INFORMATION ACTIVITIES – ESSENTIAL WARFIGHTING FUNCTION IN TODAY'S MILITARY OPERATIONS

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Abstract: *The nature of recent military conflicts, largely unconventional, essentially involves two common features related to the type of actors involved and the methods used. If regarding the first of these, one can observe that the tendency is of metamorphosis of conflicts towards the area where state actors are forced to confront malignant non-state actors, such as terrorists or insurgents, the second refers to the methods used in such confrontations, most of them having an unconventional character, which does not comply with international conventions or the laws and principles of armed conflict, methods that have, because of the unprecedented technological development, increased in number and intensity. In this context, military forces have tried to adapt their approach to conflicts, to adjust their force structures, types of operations, but also the related procedures to try to find an optimal response in countering such behaviors. Against this background, the concept of information operations has acquired an essential importance, the use of actions subsumed to it offering the possibility of military force to create effects in the psychological dimension by influencing the target audience, with immeasurably greater results than the classical approach, with effects only in physical dimension.*

Keywords*: conflict; unconventional; information activities; influence; information; information environment.*

Introduction

Most strategies, branches of service and military domain, as a whole, usually reflect the politics, the economy and, most of all, the technological advancement of any society. The rapid evolution of the information and communications systems, as well as other electronic devices with a key role in information processing represents one of the basic characteristics of our contemporary society. The possibility of transmitting information in real time, in a secure way and under the protection of anonymity, can be considered as a capability that provides many advantages, but it might be, at the same time, a considerable vulnerability for any organization. Information has become a powerful weapon that can be used to influence, destroy, corrupt or overcome the opponent's ability to make decisions in accordance with the reality or in due time in order to allow him to have a proper response to the development of the situation on the battlefield.

All of these contemporary society's characteristics have a direct impact on the military domain as well, affecting a wide range of activities, the operation planning process, ways of thinking and analyzing the operational environment, but also the decision-making process, to identify but a few. The evolution tendency in the military field is focused more on achieving informational supremacy rather than having a superior force in number of soldiers or weapons. Therefore, we can definitely say we are witnessing a shift in power from the area of gross violence to the area of subtle violence, knowledge and the intelligent use of information to model perceptions. In this article I will try to highlight the growing importance of the information in modern warfare, how it can be used to influence the adversary and create advantages in the information environment, effects that will eventually lead to the success of the military operations. In this respect, one should also be prepared to counteract such actions employed by the enemy. The practical tool the army uses in order to shape the information environment through the appropriate employment of the information is the information operations (INFOOPS). The descriptive method is the one I will use in this article to draw the attention to the importance of INFOOPS in modern warfare, considering the nature of contemporary conflicts, and then explain what information operations are all about and how one can best employ this available tool so that it facilitates adequate effects for the mission accomplishment.

At the end of the day war is but a conflict of wills, so trying to persuade the adversaries' will by using information as a tool might be the smartest way to win the war. Against this background, one may come to the conclusion that, nowadays, *to influence* has become much more important than *to have*. Furthermore, the characteristics of the contemporary warfare fully support and integrate these ideas. Nowadays, battles have become more and more unconventional. There are two main changes with respect to the nature of warfare that support this fact. First of all, this is related with the parties involved. We seldom see today conventional battles fought against two countries. Very often, the conflict today involves at least one malign non-state actor, which pursues its own agenda and makes use of all types of procedures to accomplish its objectives. Second of all, it is about these procedures used throughout the conflict. Many of them, nowadays, can be considered as unconventional. And the characteristics of the contemporary society encourage and offer new ways and methods to support this unconventional nature of warfare.

Contemporary information environment

Armies have always used information technology to support their goals in battles. The use of smoke signals in ancient times, the employment of the telegraph in the last century, or the intelligent ammunition applied today can be considered only a few examples to support this fact. However, until recently, information systems were considered to be secondary to support the achievement of the military objectives. The main concern was the use of "real weapons", with great firepower, like tanks, airplanes or projectiles to facilitate physical effects on the battlefield that eventually would create the conditions envisioned by the force at the end state of the conflict. Today, information systems have become critical to the conduct of military operations, so much that, most of the times, it is more effective to attack or influence your opponent information systems rather than to directly destroy his military forces. And this has a twofold explanation. First of all, this might be a cheaper solution and with less casualties to the force. Second of all, the previous statement has logic if we consider the increasing dependency of all military forces on the information systems to coordinate and facilitate the employment of forces on the battlefield, and by affecting its information systems one can actually manipulate his opponent's whole operations process.

