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EXPANDING THE EXTERNAL RING OF RUSSIAN DEFENSE POLICY IN PRACTICE: 2015–2020

ABSTRACT

Since 2015, there has been a change in the security doctrine regarding the forms of use of the military potential of the Russian Federation's Armed Forces, while the use of political-military influence has been transformed. The main thesis of the article is based on the assumption that Russian foreign policy is directed by strategic objectives and achieved through a wide range of projects, including limiting all forms and methods of possible retaliatory action from the international community. One of the most important tasks in the defense effort is to expand the so-called *external defense ring*, the essential elements of which are coordinated political and economic undertakings (*strategic safeguarding* of Russian interests) and the development of the armed forces' combat potential (*military deterrence*). It should be noted that the priority forms of influence are political-diplomatic and economic instruments, only supported and supplemented by military potential. Within the framework of this military potential, the important elements of the projects are in a wide sense the practical implementation of the idea of non-contact war, the activities of special forces and information warfare.

Key words

Russian Federation, defense policy, security doctrine, Russian foreign policy, external defense ring

Introduction

Since the commencement of hostile action against Ukraine, much of the attention of analysts of Russian security policy has been focused on the issue of the hybridity of its actions and the building of military potential. This process is seen as one of force projection or the creation of A2/AD (*Anti-Access/Area Denial*) capabilities. Less attention was paid to the conceptual dimension of the transformation of Russian military doctrine and the strategic goals, focusing instead on an analysis of the implemented solutions and an assessment of the scale of increase in the combat potential of Russian armed forces. The authors' aim is to fill this research gap by presenting the conditions that led to the change in the security doctrine in terms of the forms of use of military potential after 2015. The research issue is an attempt to identify the determinants underlying the transformation of Russian thinking on conducting military operations and their use to ensure the security of the Russian Federation (the factors that determine this transformation and which forms of political-military influence are being used currently and in the near future to ensure its security). The starting thesis is the recognition that Russian security policy takes on the character of a "conglomerate" of undertakings aimed at achieving strategic interests in such a way as to minimize the possibility of retaliatory action by states under Russian influence and the international community. One of the most important tasks in conducting defense activities is to expand the so-called *external ring of defense*[1] which is being achieved through coordinated political and economic action and the development of the army's combat potential. This potential is defined as anti-access, but in practice refers to creating the ability to effectively attack a potential enemy in areas distant from the national borders and eliminating the possibility of offensive action being taken against Russia. Thus the research process includes both an analysis of the transformation of Russian military thought in

[1] This concept defines the boundary line of the area from which it is possible to provide cover, classified on the basis of Tien Shansky's assumptions on the strategic centers of the Federation. These are, above all, the most important economic centers and regions of where nuclear deterrent forces are stationed.

the last twenty years, the scope of the relationship between the results of Russian military research and the content of strategic documents relating to security, with the practical implementation of solutions aimed at improving the combat potential of Russian armed forces. This approach determined the choice of research methods, among which the most basic were the analysis of documents on the research achievements of Russian military strategists and factor analysis, with elements of historical analysis as well. These were used to determine both the factors causing the need for changes in security policy, and consequently leading to changes in the determinants shaping the transformations of military doctrine, and the thinking behind the use of the armed forces' potential.

The issue of assessing Russian military potential and its use in recent years, as already noted, has focused on the issue of the hybridity of forms of international influence, and more recently on the construction of anti-access capabilities. With regard to the first, it is dominated by the theses of Frank Hoffman (Hoffman, 2008). Among Polish researchers, the milieu around the *Center for Doctrine and Training* of the Ministry of Defense and the analytical centers dealing with military issues and the Commonwealth of Independent States should be mentioned. To a large extent, their work involves a presentation of the range of activities regarded as hybrid, showing distinguishing features, especially in relation to asymmetric operations and an asymmetric adversary. The conclusions they present are based on an analysis of actions in the Crimean Peninsula and the Donbass, while those in Syria were also analyzed, yet to a minimal extent. With regard to the second issue, anti-access capability, the leading research approach is the traditional perception of the A2/AD concept (according to the American school), the assessment of Russian combat potential in terms of the ability to conduct effective anti-access operations in a selected theater of warfare. The work of Banasik, who also analyzes the combat capabilities of NATO forces in relation to Russia's anti-access potential deployed on its western border, should be particularly noted here. On the other hand, in the European and Polish literature, researchers make limited reference to the issues raised by Russian military strategists in relation to the vision of a *new type of war*. This is usually a presentation of the original thinking of researchers working in groups and individually, without taking into account the impact of their conclusions on security policy. This study is an attempt to present the idea of expanding the so-called external ring of defense through the use of instruments of political influence and the expansion of military potential, especially the opportunities created by the introduction of precision-guided weapons into the equipment of the armed forces.

