclear Policy

A survey of U.S. doctrine and nuclear weapons modernization leads to fairly contradictory conclusions. On the one hand, the conceptual foundations for nuclear policy as well as plans for the use of nuclear weapons under existing international circumstances have progressed quite far and are being supported not just by the political leadership, but by the military establishment as well. On the other hand, the development of the weapons required by the new doctrine is not just in the very earliest stages, but is also progressing very slowly and with minimal funding (by U.S. standards, of course). Even these relatively modest programs, moreover, are running into resistance in Congress and as a result have been slowed even further or modified.

Thus the question arises, whether current policy will remain in some form after January 2009 and the end of the Bush Administration. Here we are primarily talking about the limited use of nuclear weapons in limited, primarily non-nuclear conflicts. Despite all of the political zigzags this policy appears relatively stable. Change is possible and perhaps even inevitable, but some of the basic assumptions underlying the policy enjoy broad support.

In particular, this refers to the thesis that the international situation is unpredictable and could fluctuate rapidly and profoundly; that predicting the sources, scale, and nature of future threats is impossible; that present and, to an even greater degree, future opponents will be harder to deter than the Soviet Union; and that deterrence based solely on conventional weapons may be insufficient. Finally, doubts as to the stability of the nuclear nonproliferation regime are widespread. While U.S. "friends and allies" are likely to refrain from acquiring nuclear weapons in the foreseeable future, states that belong to the "axis of evil" actively are pursuing nuclear status. Therefore, they must be restrained, in part by demonstrating that nuclear weapons do not yield the expected benefits; deterred, if restraints do not work; and destroyed, if deterrence fails.

Of course, one could argue over how well-founded these views are. Furthermore, the new approach to nonproliferation adopted by the administration in the past few months only serves to undermine the nonproliferation regime—under the new approach, proliferation only needs to be checked (using all means available) if the nuclear weapons fall into the hands of "bad" countries, while the nuclear status of "good" countries can be accepted without objection. Undoubtedly, the war in Iraq provided a very powerful incentive for countries that fear the United States to acquire nuclear weapons, particularly since U.S. policy openly advocates the removal of a whole series of regimes that it deems undemocratic and unfriendly.

Regardless of how well-founded such criticisms may be, it remains true that a substantial part of the U.S. establishment and society is worried. These concerns are not so much focused on current enemies as on the general unpredictability of the situation as well as the issue of whether or not U.S. forces can handle the unknown threats. Given these circumstances, the military must be strengthened as much as possible, an idea that lies at the core of the adoption of the principle of "capabilities-based planning" by the current administration in lieu of traditional "threat-based planning."

The new nuclear policy, including the limited use of nuclear weapons as an independent mission, is just one component of the effort to maximize military strength under conditions of uncertainty. These conditions, moreover, appear to be one of the key characteristics of the developing international system.

Since the new trends in U.S. nuclear policy are answers to the threats and challenges posed by the new international system, one can hardly expect that calls to return to traditional nuclear nonproliferation will be successful. Current policy is unlikely to change as long as a significant portion of the U.S. establishment is convinced that relying on nuclear weapons is necessary to counter possible threats, and until alternatives are proposed that are equally or better able to counter them. In any case, it would be overoptimistic to expect that a new U.S. administration would lead to a radical return to the disarmament initiatives of the 1990s, whether the Republicans remain in the White House or the Democrats regain power.

Furthermore, since the new international system is about the world as a whole and does not just affect the United States, the trend toward revising nuclear policy—the policy inherited from the Cold War and the approaches of the transition period—is not limited to the United States. It is very likely that this trend will spread even further.

This is true of Russia, where nuclear policy is also being influenced by uncertainties and the possible unforeseen appearance of new threats from relatively stable quarters. Statements made in Washington and Brussels that the enlargement of NATO to the east or the appearance of U.S. bases in Central Asia do not pose a current or potential threat to Russia are not very effective. Accordingly, “just in case” preparations are being made to deter the threat of the use of force against Russia along the lines of the “Kosovo scenario,” including deterrence utilizing limited use of nuclear weapons. It is possible that in future, if nothing changes, proposals very similar to those in the United States regarding the possible limited use of nuclear weapons against third countries will appear.

In principle, it is fairly simple to change this situation: at the very least, it is necessary to enhance significantly the effective-

ness of international organizations and other international institutions and develop partnerships between key states. It is likely that the next administration will not view international organizations as negatively as the White House does today. However, the question remains: will international organizations themselves be up to the tasks that arise? To date decisionmaking procedures, the nature of these decisions, and the effectiveness of their implementation are not at the necessary level. The reforms that have begun at the United Nations are likely to be just the first stage in the reform of the entire international system, which may involve the formation of new organizations in addition to or in place of existing ones. The alternative is the victory of the “individualistic” approach to security provision, including reliance on nuclear weapons. The slow speed at which the United States is creating new weapons that meet new doctrinal requirements provides some time to solve these questions. The critical period is likely to be during the next U.S. administration.

¹ This article is based on a presentation made by the author at the Geneva Center for Security Policy in June 2005.

Analysis

**ON THE ROLE OF NUCLEAR
WEAPONS IN PROVIDING
FOR RUSSIAN SECURITY
IN THE 21ST CENTURY**

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*“The art of war is a matter
of national importance,
a life and death situation,
the way (Dao) either to safety
or to ruin. Hence it is a subject
of inquiry that can on no account
be neglected.”*

Sunzi, 6th century B.C.¹

At the present time, the global community, military, diplomats, and politicians are focusing on the issues of international terrorism and the proliferation of weapons of mass destruction, and how to design and agree upon the ways and means to fight this evil. Issues of nuclear policy and nuclear strategy, by contrast, have been given less attention. Where Russia is concerned, practically all of the questions related to these latter issues have been discussed, decisions have been made, and the formulation of these decisions in official documents is now being completed. Thus one might consider that this article is simply “catching up” to the decisions that have already been made.

However, this author is certain that the discussions that have occurred have in no way influenced decisionmaking in the area of Russia’s nuclear arms procurement, policy, and strategy. This is confirmed when one looks at the long-standing debates in the open press on the issues mentioned above, and notes that they chiefly involve experts who do not represent official exec-

utive branch agencies. The periodic speeches by top-ranking military officials only confirm the unfortunate conclusion that those in power are not ready for an open dialogue on these questions and do not want even to discuss the many and often quite well-founded proposals put forward by the independent scientific community.

Therefore, the thoughts and reflections related below should not be viewed as yet another attempt to bring the attention of the powers that be to this issue or make relevant recommendations, to say nothing of an authorial hope for the practical realization of such recommendations. Instead, this is simply an essay that attempts to “measure” the strategic ideas of the past (primarily those of ancient Chinese strategists) against the realities of the current nuclear age.

Why are we so interested in the views of the authors of ancient texts on strategy? Clearly, they are attractive thanks to the clarity and completeness of thoughts therein, the elegance of their logical constructs, and the simplicity of their articulation of the most complex issues. In addition, a close reading of these works amazes the reader by their continued relevancy, which is why they are of everlasting significance. The author hopes that this article will have at least some success in confirming this conclusion.

*“...he who defends his home
will long endure...”*

Laozi, 4th century B.C.

Do We Believe in the Possibility of Nuclear War?

Even within Russia’s community of experts one can find dramatically opposed answers to this fairly rhetorical question: from a complete denial of the possibility that a nuclear conflict could arise that might involve our country to the proposition that the likelihood of just such a conflict has increased in recent years.

There is an even more fundamental contradiction involving the assessment of the nature of nuclear weapons. Some contend that these weapons are in actuality not really weapons, since they cannot be used in battle. According to this logic, they can only fulfill the function of “detering” a probable

enemy from attack but cannot be used as instruments to achieve victory in battle.

The other point of view is that a nuclear weapon is truly a weapon in the full meaning of that term. The application of nuclear weapons is determined by the relevant conditions; they are maintained in a battle-ready state, they are capable of fulfilling concrete tasks during the course of an armed conflict, and in the final analysis, they have been and continue to be the foundation of our country's national security, today as in the past, precisely because they could indeed be employed. And if nuclear weapons were not really weapons, then they would not be able to deter an enemy or prevent war.

Without taking up either of these points of view, we would simply like to emphasize that even though the majority of those researching this issue do not see any rational uses of nuclear weapons, this does not mean that such uses are completely nonexistent. In order to find them, we must carefully consider this question, if only to substantiate or invalidate the mostly intuitive deductions of various authors who have discussed the practical possibilities for or impossibility of implementing a "functioning" nuclear strategy and a nuclear doctrine to undergird it.

Today it is fairly clear that the disintegration of the Soviet Union and the end of the bipolar international system, *inter alia*, made it far more complicated to ensure Russia's national security. On the one hand, the end of the confrontation with the principle potential adversary—the United States and NATO—sharply reduced the likelihood of a global conflict involving the use of weapons of mass destruction and opened the way to broad reductions in the arsenals of strategic and tactical nuclear weapons that had accumulated during the Cold War years. On the other hand, a range of new threats arose, demanding an adequate response throughout the government in order to guarantee the peaceful and secure life of its citizens.

It is also clear that nuclear weapons often cannot contribute to the fulfillment of these tasks. Thus we must recognize that nuclear weapons are not a universal means for providing security. Furthermore, Russian use of these weapons is extremely unlikely, since the scenarios involving large-scale aggression against our country that

might lead to a situation in which a decision on employing nuclear weapons must be made are extremely unlikely today.

Nevertheless, Russia cannot completely ignore these extremely adverse scenarios of possible military developments. As the ancients repeated in one military tract after another, "he who forgets about war will be doomed to danger" (Sima's Art of War – "Sima Fa" – 4th century B.C.) and "the true Way (Dao) of providing for national security is foresight. He who worries can avoid misfortune." (Wuzi, 5th–4th century B.C.) Laozi, cited in the epigraph at the beginning of this section, shares a similar view. It follows (though axiomatic, it is nonetheless true) that Russia probably will have to maintain and support its nuclear deterrent capability for the foreseeable future, while simultaneously trying to adapt it to changing world conditions as much as possible, on the basis of its economic capabilities and force development priorities. Thus "faith" in the impossibility of the emergence of a nuclear conflict does not outweigh the necessity of "foresight" where questions of security and perfecting one's defense are concerned. This accords with yet one more principle, put forward by the great ancient Chinese general and strategist Sunzi: "do not rely on the enemy's not coming, but on our own readiness to receive him."

One should note that Russia's approach to issues of nuclear policy has already undergone conceptual changes and will continue to adapt in the foreseeable future. Thus, during the Cold War one of the main principles upon which development of Soviet nuclear forces was based was the principle of "equal security," which required an accounting of all factors influencing the strategic situation. In practice, this meant that not only did parity (equality) with U.S. nuclear forces have to be maintained, but also that additional forces had to be fielded to "compensate" for the nuclear arms of the United Kingdom and France as well as nonstrategic weapons at U.S. forward bases that could reach Soviet territory. Furthermore, maintaining a certain "reserve" of strategic forces that took into account China's nuclear capabilities was also regarded as well-founded.

All of this led to a significant overestimation of the demand for Soviet nuclear forces. It also created serious obstacles during negotiations with the United States, which maintained the principle of strategic

“parity” and did not recognize the Soviet Union’s right to additional “compensation,” described above.

Furthermore, maintaining the Soviet strategic nuclear capability at an extremely high level was also dictated by political concerns. The Soviet leadership believed that it was extremely important to demonstrate to the world that it was capable of competing with the West on an equal footing in the military sphere. The presence of an enormous nuclear arsenal was the clearest illustration of Soviet military might.

Today, due to a whole range of external factors, Russia will have to let go of the principle of parity, not just with the nuclear states as a group, but even with the United States separately. Particularly since the political value of a nuclear arsenal, if not nonexistent, now plays a far smaller role than it did in the period of global confrontation. Today the idea of strengthening strategic stability on the basis of supporting nuclear deterrence has come to the fore. This issue requires a separate analysis.

*“In order to prevent
the enemy from engaging us,
show him the (possible) harm
this might bring.”*

Sunzi

Nuclear Deterrence

It is amazing how modern some of the statements by ancient Chinese strategists sound today. The quotation used as an epigraph for this section expresses the essence of the strategy of nuclear deterrence in a concentrated form. Indeed, in order to *prevent* an attack by a potential enemy, it is necessary to *show* (demonstrate) that retribution is inevitable, that is, the *harm* that will befall him as a result of response actions.

Sunzi also believed that an attack on the enemy’s walled cities (fortresses) was the “very last” act in the chain of escalating confrontation (“...*the highest form of generalship is to destroy the enemy’s plans; the next best is to prevent the junction of the enemy’s forces; the next in order is to attack the enemy’s army in the field; and the worst policy of all is to besiege walled cities*”). And although these “recommendations” naturally relate to wars in earlier

times, attacking the enemy’s cities, from the point of view of contemporary nuclear strategy, is indeed the final step that a party to a nuclear conflict can undertake.

The concept of nuclear deterrence has been well studied both by both Russian and foreign researchers. Therefore we will only touch upon one of the key aspects of this issue: how much force is needed to make deterrence “work,” that is, to have complete confidence that a potential enemy will not dare to use his nuclear weapons due to the threat of inevitable retribution.

The most interesting aspect of this question is that, in our view, the long-standing debates and study of this issue have not resulted in a concrete recommendation regarding the size of nuclear arsenal that would provide such a guarantee. As a rule, the quantity of forces needed effectively to deter an opponent is thought to be relative. Most analysts believe that it depends upon the composition, quantitative and qualitative characteristics of both one’s own forces and the forces of the potential enemy. Furthermore, the question of the effectiveness (credibility) of nuclear deterrence is very frequently reduced to an estimate of the number of nuclear armaments that are capable of surviving an enemy’s first strike. Both the Soviet Union (Russia) and the United States developed computer programs to model the various possible scenarios involving strategic forces. Sometimes attempts were made to introduce the factor of the survivability of the combat control and communications system into these equations, but this factor did not easily yield to quantitative or other concrete analyses.

Russia’s official approach to nuclear deterrence is built on these theses. Thus, the Russian military doctrine demands that Russia maintain a nuclear capability that can guarantee the infliction of “predetermined damage” on any aggressor “under any circumstances.” The worst such circumstances, evidently, is the scenario of an unexpected mass attack on Russia’s strategic nuclear forces. In other words, Russia’s nuclear forces should be able to “survive” this sort of unexpected attack and respond by inflicting “predetermined damage” on an aggressor (either an individual state or a coalition of states). But it is not entirely clear who “determines” the value of this “damage” and according to what criteria the corresponding calculations are to be

made. However, this article is not being written in order to criticize Russia's official approach to nuclear deterrence.

Despite all of the possible evidence supporting this approach, the author cannot help feeling that it is somewhat detached from reality. Thus, in calculating the effectiveness of first and retaliatory strikes, the experts manipulate hundreds and even thousands of high-yield nuclear warheads, which are needed to neutralize the enemy's offensive capabilities. The first strike is supposed to weaken the enemy's capability of launching a retaliatory attack as much as possible, to a level that is "acceptable" to the aggressor. The theory of nuclear deterrence in practice, strategic nuclear arms procurement decisions, and evaluations of the possible effectiveness of antimissile defense systems are all based on these calculations.

But almost no one thinks about the consequences—both for victims of the attack and for the aggressor himself—of such a massive use of nuclear weapons. Indeed, in the 1980s environmental scientists fairly convincingly showed that the consequences of the simultaneous explosion of dozens, to say nothing of hundreds or thousands, of high-yield nuclear warheads would be a global catastrophe. Nevertheless we continue to use the hopelessly out-of-date "MacNamara criteria" that each side in a nuclear conflict needs about 400 megaton-class nuclear warheads to inflict "unacceptable damage." But this level of damage would be unacceptable on a global scale for all of the world's states, just as a nuclear strike on a much smaller scale would be (some scientists speak of just 100-150 simultaneous explosions as resulting in irreversible environmental consequences and "nuclear winter").

