

MULTI-DOMAIN BATTLE. NEW DOCTRINE OF THE UNITED STATES ARMED FORCES

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Abstract

This article describes the newest doctrine of the U.S. Armed Forces, i.e. the Multi-Domain Battle (MDB) concept. It constitutes a description of several operational principles related to a potential conflict with the People's Republic of China or the Russian Federation, such as the time and space for conducting military operations, the operating environment, the forces (base of operations), the target, the concentration of forces and the operational leeway. The article looks at the origins of the doctrine, the circumstances under which it was formed and people who contributed to its development. The authors also refer to historical U.S. doctrines, such as the AirLand Battle or AirSea Battle concepts. Along with the authors' enthusiastic approach to MDB, the article also features some critical opinions which imply that the U.S. Army is not ready for MDB operations. The research methods that were used by the authors included analysis, synthesis, comparison and generalisation. Much space is devoted to analysing the U.S. Army's official documents, including *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040, FM 3-0 Operations* and *TRADOC Multi-Domain Battle: Combined Arms for the 21st Century*. The authors believe that Multi-Domain Battle is about to become the official military doctrine of the U.S. Armed Forces. In spite of the criticism, transformations of individual combat teams in the MDB spirit should be expected in the upcoming years. This doctrine also provides a military response to the geo-political changes occurring in the world, manifested as the United State's limited role in certain regions, China's growing power and Russia's aggressive foreign policy. The conclusions formulated in the article may serve as the starting point for further studies dealing, *inter alia*, with the Polish Army's readiness for conducting military operations, based on the MDB doctrine, jointly with the U.S. Army, the Polish Anti-Access/Area Denial (A2AD) capabilities and the role of military technologies in the MDB doctrine.

The article makes use of the exact translation of the term, i.e. "Multi-Domain Battle." However, the reader should bear in mind that it describes capabilities not only at the tactical level but also in operational terms, enabling the accomplishment of the strategic objective.

Key words: multi-domain battle, operational principles, military doctrine, U.S. Armed Forces

Introduction

Military doctrines, the operational concepts of the country's armed forces and the operational principles constitute essential elements of the preparation and conduct of military operations. A process of gradually moving away from the doctrines and concepts that prepare the army to fight against terrorism, in favour of the concepts focused on confronting adversaries with huge military, technological and economic potential, has been observed in the U.S. Armed Forces in recent years. In 2011, Hillary Clinton, the U.S. Secretary of State, formulated *America's Pacific Century* vision, under which the American presence was to be shifted from the Middle East and Europe towards the Pacific. The idea was to direct America's attention to a region where maritime trade is centred and also to restrict China's growing power¹. In 2014, in response to the Ukrainian conflict, the United States imposed economic sanctions on Russia, and in 2017, the U.S. Army began to deploy its troops in Poland within the Operation Atlantic Resolve framework. In turn, Russia and China, with the aim of modernising their own armed forces, have recently expanded their Anti-Access/Area Denial (A2AD) capacities, comprising air and missile defence systems, submarines, ballistic missiles, etc². The purpose of this article is to outline changes which have occurred in the last few years in the American military doctrine, along with the emergence of a new operational doctrine, referred to as Multi-Domain Battle (MDB).

The article consists of an introductory section, three substantive sections and a concluding section. The first substantive section provides historic examples of operational doctrines employed by the U.S. Armed Forces, including the AirLand Battle (ALB) and AirSea Battle (ASB) concepts. However, the readers should bear in mind that actually, many more operational doctrines have come into existence over several dozen years, such as the Army After Next³ or the U.S. Army Operating Concept⁴. Owing to the drafting constraints, the authors decided to focus on ALB and ASB only. The second substantive section deals with the Multi-Domain Battle concept, the reasons behind its development, the relevant documents, as well as the introduction, vision and execution process. The third substantive section provides some critical opinions regarding MDB.

1 J. Bartosiak, *Pacyfik i Euroazja. O wojnie [The Pacific and Eurasia. About the war]*, published by Jacek Bartosiak, Warsaw 2016, p. 119.

2 K. Weinberger, *Russian Anti-Access and Area Denial*, Institute for the Study of War, Washington 2016.

3 J. Matsumura, et al., *The Army After Next: Exploring New Concepts and Technologies for the Light Battle Force*, RAND Corporation 1999.

4 *The U.S. Army Operating Concept. Win in a Complex World*, TRADOC Pamphlet 525-3-1, 31 October 2014.