1. Strategic assumptions of the security policy of the Russian Federation

Changes in the provisions of the security strategy and defense doctrine of the Russian Federation are solely the result of the transformation of the security environment, changes in the specifics of threats and ways of combating them (Malendowski & Mickiewicz, 2018a, pp. 78–92, 161–174, 281–302). What remains unchanged, however, is the overall concept of defense which has been based on theoretical assumptions derived from the functioning of a land power by Veniamin Semyonov Tien Shansky, and experiences derived from the analysis of armed conflicts, especially World War II (Kasprzycki, 2018). Modified and adapted to modern times, Tien Shansky's position, especially the vision of building the power of the state and controlling and defending its territory, is the determinant of the formula for exercising power by the current political elite of Russia. The fundamental goal of security policy is the protection of the so-called *strategic centers* of state and the vassalization of the border zone (Mickiewicz, 2018b). This would be conducted in the manner defined by Halford Mackinder in his theory on the functioning of a continental power and its aspiration to control the *Inner (*or *Marginal*) *Crescent* (Mackinder, 1904, pp. 312–314). On the other hand, the experience of World War II and a realistic assessment of the security environment led to the replacement of the vassalization formula with the concept of anti-access operations aimed at expanding the so-called *external ring of defense* in relation to the western and northern frontiers of the state. This ring was defined based on the assessment of the operational capabilities of a potential opponent and the idea of the so-called *Fortresses* (Szubrycht, Rokiciński & Mickiewicz, 2021, pp. 113–140). These are deployed in regions where it is impossible to create a buffer zone as part of the process of vassalization, and its novelty in recent years is the recognition that it is necessary to subject economically strategic regions to strict protection by military means. For this reason and because of the change in the arrangement of strategic economic centers, the sea areas surrounding the territory of the Federation[2] are considered to be regions where it is necessary to locate *Fortresses*. The Kaliningrad and St. Petersburg

[2] Until 2015, the territories of western and central Russia from St. Petersburg to Novgorod, the region around Moscow, the territory of the Central Volga drainage basin, the Ural Mountains, and the regions around Lake Baikal were considered strategic. Nowadays, such a role is assigned to the Kaliningrad Oblast, the Crimean Peninsula, and the areas of location of major mining and mineral processing plants, especially the Yamal Peninsula, Irkutsk Oblast, Krasnoyarsk Krai and the Tuva Republic. On the other hand,

Fortresses (Baltic Sea), Sevastopol (Black and Azov Seas), the Murmansk Fortress with a system of bases located along the state border (Arctic Ocean) and bases located in Kamchatka play a vital role in the process of co-creating and expanding the *external ring of defense* in the formula of anti-access operations. It should be emphasized that the role of a *Fortress* was also assigned to a base in Syria (Tartu), and the goal is to establish one in Tunisia to ensure the expansion of the external ring of defense from the Black Sea to the Mediterranean, and at the same time to enable control of Mediterranean (and thus Eurasian) shipping lanes.

The method of deploying the *Fortresses* is derived from Tien Shansky's ideas, the Cold War experience and the strategic thinking of the "Cold War" period. Thus, it is not a new solution for Russian security strategy. What is new, however, is the idea not of defense, but of expanding the *external ring of defense* in these areas and possibly using the potential in the *Fortresses* for expansionist actions and competition on the global stage. The primary task is invariably to prevent a strategic situation in which an attack on Federation territory would be possible. The experience of the defeat suffered by the Soviet Union in the Cold War arms race means that strictly military solutions in the form of the expansion of military potential play an important role, but not the only one, and sometimes only a complementary one. To expand the zone of the *external ring of defense,* political, economic and military instruments are used, promoting the thesis that the latter are used (built and strengthened) only for the purpose of self-defense and to improve defense capabilities. The adopted concept, which is described as *integrated operations,* is largely consistent with the American concept of *Prompt Global Strike* and *Globally Integrated Operations.*

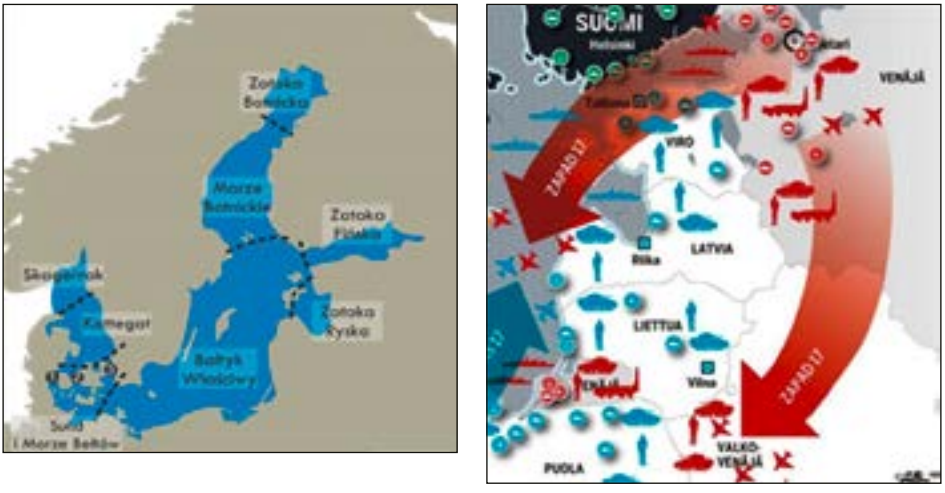
2. Boundaries of the external defense zone in the Northern and Western theaters of warfare

In the concept of expanding the *external defense zone,* the essential role is given to its course on the northern and western borders of the country. The maximum goal is to establish the zone in the area encompassing the Baltic Sea and the Scandinavian Peninsula, while the strategic objectives adopted for these areas are different. As far as the Baltic Sea is concerned, the objective of the actions is the possibility of blockading this body of water (Wieslander, 2016, p. 14). It is to be achieved in three variants. The first is a naval blockade of the central Baltic

the status of areas, defined by Tien Shansky as buffer areas, continued to be granted to territories located on the Baltic, Black and Okhotsk Seas.

Sea covering the area from the Gulf of Finland to the Gulf of Gdańsk including the island of Gotland. This is considered the minimum goal. The second option is the possibility of blocking the whole area of the Baltic proper up to the Sound. The optimal variant is the possibility of blockading the Skagerrak as well. In this concept, the primary instrument is the construction of anti-access capabilities and a demonstration of strength in the form of the ability to take actions described as *aggressive defense*.