Therefore, it would seem that it is high time to consider the question of adopting more realistic criteria for unacceptable (or "predetermined") damage. These criteria, even when a "safety margin" is included, should not exceed a simultaneous impact of over 200 strategic nuclear warheads, or 300 such warheads in a nuclear exchange (150-200 explosives launched by one party in a first strike and 100-150 explosives launched in a retaliatory strike by the opposing party). Those who disagree should look at the record of nuclear tests, particularly of hydrogen bombs, and imagine the effect of several hundred flashes

and "atomic mushrooms" covering the territory of any country or continent.

This means that first-strike plans that involve more than 200 strategic nuclear warheads are not just irrational, but suicidal, in the literal sense of the term. A number of important conclusions follow, concerning the formation of one's own forces on the basis of their survivability, estimates of the threat of a first strike, nuclear operations planning, prospects for future nuclear arms reductions in connection with a revised understanding of needs, as well as other key aspects of nuclear policy and strategy. But as was stated above, this paper is not attempting to make practical recommendations. Instead, let us continue our discourse.

*"Military matters are not determined
by the ruler's commands;
they all proceed from
the commanding general."*

*The Six Secret Teachings of Jiang
Taigong,
approximately 11th century B.C.*

*"The important thing is:
do not think!"*

*Famous answer of the commanders
of Japanese army units to the shogun's
question regarding the major principle
of successful military strategy,
17th century.*

Nuclear Strategy and Nuclear Tactics

Evidently the use of nuclear weapons is considered to be "strategic" due to their enormous destructive power, the possibility of their mass use, and their rapid and terrifying effects. Indeed, the forces themselves as well as the individual weapon systems are called by corresponding names: "strategic rocket forces," "strategic weapons platforms," etc. Nonetheless, nothing prevents us from splitting up strategy and tactics, in accordance with classical definitions, in order to conduct a more thorough analysis.

Thus, according to von Clausewitz, "tactics is the art of using troops in battle; strategy is the art of using battles to win the war." The aim of war is to use "force to compel our enemy to do our will." In today's context, this aim can be seen as compelling our enemy to cease hostilities on conditions acceptable to Russia.² This

“compelling” of the enemy, even in the official policy of Russia’s military leadership, is by no means a one-time engagement of the enemy but consists of several stages, including the stages of the employment of strategic nuclear weapons—from “demonstrational” strikes to inflicting “pre-determined damage” on the enemy. In other words, the tactics of conducting a nuclear war, if not entirely developed, have at least not been rejected on the level of Russian official military thought.

The formulation of tasks for the strategic nuclear forces should hold one of the central places in this sphere. Proceeding from official documents and the statements of military representatives, these tasks can be reduced to three basic categories:

- rebuffing an aerospace attack;
- crushing enemy forces; and
- suppressing (destroying) enemy military capacity.

In Russian military doctrine, the aim of using the armed forces and other troops is formulated as “the rebuffing of aggression, inflicting defeat on the aggressor, coercing it to stop military actions on conditions that meet the interests of Russia and its allies.” It is not difficult to ascertain that Russia’s military doctrine provides for the use of nuclear weapons in order to solve the same tasks that must be solved in a nonnuclear war, whether regional or large-scale.

But if the strategic nuclear forces are called upon to undertake these tasks, the risk of universal destruction is considerably increased. To see this, one must simply recognize that in certain circumstances the Russian president will decide to make use of nuclear weapons and delegate power over them to the country’s military leadership, through the use of the “nuclear suitcase.” The military, in order to fulfill the tasks it has been assigned, will have to act with maximum effectiveness and speed, that is, “not think,” and fulfill the order it has been given. But this means that the targets of the first strikes will be the opponent’s means of delivery of nuclear arms, its armed forces, and its control system and military capacity.

It is absolutely clear that the attempt to fulfill these tasks will bring utterly catastrophic consequences both for the aggressor state and the defending state. And it is probably

unnecessary to repeat once again that this sort of scenario will likely lead to the uncontrolled escalation of the nuclear conflict to a global scale, even if Russia’s initial nuclear strike is aimed at a nonnuclear “aggressor state” or one of the “tertiary” nuclear powers that is significantly weaker than Russia in this type of armament.

The political decision to make use of nuclear weapons and to transfer full control over their use (delegation of powers) to the military is extremely risky, particularly when it comes to fulfilling the tasks that Russia’s strategic forces are supposed to fulfill after receiving such orders together with the codes to unlock the strategic weapon systems.

Therefore, it is worth thinking about whether the strategic nuclear forces, and nuclear weapons more generally, should carry out the same combat missions to rebuff aggression that are assigned to the armed forces as a whole, particularly when there is the “temptation” to obtain tactical superiority and quickly complete the “traditional” tasks assigned them. Is it possible (and necessary) that the political leadership could retain control over the actions of the military after the decision has been made to use nuclear arms? The answers to these questions remain open to date.

*“Wenhou asked,
‘What determines victory?’*

*Wuzi answered,
‘Management of the army
is the basis of victory in war.’*

*Wenhou again asked, ‘
Is it not the number of soldiers?’”*

Wuzi, 5th-4th century B.C.

Management and Decisionmaking

A rapid response to arising situations is one of the distinguishing features of the current operationalization of nuclear deterrence. Thus, an alert from an early-warning system or a confirmation of a signal indicating a nuclear missile attack means that the country’s president must make a decision on actions in response to these threats within a very limited time period (calculated in minutes)—that is, whether to use the “nuclear suitcase” and delegate power over the use of nuclear weapons to the military. These procedures were worked

out over the years in both the Soviet Union and the United States. They remain in force today. The fact that the U.S. and Russian presidents (wherever they are—at home or abroad) are accompanied constantly by an officer who has this device with him, allowing for immediate contact with the appropriate parties and the transmission of codes to permit the launch of nuclear missiles, is not even kept secret.

The decisionmaking procedures that would come into play were a country to be unexpectedly subject to a mass attack using hundreds of warheads are similar. However, here the leadership also faces the question of whether or not to launch its missiles before they are destroyed in their silos, or risk the sharp (if not complete) decrease in its own abilities to launch a retaliatory attack as a result of the loss of a significant number of its weapons and, possibly, control over its remaining forces.

But under any other scenarios—such as a gradual escalation of conflict, a warning about the launch of a limited number of missiles, or a single launch—an immediate decision regarding response is not required. Moreover, a quick decision without seriously analyzing the situation can have catastrophic consequences for national security, since the probability of errors in this case is quite high.

One can imagine a whole range of scenarios no less likely than an unexpected mass attack on Russian strategic forces by the United States (since only the United States has the theoretical ability to destroy a significant number of Russian strategic systems on their launch pads), where an immediate decision regarding the employment of nuclear weapons is not necessary. As mentioned above, even planning for an unexpected mass counterforce strike numbering over 200 nuclear warheads is irrational and suicidal.

But the fact of the matter is that the system for deciding whether or not to launch nuclear weapons is based on precisely this least probable scenario. Even if the course of events does not fit this scenario, the president's decisionmaking procedures remain the same: he is given only a few minutes to delegate power over the use of Russia's nuclear system to the military, after which time he loses all control over these weapons (and, possibly, over the entire strategic situation).

It should be noted that both Russian and Western researchers have proposed a way to solve this problem—reducing the combat readiness of strategic systems. Without going into detail, we note that theoretically this could contribute to increased stability and give the leadership of the opposing states more time to consider their decisions. In any event, they would first have to decide to reestablish the combat readiness of their strategic forces and only subsequently decide to employ them.

Nevertheless, it would seem that reducing combat readiness would not completely solve the problem of increasing security, since the time factor would continue to play a decisive role. After all, the party able to reestablish the combat readiness of its forces more quickly would have a powerful incentive to launch a preventive attack against its unprepared enemy. In other words, it would be as though the decision on the use of one's strategic forces was “pre-programmed” in this scenario. The decision to make forces combat ready would be equivalent to a declaration of mobilization, which, in the words of the famous Soviet military strategist Boris Shaposhnikov, is not simply the run-up to war, but war itself.

* * *

In ancient China, martial activities were clearly separated from civilian activities. After appointing a commander and performing the relevant ritual in the ancestral temple with the presentation of the *fu* (short-handled ax) and the *yue* (long-handled ax) to the commander, the civilian authority not only gave up all responsibility for waging war, but also the right to interfere in decisions made by the army authority vested with military leadership.

Today we see a similar ritual, in which the role of the sacred axes is played by the “nuclear suitcase” and the codes to unblock the nuclear weapons systems. After the president (of Russia or the United States) transfers these codes to the military, he will hardly be able to interfere in the subsequent course of events. One should contemplate how “good” this procedure remains in the 21st century, when war is truly a “way either to safety or to ruin” not just for a single state, but for the entire planet.

“...the use of physical power
to the utmost extent by no means
excludes the cooperation
of the intelligence...”

Carl von Clausewitz

The Limits of “Rationality”

The rationality of the leader who has at his disposal weapons as powerful and double-edged as nuclear weapons, and who, in addition, declares that under certain circumstances he is prepared to launch them first, should consist in the ability to calculate his actions several steps ahead under crisis conditions and foresee the likely response to these actions by the probable enemy. Therefore, reducing all possible scenarios to the decision of launching or not launching nuclear weapons is simply unwise. A decision to launch carries too great a risk of complete destruction; a decision not to launch demonstrates one's indecisiveness and “paralysis of will” to one's opponent, which might strengthen his confidence that he can continue his aggression with impunity.

Russia's military leadership appears to have fully recognized this, and therefore has proposed the possibility of inflicting “demonstrational” nuclear strikes that would precede a higher level of escalation. Some analysts have proposed a system of “pre-nuclear deterrence,”³ which would be based on high-precision long-range weaponry used to destroy “high-value targets” on enemy territory in order to demonstrate one's own determination to escalate the situation.

We believe that in this case military thought is moving in the right direction, although the proposed solutions result in more questions than answers. It would seem that the “technical” development of the tactics of strategic deterrence or, more accurately, controlling escalation, cannot have positive results unless moral and psychological factors are given serious consideration.

The country's leader, put in the position of having to decide whether to escalate, should not have to act according to current procedures. In our opinion, the worst possible solution to this problem is the surrender of responsibility by delegating power over the use of nuclear weapons to the military.

Here we should particularly emphasize that strengthening control of Russia's political leadership over the country's strategic

weapons does not mean that the military can not be trusted. The military, no worse than civilians (and perhaps far better), understands all of the consequences of the use of weapons of mass destruction. At the same time, after receiving the relevant order it will be obliged fully to carry out the military duties with which it has been entrusted.

But the heart of the matter is that nuclear weapons are not simply more powerful “traditional” weapons. Therefore, as mentioned above, they cannot be used for the same (“traditional”) tasks as conventional armaments and the armed forces as a whole. Furthermore, in a crisis it is extremely important to “draw out” the time period during which a decision must be made on whether or not to employ nuclear weapons. Thus the development of a “pre-nuclear deterrence” strategy could play an important and, we hope, positive role.

It would seem that a “pre-nuclear deterrence” strategy could consist of the following.⁴ Were a serious international crisis to arise that involved our country, including limited military actions that threatened to escalate into a more serious conflict, Russia's leadership would engage in a logical series of military actions in order to force the enemy (the aggressor) to cease actions against our country and accept conditions that are advantageous or acceptable to us.

Moreover, the Russian leadership must demonstrate its willingness to escalate up to the level of using nuclear weapons, while at the same time firmly grasping that this point cannot be crossed. Here one can fully use Sunzi's “precepts,” where he stated that preserving the enemy's state capital is best, destroying their state capital second-best; preserving their army is best, destroying their army second-best: “...to win one hundred victories in one hundred battles is not the acme of skill. To subdue the enemy without fighting is the acme of skill.” One can also refer to many of the other precepts of the *Art of War*, which continue to be very relevant today.

The above actions should not aim to or even involve any physical damage to one's enemy. Moreover, this should be avoided in every way possible. Otherwise a powerful incentive for retaliatory action will be created, leading to an “automatic” increase in the level of conflict escalation. One's deci-

siveness and the unpredictability of one's further actions against the enemy must be demonstrated to him, while he is shown how defenseless he is and how vulnerable he will be if he continues his aggression. The enemy must finally be put in the position of deciding either to escalate (with unpredictable consequences) or to enter into negotiations with his opponent.

One can "devise" a whole "set" of actions that meet these conditions. These include launching a "dark" satellite into space, forcing the enemy to guess about its purpose, or launching a single ICBM or SLBM with a dummy warhead into the ocean. An extreme scenario might include the launch of one single-warhead missile with a dummy warhead at the aggressor's territory, or even at his capital. Of course, such an action would be extremely risky, but the "demonstrational" use of nuclear weapons against a single enemy target is fraught with even greater risk.

In order to have the option of a "flexible response" to the actions of an enemy during a period of crisis, one must have a sufficiently flexible and manageable tool. The Russian leadership already has such a tool at its disposal. It is the strategic rocket forces, the fleet of ballistic missile submarines, and the heavy bombers. They only need to be given the capacity for missions of "pre-nuclear deterrence." Namely, some of these forces must be reequipped with conventional warheads and dummy warheads, and the supreme commander-in-chief must be given reliable negative and positive control over them. This would fulfill one more of the precepts in Sunzi's *Art of War*, which asserts that "in battle, use the normal force to engage; use the extraordinary to win." In this case, "victory" is obtaining the aims of war, as we discussed above.

The supreme commander-in-chief, of course, should maintain negative control over strategic nuclear weapons and the option of transferring power over their use to the military. But this action, which crosses beyond the boundaries of the reasonable, should only be undertaken in the most hopeless situation.

In Lieu of a Conclusion

The absence of large-scale, real threats to Russian security at the present time, which would require making decisions about the application of nuclear weapons, does not

free the country's leadership from the responsibility to "not forget about war," including the elaboration and refinement of plans in case such a situation should arise. The widely held argument that nuclear weapons are not "weapons," despite the fact that the adoption of this argument would unavoidably lead to universal destruction, remains just a theory, just as does the opposite assertion, that these weapons essentially remain tools for waging war and ways to continue policy by "other means."

Determining whether the first or second argument is correct can only be done in practice, when the country's leadership is faced with the need to decide whether or not to employ these weapons. In practice, it is one concrete leader that will personally "resolve" this argument by his actions or inaction. In the worst case scenario, the decision will be made in an "automatic" or "pre-programmed" way in a very short period of time.

As we have already repeated more than once, it is not our aim to make practical recommendations. We simply are attempting to show that more possible procedures and scenarios for leadership action in a crisis exist than those provided for in official documents. In any event, we believe that a more detailed analysis of these issues, taking into account humanity's centuries-old experience in conducting wars, will by no means harm the cause of peace.

Wenhou said, 'I do not like military affairs.'

Wuzi answered, '... in ancient times the head of the Cheng Zang clan perfected virtue, but disregarded military affairs, and thus ruined his state.'

Wuzi, 5th-4th century B.C.

¹ Sunzi, *The Art of War*.

² "Immediate Tasks for the Development of the Armed Forces of the Russian Federation" (Moscow: Russian Ministry of Defense), p. 41.

It is interesting to note that this work, unofficially dubbed the White Paper on Russian Defense Issues in the West, was published by the Russian Ministry of Defense as a separate pamphlet in late 2003 without any information on the imprint or even the date of publication.

³ This concept was introduced by the well-known Russian scholar Andrei Kokoshin.

⁴ Once again we would like to emphasize that this is not a recommendation, but simply an argument being laid out by the author.

Viewpoint

TIME TO RETHINK THE "WAR ON TERRORISM"

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September 11, 2001–New York, September 1–3, 2004–Beslan, July 7, 2005–London: these are the terrorist acts by terrorist currently seen to be significant. Thousands of smaller terrorist acts are no longer considered to be anything out of the ordinary in the lives of many countries and peoples.

Despite individual successes, the "war on terror" cannot be seen as a successful strategy. Influenced by the tragic terrorist act in New York and in solidarity with the American people, the global community gave Washington *carte blanche*, believing in its strength and ability to make considered and objective decisions in the interests of all who suffer from the development and consequences of terrorism. This was true of Russia too, one of the first to decide to support the United States by taking the geopolitical risk of agreeing to the positioning of U.S. military bases in Central Asia.