Operational doctrines (concepts) of the United States Armed Forces

The notion of operational doctrines is not as wide as the notion of military or war doctrines. As stressed by Jacek Solarz in his book entitled *Doktryny militarne w XX wieku [20th-century military doctrines]*, a military doctrine can be interpreted as a way of preparing the country's defence in view of external threat, or the conduct of warfare operations by utilising the methods and resources available to a given country or a coalition of countries. In turn, a war doctrine refers to a set of views and ideas related to warfare preparation and conduct, perceived as a whole, taking into account such issues as the state's system, the political situation (both domestic and international), resources, economic potential, scientific and technological advancement, war-making experience and geographic location⁵. In contrast, operational doctrines are practically developed by specialised military bodies or think tanks. Then, following their approval by the chief commanders of armed forces, they are made into official strategic documents or field manuals, becoming binding doctrines. The American military nomenclature contains a definition of joint doctrine. In the publication released by the Strategic Studies Institute, entitled *The Land, Space, and Cyberspace Nexus: Evolution of the Oldest Military Operations in the Newest Military Domains*⁶, the joint doctrine was presented as a set of fundamental principles that guide the employment of U.S. military forces in coordinated action towards a common objective, which may include tactics, techniques and procedures. For the purpose of this article, the operational doctrine can also be defined as a set of views regarding the preparation of various types of armed forces for military confrontation with prospective adversaries in a given geographic area. Three concepts that have appeared in the U.S. Army within the last dozen or so years provide examples of operational doctrines, i.e. the AirLand Battle (ALB) concept, the AirSea Battle (ASB) concept and the Multi-Domain Battle (MDB) concept.

The AirLand Battle concept was developed at the turn of the 1970s/1980s in view of the potential confrontation of NATO forces with Warsaw Pact forces on the Central European plains. *The AirLand Battle and Corps 86, TRADOC Pamphlet 525-5*, drawn up in 1981, was the first document outlining ALB principles. In 1982, this doctrine was described in *Field Manual (FM) 100-5 Operations*. In 1976, i.e. before the emergence of the AirLand Battle concept, the Active Defense doctrine was formulated within the U.S. Armed Forces as one of the first proposals of changes to the military doctrine after the so-called Vietnam trauma. Based on the Israeli experience gathered during the Yom Kippur War in 1973, it envisaged "deepening" the fires area, attacking the opponent's army first and frustrating any further hostile

⁵ J. Solarz, *Doktryny militarne XX wieku [20th-century military doctrines]*, Avalon Publishing Press, Kraków 2009, pp. 13-14.

⁶ J.L. Caton, *The Land, Space, and Cyberspace Nexus: Evolution of the Oldest Military Operations in the Newest Military Domains*, US Army War College, Strategic Studies Institute, March 2018, p. 1.

attacks by means of cutting-edge weapons. The Battle of Quneitra, which was fought between the Israeli and Syrian armies during the Yom Kippur War in 1973, exemplified an offensive based on the Active Defense concept. On 6 October 1973, the Israeli 7th Brigade, equipped with 100 tanks, faced a fierce attack by the enemy's forces. Outnumbered by the adversary, it lost most of its military equipment in four days. Despite such severe losses, the 7th Brigade soldiers, using several tanks which had been repaired, organised a counter-attack on Syrian positions, forcing the Syrian Army to retreat. The heroic attitude of the Israeli soldiers contributed to strengthening the Israeli forces in the south and enabled the execution of two complex flanking manoeuvres by Gen. Lancet and Gen. Peled's divisions. This event was crucial to the whole Yom Kippur War at the Syrian border. It made the observers realise that actions that engaged land and air troops, aimed at delaying and shattering the enemy operations in the region, can actually prove really effective.

The ALB concept was described in *War and Anti-War*, a book by Alvin and Heidi Toffler⁷. According to the authors, based on the theory of three civilisation waves (corresponding to the agrarian, industrial and information evolutions), ALB is a step towards transforming the U.S. Armed Forces from a second-wave institution (i.e. large-scale, bureaucratic and hierarchical) into a third-wave institution (flexible, network-based and characterised with new technologies). This doctrine envisaged the conduct of "deep battle," the creation of "a deeper fires area" as well as Battlefield Air Interdiction (BAI) in order to preclude the enemy forces from moving forward, disable the provision of supplies and hinder information flow. The idea was also to conduct flanking attacks and rear fights. The armed forces potential displayed by the member countries of the Warsaw Pact provided another argument that prompted the new operational concept. The command of the U.S. Armed Forces was aware that NATO did not have the quantitative advantage when it came to military equipment and divisions. Moreover, in the 1950s, the Red Army developed new operational concepts to prepare for a conventional clash with NATO forces in Europe. One of these assumed the establishing of Operational Maneuver Groups (OMG) with units comprising two tank divisions and four mechanised divisions, ready to conduct deep operations within the enemy's territory. Admittedly, NATO could not fight against greater enemy forces without modern weapons. For this reason, along with changes to the military theories and doctrines, a number of new items of military equipment appeared in the United States Army at the turn of the 1970s/1980s. These were referred to as "the Big Five" and included the M-1 Abrams tank, the Apache helicopter, the Bradley fighting vehicle, the multiple launch rocket system (MLRS) and the high-mobility multi-purpose wheeled vehicle (HMMWV)⁸.

