

The role of Russian tactical nuclear weapons and the problems of their control

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1. The role and state of tactical nuclear weapons

Traditional division of nuclear weapons into strategic and non-strategic has its origins in initial phases of nuclear arms control negotiations between the Soviet Union and the U.S.. The major threat to U.S. territory was posed mainly by the Soviet rocket ground forces with range considered to be at least 5 500 kilometers, as well as by submarine-launched ballistic missiles or heavy bombers. Soviet Union has accepted this division, regardless the fact that the threat posed to it by the U.S. tactical nuclear weapons deployed in Europe and other bordering regions was virtually the same as caused by the strategic weapons. In modern Russia, a similar attitude towards the tactical nuclear weapons (TNW) not only persists but has intensified. While in the past – when the general forces of the members of the Warsaw Pact were overwhelmingly superior – this kind of weapons at disposal of the U.S., Great Britain or France might have been considered as a mean of containment, then with the superiority belonging to NATO, it can no longer be seen in such a way.

According to the experts’ assessments at the end of 1980s Russia had up to 22 000 warheads. In line with the 1991-1992 unilateral Presidential Initiatives (PNIs) of the Soviet Union and Russia – adopted as a response to the steps taken by the U.S. after the fall of the Warsaw Pact and the Soviet Union – several radical measures were implemented. Russia was to relocate all TNW assigned for ground forces to the storage areas of industrial sites manufacturing nuclear warheads and to centralized storage facilities and subsequently destroy them, eliminate 30% of TNW assigned for the navy and 50% of warheads of the surface-to-air missiles as well as 50% of the air force’s TNW. It was also proposed to – simultaneously with the U.S. – relocate all TNW assigned for the air force to centralized storage facilities, but this proposal did not found support in Washington (since such a move would affect overseas bases of the air forces equipped with TNW, serving as a symbol of nuclear guarantees for the allies).

At the present time, most of experts’ assessments recognize that Russia possesses approximately 2000 TNW warheads. This amount includes about 500 tactical nuclear air-launched missiles and aerial bombs for 120 medium Tu-22M bombers and 400 front-line Su-24 bombers. Apart from that, there is about 300 tactical nuclear air-launched missiles, gravity bombs as well as depth bombs for navy air forces including 180 aircrafts Tu-22M, Su-24, B-12 and Il-38. Over 500 TNW warheads include anti-ship, anti-submarine and anti-aircraft as well as depth-bombs and torpedoes for vessels and submarines, including up to 400 nuclear long-range SLCM for the multipurpose submarines. Approximately 100 nuclear warheads are assigned to the interceptors of the Moscow anti-missile systems A-135 and another 600 – for the surface-to-air missiles C-300.

In comparison, according to the experts' assessments, at the beginning of 90s. U.S. possessed more than 11 500 tactical charges (over 7 000 warheads located in Europe, 1 000 in Asia, 2 500 assigned to the navy and 200-300 on American territory as part of missile-defense). Additional 4 000 nuclear means were kept in strategic and tactical reserve. According to the PNI, from 1991 the Americans have withdrawn all tactical nuclear warheads of ground forces, removed all TNW from vessels and multipurpose submarines (apart from the long-range SLCM), and destroyed 50% of them.

Currently, according to the unofficial estimates, United States possesses approximately 500 TNW warheads. This amount consists of 100 SLCM 'Tomahawk' for the multipurpose submarines assigned to the naval bases Kings bay and Bangor on the U.S. territory. Another 190 warheads for SLCM (W80-0) are kept in storage. Additionally there are 400 gravity bombs (B-61-3 and B-61-4), of which about 200 are deployed on the six air force storage facilities in territories of five NATO members (Belgium, Germany, Italy, Nederland and Turkey). These bombs are to be delivered by the U.S. air forces' fighter-bombers F-16, as well as the Belgian and British air carrier of the same type and the German-Italian assault tactical aircraft 'Tornado'.

According to the new U.S. Nuclear Posture Review, all nuclear SLCM Tomahawk are to be destroyed, but aerial bombs B-61 are to be submitted to the program of life-extension, improvement of safeguards and prevention of an unauthorized use. They are seen in the context of nuclear guarantees for the allies and so their future deployment in Europe will be the subject of the inter-alliance consultations.

There is no reliable data on nuclear warheads at the centralized storage facilities on the U.S. territory. It is known, that these warheads are located at more than ten warehouses within air forces and naval bases, at the centralized storage facilities and at the storage areas of the Pantex plant (Amarillo, Texas). They are divided on various reserve categories – part of them might be immediately returned into combat forces, and the other part is designed to provide spare parts. The third part include warheads waiting to be disassembled and stripped of the nuclear materials scheduled for a long-term storage or utilization both in peaceful and military aims (assembly of the new warheads).

As reported by the independent experts about 2000-3500 warheads in reserve are stored on the U.S. territory and approximately 4200 are designated for utilization. This number increases as a result of the strategic nuclear weapons (SNW) reductions in line with new START treaty, according to which the major part of reductions will be implemented through separation of warheads from MIRV-ed missiles, which subsequently will be transferred to the storage facilities.