Today it is becoming clear that our expectations were overblown. Characteristic American "double standards," even with regards to partners and allies, are again in view. "9/11," which seemed to be a stereotypical terrorist event to others, was not seen that way at all by the egotistical American political elite. It is hard to find a more obvious example of this than its disingenuous attitude toward the tragedy in Beslan. It later became clear that the "vulcans" (as James Mann calls the group of key figures in the George W. Bush administration) preferred to apply maximum military pressure worldwide instead of a balanced approach to counter terrorism (they are the ones who coined the term "war on terror"), while simultaneously undertaking their own selfish pursuits, such as the attack on Iraq. As a result, the noble task of uprooting terrorism was compromised

and lost public support in those countries from which the terrorists themselves obtain supporters.

Four years have passed, and it has become clear that the primitive understanding of sources and, most importantly, methods to fight the terrorist plague is not providing the necessary results. There is no doubt that the military component plays an important role, but in the end, the neutralization of this cruel and extremely dangerous phenomenon can only be done through a combination of ideological, socio-economic, and military methods. This is the only path that will lead to a decisive improvement in international security. After the well-known events of this July, London understood this very well. One of Tony Blair's first meetings after the terrorist attacks was a meeting with members of an Islamic group active in the United Kingdom. The decision to extradite Abu Qatada, the popular cleric and vehement propagandist of Islamic extremism, home to Jordan was an eloquent confirmation of the ideological aspect of the problem. Further, the U.K. ambassador to Russia recently announced that London is ready to send Akhmed Zakayev to Moscow if provided with proof of his involvement in terrorism.

In Washington, too, they finally are beginning to understand. It is no coincidence that the slogan "war on terror," so sweet to hawks' ears, is quietly disappearing from the lexicon of U.S. political actors. Even leaders in the Pentagon, who are drawn to military methods, have begun to admit that "there is a battle of ideas that will continue for a long time." Currently, the focus of anti-terrorism is changing to fighting "violent extremism," and is currently aimed first and foremost at Islamic extremists (although it is not limited to Islam).

None other than Yuri Andropov pointed out the ideological composition of Islamic extremism already in the very end of the 1970s. We understand that it is not fashionable to recall Soviet times, but nevertheless will cite his words: "the Muslim reaction is trying to create a unified religious philosophy for hundreds of millions of people.... If this were to succeed, then it would be the second ideological foundation, after Marxism-Leninism, not simply (and more significantly than) for faith, but for concrete action...."

Often—intentionally or unintentionally—people try to equate Islamic fundamentalism with Islamic extremism. But Islamic fundamentalism in no way differs from Judaism or Christianity—it preaches the preservation of moral values, the maintenance of religious traditions, etc. Whereas Islamic extremist leaders are pursuing a rigid course to violently advance the idea of an “Islamic caliphate” in the consciousness of Muslims as well as its practical realization, that is, the introduction of a very problematic model of Islamic state through force. We have to recognize that the development of Islamic society, in the long run, will depend not so much on the actions of the newly created “Active Response Corps” to support new democracies, declared by President Bush in May 2005, as on whether or not Islamic fundamentalism, as Academic Yevgeni Primakov believes, can reject religious and political extremists, regain influence over the Muslim masses (the “ummah”), and become an Islamic democracy based on traditional values. But we should be ready to accept the fact that such a democracy will differ from the Western European or American model.

This is, we believe, the only sensible way.

Many experts believe that “Al Qaidism” only encompasses a tiny minority of the approximately 1.3 billion believers in various Islamic religions to date, but moderate forces in Islamic society are already being marginalized. And these are the groups that, despite their current difficulties, could become the global community’s real partners in a political dialogue on the normalization of the situation in several of the world’s conflict zones. But that would mean overcoming the widely spread idea that Islam is intrinsically an extremely aggressive and problematic religion, and halting the indiscriminate spread of the notion of a “conflict of civilizations.” (Similarly, one could extrapolate the Huntington’s theories to Orthodox Russia as well, after all.) Particularly since globally the political and religious crisis and, as a result, religious extremism and the so-called “jihad,” are gradually waning. A significant proportion of the Islamic world have embarked on the course of conciliation, particularly where socioeconomic conditions are improving and literacy is increasing, and the like.

Political scientists and government experts continue to discuss the question of whether

or not Al Qaida has a global network capable of carrying out powerful attacks and maintaining a long-term, though slow-burning, struggle in several regions of the world. Some believe that even after the military defeat of the Taliban and Al Qaida in Afghanistan, Bin Laden has a powerful terrorist network that is organizing terrorist attacks throughout the world. Others think that this phenomenon is really a sort of political brand, that is, a well-known trademark without any real content or power.

Probably the truth is somewhere in between. Al Qaida, despite serious losses of personnel and leadership, has maintained and perhaps has somewhat restored its strength. However, at present it is more likely not a well-coordinated military organization with many branches throughout the world, but a sort of ideological center trying to maintain the good will and support of its supporters and members of other terrorist and extremist groups through fatwas and other messages. This is how it generates support for its positions in the struggle against the West, “Crusaders,” and non-believers oppressing Muslims wherever they may be, and against authorities, particular secular authorities, in the Islamic world, in addition to determining priority objectives for concrete terrorist attacks. The faithful leading wretched lives who reject the unceremonious and course introduction of foreign values in their traditional ways of life still respond to this radical extremist ideology, allowing them to increase recruitment of supporters who can be trained for “jihad” and suicide bombing in the name of Islam. But there is no reason to be naive – much of this involves money (it is no coincidence that the majority of the leaders and famous terrorist fighters come from rich or at least well-to-do families in Saudi Arabia, Egypt, and Jordan), and the source the vast sums being spent is well-known, for instance on the activities of Wahhabi madrasahs in Pakistan, the establishment of networks of Internet cafes in mosques in the Balkans, etc.

Expenditures on the fight against terror and improving security are increasing throughout the globe. In 2006, Russia will spend a total of 10 billion rubles (2.2 billion in 2005) on these tasks. But even this in no way diminishes the need of undertake social policies and ideological work that would—together with efforts in the military sphere—help us to narrow the basis of sup-

port for terrorists on the part of certain parts of the Muslim community, first and foremost in the Northern Caucasus. The whole world needs to find effective ways to cut the ties between intransigent fighters and their ideologists, with whom negotiation is not possible, and the local population.

Russia will soon take up the presidency of the G8. Given recent positive developments in rethinking ways to fight terrorism, Russia, which has suffered so deeply from terrorism itself, could propose a renewed program (agreed to by others) to overcome terrorism.

In October 2005 the PIR Center published a monograph in Russian on Unmanned Aerial Vehicles, entitled

**“UNMANNED AERIAL VEHICLES:
HISTORY, APPLICATION, PROLIFERATION
THREAT AND PROSPECTS OF DEVELOPMENT”**

The conduct of war is currently undergoing major changes. A new term, "non-contact war," has been coined to describe 21st century wars. The changing nature of warfare is closely connected to accelerating technical improvements in all weapon systems and radical advances in their military characteristics.

One of these great technological advances is in the development and use of unmanned aerial vehicles (UAV). UAVs are used for a wide range of military tasks on the strategic, operational and tactical levels. At the same time, the spread of unmanned aerial vehicles presents a real danger that terrorists may acquire these technologies and use them for malign purposes.

The new PIR Center study paper *Unmanned aerial vehicles: history, application, threat of proliferation and prospects of development* is a timely study of the evolution of UAVs and the possible dangers associated with their proliferation.

The monograph was written by Gennady **Evstafiev** (Lieutenant-General (Ret.) and PIR Center Senior Consultant), Ivan **Makarenko** (PhD in military science) and Mikhail **Pavlushenko** (PhD in military science).

The monograph has 16 chapters, including details on UAV classes, the evolution of UAV designs and usage, and the history of UAV development and military use in countries like Germany, Japan, the Soviet Union, and the United States. It also provides a detailed analysis of the current state of UAV development and the dangers of UAV proliferation, while evaluating the threat to international security and Russian national security posed by UAVs.

The price of the new monograph is 30 USD.

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Viewpoint**THE THREAT OF BIOLOGICAL TERRORISM AND THE ROLE OF THE MASS MEDIA**

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Numerous publications on the threat of biological terrorism, in both the foreign and Russian media, have caused the public to have a much distorted idea of terrorist capabilities. For instance, in 2000 former CIA director James Woolsey actually said that any fourth grader could produce biological agents, while the specialist Caitlin Bailey said that \$10,000 was enough to produce biological weapons.^{2,3} Among the reasons for this distortion of information is the lack of data on which to base rational conclusions and the interest of various groups in exaggerating or underestimating the threat. Moreover, the media and scientific journals create fertile soil for terrorists by describing the ways to conduct acts of terror that would do greatest damage, suggesting possible ways to obtain pathogens and even publishing work on the artificial modification of organisms in order to weaken immunity⁴ or strengthen pathogenic viruses.⁵

The threat of bioterrorism, nourished by distorted information, is becoming more and more real because of the stir that has been created around it and the consequences that have been predicted for society. It has become imperative to explain to journalists and scientists who write about bioterrorism that bioterrorism could stop being simply a fruit of their imagination and that instead terrorists could begin to act in accordance with the scenarios described in the media and use the technology published by scholars in the open literature.

Clearly, a ban on the publication of material on biological weapons and bioterrorism is impossible since the public should know

about this danger. Moreover, information about pathogenic organisms, their possible use by terrorists, and the timely identification of diseases and treatment must be made more accessible to medical personnel as well as the society at large.⁶ However, one might also ask whether there should be norms and limitations covering the materials on bioterrorism and biological weapons.⁷ Some materials are of no public or scientific value, and are instead simply an attempt to distort information about bioterrorism and garner attention. Some scientific articles, including those mentioned above—on weakening immunity on purpose—do not have direct scientific applications. Instead, they show criminals how to use biotechnology for nefarious purposes.

The aim of this article is to determine the rational basis for fears of bioterrorism and provide recommendations for the media, scientific journals, and government officials on how to reduce the distortions in information about bioterrorism

The Role of the Media in Creating the Bioterrorist Threat

Beginning in 2001, the threat of biological terrorism has been publicized more and more frequently. The September 11 terrorist attacks in the United States and the subsequent distribution of letters containing anthrax spores produced the effect of an exploding bomb. The U.S. media and, later, Russian media began to write about the possibility of a large-scale terrorist act using biological weapons.

The general tone of foreign publications has left no doubt that this sort of terrorist act is inevitable. An enormous number of new “experts” on biological weapons have given estimates of the number of victims of such an attack, analyzed the financial losses, and have declared that biological agents are accessible to “every university student.”

The Russian media has taken up this popular theme and begun to reprint stories from U.S. sources, and sometimes invented their own, no less impressive stories. The more they write about the threat of bioterrorism, the more strongly one wants to understand what is real and what is myth. Unfortunately, this is not easy to determine, since most of the articles in the media on bioterrorism are based on assumptions and inferences, not on real facts. The history of bioterrorism contains

too few facts to make predictions, while data on biological weapons are classified and the independent media and scientists do not have access to them. This is precisely the reason for the distortion of information by certain interested groups.

One can identify several groups of people generally interested in distorting information about bioterrorism. Exaggerating the danger of bioterrorism benefits:

- the media;
- pharmaceutical companies;
- government agencies receiving funding to fight bioterrorism;
- biotechnology as a branch that needs funding (including biodefense research institutes).

Underestimating the danger of bioterrorism benefits:

- government agencies interested in reducing the related public outcry;
- biotechnology – in the interest of reducing control over related activities.

Thus, almost all U.S. interest groups have benefited from the wave of information about the threat of bioterrorism that began in 2001: the media got a hot topic of discussion, pharmaceutical companies received multimillion dollar orders for the production of vaccines, and the intelligence services got funding for the fight against the potential threat as well as the creation of a new division for the fight against bioterrorism in the new Department of Homeland Security. The biotechnology industry itself got an extra incentive for work in the area of biodetection and the analysis of genetic material. In Russia, the interest in bioterrorism is advantageous to the same groups. In addition, publications about bioterrorism especially feature specialists from enterprises formerly engaged in the production of biological weapons; Biopreperat, in particular, wins from the increased interest in bioweapons. This does not mean that there is any evidence whatsoever of intentional complicity in terrorism or adding to fears on purpose—all of the activities described above are either the fruit of the carelessness and incompetence of so-called “specialists in bioterrorism” who appeared after the wave of terrorist acts in 2001, or are simply a way to survive and attract interest.

On the other hand, soon after the general hysteria faded materials began to appear on the ephemeral quality of the threat, along with numerous predictions regarding the losses that the fight against bioterrorism would cause biotechnology.^{8,9} The possibility that limitations on exports and imports of equipment and stricter controls over technologies and publications might be introduced particularly agitated scientists, especially those in the United States.¹⁰ As paradoxical as it may sound, those interested in underestimating the dangers were the same categories of people who benefit from exaggerating these dangers. Thus, state intelligence agencies, which receive funding to fight bioterrorism, are trying to calm the public, while scientists working on biotechnology projects unrelated to biodefense fear that the beginning of a “witch hunt” could lead to additional constraints on their activities and the export of necessary equipment. Thus, it is no wonder that articles cited in footnotes 8 and 9 appeared on the site¹¹ of the journal *Commercial Biotechnology*.

To sum up, information on biological terrorism is based on a small number of facts and is strongly polarized thanks to various interest groups. Thus, many of the materials on the danger of bioterrorism reflect a preconceived point of view and distort facts, for the reasons above. Moreover, some materials contain a potential threat to national and international security. I will analyze what is known about the threat of bioterrorism based on the limited information available about biological weapons and the capabilities of terrorist organizations today. One must get the facts straight in order to understand the bases for estimates of the bioterrorist threat, and separate out attempts to impose subjective opinions.

A Contemporary History of Bioterrorism

The contemporary history of bioterrorism, if we take the last 50 years, includes just a few cases of the use¹² of biological agents for terrorist purposes. The three that are mentioned most often merit consideration:

- 1984 – Rajneeshee cult followers attempted to disrupt elections by infecting food at a salad bar with mouse typhus (*Salmonella typhimurium*). While 751 people were sickened, there were no lethal consequences.

- 1993 – Aum Shinrikyo believers dispersed anthrax spores in Tokyo. By sheer luck the strain of bacteria was not virulent and no one was harmed.
- 2001 – an unknown individual sent letters with anthrax spores in the United States—over 20 were infected and five died.¹³

It might seem that these statistics indicate that the multibillion-dollar funding of biodefense¹⁴ in the United States and the calls to concentrate attention on the security of biotechnology facilities that work with microorganisms throughout the world are a senseless waste of money. Indeed, during the same period of time terrorist attacks using conventional armaments killed thousands of people. Is it worth raising this issue in Russia, if none of the cases enumerated above have any relation to it, and most of its citizens view biological terrorists as characters in fantastical blockbusters?

The Evolution of Biotechnology and the Goals of Terrorist Organizations

However, there is more than one way to interpret these same statistics. If we reject the numerous speculations about the attempts of Al-Qa'eda¹⁵ and Chechen terrorists¹⁶ to produce biological agents as unreliable and unrealistic,¹⁷ we see that even the remaining cases of infection by biological agents indicate that the threat is serious. Here we are not only talking about terrorism but also about the government programs to develop bioweapons for military purposes, as well as about potential sources of biological weapons.

The topic of the security of Russian facilities that work with pathogenic microorganisms has lost its urgency, since not a single case of a leak of materials from these enterprises has been registered in the years since the disintegration of the Soviet Union. Speculations about this issue, most likely, are political in nature and not well-founded. However, the globalization of terrorism means that terrorist organizations can obtain access to pathogens developed in other countries, by both governments and private companies.