⁷ A., H. Toffler, *War and Anti-War*, Kurpisz Publishing Press, Poznań 2006, pp. 56-65.

⁸ B. Kruszyński, *Udział sił zbrojnych USA w konfliktach w Iraku i Afganistanie – największych wojnach przełomu XX/XXI wieku [The involvement of U.S. Armed Forces in the conflicts in Iraq and Afghanistan – the biggest wars at the turn of the 20th/21st centuries]*, Scientific Publishing Press of the Adam Mickiewicz University, Poznań 2011, pp. 78-79.

Although the AirLand Battle doctrine was originally developed by the end of the 1970s in view of the potential confrontation of NATO forces with Warsaw Pact forces on the Central European plains, its principles are still reflected in modern military conflicts. As noted by Marcin Gawęda in *defence24*, the joint air-land operations conducted by Russia in Syria, in both 2015 and 2016, conformed to ALB principles. They envisaged, *inter alia*, establishing cooperation between small commando troops with air forces, aimed at guiding aircraft to specific targets, assessing the scale of destruction, repelling enemy forces, as well as striking the adversary across the deep fires area (e.g. the front line and support areas). For several years, due to the so-called technological gap existing between Russia and Western countries, the Russian Army could not execute such operations. The provision of KRUS “Strielec” data transmission systems, coupled with the appearance of unmanned aerial vehicles (UAV), significantly increased the capacities of the Russian Armed Forces. The scale and effects of the operations conducted in line with ALB principles were presented by the end of 2017 by the former Commander of the Russian Army in Syria, Gen. Sergey Surowikin. He claimed that in 227 days, over 32,000 terrorists were put to death, 394 tanks were destroyed, and 67,000 square metres of Syrian land were liberated from the Islamic State⁹.

Another operational doctrine, referred to as AirSea Battle, emerged in 2010. The Center for Strategic and Budgetary Assessments (CSBA), an influential American *think tank*, published two reports entitled *Why Air – Sea Battle?* and *Air – Sea Battle, a Point of Departure Operational Concept*¹⁰. In 2012, a document outlining the Joint Operational Access Concept (JOAC) was released by the Pentagon, describing the A2/AD and AirSea Battle principles. Having monitored the growing A2/AD capacities of China in the West Pacific, the CSBA staff suggested that the U.S. Department of Defense adopt a new operational concept to prepare the American Armed Forces for military confrontation with the Chinese People’s Liberation Army (PLA). Whereas in the case of the ALB doctrine, the confrontation was meant to take place on the Central European plains, the air-sea battles were to be fought in the Western Pacific. A major confrontation would span across the sea and air, as well as space and cyber space domains. The doctrine also recognised the need to defend U.S. allies, i.e. Japan and South Korea, and to retain control over transport routes such as the Strait of Malacca. According to the authors of the reference documents, one of the first moves of the Chinese party during the potential confrontation would involve the use of anti-satellite and cybernetic weapons. In the latter case, attacks would most likely be targeted at the American C2 systems, radars located in Western Pacific, and all airborne and ground systems used for developing situational awareness.

⁹ M. Gawęda, *Bitwa powietrzno – lądowa po rosyjsku [The AirLand battle fought the Russian way]*, <http://www.defence24.pl/bitwa-powietrzno-ladowa-po-rosyjsku-przyklad-z-syrii-analiza> (21.05.2018).

¹⁰ A. Krepinevich, *Why AirSea Battle*, The Center for Strategic & Budgetary Assessments, 19 February 2010.

Rockets would provide another means of combat, aimed at destroying the so-called sanctuaries, i.e. permanent or rotating American bases in Western Pacific. Until recently, a number of American bases were located out of reach of Chinese aircraft and ballistic missiles, whereas now, even one of the largest American bases, situated in the Isle of Guam, can no longer be considered safe. The DF-11, DF-15, DF-21 or DF-4 missiles can cover a distance from several hundred to 2,500 nautical miles. The DF-21D anti-ship ballistic missile, sometimes referred to as a carrier-killer, poses a severe threat to the American party. It significantly changes the military potential of both parties in that geographic region, creating the carrier destruction risk at the initial stage of the conflict. In turn, the United States advantage stems from the greater number of submarines. Moreover, as stressed by the authors of the doctrine, the U.S. Armed Forces would most likely focus on “blinding” the Chinese command on the first days of the air-sea battle by destroying their satellites and radars, in line with the idea of “modern reconnaissance battle.” Then, following a victorious clash in the Japanese sky, it would focus on eliminating the Chinese naval potential in order to eventually impose a sea blockade on the Middle Kingdom¹¹.