France possesses 60 aircrafts 'Mirage 2000H' and 24 carrier-based fighter-bombers capable of delivering to the targets the total of approximately 60 air-to-surface missiles ASMP. These means could be classified as TNW but France considers them as a part of its strategic forces. The other nuclear states keep information about their non-strategic nuclear means in secret. According to experts' estimates, China possesses about 100-200 these weapons, Israel – 90-120, Pakistan – approximately 90, India – about 80, DPRK – 6-10. These include ballistic and cruise missiles of medium and long range, as well as aerial bombs for air forces. For some of the listed states, these kind of means constitute the whole nuclear potential or its prevailing part, and are considered by them as strategic means of nuclear deterrence.

The TNW's role of ensuring security for Russia and other countries, as well as these weapons current condition, should be taken into consideration, above all, in order to resolve the problem of their control and reduction.

2. The problems of control

In the course of negotiations on the new START treaty U.S. Senate insisted on the inclusion of TNW into the frames of the reductions. However, for the objective reasons this was unacceptable. Senate resolution to the ratification directly demands addressing this issue in the further negotiations.

The West sees the foundation for such an approach shared in Russia's substantial advantage over the U.S. and NATO in the field of TNW, which in the course of SNW reductions will become even more significant. In the fact that during the arm conflict these weapons are deployed together with the general purpose forces and may be involved in the conflict, that means of TNW are allegedly less secured from the threat of theft as they have smaller weight and size characteristics and less effective locking mechanisms thus constitute tempting object for the terrorist groups.

Russia's stance for about 20 years is based on the demand to withdraw the U.S. nuclear weapons from Europe to its national territory as a precondition for any talks on this issue.

The objective reasons causing problems for the control of TNW lay, above all, in the fact that in contrast to SNW, control of which according to all agreements is performed by counting the delivery means and warheads assigned to them, TNW's means of delivery are dual purpose (air forces, artillery systems, surface vessels, multi-purposes submarines, missiles, missile defense and air defense systems).

The number of bases, where TNW may be deployed, is ten times higher than the number of SNW bases, thus the tasks of inspecting them is infeasible.

In the time of peace, by precedent of the last START treaty, TNW warheads are considered nondeployed and are located at the storage facilities together with SNW warheads. There is no experience in inspecting storage facilities and no decision on this issue is expected.

In the end, contractual relationships are generally based on the principle of equality of forces, what is not acceptable for Russia, given its geostrategic location.

3. Potential solutions

It seems, that in the foreseeable future the issue of limitation and reduction of Russian and U.S. TNW may be addressed in the phased approach. There may be four of these phases.

In the first phase parties could exchange data on these non-strategic nuclear weapons, which were destroyed in accordance to the initiatives of early 90., including information about their assignment and number of nuclear warheads.

In the second phase – introducing consultations and agreeing on unilateral initiatives with no verification procedures.

The third phase – continuation of the consultations as well as execution of the agreed initiatives with partial verification.

The fourth phase – negotiations of a draft agreement on limitation and reduction of TNW, which should include full-scaled verification mechanism, without which any agreement makes no sense.

The first phase needs no explanations. In the second phase Russia and the U.S., proceeding on the basis of agreed or unilateral actions, could successively exchange data. At the beginning, on the general number of TNW warheads, subsequently on the localizations of storage facilities, then on the number of

warheads and their classification, and on the number of the warheads in the active reserve and these waiting to be utilized.

In the third phase, the initial step could include confirming that the whole tactical nuclear means are located at the centralized storage facilities, which is possible to be verified, given the fact that location of other types of bases is known and they should be empty. Certifying the non-strategic charges' location at the centralized storage facilities would once again confirm their maximum protection from the threat of being captured by terrorist groups. It is possible to achieve an agreement on the short-notice inspections (similar to these, permitted under the START, concerning bases for ICBM, SLBM and heavy bombers) of air force and naval bases on the Russian territory as well as on the territory of the U.S. (and possible on the territories of its allies as well). Such an agreement could prove to be much more difficult to accept for the U.S., than for Russia, and require from it more ambitious actions.

In order to secure transparency of the nuclear warheads utilization process, verification mechanism could be developed on the basis of technological preliminary work, which was accomplished in the middle of 90. by American and Russian experts.

This work has been terminated in 1999, when the NATO military campaign in Yugoslavia started. Nowadays it should be resumed, with the use the possibilities presented by the 123 Agreement on cooperation in the sphere of peaceful use of atomic energy, which has entered into force in January 2011.

The institutionalization of the cooperation between Russia and the U.S. in this sphere theoretically may enable them to overcome one of the main obstacles on the road to achieving verifiable agreements on TNW reduction – the lack of verification mechanism of nuclear warheads utilization process. Such a verification mechanism could be worked out through joint efforts of American and Russian national nuclear laboratories, what was previously unfeasible because of the lack of a juridical basis for their cooperation.

In theory, the fourth phase could entail the beginning of a full-fledged negotiations on limitations and reduction of TNW, based on the draft agreement prepared by parties. Features and details of this phase will, to a high degree, depend on results achieved in the first two phases. For this reason it's rather difficult to describe them. One can only conclude that in order to verify agreed level of TNW warheads, it's necessary to inspect their storage locations. At the same time achieving an agreement on equal levels of TNW between Russia and the U.S., as it was earlier described, seems to be unrealistic due to geostrategic locations of the two countries.

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