Therefore, the threat of terrorists obtaining access to bioweapons exists, and cannot be denied simply because to date terrorist acts involving pathogens have led to far fewer

losses in human life than those involving conventional weapons.¹⁸ On the other hand, one must realize that distorting and exaggerating the threat is also dangerous—it leads to an incorrect understanding of the situation and can harm efforts to prevent terrorism.

For instance, the 1979 leak of anthrax spores in Yekaterinburg led to the deaths of 96 people and caused an additional 359 to become ill.¹⁹ The United States might have faced similar consequences in 2001 if the spores had been dispersed, for example, at a basketball game and not sent in sealed envelopes. The motive for this action remains unknown, but one of the reasons could have been a wish to avoid major harm, a desire not unknown in the theory of the psychology of terrorism. At the same time, even the three letters with spores caused a drop in the stock market; U.S. financial losses from the panic and drop in the stock market were estimated to total billions of dollars.²⁰ According to forecasts by the consultants Abt Associates, the next terrorist act using biological agents could cost the United States \$40–400 billion, depending on its scale.²¹

It is impossible to evaluate the danger of bioterrorism without examining likely developments in the area of terrorism and biotechnology. Thus, if in earlier times the possibility of using pathogens as an instrument of terror seemed to terrorists to be something unattainable and fabulous, today, now that the level of biotechnology and the accessibility of information has grown and the media has created a public fear of bioterrorism, the use of bioweapons for acts of terror is more attractive than ever before. Indeed, it is the media that described how and what must be dispersed to achieve the greatest effect, and to complete the picture even published detailed procedures on how viruses are produced under laboratory conditions!²² The media has offered scenarios which would have the greatest public resonance. Some specialists assert that Al Qa'ida terrorists did not even consider using a “dirty bomb” made of radioactive wastes until they read about the idea in the media.²³

On the other hand, terrorist organizations themselves have evolved and aspire to new levels of terror—conventional explosives used against large facilities are no longer interesting. Moreover, one of the foremost specialists on Al Qa'ida, Professor Rohan

Gunaratna, contends that Al Qa'ida itself no longer presents a threat, but that its actions have given birth to many followers for whom the act of terror has ceased to be simply the means to achieve an objective: for them what is important is the scale of the public reaction and their place in history.²⁴

For this sort of organization, either state-sponsored or independent, that is united by an ideological purpose, the idea of becoming the first to carry out a terrorist act with biological weapons²⁵ that leads to mass infection could be very attractive. The only question is that of capabilities.

The Development of Biotechnology: the Source of the Future Threat?

The basic obstacles preventing terrorists from using biological agents as instruments of terror are the complexity of obtaining and producing biological weapons and their unreliability. Recently the media has mentioned a new area of possible bioterrorism—genetically modified, artificial organisms²⁶—particularly frequently. Unfortunately or fortunately, the majority of published materials about the possibility of using genetic engineering for the production of killer viruses is not based on scientific evidence and appears to be more invention than reality. The main reason for the mass errors, even among some specialists, is political scientists' misunderstanding of the possibilities of biotechnology and biologists' lack of understanding of the needs of policymakers. That is, the numerous newspaper articles written by journalists who do not have a background in biotechnology and security abound with scientific inaccuracies and, in many respects, are simply not true. While the articles written by biotechnologists concentrate on scientific details to such a degree that they are practically incomprehensible to most of those involved in legislative decisionmaking.²⁷

A clear example is the assertion that "anyone can create racial weapons," with reference to the British medical association,²⁸ as well as the article "Purely Biological Murder,"²⁹ which asserted that a "bio-negative perception of the environment" unites terrorists and that it is allegedly known that "various groups and individuals are ready or plan to use biological weapons." As long as similar assertions continue to appear in the press, it is hard to imagine

that the public and politicians will understand the real situation clearly.³⁰

The threat of the use of genetically modified microorganisms by terrorists cannot be discounted; it is simply necessary to understand its possible scale and time frame. One of the leading specialists in the study of the application of biotechnology to produce genetically modified organisms, John Ellis,³¹ believes that in the next 10-15 years developments in biotechnology will make it possible to genetically manipulate pathogenic organisms in order to increase their virulence³² or produce resistance to existing vaccines.

Among the possible applications of biotechnology for the development of biological weapons³³ the following three are most realistic:

- the development of artificially modified organisms that are resistant to vaccines;
- the creation of new pathogens;
- the recreation of pathogens that have died out—for example, the smallpox virus.³⁴

Meanwhile, it is clear that just as the production of a thermonuclear bomb initially required development and nuclear testing, so too the use of genetically modified organisms by bioterrorists is only likely after the use of more accessible natural agents such as anthrax, tularemia or ebola. Thus, ideas about the creation of viruses that target certain races or of hybrid viruses combining AIDS and influenza are likely to remain more mythical than real threats for at least the coming decade. However, scientists' carelessness and media distortions of the threat of bioterrorism could make the use of pathogenic organisms simpler and more attractive for terrorists or states.

The Media at War with Itself: Should the media cultivate threat?

The paradoxical situation that writing about bioterrorism finds itself in is that a large quantity of literature is currently based on just three reports, only one of which had lethal consequences. The absence of official information about either bioterrorism or research into biological weapons generates speculation in the media that in turn creates a false sense of the real threat of bioterrorism.

Scientists and journalists involved in combating bioterrorism have themselves proposed the scenarios that would lead to the greatest losses and characterized the agents used in each scenario.³⁵ Moreover, scientists have published numerous materials on the possible use of biotechnology for the production of pathogens.

In a democratic society it is not possible to establish total control over science and the media. One cannot foresee how scientific discoveries in the field of genetic engineering will be used; however, it is possible that in future these discoveries will be put to work against humanity.

Journalists and scientists should themselves understand and sense where the boundary line between scientific concerns and the realm of national security lies, or when a scientific article may have a negative effect on political decisionmaking. The following recommendations could improve the situation with regards to public information about bioterrorism:

- Stories in the popular media and scientific publications should be based on the principles of rationality and scientific substantiation. Governments should publish requirements, made widely accessible, regarding publications that could weaken security. Here I am particularly referring to preventing the publication of scientific materials that can be directly used for the development, modification, production, or use of pathogens as weapons. Examples of this sort of publication were provided above.
- Russia can learn from the U.S. and E.U. experience of making information about biological weapons and pathogens accessible to the public and medical personnel. The creation of a centralized information system is a major step in the fight against conjecture and the distortion of information.³⁶ Thus, for instance, the U.S. Centers for Disease Control (CDC) distributes its own journal and trains medical personnel and the public in identifying and eliminating the consequences of possible bioattacks. The CDC also has a website with complete information on all types of diseases and recommendations on the actions that should be taken in emergencies. A similar system would

allow Russian citizens, medical workers, and the media to obtain official information on a possible threat and avoid unnecessary speculation based on ignorance and fear.

- The government could also involve scientists and journalists in a dialogue about bioweapons and bioterrorism. The first steps in this direction have already taken place—conferences on biosecurity have been held in Moscow and Novosibirsk. Russia, though, is a world superpower, and as such should not simply follow others' example, but also set an example in the area of biosecurity. Instead, the lack of information in the West about Russian programs to prevent bioterrorism is negatively affecting international programs to assist Russia in this area.

It is unlikely that the current state of information about biological weapons and bioterrorism will change in the near future; the provision of information is complicated by the numerous obstacles described above, as well as by a lack of funding. However, understanding this problem and adopting measures to solve it today will help to avoid the threat of bioterrorism in the future.

¹ The author would like to thank Dr. Pavel Podvig (Center for International Security and Cooperation, Stanford University, USA) for his recommendations and review of this article, Theodore Postol (Security Studies Program, Massachusetts Institute of Technology, USA) for financial support for this project, Elena Makovskaya (Department of International Relations, Boston University, USA) for discussions and commentary related to the subject of the article; as well as the Moscow Physical-Technical Institute's Center for Disarmament, Energy, and Ecology for helping to organize the international summer symposium on security.

² Jessica Stern, *The Ultimate Terrorists* (Cambridge, Mass: Harvard University Press, 1999), p. 50.

³ In this article, the concepts of "biological weapons" and "pathogenic organisms" are used interchangeably, since the differences between them are not critical here. In general, only certain pathogenic microorganisms in sufficient quantities can be used as biological weapons. Thus, for instance, the smallpox virus and anthrax can be used in this manner.

⁴ R.J. Jackson, A.J. Ramsay, C.D. Christensen, et al., "Expression of mouse interleukin-4 by a recombinant ectromelia virus suppresses cytolytic lymphocyte responses and overcomes genetic resistance to mousepox," *Journal of Virology*, Vol. 75, No. 3 (February 2001), pp. 1205-10.

⁵ V.E. Volchkov, et al., "Recovery of infectious Ebola virus from complementary DNA: RNA editing of the GP gene and viral cytotoxicity," *Science*, Vol. 291, No. 5510 (March 9, 2001), pp. 1965-9.

⁶ This sort of information is spread among medical personnel in the United States, and detailed descriptions of the actions that must be taken if biological weapons are used is available on the Internet on the website of the Centers

for Disease Control (CDC). The European Union plans to create a similar website, <http://www.scanbalt.org/sw920.asp>. In Russia similar information is nearly inaccessible, and government websites are not very informative, <http://www.munition.gov.ru/rus/biol.html>.

⁷ Here and throughout, biological terrorism refers to the use of pathogenic agents by terrorist organizations or individuals. However, similar arguments could be made regarding state-sponsored programs for the production of biological weapons. Some developing countries, such as Iran, could be undertaking this sort of activity.

⁸ Grigoriy Tarasevich, "Bioterrorism: 'Threat No. 1' or a 'Paper Tiger?'" *Natsbez.Ru*, http://bio.su/press_2004nov_019r.htm, November 17, 2004.

⁹ "The Paper Tiger of Bioterrorism" Part 2, "The struggle against the shadow," *www.cbio.ru*, http://bio.su/press_2004oct_005r.htm.

¹⁰ "Are Science and Technology Governable?" *The Scientist*, Volume 16, Issue 9 (April 29, 2002), p. 16.

¹¹ *www.cbio.ru*

¹² The number of victims resulting from the use of (or accidents involving) biological weapons by states is noted above.

¹³ Jeanne Guillemin "The Deliberate Release of Anthrax Through the United States Postal System," Julian P. Robinson, ed., *Public Health Response to Biological and Chemical Weapons: WHO Guidelines* (Geneva: WHO), pp. 98–108.

¹⁴ About \$6 billion was expended by DHS for the fight against bioterrorism in 2004.

¹⁵ "Evidence suggests al Qaeda pursuit of biological, chemical weapons," CNN, <http://archives.cnn.com/2001/WORLD/asiapcf/central/11/14/chemical.bio>, November 14, 2001.

¹⁶ "A million dollars for Basaev: a Russian general names the reward for the head of the Chechen commander," *La Stampa*, <http://www.inopressa.ru/print/archive/1999/10/26/13:07:31/arc:lastampa:russia>, October 26, 1999.

¹⁷ After the seizure of Al Qa'ida training bases by the U.S. Army, experts could not find confirmation of the presence of a program for the production of biological weapons. Chechen fighters also do not have the capacity to produce bioweapons.

¹⁸ Thus, the head of the Russian State Health Inspectorate, Gennadii Onishchenko, believes that the threat of bioterrorism is real. Natalia Yeliseyeva, "Bioweapons: the genie is out of the bottle," *Strana.ru*, <http://www.rambler.ru/db/news-new/msg.html?mid=5471050&s=260005085>, January 12, 2005.

¹⁹ Jeanne Guillemin, *Anthrax: The Investigation of a Deadly Outbreak* (University of California Press, 1999).

²⁰ "Cost of anthrax attacks 'surges,'" BBC, <http://news.bbc.co.uk/1/hi/world/americas/1629872.stm>, October 31, 2001.

²¹ Abt Associates, <http://www.abtassociates.com>.

²² John Travis, "Do-It-Yourself: Virus recreated from synthetic DNA," *Science News*, Vol. 162, No. 2 (July 13, 2002), <http://www.sciencenews.org/articles/20020713/fob8.asp>.

²³ Personal correspondence with U.S. security specialists.

²⁴ Presentation to the 6th International Security Forum, Montreux, Switzerland, October 6, 2004.

²⁵ The anthrax letter attack does not fully correspond to the classic definition of a terrorist act: to date, the terrorists have not stated their demands, their aims, or who they are. And the act aimed to infect the people to whom the letters were addressed, not mass infection.

²⁶ "Anyone can create racial biological weapons," *MedNovosti.ru*, October 27, 2004.

²⁷ Scientific articles in Russian and foreign journals focus on scientific issues alone, for instance, the problems of virology or epidemiology. It was only in 2003 that a symposium on biosecurity was held in Moscow, bringing together specialists in the sphere of biological weapons (<http://bio.su/ru.htm>). One of the goals of the reports there was to make recommendations to legislators regarding improvements in the nonproliferation of bioweapons and preventing bioterrorism.

²⁸ "Anyone can create racial biological weapons," *MedNovosti.ru*, October 27, 2004.

²⁹ Mikhail Supotnitskii, "Purely Biological Murder," *Nezavisimaya gazeta*, http://www.ng.ru/style/2004-09-08/16_murder.html, September 8, 2004.

³⁰ Unfortunately, access to official information on the threat of bioterrorism in Russia is limited, and it is difficult to determine the sources that the government is using to make decisions regarding the fight against bioterrorism and the proliferation of biological pathogens and technologies.

³¹ Dr. John Ellis, Senior Fellow, West Point Center for Combating Terrorism, New York, USA.

³² John Ellis, "Terrorism in the Genomic Age," 2003, personal communication with author.

³³ For a more detailed description of international instruments for the control of biotechnology in Russia and the West see Aleksandr Rabodzey, "Biotechnology Control Measures – Focus on Development Stage," submitted to the International Bioterrorism Conference in Furigen (Nidwalden), Switzerland, April 22–23, 2005, "Meeting the Challenges of Bioterrorism: Assessing the Threat and Designing Biodefense Strategies."

³⁴ Aleksandr Rabodzey, "Biosecurity implications of the synthesis of pathogenic viruses," *Politics and the Life Sciences*, September 2003, Vol. 22, No. 2, pp. 44–49.

³⁵ Tara O'Toole, "Smallpox: An Attack Scenario," *Emerging Infectious Diseases*, Vol. 5, No. 4 (July–August, 1999), <http://www.cdc.gov/ncidod/EID/vol5no4/otoole.htm>.

³⁶ About bioweapons and information protection.

Survey

**THE GLOBAL PARTNERSHIP
IN THE RUSSIAN FAR EAST:
DID THE PROGRAM END
BEFORE IT EVEN BEGAN?**

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Global Partnership Against the Spread of Weapons and Materials of Mass Destruction was launched three years ago. These three years witnessed a serious progress in some dimensions of global partnership – declaration-making was replaced by problem-solving, which demonstrates how effective international efforts in the field of nonproliferation may be. However there are some dimensions, including those, declared as priorities by the G-8, where there is no real cooperation and no real progress. Having visited several objects in the Russian Far East, where GP initiative is to be carried out, the authors believe that situation with nuclear-power submarines dismantlement there may be a good illustration to the sad thesis above.

Russia identified the dismantlement of nuclear-powered submarines as one of its two top priorities for the Global Partnership, the nonproliferation initiative launched by G8 leaders at their July 2002 summit in Kananaskis, Canada.