Figure 1. The division of the Baltic Sea into areas and the plan of a Russian offensive according to the assumptions of the Zapad 2017 exercises



Sources: Portal Nasz Bałtyk; Klötzer and Launokari (2018)

In the event of a regional military action, it is to adopt the formula of a combined land and sea operation, in which the forces deployed in the St. Petersburg and Kaliningrad *Fortresses* and those deployed in the bases of the Western Military District will play an important role. The objective of the first stage of such an offensive will be to gain control of the southern (along the Baltic Coast and the East Baltic Lakes) and eastern borders of the Baltic Sea and to achieve dominance in the Baltic proper. From this perspective, an extremely important role is played by preserving the full neutrality of Finland and Sweden, which comes down to not allowing a strike on Russia from the territory of these countries (Koziej, 2017).

The concept of defending the Federation and its interests implies conducting a so-called *offensive defensive operation*. However, with regard to the western theater of warfare, it is treated as a last resort option and considered as a solution

to be used in a situation of growing political and military crisis. Russian thinking considers that a blockade of NATO forces from entry into the Baltic Sea would be the principal form of action in this theater. This goal would be achieved through two methods. The first is to demonstrate the possibility of blocking the straits at the entrance to the Baltic to force the abandonment of plans to send naval NATO reinforcement forces to the Baltic. The second method is to generate political pressure to ensure that the real actors in this area will not be NATO forces but rather those of the United States and possibly the United Kingdom. This is also to lead to a kind of isolation of NATO and the presentation of the US as the state conducting an aggressive policy forcing Russia to react, naturally in a defensive manner. In this concept, the neutrality status of the Scandinavian states again plays an important role, and its form is fundamental to the success of Baltic anti-access action. For this reason, the goal of Russian political influence is both to maintain the neutrality status of Finland and Sweden, treated as a minimum objective, to prevent them from entering into close cooperation with NATO, especially in the Baltic Sea; and, treated as an instrument to exert pressure rather than as an objective, to present the capability of taking control over part of the territories of these states. The forces of the 11th Army Corps deployed in the St. Petersburg *Fortress* and the 80th Independent Motorized Brigade stationed in Alakurtti (Northern Fleet Military District area) are expected to be capable of achieving this goal (it is a relatively strong tactical unit with the ability to conduct independent combat operations for a relatively long period). At the same time, together with other units of the 14th Army Corps, it is being prepared to protect the Federation's interests in the Arctic. Defined as a *strategic safeguard* of Russian interests, military activities assume control of the basins delimited by the Svalbard archipelago, Franz Josef Land, Novaya Zemlya and Wrangel Island, as well as gaining a dominant position in the waters of the Barents Sea between Franz Josef Land and Novaya Zemlya along with the Kola Peninsula (Mickiewicz, 2020, pp. 197–201). However, it should be emphasized that the basic form of shaping the *external border of defense* in the Arctic Ocean is its non-antagonistic expansion, which is part of the idea to control a part of this basin. The priority forms of influence are political-diplomatic and economic instruments, with military potential serving only as support. The adopted formula of the military component is the protection by the Northern Fleet of actions aimed at the unhindered conduct of economic activities by the Russian state in open waters and at counteracting the policies of other naval players. They are focused on the so-called *areas of special status and strategic importance* (Morskaya doktrina, 2015, pp. 2–10; Ukaz Prezidenta RF No. 683, 2015, pp. 3–5)

and concentrated on securing the state border of the Federation, seen in the context of efforts to expand the Economic Exclusion Zone, and ensuring the so-called *strategic stability* of the region (Ukaz Prezidenta RF No. 683, 2015; Ukaz Prezidenta RF No. 640, 2016). It should also be emphasized that the formally announced, but not actually implemented, decision to abandon efforts aimed at achieving regional strategic advantage has been made (Ukaz Prezidenta RF No. 465, 2015). The strategic stability policy is focused on ensuring the exploitation of offshore deposits on the continental shelf zone (Rasporyazheniye No. 1930-r, 2019) and maritime transportation, especially the export of liquefied gas and gas condensate (Strategiya, 2012). Thus, the most serious threat to the security of the Federation in the Arctic Ocean is considered to be the increase in US political-military involvement, especially the conduct of activities described as sea control and restrictions in the use of strategic shipping routes (Ukaz Prezidenta RF No. 208, 2017). The measures taken to limit this threat are focused on efforts to preserve the *strategic stability* of the region and to *secure* Russian strategic interests. The process of achieving the first goal involves the pursuit of a policy of strict compliance and enforcement against shipping in areas under federal jurisdiction and the correlation of these with non-Arctic economic partners (especially China, Japan and South Korea). On the other hand, as part of actions aimed at securing Russian *strategic* interests, it was decided to significantly increase the capabilities of the Northern Fleet and conduct military naval activity around the Svalbard archipelago, Franz Josef Land, Novaya Zemlya and Wrangel Island. The idea behind this can be described as *military deterrence* to be achieved by expanding the system of bases, forces and their equipment with armaments ensuring the protection of the northern *external ring of defense*. The most important points of this protection system are the bases located on Novaya Zemlya (Rogachevo), the Novosiberia Islands (Kotielnyy), the Northern Territory and Wrangel Island[3].

[3] Their location makes it possible to control both the continental shelf and the *Northern Sea Route*, and from the base on Wrangel Island it is possible to control shipping (the border with Alaska) and the Bering Strait. In turn, the bases located along the Siberian coastline also ensure control of the *Northern Sea Route,* but primarily limit the possibility of any hostile action against resource extraction complexes or incursions into federal territory. They provide a place for dislocation of forces intended to operate from bases located on archipelagos and islands in the Arctic Ocean. The most important role in this system is played by bases in Tiksi, Anadyr Ugolny and Pevek. However, bases located in Vorkuta, Alykeli, Nadym and Naryan Mar perform a strictly protective function for mineral extraction operations and provide support for control activities in sea areas.

