AZ NKE HHK TUDOMÁNYOS FOLYÓIRATA HADMŰVÉSZET

HADTUDOMÁNYI SZEMLE

DR. György SZTERNÁK

Budapest, 2013.
6. évfolyam 3. szám

THE WARFARE IN THE PRESENT AND FUTURE

A KATONAI MŰVELETEK NAPJAINKBAN ÉS A JÖVŐBEN

The theoretical and practical procedures of information operations, asymmetric warfare, psychological operations, and network centered, or effect-based operations were created with the intention of meeting the new requirements. The notion that armed combat includes crisis response operations is becoming increasingly widespread among the cultivators of military science. The concept of military culture is defined almost identically both by foreign and Hungarian special literature. While the former approaches this issue from the aspect of culture the latter approaches it from the aspect of military science. According to the lessons learned from military operations of the past few years conducting armed combat is not as simple as described above; there were many problems especially during peace enforcement, peacekeeping, and peace building. On the basis of these points in Hungarian military higher education it is reasonable to teach all the knowledge and practical lessons learned concerning armed combat – regardless of the state of armed forces – at all levels of operations.

A katonai műveletek és azok megvívásának körülményei napjainkban és a jövőben. A katonai műveletek megvívásának jellemzői.

INTRODUCTORY CHAPTER OF ARTICLE

In the past years combat operations and military operations other than war have not taken place under the traditional circumstances on the traditional theaters. There has been an increase in the number of combat operations where armed forces conduct crisis management or some other type of peace support operations in diversified (that is completely different from European circumstances) social and natural environments. Unusual circumstances have called for the research and development of new forms and methods of armed combat from the representatives of military science.

The theoretical and practical procedures of information operations, asymmetric warfare, psychological operations, network centered, or effect-based operations were created with the intention of meeting the new requirements.[1] Due to the above mentioned circumstances it seems reasonable to further analyze the theoretical and practical rules concerning armed combat and alter them if necessary. Furthermore, it seems necessary to adjust the preparation and training of commanders and soldiers to the new circumstances.

The *primary* goal of the author of the present study is to briefly present the new procedures and methodology of military operations through this study paper. His *second* objective is by amending his presentation performed at the scientific conference of Kossuth Lajos Faculty of Military Science to assist the successful preparation of our students to their examinations.[2]

[1] Pix, Gábor. *A lélektani műveletek egyes aktuális hadműveleti vonatkozásairól*. [On Some Current Operational Relevancies of Certain Psychological Operations] In. Humán Szemle. 2005. Issue 4.

[2] We must note that university notes by Bolgár, Judit – Hajdú, István – Szternák, György and titled: *A katonai műveletek háttere, megvívásuk napjainkban* [The Background of Military Operations and Characteristics of Their Conduct] were published, which further elaborates the notions of the authors concerning the problem indicated in the title. Furthermore, the manuscript of the publication can be found on the homepage of the Military Science PhD School.

HADTUDOMÁNYI SZEMLE

Budapest, 2013.
6. évfolyam 3. szám

DR. György SZTERNÁK

The notion that armed combat includes crisis response operations is becoming increasingly widespread among the cultivators of military science. Some experts also regard crisis management and conflict prevention as part of armed combat. This notion of experts is especially true in the case of military operations of the last few years. Another possible classification of armed combat found in the special literature is separating combat operations and operations other than war. There is no substantial contradiction between the two notions; they differ only in the classification of military operations.[3]

1. MILITARY CULTURE AND MILITARY VICTORY

In connection with armed combat, combat operations, and operations other than war, military culture must be addressed as well. According to the data in special literature military culture has sociological as well as historical manifestations, although it is reasonable to structure analysis around primarily military issues. Special emphasis should be placed on the existing connections between military culture and military science because this relationship contains the objectives of the leadership of state and government and links between possible tasks and applications of armed forces. The concept of military culture is defined almost identically both by foreign and Hungarian special literature. While the former approaches this issue from the aspect of culture the latter approaches it from the aspect of military science. *Their identical and constant characteristics are the following: relationship of state politics and war, the sum of notions about strategy and armed combat – while taking into account historical experience, and the process of strategic planning*.[4] According to the authors' notion the sources of military culture can be the following: the geopolitical and geostrategic status, the history, the economical and cultural heritage and advanced military traditions of a country. *Therefore military culture is a social, military intellectual and financial prerequisite and capability which is the basis of the national security and national military strategy as a whole.*