The Russian submarine dismantlement process is based on Russian Government Decree No. 518 of May 28, 1998 and the “Strategy for the Integrated Dismantlement of Nuclear-Powered Submarines and Nuclear-Powered Surface Vessels.” The principal contractor undertaking submarine dismantlement in the Russian Far East is the Zvezda Far Eastern Shipyard, a state federal unitary enterprise. Of 38 scrapped Pacific Fleet nuclear submarines, 31 were dismantled at Zvezda. In addition to

Zvezda, there are two other shipyards in the region with dismantlement capacities: Shipyard 49K (in Seldevaya Bay, Kamchatka) and Shipyard 30 (in Chazhma Bay, Primorye), which are both Russian Defense Ministry enterprises (Zvezda Shipyard is subordinate to the Federal Industry Agency). The main submarine dismantlement technique, resulting in three-compartment units, requires the following operations:

- Unloading spent nuclear fuel (SNF) from submarine reactor cores at Zvezda Shipyard’s on-shore defueling facility, loading the SNF into specialized Type TK-18 (TUK-108/1) containers, and temporarily storing them until they can be sent in a special train echelon to the Mayak Production Complex for reprocessing;
- Removing solid radioactive waste (SRW) and liquid radioactive waste (LRW) from dismantled submarines, its temporary storage and eventual treatment;
- Cutting the submarine hull and forming sealed three-compartment units made up of the reactor compartment and two adjoining compartments, so that the reactor may be temporarily held in floating storage at a special floating storage site;
- Scrapping the fore and aft submarine compartments.

Between 1998 and 2001, with the support of U.S. funding (and, for LRW management, Japanese assistance), the infrastructure needed to undertake nuclear submarine dismantlement was created at the Zvezda compound. It included three specialized facilities:

- An on-shore SNF unloading and handling facility;
- A radioactive waste management facility;
- A facility for cutting submarine hulls and processing scrap metal.

To guarantee nuclear submarines are dismantled at the required rate, the timely defueling of decommissioned vessels, and the temporary storage and shipment of SNF for reprocessing, an on-shore defueling facility was commissioned in April

2003 that can defuel four submarines per year. The facility includes the following assets:

- A plant where SNF is loaded into TK-18 (TUK-108/1) containers, outfitted with loading equipment; demag cranes (overhead bridge cranes); power supply systems; occupational safety, radiation, technological control, and physical protection systems; and sanitary inspection sites;
- Equipment for defueling the nuclear submarines, consisting in a versatile set of equipment for unloading SNF from submarine reactors and filtration units;
- Equipment for loading SNF into TK-18 and TUK-108/1 containers, for drying, for leakage tests, and for container decontamination;
- Hoisting and conveying machinery used to transport containers from the loading facility to the temporary storage site;
- Sites for the temporary storage of 80 containers. Temporary storage, according to design parameters, is supposed to last 6–24 months;
- Railways for the loading, stand-by, and formation of echelons of TK-VG-18 container railcars;
- The railroad from the on-shore technical base to Bolshoy Kamen station;
- Electric power supply and physical protection facilities.

The Zvezda On-Shore Defueling Facility was commissioned by an Act of the Government Acceptance Committee on January 30, 2003, and confirmed by the Russian Shipbuilding Agency.

The radioactive waste management facility includes the following assets, which have been built and commissioned:

- The *Landysh* floating LRW treatment facility;
- The low-level liquid radioactive laundry wash/rinse water treatment facility, with a capacity of 2,599 m³ per year;
- The solid radioactive waste (SRW) conditioning (decontamination and compacting) facility;

- An SRW storage facility, 1,500 m³ in volume, for the temporary storage of concentrated, solidified wastes from the *Landysh*, laundry water treatment facility, and SRW conditioning facility, which are transferred in 200-liter canisters.

The *Landysh* (in Japanese, *Suzuran*, or “lily of the valley”), was built with Japanese financing and commissioned in 1999. It ensures the treatment of LRW from nuclear submarines; the liquid remaining after the treatment of LRW is so clean that it can be discharged back into a fishery. The *Landysh* is the only LRW treatment facility in the Russian Far East that has gone through a state environmental impact examination and was accepted into service by a government commission.

The floating plant is a ship with a displacement of 4,500 tons, on which an LRW cleaning (treatment) plant built by the U.S. firm Babcock & Wilcox Nuclear Environmental Services is mounted. The ship was designed by the Vympel Design Bureau and the Krylov Central Scientific Research Institute, and built at the Amur Shipyard.

Measures were taken during the design of the floating treatment plant to ensure that it met Russian legal requirements for the observance of standards for the radiation safety of personnel, the general public, and environmental protection. At the same time the possibility of extraordinary (emergency) situations during the use of the floating plant, which can be used in other off-shore locations in the Sea of Japan, was taken into account. There is a system for monitoring the external environment. The design also included plans for the decommissioning of the plant.

The newly built facilities for handling radioactive wastes and SNF are equipped with automated radiation control systems that enable real-time monitoring of the radiation environment.

The submarine hull cutting facility includes:

- A guillotine with 2,000 tons of shearing force to cut hull structures of great and medium width, including the submarine pressure hull;

- A baler for compacting and packaging light-gauge metals;
- Hoisting truck-mounted cranes and truck trailers;
- A gantry crane and crawling tractor crane;
- Excavators with shears to cut structures of medium width;
- A conveyor system and scrap metal containers;
- Oxyacetylene torches, equipment for gas-powered and plasma-arc cutting;
- Tools and equipment for pneumatic mechanical cutting;
- A concrete pad and transformer substation to support the guillotine;
- A facility to process the cables stripped from the submarines;
- Scaffolding;
- Occupational safety systems.

Thus, between 1998 and 2001 a complete nuclear submarine dismantlement capability was established that can defuel four and scrap up to eight decommissioned Pacific Fleet submarines each year, while ensuring the nuclear and radiation security of the population and surrounding environment.

Difficulties in Implementing the Global Partnership Program in the Russian Far East

From 1989 to 1996 Zvezda Shipyard dismantled 11 nuclear submarines, in 1997–1998 – none, in 1999 – two boats, in 2000 – three, in 2001 – three, in 2002 – two, in 2003 – three, and in 2004 – four. One of the reasons for the cessation of dismantlement activity in 1997–1998 was that the boats could not be defueled due to the decommissioning of the Project 326-class floating service vessels used to refuel/defuel submarine reactors, a ban on transporting SNF in type TK-11 containers that were manufactured in 1971–1972, and the deterioration of loading equipment, as well as several other factors.

After a two-year hiatus in 1997–1998, when no submarines were defueled, SNF was unloaded from two boats in 1999. In 2000, three boats were defueled, in 2001 – three boats, in 2002 – three boats, in 2003 – four

boats, and in 2004 – two boats. In total, between 1999 and the end of 2004 Zvezda Shipyard offloaded SNF from 17 nuclear submarines.

The efficient execution of dismantlement tasks in the region during 1999–2003 was largely due to the financial support of the U.S. Department of Defense through the Cooperative Threat Reduction (CTR) program. To compare: in 2001 Zvezda received a Minatom (now Rosatom) state order for the maintenance and dismantlement of nuclear submarines, use of the *Landysh* floating LRW treatment facility, and capital investment totaling 88 million rubles, and in 2002 – 123 million rubles, while under CTR contracts the shipyard completed 520.7 million rubles worth of dismantlement work in 2001, 444.8 million rubles worth in 2002, and 198.4 million rubles worth in 2003.

In 2003 Zvezda completed the dismantlement of ballistic missile submarines (SSBNs) funded by the U.S. CTR program in Russia in accordance with the Strategic Arms Reduction Treaty (START Treaty). At present, the shipyard is chiefly dismantling first- and second-generation multipurpose submarines, which are supposed to be scrapped under the Global Partnership program.

However in practice, despite the existence of the necessary infrastructure, the establishment of the Global Partnership program, and the announcement by G8 leaders that they would spend \$20 billion dollars to rid Russia of its “Cold War legacy,” the Russian Far East appears to be outside of the program.

And while Zvezda Director Yury Shulgan believes that “the Global Partnership program does not work in the Russian Far East,” it is our view that the program has not even begun in the region, bogged down somewhere between the CTR program and the Global Partnership initiative. In the three years since the establishment of the partnership, only one nuclear submarine has been dismantled in the Russian Far East, with Japanese funding. Negotiations over the scrapping of an additional five boats with Japanese funds are progressing only with great difficulty. (These negotiations were successfully concluded in November 2005 only. On November 21, 2005 Russia and Japan signed an implementation arrangement for

dismantling of 5 multipurpose submarines in the Russian Far East- *ed.*).

In addition, Japan's sluggishness in solving issues related to the Global Partnership has "hung up" the funding promised by Australia (over U.S. \$7.5 million) that is being donated through the Japanese program because of the lack of a Russian-Australian intergovernmental agreement. On top of this, after the completion of SSBN dismantlement in 2003, the United States began to remove some of the equipment that it had provided earlier (as is well known, the United States is not funding the dismantlement of multipurpose submarines). Under these circumstances, the sole source of funding for submarine dismantlement in the region is the federal government. However, this funding is clearly not enough to pay for the dismantlement of all 36 decommissioned nuclear submarines in the region.

It is clear that given current financing levels, submarine dismantlement cannot be completed by 2010, as is envisioned by the Strategy for the Integrated Dismantlement of Nuclear-Powered Submarines, even if the Russian-Japanese implementation arrangement for dismantling five submarines signed during Putin's visit to Japan at the end of November 2005.

Another critical issue in addition to the financial one is the reconstruction of the railway between Smolyaninovo and Bolshoy Kamen, without which even federally funded submarine dismantlement is under threat. After the completion of the tasks specified in the 2005 State Order, the on-shore temporary SNF storage sites will be 85% full, and in 2006 Zvezda's defueling facility could defuel another 1-2 submarines. The further use of the defueling facility will be possible only after TUK containers of SNF are sent to Mayak. However, the 29-kilometer railway between Smolyaninovo and Bolshoy Kamen was built in 1934-36, is currently in unsatisfactory condition, and is restricted to light loads. In comparison, the entire railway from Zvezda to Mayak is 7,500 kilometers. The Vladivostok branch of the Far Eastern Railroad prohibited the shipyard from sending out special railcars with TUK-18 containers over this section of rail due to its technical condition on May 17, 1998 (order No. P-7/68).

The reconstruction of the railway spur was debated at a session of a Russian Security Council interagency commission in August 2002. The Russian government charged the Russian Shipbuilding Agency, Ministry of Atomic Energy, and the Ministry of Railways with undertaking immediate measures to finance and reconstruct the railway in order to ensure that spent nuclear fuel from dismantled nuclear submarines could be removed.

However, to this day Japan has not signed an implementing arrangement for this project, despite the fact that in 2001 the General Secretary of the Russian-Japanese Cooperation Committee, Toshiyuki Kawakami, even named a concrete schedule for the completion of this task: 3 years. Thus, the use of the on-shore defueling facility will be impossible after 2005 without the reconstruction of the rail spur. The alternative – using Russian Defense Ministry floating service vessels to unload SNF – will mean increased federal expenditures or the increased use of the funds of donor countries helping to solve submarine dismantlement issues.

Rosatom is currently looking for budget moneys to solve this problem. But it is clear that if this is done with federal funds, it will result in a reduction of funding in other areas approximately equivalent to the amount needed to dismantle one nuclear submarine.

Yet one more problem in the region that must be solved in the very near future is *the transportation of nuclear submarines that are no longer hermetically sealed from the bases where they are laid up to the dismantlement site.*

At present the Pacific Fleet has 36 decommissioned submarines subject to dismantlement. Fifteen of these boats are in Primorye, all with nuclear fuel on board.

About half of all of the submarines have been laid up for 10 or more years, which makes it difficult to maintain them as they await dismantlement. The technical condition of the hulls of first generation decommissioned submarines, built from the late 1950s through the early 1960s and in operation for more than 40 years, is generally unsatisfactory. All of them have main ballast tanks that are no longer hermetically sealed, are listing, and have a trim difference fore to aft, caused by the deterioration of the materials used for the tanks,

damage incurred under sail, and the failure to observe maintenance schedules.

Given the maximum capacity of Shipyard 49K – the dismantlement of three submarines per year (and in the opinion of civilian experts, two), the question arises regarding the need to transport some of the submarines laid up in Kamchatka for dismantlement at Zvezda, which cannot be affected by towing, given the condition of the boats.

In addition, we must not forget the growing need to dismantle the nuclear maintenance vessels, a question that must be considered together with submarine dismantlement. However, the dismantlement of the nuclear service boats has several important differences from submarine dismantlement:

- Their dismantlement requires the provision of radiation safety and the creation of strict exclusion areas the full length of the decommissioned vessels;
- The dismantlement of nuclear service vessels creates a large volume of SRW. Practically speaking, the quantity of SRW is equivalent to the mass of the vessel being dismantled;
- Virtually the entire nuclear service vessel is contaminated with radiation;
- There are no technologies for the decontamination of nuclear service vessel hardware; therefore, all parts of the dismantled vessel can be considered SRW;
- The infeasibility of decontaminating any part of the vessel means that access is difficult.

Accordingly, in the Russian Far East the Global Partnership should undertake the development of design and technical documentation for dismantling each nuclear service vessel class, analogous to those developed for the dismantlement of submarine classes.

Also, in the near future the problem of *decreasing the volume of solid radioactive waste* must be tackled. The dismantlement and defueling of one submarine results in approximately 30 m³ of SRW. Given that the dismantlement program financed by Rosatom involves the scrapping of 2–4 submarines per year, the yearly generation of SRW makes up about 150 m³, while the volume of the temporary storage facility

(Building 131) is 1,500 m³, enough for this program's needs for 10 years.

Though existing capacities can solve the problem of nuclear submarine dismantlement, the dismantlement of nuclear service vessels remains an open question. The dismantlement of nuclear service vessels that have already been decommissioned or will be decommissioned in the next two to five years will create a significant volume of radioactive waste, including high- and intermediate-level wastes of irregular shapes. This means that the use of traditional SRW treatment techniques will not be possible.

Scrapping a nuclear maintenance vessel results in a quantity of SRW dozens of times greater than submarine dismantlement. In practical terms, the mass of the resulting SRW is close to the mass of the vessel that is dismantled. The schedule for nuclear service vessel dismantlement at Zvezda indicates that the additional SRW created will total about 4,000 m³. The storage facility (Building 131) will not be able to handle the temporary storage of these volumes of SRW. This means there is a demand for the creation of radioactive waste handling infrastructure in the Russian Far East – storage and disposal facilities, radioactive waste transportation and packaging facilities, and means to transport TUK containers with radioactive waste to storage and disposal facilities.

Besides this *there are two damaged nuclear powered submarines floating in Pavlovsk Bay, that cannot be safely towed for dismantling at the present time.* They have already been in floating storage with nuclear fuel on board for over 15 years. Their safety is being ensured by the Russian Navy, but with each year this is becoming more and more difficult. Therefore, in the near future a decision about the way to mothball these vessels must be made. One of possible solutions is to store these submarines on-shore.

Otherwise the vessels may sink, with consequences, according to Fleet experts, that will be felt by the residents of all of the countries in the Far East. According to various estimates, the cost of these projects is \$10–40 million.

There is much to be done: the infrastructure for the creation of one-compartment units must be built, so that reactors could be put in long-term storage, and an on-shore temporary storage facility for these units must

be created in Razboynik Bay, which is part of the territory of the Rosatom enterprise DalRAO. The creation of a similar long-term storage facility and related infrastructure for the Russian North-West in Sayda Bay, is being financed by the Federal Republic of Germany. The facility in Sayda costs some 300 million.

What is to be Done?

Given the current situation in the Russian Far East, it is critical that urgent measures are taken to ensure that the Global Partnership is active in the region, and the following dire scenario described by Federal Atomic Energy Agency Deputy Director Sergey Antipov does not come to pass: "We could find ourselves in the situation where all of the problems associated with nuclear submarines and SNF in the Russian Northwest are solved, but the problems in the Russian Far East remain for many long years. From the point of view of possible threats ... this would be not simply a regional problem, but a problem for the entire global community."

Top priority measures that must be singled out include:

- The intensification of Japanese funding, which was promised at the relatively modest level of \$200 million, and to date has only been expended on the dismantlement of a single submarine (an implementation arrangement on dismantling additional five submarines was signed in Tokyo on November 21, 2005 - *ed.*);
- Finding alternative ways for countries that do not have a relevant bilateral agreement with Russia to finance the dismantlement of submarines in the Russian Far East, given that Japan has set political conditions for the provision of assistance to Russia. In particular, some way must be found to make use of the over \$7.5 million that Australia

has given to Japan for the dismantlement of submarines in the Russian Far East (signing of implementation arrangement with Japan on November 21, 2005 opens the way for using Australian money as well - *ed.*);

- The reorientation of donor countries to solving dismantlement problems in the Russian Far East. There is already some positive movement in this direction. After a visit to the Russian Far East in November 2004, German officials agreed to supply transport equipment for use in Razboynik Bay, where the temporary one-compartment reactor storage facility will be built, analogous to the equipment that will be used in Northwest Russia's Sayda Bay to transfer reactor compartments onto shore. In addition, the Germans promised to consider providing the Russian Far East with a special heavy-lifting crane for moving containers of SNF, to be paid for by German grant aid.