3. The process of building the capacity to expand the *external ring of defense*

The forces ensuring the protection of the *external ring of defense* are constructed in a way that ensures the realization of three forms of military influence: strategic deterrence, display of force and the creation of various incidents below the threshold of crisis and war. In addition, these incidents are intended to create appropriate social pressure on the state authorities in order to force them to abandon anti-Russian activities. Therefore, an integral part of this defense system are the electronic warfare (EW) units designed to disrupt technical observation, traffic surveillance and communications systems, as well as special reconnaissance and special forces units designed to combat and conduct sabotage-diversionary activities. The way in which the components designed to protect and expand the *external zone of defense* are constructed is the result of two analytical approaches developed at the Russian General Staff and at academic centers. With some simplification, they concern assessment of the possibility of using precision-guided weapons and various forms of nonlinear interaction, including in media and cyber space.

The idea of massive Russian use of precision weaponry emerged in the 1990s and has been successively developed since then. The forerunners in this field were two generals: Vladimir Slipchenko and Ivan Kapitanets.

General Kapitanets was the first to introduce and popularize the concept of non-contact war into Russian military terminology. He believed that future conflicts would be fought over long distances using precision-guided weapons in network-centered battlefield conditions. The very concept of non-contact war was associated with a revolution in the military sphere, manifesting itself in the use of new technologies in armed struggle and new ways of conducting such a struggle with the use of long-range precision weapons, according to data from space-air reconnaissance, in real time, at distances of hundreds and thousands of kilometers in an automatic way without human intervention (Solkiewicz, 2009, pp. 71–72).

The analysis of Gen. Slipchenko's statements reveals that he defined precision-guided weapons in terms of a type of guided weapon with the probability of hitting a small target close to 100%, regardless of atmospheric conditions and the enemy's countermeasures, even at intercontinental distances. Generally speaking, this type of weapon is extremely technologically advanced, with a close combination of means of reconnaissance, direction and destruction. Precision weapons are on a par with nuclear weapons in terms of effectiveness. Their

primary advantage, however, is the fact which should be strongly emphasized that unlike nuclear weapons, they favor accuracy over the scale of destruction and do not cause an environmental disaster (Slipchenko, 2005, pp. 1–2).

Since nuclear weapons will remain in the armament of some states, others will be forced to expand their defensive capabilities against aggression of a nuclear nature. This, in turn, will not only lead to the exuberant development of offensive precision-guided weapons systems, but will also influence the expansion and improvement of defensive systems capable of repelling a nuclear attack without the need for a retaliatory nuclear strike.

Taking into account the above-mentioned factors, Russian military experts from progressive circles, inspired by Slipchenko's views, came to the conclusion that in the future expanded arsenals of precision-guided weapons will play a deterrent role. The first plans for their radical expansion have emerged. An analysis of the content of the Russian general's publications shows that at that time Slipchenko intensively promoted the thesis that in the future there would be a division between states which, thanks to their high economic and scientific-technological level, would have large reserves of precision weapons, and poorer countries which would be left behind in the general arms race and their only asset would be nuclear weapons. This could lead to radical changes in international relations and initiate an arms race. It should be noted that currently such an arms race can be observed in many regions of the world, confirming the correctness of the theses put forward by this avant-garde Russian general (Slipchenko, 2002, pp. 87–98).

The development of the idea of the comprehensive application of modern military technology was also made by other Russian military thinkers besides Slipchenko, such as Lt. Gen. Bogdanov and Col. Sergei Chekinov, who began to notice the rapid increase in the importance of new technologies on the battlefield, which translates in practice into the fact that, according to an analysis of their academic work, guarantors of victory are found in the advantages gained by access to information (the so-called "new generation wars"). If the core of warfare is to make precise, "surgical" strikes against sites of key importance for the enemy's defense, it requires planning and coordination at the highest level and often taking quick, yet accurate, decisions based on verified data, as dictated by the dynamics of the modern battlefield. Hence the need for unhindered access to information and the necessity of maintaining superiority over the enemy in this aspect. This is because on the modern battlefield information is the key factor that unites all operations, so its rapid, efficient and error-free delivery

can ensure victory in both defensive and offensive operations (Grabowski, 2010, p. 54; Macias, 2016).

Despite the death of Gen. Slipchenko in 2005, the views he promoted permanently inspired the Russian General Staff, especially the progressive circles which began to gain prominence from the end of the 2000s (this was greatly influenced by the Russian analysis of the combat efficiency and technical condition of the Armed Forces of the Russian Federation after the Russo-Georgian War of 2008). A prominent figure among the supporters of Slipchenko's opinions was Col. Vyacheslav Kruglov. In proving the theses of his predecessor, he argued that wars of the future will be post-nuclear in nature, and the decisive role will be played by precision weapons. Kruglov added that occupying enemy territory will lose its value, and occupation will be carried out only if its benefits exceed the incurred military and financial costs or if without this it is impossible to achieve the objectives of the war (Kruglov, 2000). However, even if the occupation of enemy territory takes place it will, as a rule, be limited only to the most important areas of key importance. An analysis of Kruglov's views shows that such operations in the future will be very rapid, but also short-lived with a time span from about 60 to about 180 days (Kruglov, 2000). Important factors include being in command and in control of the battlefield, and the appropriate multifaceted preparation for warfare which is to lead to the formation of such conditions and advantages where one of the parties (most often the aggressor) can effectively impose on the opponent its method of conducting the war. In addition, Kruglov notes that in future wars, their complexity will mean simultaneous use of all available means of combat, both military and non-military (Kruglov, 2000). From analyzing his statement, it can be concluded that he promoted a kind of hybridization of means and a formula for conducting armed struggle. Analyzing the views of the Russian progressive generalship presented above, it can be concluded that already in the first decade of this century, there emerged the idea of combining the concept of mass use of modern, precise weaponry with the concept of non-linear and asymmetric operations, which has been unfamiliar to Russian military thought for centuries due to Asian influences.