The concept of victory in the traditional sense has changed in the case of the above mentioned operations. In the beginning of the military resolution of a crisis commissioned or participant states primarily and generally strive to eliminate the causes evoking the crisis first through the means of diplomacy then with military prevention measures (power projection, pressure). Furthermore, through negotiations, introductions of economical and other sanctions they force that particular state to abandon its intentions that generate the crisis. Therefore the complete reconsideration of the execution of methods of military operations is needed in our opinion, primarily in order to protect the combat readiness of the deployed forces and equipment.

Recent crisis response operations led to the conclusion that there is only hope for success if international organizations start an operation *in a unified political agreement; and states begin an operation with mutually supportive, collateral contributions and phrasing of mutually accepted political end state*.

The new approach to military success made the issue of effect-based operations one of the main issues in the field of military science research. This notion appeared more and more frequently at increasingly high levels among the experts of the alliance in the recent years. The summit of the heads of states and prime ministers held in Riga in November 2006 was of fundamental importance for the notion of effect-based operations. The experts came to an agreement on the

[3] AJP-3.4 Non-Article 5 Crisis Response Operations. pp. 2-15.
Deák, János: Napjaink és a jövő háborúja. [War Today And In The Future] In. Hadtudomány. 2005. Issue. 1. pp. 10.
Klaus, Naumann: Der Gewalt nicht nachgeben. Truppenpraxis 11/1999. pp. 732-742, 799.

[4] Yitzhak Klein. A Theory of Strategic Culture. Comparative Strategy An International Journal. Volume 10. Number 1. January - March 1991.
Kovács, Jenő. Magyarország katonai stratégiája (komplex kutatási téma) II.rész. [The Military Strategy of Hungary (complex research subject) 2nd part]. In. Országos Kiemelésű Társadalomtudományi Kutatások. Budapest. 1995.
Forgács, Balázs. Háború és hadikultúrák. [War and Military Cultures] In. Új Honvédségi Szemle 2002. Issue. 10. pp. 130-140.

comprehensive civil-military approach to security. In other words they agreed that successful military activity is not sufficient for the successful execution of crisis response operations.

Today experts primarily study how a crisis response operation, with military force as one of its significant elements, turns into an effect-based operation for the sake of greater success that is victory. On the basis of this kind of approach and research the conclusion may be clear that an effect-based operation is superior to a joint operation. Consequently it is inadequate to train commanders and soldiers to the execution of military operations. In this case much more is required: political, economical, legal, administrative, risk analysis, sociological, psychological as well as environment protection training. This approach raises the question of employing voluntary reservist soldiers in all member states.

2. CHARACTERISTIC OF MILITARY OPERATIONS

NATO has faced several theoretical and practical problems while analyzing the lessons learned of recent crisis response operations, says National University of Public Service (NUPS) University professor Zoltán Szenes.[5] According to the opinion of the author, which we share, the alliance is in need of a new strategy since the old one was comprised seventeen years ago. Political decisions must always be supported by military power. If the capabilities of the military force of national contributions are insufficient then the theater commander is unable to accomplish his mission or may do so only through extensive efforts. The consensus of nations concerning operations is still needed during the planning and organizing phases.

According to experts and researchers levels and boundaries in military operations are less characteristic and significant today. Thus there is a greater and greater need for the cooperation with political, administrative and non-governmental players during the whole duration of the execution of operations.[6] An effect-based operation presumes the joint use of the military element, the economical element and the civil element for the sake of success. The military element means military force, deterrence, means of coercion and obligatory deployment. The economical element includes the application of economical advantages or economic restrictions (sanctions) aimed at the resolution of a crisis. The civil element consists of the civil-military cooperation as an institution during the whole duration of the operation. Furthermore, it also comprises the use of non-military resources which include the undisturbed operation of governmental, self-governmental, judiciary, law enforcement, health care, social and educational elements. The effect-based approach to operations urges network solutions that make integrated joint military capabilities available to commanders for the execution of particular military operations. In other words, this is a process determined by the desired effect through which the kind of effect to achieve by the end of the operation is determined for the theater commander. It is clear that this cannot be achieved solely by military force.