Operational principles are another crucial notion when it comes to analysing the Multi-Battle Domain concept. They constitute a set of relatively steady elements whose positive or negative aspect significantly influences the organisation and methods of accomplishing the set objective. Operational principles do not form part of an operation but they indicate whether certain actions appear justified. They include the target, the forces (the base of operations), the operating environment, the time and the enemy’s forces, the civil-military principles, the media and the operating leeway. The commanders’ task before launching a military operation is to examine the above principles, to determine the possible actions to be taken by their own (allied) military forces, and to devise the optimum relationship between them, depending on the type of actions.¹²

Multi-Domain Battle concept

Multi-Domain Battle constitutes the newest doctrine which is now being implemented by the U.S. Armed Forces. Its assumptions have been presented in several documents of the United States Army, including *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040* issued by the Training and Doctrine Command

¹¹ J. Bartosiak, *Pacyfik i Euroazja. O wojnie*, published by Jacek Bartosiak, Warsaw 2016, pp. 129-144.

¹² M. El Ghamari, *Interpretacja czynników operacyjnych w regulaminach i doktrynach wybranych państw w kontekście walki z tak zwanym Państwem Islamskim [The interpretation of operational principles in the regulations and doctrines of selected countries, in the context of fighting against the so-called Islamic State]*, *Przegląd Strategiczny [Strategic Review]* 2016, No. 9, pp. 193-194.

in 2017¹³, *FM 3-0 Operations* released in December 2017¹⁴ and TRADOC *Multi-Domain Battle: Combined Arms for the 21st Century*¹⁵. The authors of *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040* presented MDB as a concept elaborating on how the U.S. Armed Forces, together with the allied armies, would conduct a successful military campaign in all domains, i.e. land, air, sea, space and cyber space, between 2025 and 2040¹⁶. The authors of *FM 3-0 Operations* drew attention to the crucial elements of the military missions executed within the MDB framework, including the military operation command, reconnaissance in depth, mobility, cross-domain fires, tempo and convergence of effects, protection, sustainment and information operations¹⁷.

MDB origins were essentially connected with the event that occurred on 15 April 2015 and, more specifically, with a critical speech given by Bob Work, Deputy Secretary of Defense, at the U.S. Army War College, concerning the United States Armed Forces' readiness to face contemporary and future military threats¹⁸. He claimed that the opponents of the USA would soon be in a position to question U.S. superiority in most domains. He referred to the war between Israel and Hezbollah in 2006 as an exemplary conflict whereby the weaker defeated the stronger. While modernising its army in order to prepare it for fighting down an irregular enemy, Israel underestimated Hezbollah, who were not only extremely determined but also possessed the latest military equipment. Work also pointed to the need to adjust the American armoury to the growing powers of China and Russia, and to prepare for the U.S. adversaries' being in possession of numerous steering rockets, anti-aircraft weapons, anti-missile shields, etc. When finishing his speech, he called for the commencement of work on the new operational military doctrine, which he called Air Land Battle 2.0.¹⁹

MDB origins were also discussed by Gen. David Perkins who commanded the U.S. Army Training and Doctrine Command. According to Perkins, the need to develop the Multi-Domain Battle doctrine resulted from several factors. Firstly, contrary to the Cold War period with the prevailing AirLand Battle concept, the

13 *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040*, Training and Doctrine Command 2017.

14 *Field Manual 3-0 Operations*, Headquarters Department of the Army, Washington DC, 6 December 2017, pp. 1-17.

15 *Multi-Domain Battle: Combined Arms for the 21st Century*, TRADOC, 24 February 2017.

16 *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040*, Training and Doctrine Command 2017, p. 1.

17 *Field Manual 3-0 Operations*, Headquarters Department of the Army, Washington DC, 6 December 2017, pp. 1-18.

18 K. McCoy, *The Road to Multi-Domain Battle: An Origin Story*, Modern War Institute, <https://mwi.usma.edu/road-multi-domain-battle-origin-story/> (23.05.2018).

19 Deputy Secretary of Defense Speech, Army War College Strategy Conference, PA, 8 April 8 2015, <https://www.defense.gov/News/Speeches/Speech-View/Article/606661/army-war-college-strategy-conference/> (23.05.2018).

U.S. Army now has to prepare for confronting different types of opponents, such as international superpowers, failed states, terrorist groups, etc. Secondly, in the 1990s, none of the adversaries was capable of threatening the USA in any domain of armed operations – land, air, sea, space or cyber space. The United States had indisputable comparative advantages in the air and sea domains. Land was the only domain where America’s superiority could be questioned, given that even potentially weaker opponents, using asymmetric engagement methods, could inflict severe losses on conventional forces. At present, taking into account the Chinese capacities in the West Pacific and the Russian abilities manifested in the war in both Ukraine and Syria, it should be expected that the dominance of the United States in future military conflicts will be questioned in all the domains. Thirdly, in order to retain its global superpower status, the United States must maintain its armed forces in distinct parts of the world, thus running the risk of their supply lines being cut off during potential conflicts. This triggers the need to prepare military forces to operate as independent and self-sufficient units, and to take measures in various domains. The MDB doctrine, therefore, assumes the establishing of a new type of units, referred to as Intelligence, Cyberwarfare and Electronic Warfare (ICEW), capable of conducting simultaneous operations in several different domains. New medical technologies, enabling the provision of assistance to wounded soldiers on a battlefield, and the use of new spare parts for military equipment, will ultimately increase military independence²⁰.