The greatest proponent of this concept was Yevgeny Messner (Kraj, 2012, pp. 33–35)[4]. In his discussion, Messner paid attention to blurring the differences

[4] Russian theoreticians have been considering the essence of the so-called *small war* since the early 19th century, although some of its elements were used in the Russian art of war much earlier, since the 16th century. Initially it was identified, after Denys Davydov, as a guerrilla war. In the 1920s the USSR conducted research on the development of this

between the state of war and the state of peace, and between regular and irregular actions. He argued that in future wars there will be a transformation of the forms and methods of conducting armed struggle, as a result of which irregular actions will gain primacy. He considered terror, sabotage, diversion as well as guerrilla and insurgent actions to be their components (Banasik, 2018, pp. 54–61; Kraj, 2012, pp. 33–39; Sykulski, 2015, pp. 103–112)[5].

Ideas of nonlinear operations have taken permanent root in Russian military thought and have been continuously developed. The transformation of the national security environment and the overall extremely rapid technological development have influenced their evolution, especially in the past two decades. In analyzing contemporary Russian military thought, the concepts propounded by the mentioned Russian officers Bogdanov and Chekinov should be considered as particularly relevant approaches to the field of non-linear operations.

These experts, in the course of a thorough analysis of contemporary armed conflicts and the forms and methods of military combat applied in them, took the assumption that future operations must be conducted within the framework of network-centered joint operations. They also confirmed the thesis about the increasing role of precision-guided weapons and robotic weapon systems, as well as weapon sets based on new physical principles. The new weapons being introduced should be characterized by greater firepower, range and accuracy.

theory, because after World War I it was seen as a convenient instrumentarium for action against capitalist states. It was developed among others by Mikhail Frunze and Mikhail Drobov, while Boris Shaposhnikov worked on asymmetric and partisan actions. During the Cold War the issues of small war were developed by Boris Holmston-Smyshovskiy, but it is Yevgeny Messner who is considered the actual creator of the Russian concept of asymmetric warfare. The proponents of this concept claimed that this type of activity, referred to as *small war,* could be conducted both in peacetime (in a subliminal manner) and in wartime, while the war itself is a combined complex of various undertakings, oriented towards inflicting the greatest possible losses on the enemy wherever possible. These actions were to be conducted in an active manner, characterized by constructive improvisation, by all possible means, while their form, depending on conditions and situation development –- could be transformed.

[5] In addition, he believed that the boundaries of the area of warfare will blur and it will be difficult to clearly define the warring parties. Illegal actions will be intertwined with legal ones. Lack of adherence to international law and war ethics by asymmetric forces will make it difficult for regular armies to conduct warfare, while unmarked paramilitary formations hiding their nationality will be in common use, allowing states to avoid official involvement in waging wars. The key element of such wars will be the instrumentarium of psychological influence, used to control the consciousness of the enemy society.

The growing importance of intelligence, real-time reconnaissance, broader communication capabilities already available at the tactical and individual soldier level, and direct-to-consumer elements of information warfare (e.g. *color revolutions*, and properly targeted/controlled use of *protest potential*) will create a new shape and character. They again took the theories of Messner as the starting point for defining the scope of actions, but recognized that the use of state-of-the-art technologies and appropriate methods leads to a weakening of the morale of the enemy and breaking the will to resist (Chekinov & Bogdanov, 2013, pp. 12–23).

It should be emphasized that the very concept of information warfare is not something new in Russia. It is basically a version of propaganda and psychological warfare used in the USSR modified and adapted to current needs. In its concept of information warfare, contemporary Russian military thought clearly refers to the psychological warfare conducted in the USSR's time and to the techniques of exerting influence and social control already tried and tested during its existence.

The Russians based their attempt to build an algorithm of aggressive information operation on the conclusions drawn from the coalition actions in Libya in 2011 (Golts, 2014)[6]. Analyzing the views of Russian experts in this field, Sergei Rastorguyev and Vasily Kariakin among others, it can be concluded that modern information warfare is fought primarily through social groups (Nazarov, 2013). The Russians believe that the success of sociotechnical influences in this case will be ensured by the possible placement of a sufficient number of agents of influence among the elites of the enemy state – ideally, in the spheres of power

[6] This algorithm envisages undertaking an information operation after the creation of a specific geopolitical situation, which is to lead to the exertion of political and military pressure on the leadership of the state subjected to hostile influence. Its goal should be to build a coalition against the attacked state and launch processes of its internal destabilization. Its scale should limit the actions taken by the authorities of the attacked state to restore public order. These should take the form of gradual, covert control of political, economic and cultural processes in the attacked state, leading to the occurrence of "controlled chaos" on its territory. The next step should be to create the possibility of taking military action against the legal government by an externally controlled revolutionary movement. It should demand military and economic assistance from outside on the basis of the UN Charter and the principles of international humanitarian aid. At the same time, reasons should be generated to justify intervention, which should be limited to supporting the activities of the opposition, preferably also under the guise of conducting humanitarian or stabilization operations aimed at protecting the population.

and mass media so that they can influence the formation of social attitudes and political views. Analyzing the source material available, it can be concluded that seizure of control should have the broadest possible dimension. Its primary purpose should be to control, for example, political parties, various social movements, non-governmental organizations and foundations, independent bloggers and, of course, the mass media, including the electronic media; then, once the means of political pressure have been formed at the appropriate level, strive to reform the "mental space" of the hostile state's society should be striven for in a way that is as favorable to the aggressor as possible (Karyakin, 2015).