An additional alternative funding source is Canada, which has broadened its interest in the Russian Far East as a whole. In April 2005, Russian Prime Minister Mikhail Fradkov signed an order on the opening of a Canadian general consulate in Vladivostok. Of the Canadian \$300 million (approximately U.S. \$240 million) committed to submarine dismantlement, Canada has only determined how it will spend Canadian \$150 million (for submarine dismantlement at Severodvinsk's Zvezdochka Shipyard).

Of the practical measures needed to implement submarine dismantlement, primacy should be given to the reconstruction of the Smolyaninovo-Bolshoy Kamen rail spur, needed to send SNF to Mayak so that the entire dismantlement process does not come to a complete standstill in 2006. The estimated cost of this project is \$7 million.

Commentary

THE TRUTH ABOUT “SUITCASE NUKES”

**By Viktor Yesin,
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The monstrous terrorist act of September 11, 2001, in New York, and the subsequent train bombings in Spain and hostage takings in Russia (at the Nord-Ost Theater and Beslan school), in which victims were counted in hundreds and thousands, indicate that *a priori* terrorists have no moral qualms. They will not hesitate to employ the most barbarous means to destroy people. This is why it would be so very dangerous were they to get their hands on nuclear munitions, which can bring about mass destruction and the death of not hundreds and thousands, but millions of people.

This threat is most often associated with the possible terrorist possession of mobile nuclear munitions, or so-called “suitcase nukes.”

In the mid-1990s, stories began to appear in the media of several countries regarding the possession of “suitcase nukes” by terrorist organizations and extremist movements. Moreover, in general the reports declared that these “suitcases” were of either Soviet or Russian origin and that the terrorists (or extremists) had acquired them from Russian military, who had sold them off practically by accident.

In the interest of truth, I should note that the sensational broadcasting of this story was largely aided by “leaks” of information from Russian secret services at the time. Thus, in the fall of 1995 media stories citing the Russian Foreign Intelligence Service reported that Dudayev’s fighters had acquired two special nuclear munitions in Latvia from the Russian military in 1992. Then-Russian Security Council Secretary Oleg Lobov sent an official request to the head of the Russian Armed

Forces General Staff, Mikhail Kolesnikov, for clarification. He received the answer that any information about the loss of Soviet or Russian nuclear munitions was untrue, and that the announcements made by Dudayev’s men and others like them constituted disinformation aimed at frightening the global community.

I do not believe that it is necessary today to enumerate all of the news stories about lost Soviet and Russian nuclear munitions and their falling into the hands of various terrorist groups and other armed gangs. Instead, it is enough to recall the particular resonance provoked by the 1996-1998 declarations of former Russian Security Council Secretary Alexander Lebed and the statements of Alexei Yablokov, of the Russian Academy of Sciences, regarding the supposed losses of “suitcase nukes” of Soviet manufacture during the break-up of the Soviet Union.

After the Russian Ministry of Defense issued answers to these and analogous statements, as well as media stories, one would have thought that the problem of “suitcase nukes” would have been exhausted. But in the book *Osama’s Revenge*, which was recently published in the United States, the reporter Paul Williams avers that the Al Qa’ida international terrorist organization possesses dozens of “suitcase nukes” stolen from Russian storage depots. Moreover, the author states that according to intelligence sources these “suitcase nukes” are already in the United States.

One of the motivations for Mr. Williams’ assertions is apparently the wish once again to “expose” Russia as a country incapable of guaranteeing the security and safety of its nuclear weapons and, therefore, supposedly posing a threat to humanity. And so, yet again, the subject of “suitcase nukes” has been raised.

As an official whose duties as head of one of the directorates in the Russian Security Council staff (1997–2002) included answering questions related to Russia’s possession of mobile nuclear munitions, I consider it my duty to share my knowledge of this issue. As a patriot, I believe that my country’s image should not be made to suffer due to the current lack of information regarding some details of Russian nuclear policy. Naturally, I will not reveal state secrets, but I want to dispel the existing

myths about “suitcase nukes” and relate, as far as possible, details about the mobile nuclear munitions that have actually been built in the world.

The media widely uses the term “**suitcase nuke**,” but this is a slang term. In truth, we are really talking about mobile, special-purpose nuclear munitions carried in backpacks (special nuclear mines).

Thus Igor Valynkin, head of the Russian Ministry of Defense 12th Main Directorate,¹ was correct when he said, as a lieutenant general on December 2, 1997, in an interview with a *Nezavisimaya gazeta* correspondent, that “no suitcases, carpetbags, purses, or other handbags with nuclear ammunition... have ever existed.”

The world’s first small-scale nuclear munitions were created by the Americans. In 1960, Los Alamos National Laboratory constructed the plutonium-based W-54 miniature nuclear implosion-type device. Its yield, depending upon its mission, could be changed with the use of a special regulator from about 10 tons to 1 kiloton. The weight of this nuclear charge was about 27 kilograms. It was used in several types of nuclear munitions. All of them were classified as Special Atomic Demolition Munitions (SADMs).

Initially, the W-54 nuclear charge was used in 120 and 155 mm calibre nuclear artillery shells. In 1964, it was also used to produce two types of special nuclear mines: the M129 and the M159, known in the United States as “portable” atomic bombs. The M-159 special atomic munition was manufactured in two versions: the M-159-V1 and the M-159-V2. The construction of these two versions differed little, one from the other. Their principle difference was in the size of the minimal yield of the nuclear charge: M-159-V1 had a yield of 10 tons, while M-159-V2 had a yield of 250 tons.

The M129 and M159 special nuclear mines had identical dimensions: they were both 70 cm in length and had a maximum diameter of 31 cm. They were housed in special H913 transport containers, which in addition to the nuclear mines also contained all of the necessary additional equipment such as code locks (also known as permissive action links, or PALs), radio receivers, and timers. The H913 container was 87 by 65 by 67 cm in size, and weighed 68 kg when fully loaded. It could be carried by one person using a specially

designed backpack, or by two people using a special sling. The M129 and M159 nuclear mines could be set off using timers or from a distance using special radio signals.

In total, Los Alamos National Nuclear Laboratory produced about 600 M129 and M159 special nuclear mines between 1964 and 1983. Production was halted in 1983.

“Backpack” atomic bombs were part of the equipment of the U.S. Army’s “Green Berets,” U.S. Navy “Seals,” and special divisions of the U.S. Marines. They were designed to be used for acts of sabotage behind enemy lines, in particular for the destruction of airfields, ports, major bridges, dams, underground command posts, and other similar facilities, as well as large troop concentrations. These nuclear weapons were very effective: they were compact, and thus could secretly be moved behind enemy lines in order reliably to destroy the intended targets. This is clear when one looks at the basic parameters of the nuclear explosion, which had an explosive yield of 1,000 tons: the radius of the shock wave (with a blast pressure of 0.3 kg per square centimeter) was 800 meters, thermal radiation 3.8 calories per square centimeter, and ionizing radiation 670 rems. The shock wave would destroy installations 800 meters away from the blast epicenter, destroying all living things inside, while the thermal radiation would ignite fires.

During the Cold War, M129 and M159 special nuclear mines were located at U.S. military bases in Western Europe (West Germany and Italy), the Republic of Korea, Guam, and possibly Okinawa, in addition to U.S. territory. During the Vietnam War these mines were brought to Clark Air Base in the Philippines. According to some sources, the Americans had planned to use special nuclear mines to destroy mountain passes on the famed Ho Chi Minh Trail, the main transport artery between North and South Vietnam. However, these plans were never realized, apparently due to the dangers intense radioactive contamination would pose in the region.

The Americans also considered the use of special nuclear mines by NATO special forces divisions (in Germany, Italy, and elsewhere). However, after the “thaw” in relations with the Soviet Union and Warsaw Pact countries that began in 1987,

these considerations were ended and all special nuclear mines removed from Western Europe and the other locations where they had been deployed, to be stored on U.S. territory.

In late 1991-early 1992 all remaining special nuclear mines (there were about 300 at that time) were dismantled at the PAN-TEX facility in Amarillo, Texas (in fulfillment of the 1991 unilateral declaration by U.S. President George Bush on deep cuts in U.S. nonstrategic nuclear weapons).

The Soviet Union began to produce small-scale special nuclear munitions in 1967, three years after the Americans. These backpack-type nuclear munitions were called "special mines." This was probably because they were designed exclusively for equipping special divisions of the USSR armed forces: special forces brigades under the Main Intelligence Directorate of the Russian General Staff and special units of the Soviet Marines.

The design of Soviet special mines, particularly earlier types, was largely similar to U.S. special nuclear munitions. Accordingly, their military characteristics, weight, and dimensions were about the same.

The Soviet Union produced four types of special mines, totaling just less than half of the number of U.S. special nuclear mines. The most advanced design was the RA115, the final type of Soviet special mine, which was the type mentioned by Alexander Lebed. The weight and dimensions of this mine were considerably superior to U.S. analogs.

The main producer of Soviet special mines was the formerly secret Avangard facility in Sarov, Nizhnyy Novgorod region (formerly known as Arzamas-16). All of the special mines that were constructed were delivered to a USSR Ministry of Defense 12th Main Directorate arsenal, the only one of its kind, for storage and handling (the arsenal was located on the territory of the Russian Soviet Federated Socialist Republic, today's Russian Federation). Throughout the Soviet period, to say nothing of the new Russia, these special mines were never transferred from this arsenal or the production facility to military forces (this has been confirmed by documentation). Therefore, they could not have been lost or stolen at military units. Sabotage teams from Soviet, and later Russian, special

forces brigades trained using simulators, as well as on the ground with the use of dummy special mines. It is possible that some of these dummy mines may have remained in the armed forces of the newly independent states created after the break-up of the Soviet Union.

Stories that appeared in the media in the late 1990s regarding the construction of a certain number of special mines ("suitcase nukes") for the KGB, and their delivery to the agency, are false. It has been reliably established that the all-powerful Soviet KGB never ordered or joined in an order for any type of nuclear munitions, and therefore could not have been issued such weapons. In fact, the functions of the Soviet KGB, like that of Russia's FSB today, were limited to monitoring the observance of regulations by production facilities and the armed forces in the production and handling of nuclear munitions.

By the early 1990s, only the final type of special mine (the RA115) remained, then numbering about 200. Earlier types of special mines had already been returned to the production facility and dismantled in accordance with established procedures by that time. In the second half of the 1990s this fact was substantiated through an examination of documentation carried out by a special commission, as described below.

All remaining RA115 special mines were supposed to be destroyed by 2000, in accordance with the unilateral U.S.-Soviet initiatives of 1991 on the reduction of non-strategic nuclear munitions, mentioned above, which were confirmed by Boris Yeltsin, the first Russian president, in January 1992.

In April 2000, then-Russian Minister for Foreign Affairs Igor Ivanov told the Review Conference on the Nuclear Non-Proliferation Treaty in New York that "Russia [is] about to complete the destruction of nuclear warheads... from nuclear mines." This allows us to confirm that Russia fulfilled its promise to destroy nuclear mines, if not in the first half, then probably in the second half of 2000.

Thus, today neither the United States nor Russia has portable (backpack) special nuclear munitions ("suitcase nukes") in its arsenal. However, they do of course continue to possess the technology and man-

ufacturing base for the renewed production of this type of nuclear munition.

As is well known, Washington recently decided to carry out research and development work on the design of miniature nuclear explosives. Yet the U.S. government has stated that these nuclear explosives, if a decision to deploy them is made, will be used for the construction of high-precision earth-penetrating nuclear munitions designed to destroy hardened targets with pinpoint accuracy and not for the renewed production of special nuclear mines. It is impossible to confirm or contest this assertion. We shall simply have to wait and see.

Could another nuclear state besides the United States and Russia have portable special nuclear munitions in its arsenal? I do not have an unequivocal answer to this question.

According to the Stockholm International Peace Research Institute's *Yearbook 2005*, **China may possess some 120 atomic demolition munitions and Israel may have nuclear artillery shells and landmines.** However, there is no information on the possible weight, dimensions, or power of these nuclear munitions. Therefore, it is impossible to determine whether or not they fit into the category of portable special nuclear munitions.

Recently, it appears that **there have been renewed attempts to accuse Russia of unsatisfactorily storing its nonstrategic nuclear weapons and "losing" portable special nuclear munitions ("suitcase nukes").** Alexei Yablokov, who was mentioned above, once even said that "Russia possesses nuclear explosives that are not under presidential control" (that is to say, "suitcase nukes" that could be employed—or, to put it simply, detonated—without the authorization of the Russian president).

Alexander Lebed too did his bit in the campaign unleashed by Alexei Yablokov in mid-1997 to accuse Russia of supposed "failures" in monitoring its nonstrategic nuclear weapons, largely thanks to his lack of knowledge in the sphere of nuclear weaponry and his excessive credence of the unverified information with which he was inundated. This information was provided by officers from the Main Intelligence Directorate of the Soviet/Russian General Staff who were in the reserves or had retired (and who, it would appear, were acting in their own self-interest).

Russian President Boris Yeltsin, albeit with some delay, reacted to the rising "brouhaha" in the global community regarding the "proliferation" of nuclear weapons from what was now already the Russian arsenal by charging the Ministries of Defense and Nuclear Industry with carrying out a dedicated enquiry into the existence and safeguarding of all types of nuclear munitions, both nonstrategic and strategic. In order to fulfill Yeltsin's order, a special joint commission was formed by the Russian Ministries of Defense and Nuclear Industry. This **commission**, having worked in all of the Russian Armed Forces organizations that dealt with nuclear weapons and at industrial enterprises that produced nuclear munitions, **concluded that Russia's system of ordering, accounting for, distributing, and dismantling nuclear munitions, along with its system for continuously monitoring the safeguarding of these weapons throughout their life cycles and for systematically checking them on a regular basis, demonstrate that there have been no cases of loss or theft of nuclear munitions in Russia's inventory during the entire period of the existence of Soviet/Russian nuclear weapons.**

The results of the work of this commission, after consultation with Boris Yeltsin, were provided in early December 1997 by the Russian Ministries of Defense and Atomic Energy to the public at large via media publications. However, it is true that in order to avoid divulging state secrets, the information on the results of the commission's work were presented in a restricted and not very convincing manner.

Thus it is not surprising that in early 1998 there were renewed accusations that Russia had lost mobile nuclear munitions, which had fallen into the hands of terrorists and extremists. True, this time there was no talk of other types of Russian nonstrategic nuclear munitions.

Boris Yeltsin then gave a special mandate to Andrei Kokoshin, then-Russian Security Council Secretary, to thoroughly clear up the issue of the "suitcase nukes" and report on the actual situation.

The resulting dedicated enquiry, carried out in the spring of 1998 by a group of Russian Security Council staff experts, myself included, involved the accounting of individual weapons and cross-checking of all accounting data regarding the produc-

tion, dismantlement, and inventory of special mines both at the Russian Ministry of Defense arsenal, mentioned above, and at the Russian Ministry of Atomic Energy production facility. This enquiry confirmed the conclusion of the joint Ministry of Defense/Ministry of Atomic Energy commission: there have been no cases of the loss or theft of special mines, and all accounting data correspond to the facts on the ground. Simultaneously, the experts made recommendations for increasing the security of special mines awaiting dismantlement; these recommendations were quickly realized both by the Russian Ministry of Defense and at Russian Ministry of Atomic Energy enterprises.