As regards the area of conducting military operations, the Multi-Domain Battle doctrine comprises a number of operational components, i.e. a deep fires area, a deep maneuver area, a close area and a support area²¹. A deep fires area is beyond the feasible range of conventional maneuver forces and may accommodate special forces operations, as well as information and cyber operations. Operations conducted in the deep fires area can be restricted by international law or political covenants. Under the circumstances of defending an allied country, the deep fires area may correspond to the attacker’s territory. A deep maneuver area is where land or sea manoeuvres are planned, with their successful conduct dependent on the support provided in all the domains listed under the Multi-Domain Battle concept (i.e. land, air, sea, space and cyber space). Deep maneuver areas are extremely significant since the ultimate maneuver success is often of key importance to the entire military operation. A close area is where the major direct fire fight unfolds between the parties to the conflict, supported by their allies. Within the close area, armed forces seek to hold a given territory, regain control of the previously lost land and prepare the conditions for a deep maneuver. Finally, a support area is where the allied forces have the largest leeway to

20 A. Dilanian, M. Howard, *Sustaining Multi-Domain Battle: An interview with Gen. David Perkins*, https://www.army.mil/article/198440/sustaining_multi_domain_battle_an_interview_with_gen_david_perkins (21.05.2018).

21 D. Perkins, *Multi-Domain Battle. Driving Change to Win in the Future War*, *Military Review*, <http://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/July-August-2017/Perkins-Multi-Domain-Battle/> (21.05.2018).

act. It is not situated in the immediate vicinity of the front line, and it accommodates communication lines, command bases, airfields and military garrisons. Nonetheless, the infrastructure and military troops situated in the support area run the risk of being attacked by the enemy special forces, along with the risk of cyber attacks and information warfare consequences. Support areas also concentrate the activities of the adversary's supporters, such as national minorities, political supporters, etc²².

American planners from TRADOC, when discussing the Multi-Domain Battle vision, also described the potential armed combat methods to be employed by the opponent. They claimed that such methods could be classified, in terms of the war-making level, into methods employed during competition, armed conflicts and return to competition²³. As regards the competition methods, also referred to as below-war-level or grey-zone methods, the opponent is likely to concentrate on reconnaissance, unconventional warfare, information warfare and the use of conventional forces. From the point of view of American planners, the opponent's attacks will not be directly targeted at the United States but rather at one of their allies. At the competition level, the enemy party will focus on the political isolation of its victim in order to hinder the response of the attacked state's allies, including the United States, at the point of direct fire fights. Hostile diplomatic actions aimed at compromising the state's credibility can thus be expected, along with cyber attacks on critical infrastructure. By using information warfare methods, the attacker will seek to inspire a positive perception among the population residing in the area of the future warfare. At the same time, the opponent's conventional forces, under the pretence of military training, will concentrate in border regions. Integrated air defence systems, surface-to-surface missiles and air forces will also be deployed in those areas.

In line with the MDB concept, political competition may, under certain circumstances, lead to an open armed conflict during which the adversary changes its war-making methods and resorts to conventional forces, ISR-strike systems, integrated air defence systems, ground maneuver formations, maritime, unconventional warfare, information warfare and nuclear weapons. A crucial role will be played by conventional forces conducting offensive operations with the aim of seizing a given territory and destroying the allied forces. Conventional forces will also support irregular troops entrusted with controlling the seized area. According to TRADOC planners, this may entail the risk of ethnic-related clearance or other cases of humanitarian law violation by irregular units. Military operations will also be supported by units executing ISR strikes, with missiles being launched from the land, air and sea to destroy the critical infrastructure of the allied state, as well as its command centres, soldiers and military equipment. An integrated air defence system will form the basis for A2AD capacities, protecting conventional forces from missile attacks of the allied forces and restricting the freedom of movement of the

²² *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040*, Training and Doctrine Command 2017, pp. 9-11.

²³ *Ibidem*, p. 12.

allied air forces. Nuclear weapons are also listed among the war-making methods employed at this stage of the conflict, serving as a means of securing favourable ceasefire and peace treaty conditions between the parties to the conflict. By making a threat of nuclear war, the enemy possessing nuclear weapons will use diplomacy and information warfare to terrorise the government and society of the defending state. The Multi-Domain Battle doctrine does not rule out the possibility of a nuclear war outburst. This can happen if the conflict scale can no longer be controlled or the attacker loses most of its forces, with the allied forces crossing its border. Methods used by the adversary on return to competition form the third group of armed combat methods. Return to political competition is likely to take place after both parties to the conflict have lost most of the resources that they had before the commencement of regular military operations. War exhaustion will result in the limited engagement of conventional forces, with a shift towards positional warfare dominated by the use of unconventional forces as well as information warfare²⁴.

