

CHAPTER 4

MILITARY AND POLITICAL ASSESSMENT OF THE CONSEQUENCES OF WEAPONS DEPLOYMENT IN OUTER SPACE

Vladimir Kamenskiy

I would like to share a few views on the possible military policy implications of the deployment of weapons in outer space.

From the very beginning of man's conquest of outer space, military interests have constituted a decisive factor in such efforts. In order to pursue these interests, both individual spacecraft and entire orbital systems have been developed and extensively operated. Space systems are being used on an increasing scale for military purposes. The concept of military activities in outer space has now taken shape in international practice, in other words, any activity connected to the direct conduct of operations for the specific investigation and use of outer space for military purposes.

The Russian Federation's position is that it is necessary to differentiate between two approaches to the military use of outer space. Space systems that have been created to perform information support tasks, without the intention of causing damage to other objects, are not regarded as threatening to international security. Indeed, military systems in space that, for example, play a role in warning of missile attacks, observation and intelligence, communications and navigation have an overall restraint and stabilization function, as we have repeatedly emphasized.

Space systems that were intended from the outset to strike various targets directly or disrupt their normal operation are another matter. Such systems must be classified as "space weapons", by which we mean "systems or devices based on any physical principles that are launched into Earth orbit or placed in outer space by any other means and which are designed or converted to destroy, damage or disrupt the normal functioning of

objects in outer space, as well as targets on the Earth's surface or in its atmosphere". Space weapons are designed to have a direct impact on an adversary's assets, and by their nature they can be either weapons of mass destruction or conventional weapons, including those based on new physical principles.

The Russian Federation has no plans to deploy weapons in outer space. Moreover, preventing the deployment of weapons in outer space is one of the priorities of the Russian Federation's activities in the area of arms control, as we have stated on more than one occasion in various fora, including the Conference on Disarmament.

The deployment of weapons in outer space, possibly transforming it into another battlefield, can in our view lead to serious adverse consequences in the field of military policy. What are our fears based on?

First, at the technical level, space weapons will be based on exceedingly complex systems. In such systems the likelihood of technical malfunction is high and the consequences for mankind can be very serious; they will be particularly unpredictable where weapons of mass destruction are involved. All of mankind will be condemned to live within a kind of psychological "shell" when weapon systems deployed in outer space can be manipulated outside the control of those who placed them in space.

Moreover, a further risk of the deployment of weapons in outer space is the potential short period of time that would be available to make crucial decisions on their military use. Consequently, objectively solving the problems involved in the use of space-based weapons would require the creation of weapon systems where actions on use can be taken without human intervention. For most of their existence, such systems must also operate independently. In such cases there is a substantially greater risk that a situation will lose control following a malfunction or incorrect operation.

Second, a state possessing space weapons would have virtually unhindered capacity to knock out the space systems of an adversarial state, thereby inflicting irreparable damage. The development of a spacecraft and its launch into space demands considerable resources in terms of materials and time, and damage would not be confined to the military component of a space complex. Since the use of space assets involves both military and civilian participants in a highly integrated manner, as well as a large number

of states and international organizations in the case of specific space programmes such as space meteorology and navigation, damage to or disruption of such systems could have irreversible global implications. Such a development would provoke a natural reaction by any state to further protect its spacecraft, and it would be impossible to rule out the intention to carry out warning strikes against spacecraft by developing offensive space systems.

Third, when weapons that are capable of being used against ground and air targets are deployed in outer space, the normal operation of the infrastructure that has a direct bearing on a state's national security will be under direct threat of strikes from space, and this will also provoke the adoption of countermeasures. Countermeasures can be either symmetrical or asymmetrical.

Fourth, it must not be forgotten that space weapons, if developed, would require a series of tests involving the actual launch into Earth orbit of a satellite equipped with a weapon as well as targets against which the tests would be carried out. Naturally, a large quantity of fragments of both the armed spacecraft itself and the targets will remain in space following such tests. This will lead to increased technogenic pollution of outer space and will further exacerbate the already acute problem of "space debris".

Fifth, we must realize that the deployment of weapons in space would undoubtedly lead to the creation of a rather large number of orbital space systems. If these are low-orbit systems (400–1,500 kilometres), they can be composed of several dozen or even several hundred space objects. Thus, a significant number of space objects will be located in low orbit, in turn obstructing the use of this zone by others engaged in space activities. And up until now, this part of outer space has been widely used for Earth remote sensing functions.

Nor can there be a place for space weapons in geostationary orbit. The issue of saturation of geostationary orbit is under constant examination at the United Nations Committee on the Peaceful Uses of Outer Space. This orbit is a limited natural resource and accordingly should be used rationally and fairly for the benefit of all of mankind, with particular attention to the needs of developing countries.

Overall, the deployment of weapons in space would have a serious effect on the military–strategic balance, creating the illusion that a first strike could be made with impunity and multiplying the importance of the surprise factor many times over. Such weapons would therefore be destabilizing regardless of whether they were classified as offensive or defensive weapons.

There is no doubt that if space weapons were created, they would constitute a new type of strategic weapon. This is related to the fact that because of their specific characteristics, any state possessing such weapons would secure considerable strategic advantages. Essentially, it would monopolize access to outer space and the ability to make use of it.

We know from mankind’s historical experience that if one state obtains unilateral strategic advantages in any area of military activity, this inevitably leads other states to adopt countermeasures in order to ensure their national security.

In this way, the deployment of weapons of any type in outer space can lead to the most serious adverse consequences—aggravating the international situation by creating a climate of distrust and suspicion, and also undermining the entire existing structure of arms limitation agreements, especially as regards to strategic arms. The efforts the international community has made and is making in the field of disarmament would come to nothing. Ultimately, a new spiral in the arms race is possible not only in space but also on the Earth, including nuclear missiles, which would stimulate the process of proliferation of weapons of mass destruction and their means of delivery.

This would in practice signify a return to the Cold War era. The question arises: Is this what the world community wants? Certainly not.