In connection with effect-based operations experts have considered how the cooperation opportunities of an operational commander can be regulated in connection with non-military activities in theater.[7] In our opinion military successes can only be long-lasting if they are followed by security reinforcement successfully, public administration is established during reconstruction, public security is consolidated and significant improvements are detectable in the inhabitants' social life at all strata. All this requires a close cooperation between crisis management forces and local forces. An agreement concerning the political end state is useless if standpoints differ in the resolution of any of the partial problems. In this case the success of the mission is jeopardized.

[5] Szenes, Zoltán. Békeperspektíva. [Perspective of Peace] In. Regiment. 2008. Issue. 1. pp. 8-11.
[6] Talla, István – Babos, Tibor. A műveletek hatásalapú megközelítése koncepció a rigai NATO-csúcsértekezlet tükrében. [Effect-based Operation Approach Concept According to the NATO Summit in Riga] In. Új Honvédségi Szemle. April. 2006. pp. 6-10.
[7] Bjorn E. Kristiansen. Defense Transformation (A NATO Prespective). Conference in Garmish-Partenkirchen. 10. April. 2006. www.marshallcenter.org.de 14-03-2008.

Today in crisis response operations the goal is not the destruction of the enemy but rather a peaceful settlement, intention to prevent an armed conflict, basically through political, diplomatic and economic means. If these preventive measures fail then usually a military operation is executed in order to establish security and peace; this operation is a method and form of armed combat. In this case – according to the law of armed conflict – the primary objective is the disruption of the enemy's political, administrative and military leadership and the deprival of its military capabilities, the goal is not the complete destruction of a state and its armed forces. Nowadays crisis response operations do not stop at the activity of the participating military force but continue with the execution of peacekeeping, reconstruction (peace building) missions. According to experiences these are long and complex processes.

3. THE SOLDIER AS A SYSTEM

Approximately ten years ago military science experts realized that it is reasonable to use the findings of network-centered social research in connection with operations of armed forces for the sake of successful military activities. The Member States of the Alliance conduct research aimed at protecting their soldiers participating in armed conflicts as the fighting soldier is considered and equipped as a system. As a result of this research – even today but rather in the future – these soldiers are to be equipped and provided with light and efficient weapons, battle dress uniform and protective clothing, "networked" communication devices, and modern energy sources, thus boosting human performance.[8] In the studies of the referred to article various authors of the Member States present their findings and plans achieved in "*the soldier as a system*" research and development. In Hungary it is Gyula Koródi, who dealt with the issue but he was researching it primarily from a medical aspect.[9]

We will discuss its fundamental points in the following as far as it relates to the theme declared in the title of the present study paper. According to the lessons learned the majority of the future armed conflicts will be conducted in inhabited environment where the use of main battle tanks, armored personnel carriers and armored vehicles is limited. The soldiers and small units participating in operations need to leave their vehicles or transport helicopters in order to execute their tasks. According to experts the mentioned soldiers and small units should be considered as "*basic combat units*" and should be regarded as systems – the subsystems of modern airplanes, helicopters, main battle tanks, or armored fighting vehicles.

Development and modernization should be executed in five fields in order to establish the capabilities of the system: mobility, destructive power, endurance, survivability, command and control. From another aspect: clothing, equipment, communication and information technology, armament, and power-supply. The Member States involved in the research agreed on these five fields as a whole and these are the directions which research is heading these days.

4) NETWORK CONCEPTS OF WARFARE

One of the preconditions of success during the execution of operations is the information flow between soldiers and devices in network-like connection which guarantees the reduction of the time factor effect in the course of reconnaissance, target designation, and destruction. Modern warfare has substantially changed the war-fighting techniques and information transmission systems of previous ages. *Network concepts also emerged in warfare*. Network-based warfare regards elements participating in both defensive and combat activities at different levels of leadership

[8] Future Soldier Systems. NATO's Nations and Partners for Peace. 2004. Issues. 4-5. pp. 122-154., 76-95. 2007. Issue 4. pp. 52-83.