Nowadays, information itself has become more precious. It is unthinkable, today, for the military operations to have effects only in the physical environment. The ones in the information environment and in the cognitive or psychological one can have much more concrete results and over a longer period of time. These actions can be considered a viable option in achieving long-term military objectives. The importance of the outcomes in these environments is increased by the main characteristics of today's conflicts that take place especially in the urban environment, often against non-state actors that merge with the local civilian population. Likewise, these types of conflicts involve, usually, last generation technology, that is used as support for different methods employed. As a consequence, the population has become the main target audience which, coerced in an intelligent and efficient way, can support the military force efforts in achieving its set missions.

The development, without precedent, of the information technology, the accelerated pace at which they are materializing, the unrestricted access to information, in real time and on a wide scale, have determined military forces to adjust their structure, techniques and methods of reaction in crisis situations, in order to respond as effectively as possible to their occurrence or in the attempt to prevent them. This adaptation required an organizational adjustment that covers two complementary areas in terms of the information environment. The conclusion reached is that, equally, it is necessary for a military force to be able to influence and exploit certain vulnerabilities of the opponent, but also to be able to develop skills and capabilities to protect their own. In this regard, information activities were considered the best suitable method

to respond to the situations mentioned before. These involve the transmission of information, whether they are false or true, with the purpose to manipulate the audience and influence the behavior of the enemy.

Information operations warfighting function

The essence of information activities is to be able to influence, and the latter requires effective communication. We all consider communication as representing those words, facts, images or symbols that shape the public opinion in order to change behaviors and achieve certain effects or objectives. But successful communication should also involve assessing the availability, the level of trust, but also the vulnerability of the communication infrastructure. It requires, at the same time, a thorough examination in order to identify the most appropriate channels to transmit the message as well as an analysis of the target audience in order to shape the message according to it.

To optimize the communication process, it is necessary to develop a comprehensive understanding of the target audience and how they receive information and react to it. Given the characteristics of the contemporary armed conflicts listed above, in which the population is one of the centers of gravity that must be employed to achieve success, this understanding can also help the person who wants to send messages, identify which part of the population is more likely to receive the message and what are the best ways/means/tools of communication to achieve the goals they endeavor.

Influencing through communication can be considered as the essence of information operations and it should involve the efficient manipulation and management of information. This is the basis for carrying out these types of actions, and a correct and timely understanding of it can create an advantage for the one who manages this goal. Influencing has always been, throughout history, an important part of the society life. The ability to collect, research, analyze, process and transmit information has always been an asset for those who managed to optimize this process. "The most successful people are generally the ones who have the best information" said Benjamin Disraeli, a former prime minister of the United Kingdom in the 19th century. This assertion has proven its veracity throughout history in all areas of society that involve competition and, even more so, in the military, during armed conflicts, but also in peacetime, by protecting that critical, essential information for their own structure, or by collecting those that the opponent wants to hide. The importance of having the right information lies in the fact that it can ensure freedom of movement and action for those who manage it. However, information plays a crucial role in forming perceptions and opinions, and a hostile actor can make use of this, by employing the right methods and means, to place misinformation that leads to misinterpretation of the battlefield and thus creating an operational advantage for its forces. Therefore, influencing the understanding of the opponent's military leaders can be one of the most rewarding forms of using information operations.

Even though the impact of information operations on the conduct of military operations has always been critical, the recognition of this fact has materialized relatively recently, this field being included among the warfighting functions, both in NATO and Romanian doctrines, since 2017. Although the US has not recognized it as a warfighting function in its tactical doctrines, there are debates in the US Army to acknowledge the proper importance of the information operations in combat, giving the nature of today's military operations. Nevertheless, the US recognizes its importance at the joint level where it is one of the seven joint functions.