Russia also continues to be active on the internet. One aspect of the information warfare conducted by the Russian Federation is an attempt to comprehensively shape generally pro-Russian views through online blogs, portals and news services[7]. The analysis of available sources allows us to build a general model of such activities, which presents itself in such a way that the desired information and comments are written according to a similar scheme; usually their content is extensive and they are highly rated by other users, which is expected to translate into visibility online (Orzechowski, 2016, p. 122). Opinions that stand in opposition to mandated content are poorly rated by subsequent contributors. Entries are, to a large extent, copies of previous ones posted on other portals, often at small intervals, even seconds. Russian hackers are also very active. Cyberspace is now the main arena of active struggle between the West and Russia. It is estimated that Russian hackers are constantly conducting reconnaissance activities and preparing the ground for attacks on sensitive elements of the civilian and military infrastructure of NATO and EU countries. In response, Western countries are using similar tactics. Russians are behind several dangerous attacks such as that on Estonia in 2007, on a Thyssen-Krupp factory in Germany in 2014 (may have caused fatalities) and the attack on the Norwegian parliament in 2020 (Darczewska, 2014, pp. 14–17; Lilly & Cheriavith, 2020).

According to Russian theorists, the primary goal of military action should be to nullify the capabilities of a potential adversary. This task, defined as *Anti-Access/ Area Denial* – A2/AD, has been to:

- prevent the adversary from entering the theater of operations (*Anti-Access*) with long-range means of destruction;

[7] It is now estimated that the Russian Internet Research Agency has employed at least 600 people who are unofficially involved in preparing information about conflicts and dissemination of this information combined with activity on social networks.

- depriving it of the freedom to act in that theater (*Area Denial*), by shorter-range means (Smura, 2017).

A wide range of missiles – Ballistic Missile System (BMS), Surface-to-Air Missile (SAM), Anti-Ship Ballistic Missile (ASBM), and Anti-Ship Cruise Missile (ASCM) – as well as submarines, mines, aviation, and drones are used to accomplish these tasks.

Figure 2. Russian A2/AD capabilities in Europe and the Middle East

Source: Avroveks (2020).

Key importance at the operational level is ascribed to operational-tactical missile launchers. The 9K720 Iskander (NATO: SS-26 Stone/Stone-C) operational-tactical missile complex, which is the core of Russian armaments in this system category, is designed to destroy with precision high-level command posts, communications and data transfer nodes, air- and missile-defense systems, missile systems at launch pads, aircraft at airfields, areas of military groupings and the enemy's critical infrastructure. The version of the system with 9M723 ballistic (aeroballistic) missiles is called Iskander-M, and with 9M728 winged missiles Iskander-K (officially, the latest variants of the former have the ability to fire both missiles). The missiles have a range of up to 500 km. Some launchers of

the Iskander system are also adapted to fire 9M729/SSC-8 cruise missiles, with a range of over 2,000 km ("Iskandery zastępują Toczki," 2019).

Since aviation has the greatest combat capability of all conventional armed forces, anti-aircraft systems play a key role in Russia's battlefield isolation strategy. First and foremost are the S-300 and S-400 family of surface-to-air (S-300P and S-300V series) and water-to-air (S-300 Fort) anti-aircraft systems. Both the S-300 and S-400 are mobile systems. The newest, fully operational (development dates back to 1993) system of the S-300 family is the S-400 system (formerly designated S-300PMU3, NATO: SA-21 Growler). The S-400 system was officially accepted into service in 1999 (S-400, 2019)[8]. The range of detection and tracking of air targets by the radar component is approximately 600 km, with the ability to simultaneously fight up to ten targets and guide up to twenty missiles. The S-400 system can use four types of surface-to-air missiles, all designed specifically for it (48N6E3, 40N6, 9M96E, 9M96E2), as well as the missiles (48N6E, 48N6E2) used by its older predecessor, the S-300PUM2 system (NATO: SA-20 Gargoyle B). The range of the most modern missiles is up to 400 km, such as the 40N6 missile with an active or semi-active radar warhead (S-400, 2019)[9].

The Russians attach great importance to the defense of their maritime border, which is more than 37,000 km long, and therefore great emphasis is placed on the development of medium- and long-range anti-ship systems. At present, the older systems are being replaced by the K-300P Bastion-P system (NATO: SS-C-5 Stooge), which entered the equipment of the Russian armed forces in 2010. It is a mobile coastal defense system whose main task is to combat surface ships, including Aircraft Carrier Strike Groups, approaching the coast. The Squadron Bastion Complex consists of four self-propelled launchers, two command vehicles, four K-342P ammunition-loading vehicles and one logistics support vehicle. All are built on variants of the Belarusian 8x8 MZKT-7930 high mobility chassis. Each self-propelled launcher is armed with two 3M55 (P-800) Onyx (NATO: SS-N-26 Strobile) supersonic missiles with an effective range of

[8] Each S-400 battery includes several core components, with most of them based on Belarusian-made BAZ chassis (S-400, 2019). Each squadron consists of: 8 TEL (Transporter-Erector-Launcher) launcher vehicles, a single launcher consists of a 6x6 BAZ-64022 tractor and a special 2-axle trailer containing missile containers; 4-8 ammunition-loading vehicles on Ural-532301 8x8 chassis; 91N6E (NATO: Big Bird) on a MZKT-7930 8x8 chassis; a three-coordinate (3D) phased array fire control radar 92N6E (NATO: Grave Stone) – also on a MZKT-7930 8x8 chassis; a 55K6E command vehicle on a Ural-532301 8x8 chassis and a battery crew welfare vehicle on an 8x8 MAZ-543M chassis.