[9] Kóródi, Gyula. Az idegrendszer lövési sérüléseinek aktív megelőzése. [Active Prevention of Gunshot Wounds of the Nervous System] In. Doktorandusz. 2005. Issue. 1.
A digitális katona személyi védelme a honvédorvos szemszögéből. [The Protection of the Digital Soldier from the Aspect of the Medic] In. Hadmérnök 2006. Issue. November. Print edition of the lecture delivered at the 6th Robotic Warfare international conference.

(leadership, commanders, arms, commanders, executives, soldiers, defense communications, logistics and other elements) as network layers and units, and defines their relations based on the network's system, task and structure. Due to this modern defense-tactical communication concepts are also expanded through network-based approaches. Defense-tactical communication is characterized by both the network-based nature and functionality of communication centers and protocols used in warfare, both the networked structure and function of topology and system establishment (infrastructural, occasional, and mixed). These concepts are collectively: Network Centric Warfare (NCW) and Network Control Warfare (NCW).[10] Experts talk about *digital, network based army and armed forces* in the referred studies, which is not that far in the future considering the present rate of progress. A digital, network-based army uses all the achievements of information technology: it possesses precision weapons, its leadership is based on integrated combat network systems and multimedia technology, qualitative measures are preferred to quantitative measures; its efficiency is due to its information-based approach, therefore it may also be called a knowledge-based army. Its power derives from the asymmetry of the opposing forces. Gaining information superiority is the primary objective which helps allied forces to initiate attack before the enemy. Apart from the efficient gathering and storage of information fast processing is also necessary; there should be an interface which can display all the necessary information perspicuously tailoring it to the personal needs of a certain user.

In modern combat operations and operations other than war systems and subsystems connect to the developed elements of Network Centric Warfare (NCW), thus soldiers function and execute their tasks in accordance with its rules and regulations. Research concerning *"soldier-systems"* is conducted in every Member State and according to the experts; the provision of armed forces with the necessary devices and equipment will take place in the next 5 to 10 years.

Network Centric Warfare enables commanders of armed forces to communicate with all the arms and services through a secure computer network. Technology enables the commanders to get a more accurate picture of the events in the theater. With the help of the developments of Network Centric Warfare a commander is always aware of the exact location of his forces, the available ammunition, fuel, and other resources. He is familiar with logistic information such as the condition of roads or the weather. With these he is able to predict the outcome of his decisions through the simulation of future events. Three fundamental preparatory measures must be undertaken in order to introduce Network Centric Warfare: existing network technology must be tailored to combat situations. The existing procedures must be tailored to the network systems. Classic military hierarchy must be reorganized in order to enable the realization of network concepts. Although at the same time experts raise the question: how much information is sufficient and how much is too much? The answer urges experts to undertake further research.[11]

The most important precondition of the efficiency and success of the effect-based approach and Network Centric Warfare is the establishment of decision superiority. Decision superiority can be achieved if the army is capable of gaining exact and timely information, transmitting that safely, evaluating that with the use of standard principles and procedures. For this the armed forces should comprise an integrated, collective operational network cooperating in its every element.[12]

---

[10] Dárdai, Ádám. Új eljárások a védelmi célú mobil távközlésben. [New methods in defensive mobile communications] In. Hadtudomány. 2004. Issue. 3-4.
Előházi, János. Védelmi célú informatikai rendszerek feladatai és fenyegetettségei a hálózatközpontú hadviselésben. [Tasks and Threats of Defensive Information Technology Systems in Network Centric Warfare] In. Hadmérnök. Volume 2. Issue 3. September. 2007.

[11] Jane's Defence Weekly. Issue. 23. March. 2007.

[12] Nagy Zoltán. A 21. század fegyveres küzdelmeinek irányai és kihívásai a NATO szemszögéből. [Trends and Challanges of Armed Combats of the 21st Century from the Aspect of NATO] In. Hadtudomány 2005. issue 4. Indroductory presenation.

5. ASYMMETRY

According to the lessons learned the versatile – primarily psychological – preparation and training of the deployable personnel is exceedingly important considering the knowledge about the expected area of operations (theater), because the majority of operations – according to the experience – are executed in different environments, under different weather and terrain conditions and under different cultural and social circumstances. Military forces of the alliance and one-off coalitions frequently resolve their tasks through the asymmetry of forces, devices, procedures and circumstances. Asymmetry can mean the differences in theory and practice of armed combat, different technologies and organizations of the opposing forces. The larger the asymmetry the more important the preparation becomes.