The progressing conflict between the Armed Forces of the United States and their allies, on the one hand, and the adversary's units, on the other, is another issue dealt with under the Multi-Domain Battle concept. According to American military professionals, direct fights will involve smaller units (with around 1,500 soldiers) than those currently-functioning. This decrease in the number of soldiers from 4,000 (as in the current brigade) to 1,500 is meant to strengthen the unit's mobility and reduce the number of casualties in the event of exposure to hostile missile attacks. Such units, referred to as Multi-Domain Task Forces, will be equipped with both heavy infantry weapons and helicopters. They will also comprise hacker troops, thus serving as independent units, capable of conducting military operation in all the five domains under discussion²⁵. Central and Eastern Europe or South-Eastern Asia are regions where military confrontation is most likely to occur. The MDB vision, as presented by TRADOC, outlines the process of the U.S. Army liberating the allied territory. The attack on the enemy will begin with a cyberspace operation meant to destroy the command systems and other elements of critical military infrastructure. This will be followed by a missile strike to eliminate the enemy's air defence systems, air forces and surface-to-surface missile launchers. On suppressing the A2AD capabilities, the operation will be joined by air-assault and maritime forces that will execute deep manoeuvres behind the main front line, cutting off the adversary's supply lines. The final stage of the operation will entail attacks by conventional forces (both mechanised and panzer) to eliminate the remaining enemy's units deployed in the occupied area²⁶. The course of a multi-domain battle is compared by some scientists to the

²⁴ Ibidem, pp. 13-20.

²⁵ S.J. Freedberg, *New Army Unit To Test tactics: Meet The Multi-Domain Task Force*, <https://breakingdefense.com/2017/03/new-army-unit-to-test-tactics-meet-the-multi-domain-task-force/> (23.05.2018).

²⁶ *Multi-Domain Battle Space Scenario*, TRADOC G-2 OE Enterprise, https://www.youtube.com/watch?v=car1O_qfkW0 (23.05.2018).

solutions employed by the Entente states during World War I, when major challenges were connected with breaking the German lines of defence. Such technologies as machine guns, mustard gas and trenches resulted in the defensive becoming superior to the offensive. The situation changed by the end of the war, when the Ally forces introduced a number of modifications to their military equipment and tactics. One such modification was the establishing of new military troops at the corps level, including the Counter – Battery Staff Office. These comprised several dozen soldiers and officers, entrusted with “shallow intelligence” actions and detection of German artillery positions. Reconnaissance was conducted through human intelligence, air reconnaissance and ground-based observations. Owing to the early detection of the enemy’s battery, the Entente forces could promptly respond with fire and eliminate threats at the initial battle stages. Tanks were another major advancement. They were used to pave the way for the infantry, protecting the soldiers and reducing the number of casualties among the attackers. The introduction of technological changes and new armed combat methods eventually turned the tide in favour of the Entente states, *inter alia*, resulting in victories in the Battles of Hamel, and then in the Battle of Amiens, in 1918. As regards the Multi-Domain Battle concept, the A2AD capabilities draw an analogy to positional warfare, while ICEW units can be viewed as equivalent to the Counter – Battery Staff Office²⁷. According to other researchers, examples of multi-domain operations can also be found by referring to both World War II, and in particular the Battle of Guadalcanal fought in 1942, and the Falklands War. The Battle of Guadalcanal involved a combination of military operations in three domains, i.e. land, sea and air. Following the construction of a military airfield on Guadalcanal by the Japanese, the American command realised that the enemy’s air forces would be capable of attacking targets within the reach of 500 miles, thus threatening the lines of supplies between the United States, and Australia and New Zealand. Therefore, the naval infantry was entrusted with seizing the island, together with the airfield, and preparing grounds for the launching of the American counter-offensive at some point in the future. Following the initial success, the American party expected the Japanese to counter-attack. To this end, the U.S. forces built the airfield anti-access capabilities, comprising air defence, anti-submarine weapons, etc. The suppression of the Japanese counter-attack, thanks to the A2AD capabilities, enabled the American Army to focus on expelling the remaining Japanese military units from the island and, eventually, to seize full control of that territory. The Falklands War that broke out in 1982 provides another example of the MDB concept. The British Army and naval forces managed to isolate the Falkland Islands from the rest of the world with their A2AD capabilities, air defence systems and methods of fighting down surface ships and submarines. The efficiency of the Anti-Access/Anti-Denial capabilities was reflected, *inter alia*, in the sinking of ARA General Belgrano,

²⁷ A. Palazzo, *Multi – Domain Battle: The Echo of the Past*, https://www.realcleardefense.com/articles/2017/10/11/multi-domain_battle_the_echo_of_the_past__112467.html (03.06.2018).

an Argentine Navy light cruiser, by a British submarine, as well as the British raid on the Pebble Island and the destruction of 11 aircraft deployed there. This caused the Argentine Air Forces to retreat 400 miles into the mainland²⁸.