[9] Currently, the Russians have about sixty S-300 and S-400 regiments.

about 300 km, which can travel at Mach 2.5. It is a dual-use system as it can also fire at land targets (Smura, 2016; SS-N-26 "Strobile", 2018).

In Russia's battlefield isolation strategy, submarines also play an important role as they can prevent or hinder NATO forces from operating in key waters. The A2/AD strategy places great emphasis on the use of conventional vessels that are smaller than ocean-going vessels but can operate in the coastal zone. The Project 636.3 Varshavianka (NATO: Improved Kilo) submarine is such a vessel, the third generation of Russian diesel-electric submarines. These vessels are considered to be among the quietest in the world. According to the Russians, they can reach a speed of 20 knots and are prepared for 45 days underwater (to a maximum depth of 300 meters). The crew consists of 52 (Ships, 2019; Smura, 2016). Submarines can attack enemy vessels, lay mines and conduct reconnaissance for the benefit of other components of the armed forces. These ships have the capability to strike land targets with Kalibr cruise missiles with a range of about 1,500 km, and there are currently eight of them in service ("Russian Navy 2021," 2021).

Complementing these measures is the use of aviation. Currently, the Russian Federation is intensively expanding and revitalizing air bases. In the A2/AD system, strategic aviation is important because it has the ability to attack targets in *stand-off* mode with a relatively large range and armament payload (Tu-95: range – 12,000 km, armament payload – 15,000 kg; Tu-160: range – 14,000 km, armament payload – 28,000 kg; Tu-22M: range – 2,400 km, armament payload – 24,000 kg). The bombers can fire on enemy land and naval forces with a variety of long-range armaments (cruise missiles, anti-ship missiles, hypersonic missiles etc.) while circling over the territory of the Russian Federation and under the protective umbrella of their own fighter aircraft and air defense systems (Tu-95, 2017; Tu-160, 2017; Tu-22M3, 2017).

The shielding of areas located in the A2/AD zone is handled by tactical aviation. The Russians operate several types of aircraft, but among the most modern and capable are the Su-35 multi-role fighter and the Su-34 tactical bomber[10]. The Su-35 is a developmental version of the Su-27[11] with modern electronic and optoelectronic equipment. The new N035 Irbis-E radar, equipped with a passive

[10] The Su-57, a stealth fighter of the fifth generation, is still in the testing phase. The first regular deliveries of this machine to military units (the target is 76 aircraft) are to begin in 2022.

[11] The Russians consider this aircraft so advanced that they describe it as a Generation 4++ machine.

phase-scanning antenna, is capable of tracking up to 30 air targets, fighting up to eight targets simultaneously or tracking up to four ground targets without interrupting airspace scanning. The cockpit is fully digitized and incorporates many modern design features. The aircraft navigation is entirely based on the Russian GLONASS system. Similar to the Su-27, the Su-35 aircraft has a 30 mm cannon as well as two armament nodes on the wingtips with the possibility of hanging R-73 rockets or radio-electronic warfare containers; however, it has more carrying capacity with twelve under-fuselage and under-wing nodes altogether with the possibility of hanging air-to-air and air-to-ground rockets, bombs or special containers. It can carry a wide range of armament with a total weight of 8000 kg. The maximum range of the aircraft is 4500 km (Su-35 Flanker-E, 2021).

The Su-34 tactical bomber is intended to replace the ageing Su-24. The Su-34 is designed primarily for precision strikes against important targets protected by particularly strong anti-aircraft defenses. The aircraft can also perform the tasks of close air support, reconnaissance and harassment of enemy forces. The Su-34 is equipped, among others, with a multifunctional radar station and a number of optoelectronic systems. The armament of the machine is a 30-mm onboard cannon; at twelve knots the aircraft can carry various sets of suspended armament with a total weight of up to 8,000 kg in various specialized hoppers. The maximum range of the Su-34 is 4000 km (Su-34 Fullback, 2021).

It is also worth noting the use of tactical A2/AD measures in the form of rocket artillery. The fighting in Donbass has shown that artillery is still an effective means of combat with as much as 85% of losses caused by massive precise artillery fire. A good reconnaissance system combined with new types of ammunition proved to be extremely effective. Particularly important was the development of rocket artillery as its effective fire forced the Ukrainian side to disperse its forces in order to minimize losses. Especially dangerous proved to be the 9A52 Smerch cal. 300 mm and 9P140 Uragan cal. 220 mm systems (Romero, 2018, p. 9)[12].

Naval mines are one of the oldest, but also undeniably, one of the most effective naval weapons. They play an important role in Russia's A2/AD strategy, first and foremost because of their low cost of use, the low cost of training needed to master the skills of deploying them, technological progress in the ability to set up minefields quickly and efficiently, and their still high effectiveness combined

[12] There is a famous case from the period of fighting in Donbass, when two Ukrainian mechanized infantry battalions were almost completely destroyed by massive and accurate surface fire of Russian rocket artillery.

with remaining active in an area for a long period of time. The Russian navy uses a wide range of different types of mines, e.g. contact, anchor, non-contact, bottom, homing, remote-firing, those that can fire a self-guided torpedo, and the completely new so-called "smart mines", microprocessor-controlled, which are difficult to detect and combat. Mines can be deployed by a variety of means including aircraft, helicopters, surface ships and submarines ("The Russian Navy," 2015, p. 37).