Analyzing the events in Iraq and Afghanistan it can be concluded that local resistance (rebels, suicide attackers) adapted quickly to the circumstances of asymmetric warfare in both countries. They are well aware of the fact that the international forces have military advantage over them therefore they try to avoid confrontations, engagements in combat; they use hit-and-run tactics and their attacks target forces with weaker resistance (local police, security forces). Attaining the largest possible media and population impact (support) favorable to them through actions and assassinations is an important aspect in the planning. [13]

The importance of psychological preparation is not debated among researchers of military science, what is more its importance is emphasized more and more frequently. It became central to the training of soldiers that during armed combat the presence of initiative means comparability as well. In other words, different capabilities mean the potential for victory. "*The psychological dimension of a conflict is as important as the physical. This is especially true considering the current changes in the security environment and regarding the rapid increase and multiplication of asymmetric threats and the increased demand for peace. In fact a conflict is the clash of opposing interests which takes place not only in the minds of the participants but in the field as well. A conflict is fight for power. The mental constitution and attitude of people (friendly, enemy, uncertain, or non-committed) could decide the outcome of that certain conflict and the nature of the environment after the conflict.*"[14]

Asymmetry can also mean *in psychological operations* that the enemy seeks terrains during the conduct of combat where our advantage does not apply. They win over the population, use other procedures and methods of combat, attack only the exposed, vulnerable and defenseless points etc. A possible solution is the elimination of asymmetry in certain fields of armed combat. The successful execution of psychological operations may help with this. Connections between the strengths of the enemy must be recognized as fast as possible and one of them must be efficiently blocked and destroyed. Due to its relationships the blocked, destroyed combat unit will probably have its influence on other units as well thus establishing favorable conditions for victory. Recognizing the strengths of the enemy and the connections between them is naturally a prerequisite of success. In our opinion psychological preparation during commanders' training plays an important role in establishing these capabilities.

6. MILITARY SCIENCE RESEARCH IN THE FUTURE

According to the lessons learned from military operations of the past few years conducting armed combat is not as simple as described above; there were many problems especially during peace enforcement, peacekeeping, and peace building. Absolutely superior and modern military force has always been relative. Its aim is the complete destruction of the enemy and nowadays there are more and more situations where building is also required for the victory. Comparing

[13] Szenes, Zoltán. Békeperspektíva. [Perspective of Peace] In. Regiment. 2008. Issue. 1. pp. 8-11.
[14] Honvédelmi Minisztérium Honvéd Vezérkar, Civil-katonai együttműködési konferencia. [Ministry of Defence, Defence Forces General Staff. Civil-Military Cooperation Conference] Göd. 15-16. December. 2004.

the experiences with the authors' opinions it can be concluded that *armed combat has become more complex. The following issues have become the focus of military science research:* what is the impact of the changes and expansion of the content and form armed combat on the execution of the previous tasks of the armed forces, the operation of organizations, the preparation and training of soldiers? Are these operations (peacekeeping, peace enforcement) part of military science (tactics, operation, combat activity) or are they new ways of armed combat which require further research according to the lessons learned from previously staged operations? What kind of new mental, psychological phenomena, ethical and other circumstances and problems appear in these changes? What kind of combat procedures do armed peace enforcement and peacekeeping require from small units?[15]

During theoretical and practical research of military operations the theory of *universal defense* can be encountered more and more frequently which includes the comprehensive information technology supervision and use of the theater. The exact and timely availability of information can be crucial in decision superiority and in gaining initiative.[16] An information technology network containing more and more data due to computerized process contains data concerning the medical status of soldiers deployed in the theater. The displayed data accurately indicate the "biological resources" and capabilities of the soldiers that is their states of combat readiness. Gyula Koródi described his notions concerning the combat capabilities of soldiers in a previously published study which is useful for experts and researchers dealing with this issue.[17] In our opinion in spite of the constant development of technical devices the soldier will remain the central part of conducting armed combat. The soldiers of the future are in the center of a universal information technology system where almost every part of the system is designed for their safety and the protection of their combat capability. The constant physical, mental and psychological state of soldiers has a significant influence on the successful execution of the task, the protection of their combat capability and the possibility of their wounding (death). "Acting" in theater involves a tremendous load for soldiers. In other words, the soldier constantly balances between the protection of his own life and the success of the mission on the higher end of his endurance. This must be compensated with the use of universal defense in theater which has many medical and biological components, as the author disclosed in his study.