Criticism of MDB

Critical opinions were expressed by some of the American military professionals and analysts right after the development of the Multi-Domain Battle doctrine. David Johnson, a retired colonel of the U.S. Army, pointed to the threats arising from the establishing of the Multi-Domain Task Force. He claimed that this would result in further concentration of the whole armed forces' attention on brigades and entrusting them with an increasing number of duties. Therefore, the Army should rather consider re-building its potential by treating divisions as basic operational units²⁹. Cpt. A. J. Shattuck., the U.S. Army analyst, also expressed criticism of MDB. In his article *The Pipe Dream of (Effective) Multi-Domain Battle*, he listed an array of drawbacks exhibited by the new doctrine. According to Shattuck, the current shape of the U.S. Department of Defense could not allow for efficient MDB implementation. To this end, an institutional reform of the U.S. Armed Forces would be needed in order to foster increased synergy between individual units, along with more leeway and powers to be vested in lower-level units. Moreover, to execute MDB in its purest form, commanders must possess offensive capabilities from all the domains concerned, which currently is not the case³⁰. Jon Bott, John Gallagher, Jake Huber and Josh Powers, in their article *Multi – Domain Battle: Tactical Implications*, stressed that the idea of conducting military operations in several different domains at the same time was not new and, as such, should not be considered revolutionary. The ancient Athenians used their navy to maneuver their forces and achieve an advantage over the enemy on land. Furthermore, as already mentioned, similar multi-domain operations were carried out during World War I, World War II and the Falklands War³¹.

28 K.M. Woodsm T.C. Greenwood, *Multidomain Battle: Time for a Campaign of Joint Experimentation*, Joint Force Quarterly 88, <http://ndupress.ndu.edu/Publications/Article/1411615/multidomain-battle-time-for-a-campaign-of-joint-experimentation/> (03.06.2018).

29 S.J. Freedberg, op.cit., <https://breakingdefense.com/2017/03/new-army-unit-to-test-tactics-meet-the-multi-domain-task-force/> (23.05.2018).

30 A.J. *The Pipe Dream of (Effective) Multi-Domain Battle*, Modern War Institute, <https://mwi.usma.edu/pipe-dream-effective-multi-domain-battle/> (23.05.2018).

31 Jon Bott et al., *Multi – Domain Battle: Tactical Implications*, <https://othjournal.com/2017/08/28/multi-domain-battle-tactical-implications/> (03.06.2018).

Concluding remarks

The multi-domain battle concept, since its origin in 2015, has been gradually brought into practice as the new official doctrine of the U.S. Army. In view of Poland's national security, further development of the doctrine should be closely monitored by Polish academic and military centres. There are several reasons behind it. Firstly, the studies focused on MDB, which have been carried out to date identify Central and Eastern Europe as the possible venue for the doctrine's implementation should there be any conflict within the territory of Poland or other Baltic countries. Secondly, Russia is considered a source of threat to international security, together with China. Thirdly, both the U.S. and NATO forces are deployed in the territory of Poland, including the 3rd Armored Brigade Combat Team, forming part of the 4th Infantry Division and comprising around 4,000 soldiers, and the Combat Aviation Brigade³². It cannot be ruled out that following the MDB-driven transformation of the units which form part of the U.S. Pacific Command, the U.S. troops deployed in Central and Eastern Europe will follow in their footsteps³³.

This article does not clear up all the doubts related to the introduction of the new U.S. doctrine. It can merely serve as the starting point for discussing other issues significant from the point of view of Polish researchers, such as the Polish A2AD capabilities, the Polish revolution in military affairs, the power projection capacities of Polish brigades in Central and Eastern Europe, and the possibility of the U.S. and Polish armies jointly conducting military operations based on the MDB doctrine.

References

- Bartosiak J., *Pacyfik i Euroazja. O wojnie [The Pacific and Eurasia. About the war]*, published by Jacek Bartosiak, Warsaw 2016.
- Jon Bott et al., *Multi – Domain Battle: Tactical Implications*, <https://othjournal.com/2017/08/28/multi-domain-battle-tactical-implications/> (03.06.2018)
- Caton J.L., *The Land, Space, and Cyberspace Nexus: Evolution of the Oldest Military Operations in the Newest Military Domains*, US Army War College, Strategic Studies Institute, Carlisle Pennsylvania 2018.
- Dilanian A., Howard M., *Sustaining Multi-Domain Battle: An interview with Gen. David Perkins*, https://www.army.mil/article/198440/sustaining_multi_domain_battle_an_interview_with_gen_david_perkins
- El Ghamari M., *Interpretacja czynników operacyjnych w regulaminach i doktrynach wybranych państw w kontekście walki z tak zwanym Państwem Islamskim [The interpretation of operational principles in the regulations and doctrines of selected*

³² M. Wągrowka, *Wojska amerykańskie w Polsce [American wars in Poland]*, Government Centre for Security, <http://rcb.gov.pl/wojska-amerykanskie-w-polsce/> (23.05.2018).