Warfighting functions are functional categories of capabilities used to generate specific effects during military operations. These are major activities that constitute the basis of the courses of action. They support each other, having the command act at their center, and represent the main tools available to the commander, which he integrates and coordinates in the operation, to synchronize their effects in time, space and objectives. Therefore, they support the

exercise of command and control by commanders, and through proper employment, they contribute to the fulfillment of the mission and objectives of the military structure.

Information operations, as a warfighting function, represent a mechanism that can allow military forces to employ information to influence relevant actors, using its persuasive side throughout the battlefield. Therefore, this function involves the management of information, its deliberate exercise, in correlation with other functions, with the purpose to create certain effects that can be measured by changing or maintaining certain perceptions, attitudes or other elements that contribute to achieving the desired behavior by the target audience and which support the decision-making process. Also, these types of activities reinforce the commanders' understanding of how the persuasive nature of information is used in military operations to accomplish the mission and achieve the objectives.

Information operations create effects within the information environment, as part of the operational environment in which military actions take place. These effects involve influencing, destroying or degrading to a certain extent, corrupting or defeating the opponent, by affecting its decision-making process and all the other elements involved, and, at the same time, protecting your own capabilities and systems against possible actions of this kind carried out by the opponent. Considering that the main objective of information operations is to alter the decision-making process of the opponent, consequently affecting the will to fight, commanders, regardless of the hierarchical level at which they act, must ensure their integration into the operations process from the very beginning.

Information operations and information environment

Commanders conduct information operations to affect the information environment. Consequently, for a comprehensive approach of these types of operations, it is necessary to define and understand what the information environment, from a military perspective, is. JP 3-13 - *Information Operations*, the American joint doctrine for information operations, defines this concept as "the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information."[1]. The purpose of using the capabilities of information operations is to gain an advantage over the opponent within the information environment. This advantage supports the execution of the operations in accordance with the commander's intention, allowing him freedom of movement and, at the same time, creating the necessary premises for the operations success, thereby contributing to limiting the opponent's ability to operate in the information environment, and restricting his counter options in accordance with his concept of operations.

The information environment is not separate or distinct from the operational one. It is rather a part of it. In fact, any activity that takes place in the information environment is transposed and affects, simultaneously, the development of activities in the operational environment. The American Doctrine for Joint Operations, JP 3-0, defines the operational environment as "a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander"[2]. Although the two environments are defined distinctly, they are interdependent and each is an integral piece of the other.

The information environment can be understood by referring to its three component dimensions: physical, informational and cognitive.

The physical dimension is comprised of the infrastructure necessary for the transmission, reception and storage of information. It represents what is perceptible, palpable and can be measured and quantified. As the name suggests, it implies something concrete that can be felt using the olfactory sense.

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[1] ***, JP 3-13, *Information Operations*, US Joint Chiefs of Staff, 2014, p. GL-3.
[2] ***, JP 3-0, *Joint Operations*, US Joint Chiefs of Staff, 2018, p. GL-13.

The information dimension is the field in which information is created, collected, processed, manipulated, disseminated or protected. It involves the data that are manipulated. These may represent various codes, texts, images or other documents that military personnel can use to support the achievement of their objectives. The informational dimension ensures the necessary connection between the physical and the cognitive dimensions.

The cognitive dimension of the information environment refers to the minds of those involved in transmitting or receiving information. It implies the information process, perceptions, reason, knowledge, understanding, beliefs and values of individuals or groups. It is also the place where decisions are made and, where many battles or wars can be won or lost. There are many factors that can influence the elements of the cognitive dimension of the information environment, among which the most important can be considered: values, beliefs, culture, motivations, emotions, experience, prejudices, morals, education, mental state, identity or ideology of individuals or organizations. Defining these influencing factors as accurately as possible, in a certain space and time, or in a certain situation, becomes critical to understanding the best way to influence the solution of opponents' decision makers and create the desired effects. If we admit that war is a conflict of wills, then victory can be achieved by mentally defeating the opponent, so what one should do is to create effects within the adversary's cognitive dimension. From this point of view, although all three dimensions are important and only together, through synergistic actions, can lead to the achievement of the proposed objectives, the cognitive one seems to acquire a crucial relevance in conducting military operations through its complexity, that requires sustained effort in creating those desirable ideas to support the success of the operation.