The above weapon systems are complemented by those for radio-electronic/electronic warfare. Particularly threatening here are the 1RL257 Krasukha-4 sets, which provide the ability to jam radiolocation signals (they can intercept and jam signals emitted by reconnaissance satellites, early warning aircraft, drones and ground stations) and have a range of 150 to 300 kilometers. Other Russian EW systems include 1L267 Moscow-1 and Borisoglebsk-2 (Smura, 2016).

All these systems can be effectively complemented and supported by unmanned systems (land, air and sea: underwater and surface). Unmanned Aerial Systems (UAVs) proved their high utility in Ukraine where they were successfully used for reconnaissance and guidance of artillery fire as part of so-called *combined targeting* (Gryga, 2020)[13]. Similar examples can be found by analyzing the recent (2020) conflict in Nagorno-Karabakh (Gressel, 2020). These systems are all rapidly evolving. In the near future, the presence on the battlefield of unmanned vehicles operating in other environments, thus UGVs, USVs, and UUVs[14] must also be expected.

Conclusions

Russia's strategy of building a so-called *external ring of defense* is now undoubtedly both a challenge and a threat to international security. At the turn of the 21st century, the Russians realized that they would not be able to defeat the West through technological competition in the field of military technology. Due to the weakness of the Russian economy, it was not possible to develop all types of weaponry equally. The primary focus was therefore to develop missile technology in the broad sense, in which the USSR and then Russia had made considerable

[13] Which means finding, locating, destroying, or overpowering enemy combat forces and assets through the synergistic use of EW systems, unmanned systems, special forces, artillery, and aviation.

[14] They will be able to perform a range of missions: reconnaissance, guidance, combat, mine clearance etc.

progress over the decades. This was influenced by the theories propounded by the progressive generalship, initially led by General Slipchenko. The Russians' careful use of Sergei Korolov's "heritage" (rocket technology) led to the development of a number of weapons (various land, sea, and air missiles) with considerable potential regarding their firepower, accuracy and range. This made it possible to offset the West's superiority, especially in areas of military aviation and naval forces. Combined with other RMA acquisitions (network-centrism, computerization, electronics, optoelectronics, etc.), this enabled the development of a strategy based on strategic-operational containment. This was complemented by the use of special forces and services and implementation of the idea of non-linear actions (small wars, exploiting the potential of protests) as well as subliminal ones, which proved to be an excellent multiplier of Russia's military potential. This is because information, IT and cybernetic influence is 1) difficult to detect and combat, and 2) often not easy to prove unequivocally. It has a high effectiveness in relation to the costs incurred, largely influenced by widespread computerization and digitization as well as the increasingly important phenomenon of media convergence. The same applies to the use of special services and forces due to their obvious specificity of operation. All these aspects were supplemented by spreading a well-thought-out political and economic influence, fully concentrated on areas of strategic importance for Russia, creating another kind of *A2/AD Fortress*, difficult to overcome for most potential adversaries.

The deployment of these *Fortresses* in strategically vital areas is to serve both the protection of the economic and geopolitical interests of the Russian Federation and to create a significant deterrence potential. By tying up and/or checkmating NATO and US forces, Russia seeks to remove as far as possible the threat from its borders, remembering the sad experience of World War II. This also enables it to gain control over raw material deposits and over shipping lanes on land and (particularly) on sea. It is no secret that the current shipping lanes are approaching maximum capacity; considering also the climate change, the possibility of controlling and using new lanes (e.g. the Northern Sea Route) would be very lucrative. Anti-access projection of power may also lead to blocking/obstructing the trade of Russia's opponents (causing decrease in their GDP) or to exerting political pressure on them (necessary to promote Russian interests).

It is important to answer the question about what *rings* the Russian Federation can in reality create? First of all, attention should be paid to the rapidly growing Russian power in the Arctic. The Russian Federation already enjoys an advantage over other states in this region. The creation of a new military district in this area (2020), the expansion of its bases and the deployment of new

units will undoubtedly allow Russia to build a well-fortified *defense-access ring* there, which may in future bind the considerable forces of Western states (and especially of the EU and NATO).

The *Fortresses* in Kaliningrad and Crimea are also strongly fortified and adequately saturated with units. However, for them to form a strong *ring of defense* on the western borders of the Russian Federation, the Russians would somehow have to take control of Belarus and Ukraine. Then a *ring of defense* based on Kaliningrad-Minsk-Kiev-Crimea would be a viable barrier. This would be an extremely strong anti-access barrier, which could also effectively separate NATO's Baltic states from the rest of the alliance and force the West to commit significant forces in response, which in turn would prevent their use elsewhere (e.g. in the Arctic). The currently visible pressure that the Russian Federation is exerting on Belarus and Ukraine allows a hypothesis to be posed that such an idea may be slowly implemented at present.

The situation in Syria is similar: since 2015 Russian intervention has been enabling the survival of the regime of President Bashar al-Assad. Connecting the ring with the Syrian stronghold would be extremely beneficial for Russia; however, this would require some form of Moscow-Ankara cooperation, and it should be remembered that Turkey is a NATO member.

These options, conventionally called Arctic and Eastern European, seem to be the most realistic. One important aspect of creating the discussed *Fortresses* should be remembered; they enable the Armed Forces of the Russian Federation to operate from a central position, under the protective umbrella of its own A2/AD systems, an additional multiplier of their deterrence potential and power projection capability.

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