7. CHARACTERISTICS OF ARMED COMBAT

According to Hungarian and foreign (both western and eastern) authors armed combat can be characterized by the following points: *firstly,* the use of long range and precision weapons threatens the forward movement and assembling of forces. This action is executed through rocket- and air strikes with the involvement of all services. *Secondly,* the strategy and link between strategy, operation, and tactics are constantly modernized and qualitatively improved from the aspect of execution of operational tasks. On the basis of corresponding and comprehensive (coherent) connection the extent of the strategic success of armed forces is based on operational and tactical successes in both combat operations and operations other than war. *Thirdly,* an armed combat will take place in the entire space with the involvement of all the services, arms, expert teams and civil forces using the latest and most modern devices. *Fourthly,* the importance of the division, protection and defense of forces and devices increased due to more accurate and efficient rocket- and air-strikes. *Fifthly,* the range, accuracy and destructive power of rocket- and air-strikes will further increase. This enables the non-stop continuation of strategic level offensive operations. *Sixthly,* rocket- and air-strikes will destroy political,

[15] Herfried, Münkler. Háborúban vagyunk? Terroristák, partizánok és a háború új formái. [Are We At War? Terrorists, Guerrillas and New Forms of War] In. Politische Vielterjahressehchrift. Issue 2001/4. pp. 581-589.

[16] Kőszegvári, Tibor. A hadviselés és a tér összefüggései a 21. században. [Correspondances of Warfare and Space in The 21th Century] Material of the presentation delivered at Zrínyi Miklós National Defense University on 13th December 2000.

[17] Kóródi, Gyula. Az idegrendszer lövési sérüléseinek aktív megelőzése. [Active Prevention of Gunshot Wounds of the Nervous System] In. Doktorandusz. 2005. Issue. 1. pp. 119-127.

economic, administrative, infrastructural and military objects of the enemy at the same time. *Seventhly*, according to the above points the efficient and well protected missile and air defense will be – and is even today – of crucial importance which can compete with all the enemy's destructive devices. *Eighthly,* the role of reconnaissance and intelligence will further increase in order to learn the enemy's intentions and to prevent disinformation. *Ninthly,* the achievement of air superiority; successful execution of rocket- and air-strikes will have a crucial impact on the success of armed combat, but apart from these the importance and necessity of land operations will remain.[18] If this evaluation is to be accepted it becomes evident that it is reasonable to analyze the potential tasks, organization, equipment and education, qualification and training of armed forces through the consideration of all these factors.

Lessons learned from the crisis response operations of the previous years justify the fact that for the protection of the so called "*effective fighting force*" at least three times bigger support force is needed. This is especially true in case the contingent is deployed in an area far from homeland. The running of this infrastructure requires further personnel and financial resources during the operation. According to other experts every deployed soldier will be served by five to six other people in future crisis response operations. Furthermore, forces participating in these operations will be much more expensive than the forces of the Cold War era. Expenses can be cut with international cooperation which means that certain logistic services get cheaper as the number of nations participating in the operation increase.[19]

CONCLUSION

In our opinion the questions "*is military science is crisis*" and "*is there a contradiction between theory and practice of armed combat*" should be discussed but the answer is not easy. Comparing theory and practice the answer to the first question is "no" and "yes" to the second one. At the same time analyzing the military events of the past years the answers require serious research because armed combat itself became more complex.

On the basis of these points in Hungarian military higher education it is reasonable to teach all the knowledge and practical lessons learned concerning armed combat – regardless of the state of armed forces – at all levels of operations. The expected rules of application of arms and services, the law of armed conflict, the latest achievements of military science research should also be included in the curricula. In our opinion such a task can only be carried out by well educated and constantly researching teachers. In other words, those who are ignorant of the development of the theory and practice of tactics, operation and strategy, are not able to analyze contemporary events of armed combat scientifically.