Military actions carried out in the operational environment create effects in all three dimensions of the information environment. Maximum accuracy in terms of these effects can only be achieved through a detailed analysis, accurate understanding and correct visualization, by military commanders, of the information and operational environment as a whole. However, the contemporary information environment can be characterized by an unprecedented complexity preventing a smooth process in this regard. Due to unrestricted access to the Internet, computer and digital communications networks, this environment has become even more important in the planning and conduct of military operations. The devices used in the dissemination and processing of information today require, for the most part, wireless technology, which ensures a much higher speed of information flow and a high volume of information transmitted. All of this complexity affects the precise interpretation of the operational environment that may create an advantage for the adversary.

One of the purposes of information operations involves affecting the opponent's ability to correctly understand the course of events. This damage to the opponent's perception of certain circumstances on the battlefield can lead, indirectly, to the deterioration or destruction of his ability to lead and coordinate military operations, providing an advantage, often decisive, for our own forces. At the same time, information operations involve preserving those skills of the allied commanders to lead, understand, visualize, describe and direct their own operations.

NATO doctrine for information operations, AJP-3.10, as well as that of the Romanian Army, offers a similar definition to the information operations. According to these documents, they represent a "military function to provide advice and coordination of military information activities in order to create desired effects on the will, understanding and capability of adversaries, potential adversaries and other approved parties in support of the mission objectives"[3].

A correct understanding of this definition requires a detailed analysis of its component parts. Therefore, according to it, information operations involve the performance of information activities that can be defined as those actions designed to affect the information or information

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[3] ***, AJP-3.10, *Allied Joint Doctrine for Information Operations*, NATO Standardization Office, 2009, p. 80.

systems of the opponent. They can be carried out by any actor and they also include measures to protect against possible information activities carried out by the adversary.

The efficiency of any decision-maker depends on his will, his ability to understand, as well as the capabilities he has at his disposal to undertake a smooth process in this regard. In plain English, he must be able to understand the situation he confronts with, to have the will to act in accordance with it, but also to have at his disposal the resources he needs in order to deliver effects. If at least one of these elements is missing or damaged, then his ability to perform in the desired way will be affected.

It is very important to mention that information operations are not a capability in itself, but an integrative process, which involves coordinating and synchronizing those capabilities available to act and create the desired effects in the information environment. Therefore, information activities and their effects, which are found in the definition of the concept of information operations, are carried out with the help of certain military capabilities, which are different, in magnitude, from echelon to echelon. The most important of these can be considered psychological operations, civil-military cooperation activities (CIMIC), actions to mislead the opponent or deception operations, security of operations (OPSEC), electronic warfare (EW), etc.

The US approach to defining information operations is, in essence, very close to that of NATO. According to JP 3-13, the US doctrine for information operations, they represent "the integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own"[4].

The integrated use of information capabilities means that information operations bring together, at a given time, those information capabilities necessary to create effects in the information environment to ensure an operational advantage to the commander for his own forces. While information capabilities create individual effects, information operations, through their integrated use, can achieve aggregate, synchronized and synergistic effects in support of the achievement of operational objectives.

Information capabilities are tools, techniques and activities used in the information environment to create favorable operational effects and conditions. This definition allows any commander to use all available resources to change the operational environment in his favor. For example, if artillery fire is used to destroy the communications infrastructure that supports the opponent's decision-making process, then artillery can be considered, by extension, an informational capability. However, the term information capability tends to refer to those tools, techniques or activities whose main purpose is to affect the information environment. These capabilities are used in accordance with the other lines of operation. Commanders use lines of operation and lines of effort to visualize and describe military operations, linking those points and conditions deemed decisive to the desirable conditions at the end state of the operation.

Commanders, supported by their own command staff, ensure the integration of information operations into the operations design in order to support each line of operation or effort. Depending on the situation, information operations can be a line of effort, within the design of operations, to synchronize military actions in support of creating effects in the information environment.

Information capabilities are used in order to influence, disrupt, corrupt or usurp. Information operations seek to create specific effects, at some point, within the information environment. Immediate effects, such as disruption, corruption or usurpation, are possible within the physical and informational dimensions of this environment, by denying, degrading or destroying the opponent's information capabilities. The effects within the cognitive dimension, achieved through influence, require a longer period of time to manifest. However, these cognitive effects, which involve a behavioral change, are the ones that most affect and

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[4] ***, JP 3-13, *Information Operations*, US Joint Chiefs of Staff, 2014, p. GL-3.

influence the achievement of decisive results. These effects are directed, as I stated before, on the decision process of the opponent, regardless of the stage of the operations.