Some time later, in order permanently to "do away with" the issue of Russia's mobile special nuclear munitions, at the initiative of Alexei Kokoshin a presidential decree was prepared and issued banning the design and production of similar types of nuclear munitions at any time in the future.

As for Alexander Yablokov's assertion that Russia possesses nuclear explosives that could be employed without the authorization of the president, I will clarify the situation as far as I am permitted.

When the first prototype special mines were built by the Soviets, the question of authorizing their use was indeed given insufficient attention. Measures to prevent their unauthorized use were primarily organizational in nature. But this "shortcoming" was soon eliminated. Subsequent types of special mines already had code locking mechanisms (PALs) that made it impossible to trigger them without authorization. The most thorough technical measures to prevent unauthorized use of the nuclear charge were realized in the construction of the RA115 special mine, which possessed an electromechanical PAL device.

Since Russia no longer had any types of special mines other than the RA115 by the early 1990s, Alexander Yablokov's assertion regarding the possible use of "suitcase nukes" without presidential authorization, made in 1997, cannot be taken seriously. **Both then and now, the use of both non-strategic and strategic nuclear weapons possessed by Russia is only possible with the authorization of the Russian president, commander-in-chief of the Russian armed**

forces. I am certain that this will remain true as long as Russia possesses nuclear weapons. Anything else is simply not possible.

If one asks the question of whether it is possible to create extremely small nuclear munitions that could fit in a container the size of a small suitcase, handbag, or purse, then I would answer as follows.

The current state of knowledge in the area of nuclear weapons design makes it possible, in principal, to create an extremely small "suitcase nuke" weighing 10-12 kg. But this would require not weapons plutonium, to say nothing of highly enriched uranium, but transplutonic materials that have a small critical mass, but also a short half-life. This implies that new military technologies would have to be designed and new production lines created for transplutonic materials. The costs would be colossal compared to existing military nuclear materials. Of course, a series of nuclear tests would also be needed.

Such easily-carried "suitcase nukes" would be so expensive that not even the richest country could afford them. In addition, they would be short-lived due to the short half-lives of their nuclear warheads—with lifetimes of just a few months. Besides, as a rule, short-lived elements are much more radioactive, making it much more difficult to store extremely small nuclear munitions and likely giving rise to overexposures of maintenance staff. As the saying goes, "the game is not worth the candle."

If one were to seriously evaluate the options for terrorist organizations and extremist movements to obtain nuclear explosive devices, then **one would primarily have to consider the possibility of their constructing so-called "dirty bombs."** This type of explosive device is so simple that it could be created using crude methods. In essence, the device is a container with fissile materials attached to conventional explosives. When set off, the radioactive materials do not initiate a chain reaction, but are instead diffused. The living would not be harmed by a nuclear explosion, since none would occur, but instead would be subject to radiation.

There are many different radioactive materials, and many of them are widely used in industry as well as for other uses. In total, there are over a hundred countries capable of producing radioactive materials.

As unfortunate as it is to admit, the radioactive materials needed for the construction of a “dirty bomb” can now be obtained relatively easily on the *de facto* international “black market” of nuclear technologies and materials. Here it is pertinent to note that very recently it became clear who has been heading this “black market.” It turned out that it was not people from so-called “pariah states,” but the “father” of Pakistan’s nuclear bomb, Doctor Abdul Qadeer Khan. And Pakistan’s president, Pervez Musharraf, magnanimously forgave A. Q. Khan and even denied the IAEA access to him, thus preventing this international organization from clarifying the “black market” situation.

This is the real threat to global security, not inventions about the “proliferation” of Soviet (or Russian) “suitcase nukes” around the world.

The only effective way of preventing terrorist acts using “dirty bombs” is to put all production of fissile materials for nuclear weapons and other explosive devices under the complete control of the IAEA. A draft

of just such an international agreement has existed for more than five years, albeit not in a final form. However, to date it has not been possible to come to an agreement on it within the framework of the Geneva Conference on Disarmament. There are serious disagreements between nuclear weapon states and non-nuclear weapon states. In addition, several states worry that if the agreement is adopted they will lose the option of developing nuclear energy.

Still, the global community must adopt the Treaty on the Ban of the Production of Fissile Materials for Nuclear Weapons and Other Explosive Devices if it wishes to live under conditions where terrorist acts using nuclear munitions and their surrogates – “dirty bombs” – are impossible, to say nothing of the appearance of new nuclear weapon states. But that is another issue, which is not the subject of this article.

¹ The Russian Ministry of Defense 12th Main Directorate is the division of the Russian Armed Forces responsible for the procurement, storage, and use of nuclear munitions.

Summary

Yaderny Kontrol (Nuclear Control)
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EDITORIAL**The High-level Panel Did Its Job – “The Process is Underway”**

In 2004, UN Secretary-General Kofi Annan formed the “High-level Panel” also referred to as “Group of Wise Men” to evaluate the character of the changes going on in the world, and the new threats and challenges facing humanity. The goal laid before the Panel was to try to find a consensus opinion on the outlook for, and possible solutions to, many of the world’s most critical situations; including one of today’s most vital issues – the conditions for, and general appropriateness of, the use of force in international relations for neutralizing threats to the stability and security of all peoples.

Now, after the presentations of Panel’s report, it is clear that Kofi Annan succeeded in forming a sufficiently objective and balanced team consisting of 16 leading political and governmental figures from various countries, a team for which Russian President Vladimir Putin proposed Evgeny Primakov. The panel created an intellectually rich 100-page document. The document’s stand is, naturally, a compromise one, but very convincing and helpful, including pieces of advice on how to make the UN a more effective instrument for the cooperative resolution of global problems. The report by the 16 wise men, as they are being called more and more often, is titled “A More Secure World: Our Shared Responsibility.”

In creating the High-level Panel, UN Secretary-General Kofi Annan took a knowing risk. One can already state that the risk has paid off. The High-level Panel has suitably fulfilled its mission, and gave considered answers to these and other questions. The High-level Panel did its job – it launched the process. Now, it is the duty and honor of the Secretary-General and his colleagues at the United Nations to correctly comprehend the intellectual impetus it received and apply it for the common good of the world community.

INTERVIEW

“How can one speak of the development of nuclear power and, meanwhile, put limits on its development? – This is the dilemma that stands before the NPT member-states” – Sergio Duarte – What is the outlook for the 2005 NPT Review Conference, and what are the basic challenges to the nonproliferation regime, these questions are raised in an interview with the President of the Conference Sergio Duarte by the editor-in-chief of this journal, Vladimir Orlov. One of the possible mechanisms for strengthening the regime is giving the Additional Protocol obligatory status, making it mandatory for all non-nuclear states.

“Combating Terrorism Must Hold a Central Place in the New Russian National Security Concept” – Nikolai Spassky – In an interview with Vladimir Orlov, Deputy Secretary of the Security Council Nikolai Spassky discussed the nature of the development of the Concept, how it differs from the 2000 Concept, measures for increasing the effectiveness of the war on terrorism, the outlook of the CFE Treaty, Russian-NATO relations, and the outlook of Russian-Iranian nuclear cooperation.

“Iran: the situation has become clearer, but not all questions have been answered” – Sergei Kislyak – Answering the questions of this journal’s editor-in-chief Vladimir Orlov, Deputy Minister of Foreign Affairs Sergei Kislyak dwelled upon the issues of Russia’s participation in the Proliferation Security Initiative, the up-coming 2005 NPT Review Conference, gave an evaluation of the EU initiative on Iran’s nuclear program, as well as on issues relating to the whole spectrum of Russian-Iranian bilateral relations.

ANALYSIS

Nuclear Weapons Security – Russia’s Top Priority in the Long Term – Vladimir Verkhovtsev – Using as his example the exercise “Emergency-2004”, the Deputy Head of the 12 Main Directorate of the Ministry of Defense of the Russian Federation examines practical measures for securing Russia’s nuclear arsenal, and comes to the conclusion that Russian protection measures are in accordance with the criteria for nuclear security adopted by the nuclear powers, do not fall below world standards, and in some areas (in par-

ticular, the criteria for immunity from unsanctioned use), exceed them. The article notes that to ensure reliable security for its nuclear weapons, Russia has, over the course of many years, cooperated with foreign partners, and has used the knowledge of foreign specialists with long practical experience in this area, both at the highest political level, and as the level of specialist issues.

Indian Nuclear Security: Strategic Culture and Doctrine – Rajesh Basrur – How balanced is India's nuclear strategy, and has India reached its stated objectives through its possession of nuclear weapons? In the opinion of the Director of Center for Global Studies (Mumbai), the future of India's nuclear weapons is unclear; in the first place, due to the risky strategy of the use of nuclear weapons as an element of policy toward Pakistan, which has shown its ineffectiveness and danger in practice. As a result, nuclear weapons will likely play a more modest role in India's security policy.

Missile Defense After the ABM Treaty – Pavel Podvig – Currently, it is impossible to predict all of the positive and negative consequences of the US decision to begin the development of missile defenses. The Research Associate Center for International Security and Cooperation of Stanford University (CISAC) asserts, however, that the development of a missile defense system cannot ensure the resolution of those tasks that stand before the US, and it will not have a significant impact on US foreign policy. In the end, the missile defense system will, most likely, occupy a place similar to that of air defense – an important component of the armed forces, capable of providing a real impact on the course of one conflict or another, but not capable of changing the strategic balance in the relations between states.

Will the PSI Become a Real Instrument for Counterproliferation Policy? – Alexander Kalyadin – What place is there in the nonproliferation "arsenal" for the Proliferation Security Initiative (PSI), aimed at preventing the further spread of WMD? The Deputy Administrator, Center for Political and Military Forecasting of the Institute of World Economy and International Relations of the Russian Academy of Sciences proposes that the significant expansion of international support for the PSI reflects a new tendency in

nonproliferation, in particular, in relations towards states that do not observe the norms of the WMD nonproliferation regime. Thus, Russia joined the PSI, as was required by its vital security interests. Becoming a member of the PSI "core," Russia can actively take part in the process of making concrete decisions, and enable a more effective use of the collective capability for strengthening the nonproliferation regime.

The "Very Great Game": The U.S. New Frontier in Central Asia – Vicen de Kytspotter – This article makes the proposal that US actions in the region after September 11th were aimed not only at solving short-term security problems, but also objectively enabled the establishment of definite stability in Central Asia. In the opinion of the author of this article, Major, French Armed Forces, however, US participation in the region's problems is foremost pursuing long-term strategic tasks that could, likely, destabilize conditions in the region, leading to the creation of new challenges to the security of the states of Central Asia and to the region as a whole.

VIEWPOINT

Mutual Assured Destruction: Is There an Alternative? – Aleksei Obykhov – This article examines the current status of the key doctrine of nuclear containment – the concept of "mutually assured destruction" (MAD). Ambassador (Ret.) Obykhov is against attempts to return to the nuclear confrontation of the Cold War, and, in relating to today, to introduce the concept of "non-confrontational containment/deterrence" and proposes that the US and Russia exchange the dangerous concept of MAD for a wide-ranging agreement on mutual security.

The North Korean Nuclear Crisis and International Relations in North-East Asia – Yoshinori Takeda – What influence has North and South Korea, China, Russia, the US and Japan exerted on the crisis on the Korean Peninsula, and what changes in the regional security system can be expected in the future? The author, a diplomat with the Ministry of Foreign Affairs of Japan and a Research Fellow at Georgetown University, comes to the conclusion that through most of the 1990's, the US was, de facto, the only actor influencing the development of the North Korean crisis. The reason for Washington's

“monopolization” of the Korean problem was, foremost, the fact that the DPRK did not pay much attention to relations with other governments and organizations. Furthermore, the other actors were not very active in the process of regularizing the problems on the Korean Peninsula, including the development of nuclear and missile programs.

COMMENTARY

The Threat of the Use of EMP Weapons for Military and Terrorist Purposes – Valdimir Belous – Before long, terrorist acts using electromagnetic weapons, acting on various facilities with the aid of powerful electromagnetic pulses (EMP), are likely. The author, Lead Research Fellow at the Institute of World Economy and International Relations (IMEMO), Major-General (Ret.), proposes that to neutralize this threat it is necessary to unite the efforts of scientists in different countries with the goal of discovering and neutralizing devices that could be used for the realization of such scenarios, as well as with the goal of developing methods for countering and protecting facilities from attacks with EMP weapons. It is not impossible that, in terms of importance for ensuring national security, such a program will, in the near future, become no less urgent than the creation of missile defense systems, and the importance of such programs will only grow with the passage of time.

Nuclear Shipbuilding at the Beginning of the 21st Century – Mikhail Barabanov – This article gives a short historical outline of, current conditions of, and outlook for nuclear military and civilian shipbuilding. The author, a Russian independent expert, notes that currently there is reduced enthusiasm in military fleets for the use of nuclear plants for military escort ships and cruisers. The article also analyzes the reasons for the continued use of nuclear power on American aircraft carriers.

SURVEY

On the Proliferation of Chemical and Biological Weapons in the States of the Middle East and North Africa – Vitaly Yurchenko – In the opinion of the author of this article, an expert at the Institute for Israeli and Middle Eastern Studies, Colonel (Ret.), there is on-going work by countries of this region to develop and producing

chemical and biological weapons under conditions of the utmost secrecy, including work in violation of officially accepted international responsibilities. Taking this into account, the relative accessibility of these types of WMD, the presence of the necessary infrastructure and specialists as well as means of delivery all enable the possession of chemical and biological weapons by Middle Eastern and North African states.

On the New US Initiative for Ensuring the Security of Nuclear and Radioactive Materials – Vitaly Fedchenko – How effective is the American Global Threat Reduction Initiative (GTRI), announced in May 2004, and how does it correlate with the already existing nonproliferation programs? The author, Coordinator of Educational Programs for the PIR Center, notes that the basic advantage of the GTRI program is its global character. Taking this into account, its adoption could create a good chance to ensure the security of the materials most dangerous from the point of view of the threat from terrorism.

New Directions for the Global Partnership Program – Aleksei Shitikov – The changing conditions in which the Global Partnership (GP) program should be fulfilled could require corrections in the timeline for beginning the realization of projects and the structure for cooperation, notes this article. The author, Attache, Department for Security and Arms Control Issues, Ministry of Foreign Affairs of the Russian Federation, notes that Russia needs to define new directions for cooperation within the GP and that look to be the most important from the point of view of nonproliferation and protecting national interests. It is of central importance that all new projects are in accordance with the underlying principles of the GP, as well as that all of the cooperation potential is used for the resolution of concrete tasks in the areas of nonproliferation and the liquidation of the threat connected to the use of WMD by terrorists.

HISTORICAL PAGES

Lessons from the Fourth NPT Review Conference, 1990 – Roland Timerbaev – Ambassador (Ret.) Timerbaev reconstructs, on the basis of his diary entries, the events of the final phase of consultation on the development of the concluding document of the conference on nuclear testing. The

article notes that the 1990 conference ended without the adoption of a concluding declaration, but this did not detract from the importance of the NPT or reduce its effectiveness. In this regard, its results served as a sobering and, to a certain degree, mobilizing factor for the US. Despite the historical character of the events, they have not lost their relevance today.

LIBRARY

The Blix Memoirs – Gennady Evstafiev – In the pages of his memoir, the head of the UN Commission on Iraq Hans Blix further tells of the years and millions wasted on the search for signs of that which

the author aptly christened “weapons of mass disappearance” in Iraq.

LETTERS TO THE EDITOR

Makhmut Gareev – What are the missiles pointed at? – In this letter to the editor, the author, President of the Academy of Military Sciences of the Russian Federation proposes that we stop beating around the bush, and define the future of nuclear deterrence in US-Russian relations; as, at least in theory, the missiles and bombs with nuclear warheads “are not targeting anyone” and practically speaking – compared to what they once were – nuclear relations and mutual perceptions are totally different.

