

About Strategic Nuclear Missiles and Other Weapons in Ukraine.

1. In the USSR, up until 1991, the production of most of land-based strategic missiles that carry nuclear weapons, which are still in service in the Rocket Forces of the Russian Federation and Ukraine, was based in Ukraine at one of the biggest in the world specialized missile center in Dnepropetrovsk, which encompassed the design bureaus “Uzhnoe” [Southern], the Southern machine-building plant and the Pavlograd mechanical plant (total of 55 thousand workers).

This research and production facility carried out work on the entire [production] cycle: from developing the concept, pre-blueprint, blueprint and design development, to production of the missile and to warranty services and post-warranty support.

Along with that, they monitored the work in organizations and enterprises participating in development and production of the elements of the missile system as a whole. There were about 500 such organizations and enterprises on average, which were engaged in the production of a missile system; of those 15-20% were located in the territory of Ukraine and the rest mainly in Russia.

The possibility of developing the infrastructure for the production of a strategic missile capable of carrying nuclear weapons completely within Ukraine is determined by the ability of the republic to build new production facilities to manufacture elements of a missile system. In conditions of an intense mobilization of a state, for example such as Germany, with its relatively favorable state of the economy, it would be theoretically possible in 4-5 years. An independent manufacturing by Ukraine of a missile, which could be deployed into the existing in the republic silo launchers in its current economic situation would require no less than 10-15 years and 2-3 billion dollars. One has to emphasize again—we are only talking about the missile itself.

2. The nuclear components of the missiles and other weapons remaining in the territory of Ukraine are in precarious conditions.

The length of service of nuclear warheads is determined by two basic natural processes: the decay of plutonium 239, its partial transformation into americium 243 (in the process of transformation into a stable isotope 244) and the half-life decay of tritium (half-life of 12.5 years).

Americium is a strongly radioactive element, which complicates the service personnel's work with the warhead. For this reason after a certain period of time, the warhead is sent to be disassembled to separate americium from plutonium. If this procedure is not done in a timely manner, then after 12-15 years (from the moment when the warhead was manufactured) any work with the warhead would present a difficult technological problem because of the strong radioactivity of the warhead—since the work with the warheads cannot be done in a completely automated fashion (unmanned).

Tritium (the radioactive isotope of hydrogen) serves as a catalyst of the firing process during the explosion of the warhead. Due to its half-life term, it has to be replaced in 12 years. When the warhead is filled with an excess amount of tritium, (as it is done with the American warheads), some extension of the service term is possible, but not more than to 15 years.

Therefore, the general permitted lifespan of our nuclear warheads is 12 years. When they remain in operation beyond the identified term of service, they become especially dangerous for the environment.

Ukraine does not have specialized facilities, including the material and technological base, for the processing and production of nuclear warheads. Ukraine cannot create such conditions independently. In accordance with the non-proliferation of nuclear technology regime nobody has the right to provide Ukraine this kind of assistance.

The nuclear warheads still remaining in Ukraine were manufactured no less than 5-8 years ago, and some of those are now very close to the critical line in terms of their length of service.

The absence of a clear understanding of the operation of the nuclear warheads on the part of the Ukrainian political leadership puts Ukraine in a difficult situation. They waste time trying to play political games with nuclear warheads (with the purpose to blackmail both the American and the Russian sides economically). The Russian politicians, who accepted these rules of the game, in essence create certain points of focused attention, thus encouraging Ukraine to squeeze financial resources out of Russia and contributing to the dangerous delays in the resolution of the question about the transfer of the charges to the Russian reprocessing plants.

One can get the full picture of the situation with nuclear charges in Ukraine by analyzing the register of nuclear charges that still remain there.

The Defense Ministry has such a register.

3. The republic [of Ukraine], which has always been under the military-technological and military-political “umbrella” of the Soviet Union, does not have its own mechanism of “command-technology-combat.” Without the creation and long-term development of such a mechanism, the Ukrainian army is mostly only capable of dealing with the economic questions of its own organization.

To create a defense industry, which is the second element and fundamental part of this kind of mechanism, one must have a well-established and deep scientific-technological non-departmental basis for focused work and mobilization of this potential of the country. Ukraine does not have the serious political conditions and powerful driving momentum that the USSR gained during World War II. The republic also does not yet have cadres capable of solving this problem within a short timeframe.

4. During the preparation of the Treaty on Conventional Armed Forces in Europe the states bordering the Soviet Union in Europe, the flanking countries (Turkey, Finland, Norway), strongly objected to moving weapons into regions bordering these countries. Therefore, a large number of weapons were concentrated in the middle of the European part of the country, in Ukraine and Belarus.

The fate of these weapons is totally dependent on the supply of component and spare parts that are mostly produced by Russian companies. Without these parts, the weapons will become unusable in the next 5-10 years.

Conclusion.

We have to keep Ukraine within the framework of joint geopolitical interests, including in questions of military-technical cooperation.

It would be advisable to stop asking Ukraine to transfer the nuclear warheads to Russia: after some time Ukraine itself will be asking us to do this, and it will have to pay for this transfer.

Prepare and present to Ukraine at the highest political level a registry of the nuclear warheads in its possession, identifying the final deadline by which Russia would be willing to accept each warhead. Also indicate that failure to transfer the warheads by the specified deadline would make Russia unable to accept the warheads for processing, so Ukraine would have to deal with them on its own, which it will be unable to do.

Conduct purposeful explanations to Ukraine's political leaders of the dangerous environmental impact that may occur if the nuclear warheads are not transferred to Russia within the specified deadlines.

Review the policy issues of supplying components and spare parts for the military equipment that remains on Ukraine's territory.

[Signed]

September 16, 1994

Vitaly Leonidovich Kataev

General Director of the "Business Center of the Military-Industrial Complex"

[Source: Vitaly Kataev Collection, Hoover Institution Archive Box 13, Folder 26. Translated by Svetlana Savranskaya and Anna Melyakova for the National Security Archive.]