In our study we examined whether there is a contradiction between the theory and practice of armed combat, why there is a contradiction, what the cause is of this using experiences and research findings published both in Hungarian and foreign literature. Naturally we cannot describe every detail due to limitations of extent, and it was not our aim. However, observations made by other researchers are welcomed for the sake of the research of the theme indicated in the title.

---

[18] Pirityi, Sándor. Barangolás a „sebezhetőség" fogalma körül. [Exploring the Concept of Vulnerability] In. Új Honvédségi Szemle. Volume 59. Issue. 2005/12. pp. 45-61.
Hajma, Lajos. A háborúval kapcsolatos elméletek változásai. [Changes of Theories Concerning War] In. Hadtudomány. 2005. Issue 2.
Richard J. Rinaldo. Warfighting and Peace Ops: Do Real Soldiers Do MOOTW? In. Force Quarterly 1997. Issue. 14. pp. 111-116.
AJP 3.4 Non-Article 5 Crisis Response Operations.
MC 237/2 NATO Military Policy for Crisis Response Operations.

[19] Szarvas, László. A békeműveletek logisztikai támogatása. [Logistic Support of Peace Operations] Thesis. Library of Zrínyi Miklós National Defense University. Budapest, 2004.

Keywords: Combat operations, operations other than war, crisis management, crisis response operations, Network Centric Warfare.

Kulcsszavak: a katonai képességek, a katonai feladatok, az információs műveletek, a katona mint a művelet rend.

FELHASZNÁLT IRODALOM

1. Klaus, Naumann: Der Gewalt nicht nachgeben. Truppenpraxis 11/1999.
2. Yitzhak Klein. A Theory of Strategic Culture. Comparative Strategy An International Journal. Volume 10. Number 1. January - March 1991.
3. Kovács, Jenő. Magyarország katonai stratégiája (komplex kutatási téma) II.rész. [The Military Strategy of Hungary (complex research subject) 2nd part]. In. Országos Kiemelésű Társadalomtudományi Kutatások. Budapest. 1995.
4. Forgács, Balázs. Háború és hadikultúrák. [War and Military Cultures] In. Új Honvédségi Szemle 2002. Issue. 10.
5. Szenes, Zoltán. Békeperspektíva. [Perspective of Peace] In. Regiment. 2008. Issue. 1.
6. Talla, István – Babos, Tibor. A műveletek hatásalapú megközelítése koncepció a rigai NATO-csúcsértekezlet tükrében. [Effect-based Operation Approach Concept According to the NATO Summit in Riga] In. Új Honvédségi Szemle. April. 2006.
7. Bjorn E. Kristiansen. Defense Transformation (A NATO Prespective). Conference in Garmish-Partenkirchen. 10. April. 2006. www.marshallcenter.org.de 14-03-2008.
8. Future Soldier Systems. NATO's Nations and Partners for Peace. 2004. Issues. 4-5. pp. 122-154., 76-95. 2007. Issue 4.
9. Kóródi, Gyula. Az idegrendszer lövési sérüléseinek aktív megelőzése. [Active Prevention of Gunshot Wounds of the Nervous System] In. Doktorandusz. 2005. Issue. 1.
10. A digitális katona személyi védelme a honvédorvos szemszögéből. [The Protection of the Digital Soldier from the Aspect of the Medic] In. Hadmérnök 2006. Issue. November. Print edition of the lecture delivered at the 6th Robotic Warfare international conference.
11. Előházi, János. Védelmi célú informatikai rendszerek feladatai és fenyegetettségei a hálózatközpontú hadviselésben. [Tasks and Threats of Defensive Information Technology Systems in Network Centric Warfare] In. Hadmérnök. Volume 2. Issue 3. September. 2007.
12. Kőszegvári, Tibor. A hadviselés és a tér összefüggései a 21. században. [Correspondances of Warfare and Space in The 21th Century] Material of the presentation delivered at Zrínyi Miklós National Defense University on 13th December 2000.
13. Pirityi, Sándor. Barangolás a „sebezhetőség" fogalma körül. [Exploring the Concept of Vulnerability] In. Új Honvédségi Szemle. Volume 59. Issue. 2005/12.