Summary

Yaderny Kontrol (Nuclear Control)
Journal of the PIR Center
for Policy Studies, No.2 (76),
Volume 11, Summer 2005

EDITORIAL

Will the Iranian Atom Become a Persian Carpet for Russia? – A series of meetings between PIR Center leaders and Iranian experts and high ranking officials in Moscow, Tehran and Geneva in January-March 2005 further convinced us that Iran earnestly intends to develop a large-scale nuclear energy program. Under the circumstances, Russia must make certain that it is not sidelined when the divvying up of the Iranian market begins. Russia must be sure to learn from its previous experiences, which have not all been positive, when expanding its cooperation with Iran.

INTERVIEW

Sergei Kislyak: "Iran: the Situation Has Become Clearer, But Not All Questions Have Been Answered" – In an interview with editor-in-chief Vladimir Orlov, Russian Deputy Ministry of Foreign Affairs Sergei Kislyak communicated Russia's position on the Iranian nuclear program, official Tehran's cooperation with the IAEA and the prospects for the development of bilateral Russian-Iranian relations. He also spoke about his expectations for the upcoming Nuclear Non-Proliferation Treaty review conference.

ANALYSIS

The Russian Armed Forces: New Challenges and Threats – Aleksandr Rukshin – Deputy Head of the General Staff of the Russian Armed Forces examines the basic trends in the organization and development of the Armed Forces given the transformation of the national security threats facing Russia. Critical priorities in this process are to maintain the capacity of the nation's strategic deterrence forces, to increase the number of task forces and units maintained in constant combat readiness, and to implement the armaments modernization program.

Low Yield Nuclear Weapons – a Possible Foundation for the Nuclear Arsenal of the New Century – Igor Andryushin, Viktor

Mikhailov, Yuri Trutnev, Aleksandr Chernyshev – The need for nuclear weapons to provide for the security of Russia and its allies is determined not only by future relations with the United States, but also the possible aggravation of global crises. In the opinion of the group of the leading Russian nuclear weapons experts from Sarov, current circumstances are developing in such a way that one likely scenario for the development of nuclear weapons systems in the near future is the appearance of new nuclear arsenals with low yield charges, mounted on both tactical and strategic nuclear missiles.

Brazil's Nuclear-Powered Submarine Development Program: Through Squalls to the Depths – Andrei Frolov – Based on a detailed analysis of Brazil's design and construction of a pilot nuclear-powered submarine, the author, a Russian independent expert, proposes a system of criteria to evaluate the political, economic, and technological preparedness of a state to join the club of nuclear-powered submarine owners. The author concludes that without foreign assistance and with a relatively low level of technological development, it is doubtful that Brazil will be able to bring its nuclear-powered submarine R&D up to the level needed to build such boats.

VIEWPOINT

The Proliferation of Unmanned Aerial Vehicles is a Growing Security Threat – Gennady Yevstafiev – An analysis of the world-wide development of unmanned aerial vehicles (UAVs) leads to the conclusion that the global community must finally pay adequate attention to this growing problem, in order to prevent a new type of arms race. Given the newness and many dimensions of this incipient problem, the Senior Advisor of the PIR Center argues that it would be advisable to set up a working group of government experts with the appropriate mandate under the auspices of the UN General Assembly First Committee to undertake a comprehensive examination of the situation.

COMMENTARY

The Truth about 'Suitcase Nukes' – Viktor Yesin – The numerous media articles about terrorist organizations and extremist movements in possession of "suitcase nukes" have seriously worried the public at large, once

again raising the question of the existence of compact nuclear weapons in Russia. On the basis of rich factual material, the First vice-president of the Academy for security, defense, law and order tells the history of the design, production, and subsequent complete destruction of this class of nuclear weapon in Russia.

Viktor Murogov and Nikolai Ponomarev-Stepnoi – Nuclear Technology: Guaranteeing Russia’s Steady Development – Russia’s long-term energy and national security interests, as well as its sustainable development, require an increase in the use of nuclear energy in the production of electricity, as well industrial and household heating. However, in the opinion of the Former Deputy General Director of the IAEA and the Vice-President of the Kurchatov Institute in Moscow, Russia’s lack of a clear nuclear energy strategy is causing the intergenerational continuity of specialists in this area to be lost, requiring the adoption of urgent national measures.

SURVEY

Central Asia: The Collective Efforts of States to Prevent the Threat of International Terrorism – Aibek Toktomushev – The development of cooperation among Central Asian states in the struggle against international terrorism is occurring in an atmosphere of regional political instability and an aggravated geopolitical game. The inconsistent and unpredictable foreign policy of the region’s young independent states, together with the disagreements between them, reduce the level of confidence and, in the opinion of security expert from Kyrgyzstan, slow the processes of integration in the sphere of security.

SNF Reprocessing in the Context of the Global Partnership Program – Dmitry Kovchegin – One of the main difficulties in the process of nuclear-powered subma-

rine dismantlement is the handling of irradiated nuclear fuel unloaded from nuclear submarines. The consultant to Booz, Allen and Hamilton considers the scale of the problem through the prism of the Global Partnership programs against the proliferation of WMD, and concludes that foreign financial assistance could significantly increase the safety and security of this process, including both its environmental aspects and the physical security of nuclear materials.

HISTORICAL PAGES

South Africa: How It Created Nuclear Weapons, and How and Why It Relinquished Them – Roland Timerbaev – The dismantlement of South Africa’s nuclear weapons is a truly unique occurrence in the history of nuclear nonproliferation. In the opinion of the PIR Center’s Executive Board Chairman, regardless of the motives that guided the RSA government when it decided to give up these weapons, this precedent clearly demonstrates that nuclear nonproliferation – given the proper political will – is attainable and can be realized with reliable international monitoring.

LIBRARY

From the Shadows into the Light... or Showing their True Colors – Vladimir Orlov – The editor-in-chief of the journal read the book *Engaging Eurasia’s Separatist States* by British expert Dov Lynch and now asks the question: should the conflicts in Transnistria, Nagorno-Karabakh, Abkhazia, and South Ossetia really be managed through a policy of increasing the “engagement” of these territories into global society, primarily through expanding economic contact with them? Or is there only one way to fight these “pirate republics” – excising the abscesses?

Summary

**Yaderny Kontrol (Nuclear Control)
Journal of the Center for Policy
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EDITORIAL

Time to Rethink the “War on Terrorism” – Despite individual successes, the “war on terror” cannot be seen as a successful strategy. Influenced by the tragic terrorist act in New York and in solidarity with the American people, the global community gave Washington *carte blanche*, believing in its strength and ability to make considered and objective decisions in the interests of all who suffer from the development and consequences of terrorism. This was true of Russia too, one of the first to decide to support the United States by taking the geopolitical risk of agreeing to the positioning of U.S. military bases in Central Asia.

Four years have passed, and it has become clear that the primitive understanding of sources and, most importantly, methods to fight the terrorist plague is not providing the necessary results. There is no doubt that the military component plays an important role, but in the end, the neutralization of this cruel and extremely dangerous phenomenon can only be done through a combination of ideological, socio-economic, and military methods. This is the only path that will lead to a decisive improvement in international security. After the well-known events of this July, London understood this very well. One of Tony Blair’s first meetings after the terrorist attacks was a meeting with members of an Islamic group active in the United Kingdom. The decision to extradite Abu Qatada, the popular cleric and vehement propagandist of Islamic extremism, home to Jordan was an eloquent confirmation of the ideological aspect of the problem. Further, the U.K. ambassador to Russia recently announced that London is ready to send Akhmed Zakayev to Moscow if provided with proof of his involvement in terrorism.

In Washington, too, they finally are beginning to understand. It is no coincidence that the slogan “war on terror,” so sweet to hawks’ ears, is quietly disappearing from the lexicon of U.S. political actors. Even

leaders in the Pentagon, who are drawn to military methods, have begun to admit that “there is a battle of ideas that will continue for a long time.” Currently, the focus of anti-terrorism is changing to fighting “violent extremism,” and is currently aimed first and foremost at Islamic extremists (although it is not limited to Islam).

Expenditures on the fight against terror and improving security are increasing throughout the globe. In 2006, Russia will spend a total of 10 billion rubles (2.2 billion in 2005) on these tasks. But even this in no way diminishes the need of undertake social policies and ideological work that would—together with efforts in the military sphere—help us to narrow the basis of support for terrorists on the part of certain parts of the Muslim community, first and foremost in the Northern Caucasus. The whole world needs to find effective ways to cut the ties between intransigent fighters and their ideologists, with whom negotiation is not possible, and the local population.

Russia will soon take up the presidency of the G8. Given recent positive developments in rethinking ways to fight terrorism, Russia, which has suffered so deeply from terrorism itself, could propose a renewed program (agreed to by others) to overcome terrorism.

INTERVIEW

Konstantin Kosachev: “Russian Foreign Policy Priorities” – What are the priorities of Russia’s foreign policy, how Russia’s policy in the Former Soviet Union should be formed, which factors shape the US-Russian agenda? Konstantin Kosachev, the Chairman of the Committee on Foreign Affairs of the Russian State Duma answers these and some other questions of the journal’s editor-in-chief Vladimir Orlov.

Viktor Mourogov: “Russia Is “Doomed” To Develop Nuclear Power Industry” – Former Deputy Director General of the IAEA Viktor Murogov in his interview to the journal’s correspondent Nadezhda Logutova discusses future prospects for development of the nuclear power industry in the world as a stabilizing factor of energy-related, social and political progress, and the role of Russian technologies in this process. According to the well-known Russian expert, today Russia faces an urgent need to

develop and implement technological innovations, which would ensure long-term and large-scale development of the country's nuclear power industry.

ANALYSIS

The Right To Withdraw From The Nuclear Non-Proliferation Treaty: The Views of Two NPT Negotiators – George Bunn, Roland Timerbaev – Why a provision limiting the right to withdraw from the NPT has been included in the text of the Treaty? What powers does the withdrawal clause vest in the NPT member states and in the UN Security Council in order to solve the problem of opting out of the Treaty by DPRK or Iran, or any other member state? These and other questions are considered in the joint work by two “co-authors” of the Treaty, Ambassador Roland Timerbaev, Chairman of the PIR Center Executive Board and George Bunn, Consulting Professor, Stanford University.

On The Role of Nuclear Weapons in Providing for Russian Security in the 21st Century – Aleksandr Saveliev – Current lack of large-scale and credible threats to Russia's security does not liberate the country's leadership from its responsibility “to remember about war”, including the development and improvement of operational plans for nuclear forces, which may be used in case if such threats will arise. Considering options of the country's leadership in a crisis situation, linked to a possibility of the nuclear weapons use, which is envisaged in officially approved regulations, strategies, and doctrines, Aleksandr Saveliev, Head of Strategic Studies Department, Center of International Security, IMEMO, Russian Academy of Sciences, and professor of the World Politics Department at the Moscow State University, proposes a number of different measures, aimed at prevention of escalation of such a crisis into a more serious conflict.

The Prospects of US Nuclear Policy After the George W. Bush Administration – Nikolay Sokov – The evolution of US nuclear policy continues drawing close attention all across the globe. According to the opinion of the author, a senior research associate of the Center for Nonproliferation Studies at Monterey Institute of International Studies, in fact, the practical steps taken in the recent years are very modest (at least compared to budgetary

requests), and even they meet stiff resistance in the US Congress and opposition of political and expert elites. Therefore, one can say that the world community reacts not to real steps, but rather to its own expectations related to the future direction of the US policy.

Proliferation Security Initiative: Looking from Russia – Marat Berdyev, Maria Prokhorova – Based on detailed analysis of various aspects of the PSI – the US President's initiative in interception and searching shipments, suspected in transporting materials that can be used for WMD production, the Diplomatic Academy trainee and expert of the Institute for US and Canadian Studies assess conformity of the initiative with the international law. The authors consider the reasons of Russia's accession to the initiative and possible consequences of this action for Russia.

Information Security and Globalization – Aleksandr Fedorov – The transition to the “information society” leads not only to economic growth, creation of global industries and strengthening the countermeasures against “new challenges”, but also to enhancement of opportunities for using the methods of economic and military information confrontation, and information warfare means in economic and political spheres. Aleksandr Fedorov, an expert of the Russian Foreign Intelligence Service, analyses the issues related to ensuring global security through the perspective of solving the problem of international information security.

VIEWPOINT

The Threat of Bioterrorism: Role of Mass Media – Aleksandr Rabodzey – Information on bioterrorism is based on a small number of facts and it is significantly polarized due to the interests of various groups. As a consequence, many materials on the threat of bioterrorism reflect a preconceived point of view and distort facts for the reasons mentioned above. According to Aleksandr Rabodzey, an expert of the Center for Security Studies at the Massachusetts Institute of Technology, the threat of bioterrorism, nurtured by distorted information, is becoming ever more realistic due to agitation created around it and due to its predicted consequences for the society.

COMMENTARY

The NPT Review Conference: in Search of Consensus – William Potter – The NPT Review Conference, which took place in May 2005 in New York has ended in failure, being unable to adopt a final document. However, even despite the pessimistic forecasts of the results of the Conference, which had been made on the eve of its opening, the author of this article, director of the US-based Center for Nonproliferation Studies was surprised by the extent of tensions inside many major political groups and by the energy displayed by one of the member states in blocking almost any attempt to reach consensus both on procedural and on substantive issues.

Results of the NPT Review Conference and Pakistan's Nuclear Policy – Masood Khan – Pakistan is not a member of the NPT and it has not been represented at the NPT Review Conference. However the failure of the Conference requires the expert community to go back to the genesis and *raison d'être* of Pakistan's nuclear program, Islamabad's official vision of contemporary South Asia, its security architecture and of the future of the international non-proliferation regime. A commentary on Pakistan's nuclear policy by Ambassador Masood Khan, Permanent Representative of Pakistan to the United Nations at Geneva gives a lot of food for thought in this regard.

SURVEY

Civilian Control over the Armed Forces in Russia: History and Future Prospects – Yuri Nazarkin – Presence of civilian control over military activities of a state is not only a necessary component of a democratic state, but also an essential precondition for increasing its efficiency and combat effectiveness of its military. A well-known Russian diplomat, former arms control negotiator, Ambassador Yuri Nazarkin reflects on the existing principles of control over the armed forces in contemporary Russia.

"Second Line of Defense" Results of International Cooperation in the Zone of Operations of Astrakhan Customs – Katya Shadrina – An important role in strengthening controls over shipments of nuclear and radioactive materials through Russian borders is played by an international program entitled "Second Line of Defense". Katya Shadrina, an expert of the Geneva Centre for Security Policy, also working at

the Geneva Center for Security Policy, examines the mechanisms, which are aimed at countering the threat of illicit trans-border trafficking in sensitive materials with specific reference to implementation of the program at Astrakhan Customs.

HISTORICAL PAGES

Deideologized diplomacy: an Experience of US-Soviet Strategic Arms Limitation and Arms Reduction Talks – Aleksey Obukhov – During the Cold War there was a sphere of diplomacy, which practiced deideologization and pragmatism long before the revelations of Perestroika. They were done without much fuss and publicity, both due to conditions that existed at that time and also because there was no other alternative way. One of the participants of those events, Ambassador Aleksey Obukhov, former arms control negotiator and a deputy foreign minister of Russia, remembers nuclear arms negotiations between the USSR and the United States, which were kind of a testing ground for deideologized diplomacy.

Pioneer of Russian Aeronautics – Mikhail Pavlushenko – On the basis of archived documents and discussions with children and grandchildren of "the key character of the story", Mikhail Pavlushenko, professor of the Operational Art Department at Peter the Great Academy of Strategic Missile Forces, gives an account of the life of a founding father of Russian aviation and aeronautics Aleksandr Kovanko. His biography is nothing else but the history of Russian aeronautics.

LIBRARY

The Smell of Fear, the Smell of Dust – Vladimir Orlov – A review of Asne Seierstad's books dedicated to the two central events of the last five years in world politics: defeat of the Taliban regime in Afghanistan and American invasion of Iraq. The books by this author do not offer a profound political analysis of origins and consequences; a clash of geopolitical interests is not visible there either. *A Baghdad Journal* and *The Bookseller of Kabul* by the Norwegian journalist consider *democratization* of Afghanistan and Iraq through voices, faces, and thoughts of ordinary people, the "little guys", *overwhelmed* by war.