Cristian-Octavian Stanciu synthesized very well what INFOOPS is all about. According to him, „information operations/information war are non-kinetic operations, directed to annihilating opponent's C2 systems, neutralizing their electronic means while protecting their own systems and equipment"[5].

Considering this, it is obvious that, in a first phase, although with results that can be quantified later, these information operations are directed to the opponent's planning process. Achieving these effects involves affecting all factors of the process, among which the most important are:

• command and control systems, as well as other systems that facilitate the development of the decision-making process by the opponent;

• communication systems;

• informational content (words, images, symbols);

• military personnel involved in the process;

• the relevant audience, which may influence the decision of the opponent, from the area of operations or interest.

Our own forces' commanders, as well as those of the opponent, at all hierarchical levels, as well as the activities they undertake during operations, depend on a wide range of systems, capabilities, information and networks that support the decision-making process at the level of the structure it commands. Creating operational advantages in the information environment involves exploiting these sort of capabilities of the opponent, but also protecting those who support our own forces decision-making process.

Therefore, it can be seen that both of the approaches, American and NATO, regarding the concept of information operations are very similar. In both cases, information operations involve the performance of information activities, through various information capabilities, in order to achieve desired effects within the information environment. These effects can be created using a wide variety of military capabilities, their coordination and synchronization being essential conditions for achieving military objectives.

Conclusions

In conclusion, it can be seen in today's military operations that, given the growing importance of information and information systems for the success of the operations, but also due to the growing dependence of any military decision making process on these tools in order to facilitate fast and foremost better decisions, the military force becomes very vulnerable as well to adversary's actions designed to exploit such weaknesses, if proper measures to protect their process are not taken. In this regard, the significance of the correct use of information operations tends to become critical for the success of the military operations, if these are directed to influence the target audience, or to protect their own information evaluated as being critical for the military structure. This is also due to the nature of current conflicts, which increasingly involve an unconventional side, implying malicious non-state actors who are an integral part of the population in the conflict area, and who often apply unconventional methods, being sheltered by this merge with the civil environment in the respective area, trying to gain its trust to achieve their own objectives. Consequently, these conflicts require a competition to influence and gain the trust of the population, and the correct and timely use of the component capabilities of information operations may be the most appropriate response of the military to these types of challenges.

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[5] Locotenent colonel Cristian-Octavian Stanciu, Teza de doctorat, „*Implicaţiile sistemelor şi tehnologiilor moderne asupra fizionomiei acţiunilor militare",* ştiinţe militare, Universitatea Naţională de Apărare „Carol I", Bucureşti, 2016.

BIBLIOGRAPHY

1. ***, AJP-3.10, *Allied Joint Doctrine for Information Operations*, NATO Standardization Office, 2009.
2. ***, ATP 3-13.1, *The conduct of Information Operations*, US Department of the Army, 2018.
3. ***, FM 3-13, *Information Operations*, US Department of the Army, 2016.
4. ***, JP 3-0, *Joint Operations*, US Joint Chiefs of Staff, 2018.
5. ***, JP 3-13, *Information Operations*, US Joint Chiefs of Staff, 2014.
6. ***, MC 0422/6, *NATO Military Policy for Information Operations,* 2018.
7. Locotenent colonel STANCIU Cristian-Octavian, Teza de doctorat, *„Implicaţiile sistemelor şi tehnologiilor moderne asupra fizionomiei acţiunilor militare", ştiinţe militare*, Universitatea Naţională de Apărare "Carol I", Bucureşti, 2016.
8. Major TELLEY Christopher, *The Influence Machine: Automated Information Operations as a Strategic Defeat Mechanism*, The Institute of Land Warfare, Association of the United States Army, 2018.
9. Col. MARK D. Vertuli, Lt. Col. BRADLEY S. Loudon, *Perceptions are reality - Historical case studies of Information Operations in Large-Scale Combat Operations*, Army University Press, Kansas, 2018.