³³ S.J. Freedberg, *\$49M For Multi – Domain Wargames Tops PACOM Wishlist*, <https://breakingdefense.com/2017/06/49m-for-multi-domain-wargames-tops-pacom-wishlist/> (23.05.2018).

- countries, in the context of fighting against the so-called Islamic State], Przegląd Strategiczny [Strategic Review] 2016, No. 9.
- Freedberg J. S., New Army Unit To Test tactics: Meet The Multi-Domain Task Force, <https://breakingdefense.com/2017/03/new-army-unit-to-test-tactics-meet-the-multi-domain-task-force/>
- Freedberg S.J., \$49M For Multi – Domain Wargames Tops PACOM Wishlist, <https://breakingdefense.com/2017/06/49m-for-multi-domain-wargames-tops-pacom-wishlist/>
- Gawęda M., Bitwa powietrzno-lądowa po rosyjsku. Przykład Syrii [The AirLand battle fought the Russian way. The Syrian example], <http://www.defence24.pl/bitwa-powietrzno-ladowa-po-rosyjsku-przyklad-z-syrii-analiza>.
- Krepinevich A., Why Air – Sea Battle? Center for Strategic and Budgetary Assessments, Washington 2010.
- Kruszyński B., Udział sił zbrojnych USA w konfliktach w Iraku i Afganistanie – największych wojnach przełomu XX/XXI wieku [The involvement of US Armed Forces in the conflicts in Iraq and Afghanistan – the biggest wars at the turn of the 20th/21st centuries], Scientific Publishing Press of the Adam Mickiewicz University, Poznań 2011.
- Matsumura J., et al., The Army After Next: Exploring New Concepts and Technologies for the Light Battle Force, RAND Corporation, Santa Monica 1999.
- McCoy K., The Road to Multi-Domain Battle: An Origin Story, Modern War Institute, West Point New York, <https://mwi.usma.edu/road-multi-domain-battle-origin-story/>
- Palazzo A., Multi – Domain Battle: The Echo of the Past, https://www.realcleardefense.com/articles/2017/10/11/multi-domain_battle_the_echo_of_the_past__112467.html (03.06.2018)
- Perkins D., Multi-Domain Battle. Driving Change to Win in the Future War, Military Review, <http://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/July-August-2017/Perkins-Multi-Domain-Battle/>
- Shattuck A. J., The Pipe Dream of (Effective) Multi-Domain Battle, Modern War Institute, West Point New York, <https://mwi.usma.edu/pipe-dream-effective-multi-domain-battle/>
- Toffler A., H., War and Anti-War. Survival at the dawn of the 21st Century How, Kurpisz S.A. Publishing Press, Poznań 2006.
- Van Tol J., Gunzinger M., Krepinevich A., Thomas J., AirSea Battle. A Point – of – Departure Operational Concept, Center for Strategic and Budgetary Assessments, Washington 2010.
- Wągrowka M., Wojska amerykańskie w Polsce [American troops in Poland], Government Centre for Security, <http://rcb.gov.pl/wojska-amerykanskie-w-polsce/>.
- Weinberger K., Russian Anti-Access and Area Denial, Institute for the Study of War, Washington 2016.
- Woodsm K. M., Greenwood T. C., Multidomain Battle: Time for a Campaign of Joint Experimentation, Joint Force Quarterly 88, <http://ndupress.ndu.edu/Publications/Article/1411615/multidomain-battle-time-for-a-campaign-of-joint-experimentation/> (03.06.2018)
- Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040, Training and Doctrine Command, Fort Eustis 2017.
- Solarz J., Doktryny militarne XX wieku [20th-century military doctrines], Avalon Publishing Press, Kraków 2009.
- Field Manual 3-0 Operations, Headquarters Department of the Army, Washington 2017.

Multi-Domain Battle: Combined Arms for the 21st Century, Training and Doctrine Command, Fort Eustin 2017.

The U.S. Army Operating Concept. Win in a Complex World, Pamphlet 525-3-1, 31, Training and Doctrine Command, Fort Eustin 2014.

Deputy Secretary of Defense Speech, Army War College Strategy Conference, Carlisle Pennsylvania 2015, <https://www.defense.gov/News/Speeches/Speech-View/Article/606661/army-war-college-strategy-conference/>

Multi-Domain Battle Space Scenario, Training and Doctrine Command G-2 OE Enterprise, Fort Eustin, https://www.youtube.com/watch?v=car1O_qfkW0