INFORMATION CYCLE PART OF INTELLIGENCE PROCESS

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Abstract: *In this article, I highlighted two elements essential to any modern military action and the connection between them. One of them is analyzing the information cycle as a process and the other is the process of intelligence. The information cycle can be considered a process, because it consists of operations through which the transformation of data occurs, which include different stages such as collecting, processing, analysis and dissemination. After this, the data is successfully transformed into intelligence products. After studying the connection between data, information and intelligence, I highlighted the fact that the processed information is transformed into "intelligence" products, which, in turn, are obtained from a structured process called the cycle of "intelligence". In this article I speak about these concepts while relating to information that are presented in the NATO and US army's doctrines.*

Keywords: data and information, information cycle, intelligence process.

Introduction

Information activity, within the operational structure of a military command, is a complex process for processing data and information so that it can be used in decision-making processes. The many activities, which are carried out within this process, involve the simultaneous or successive intervention of the human and of the technical means of processing the data and information for: collecting, formalizing and storing the data as well as for the analysis, interpretation and processing of the data.

The information structure, within the military command, acts to ensure, in a timely manner, the flow of critical information and the necessary information products, both inside and outside its own structure. The relevant information needs are set by the commander of the operational structure who must specify who the other beneficiaries of the information are and ensure that they will receive the information in a timely manner.

Information is introduced into a complex process, in which it becomes relevant to the needs of the beneficiaries. This process is extensive and it requires certain elements to be able to run. Thus, information travels further, into being transformed into intelligence products.

Information Cycle

The information cycle was defined, in certain works devoted to this field (doctrines, military publications, manuals), as a fundamental process of the military information field, sequential method or even framework. It can be said that the information cycle represents in fact a cyclical series of logical sequences of specific activities structured logically and systematically in the form of distinct stages and that can be considered a process because, this

represents a succession of operations through which a change occurs, by transforming data and information into processed information or even intelligence products.

In the Romanian specialized doctrines and handbooks, for the military intelligence activities, the following phases are established, consisting of[1]:

- Planning and directing;
- Collecting data and information;
- Processing data and information;
- Analysis and production;
- Disseminating information.

Other armies, whose methodologies are based on the same set of principles, provide, within the Information Cycle, five stages. From the five stages dissemination and feedback are merged and included into one. Analyzing the main concepts regarding the Information Cycle, we can conclude that it represents a cyclical series of logical sequences, of systematically structured operations in the form of distinct stages. It is also to be noticed that, according to the information doctrine of each army, this is the main model used in this field, having a multitude of details, which basically is summarized in four, five or six essential stages. It is appreciated that in the context of modern military actions the most complex and topical form is represented by the combined operations.

In order to achieve the information support of the joint operations, in the activity of planning the actions of the operational forces structure, a complex process of analysis and evaluation, carried out by the information / research structures, is carried out. The planning of the actions to support information must ensure the following: identification and assessment of the threat, knowledge of the situation, elaboration of the courses of the action and selection of the optimal one, the elaboration of the actions planning and means for collecting the information, implementing the information plan and carrying out the actions of collecting the information.

Within the General Staff of the respective structure, which carries out activities necessary for the elaboration of the courses of action, the information structures that carry out specific activities also participate. During these, the head of the information / research structure identifies the information requirements and elaborates the “Information Gathering Plan” as a basis for initiating future research actions. During the planning of the operations, all the activities specified above are found in the general concept of “informational preparation of the battlefield” known as IPB (Intelligence Preparation of the Battle space).

The process of information requirements and the coordination of the collection is recognized in the NATO language under the acronym CCIRM and refers to the activities carried out by the information / research structures, for the effective implementation of the stages of the information cycle.

CCIRM is defined as the process of transforming information requirements into information collecting requirements, establishing missions and coordinating collection elements and resources, monitoring results and reformulating missions, when necessary, and consists of two major components: managing information requirements and coordinating the effort of gathering information.

First component comes from operations and missions and starts from the critical information requirements of the commander - CCIR.

During the planning of the operation, the commander requests reports on the status of some structures, and the answers can be given through collection and dissemination and some of them must be discovered.

Information about the enemy's intentions is the most important and therefore the answer requires an assessment of its operational capacity. Such an assessment cannot be made by simply identifying the data. It requires an analysis of primary data and information, to be

transformed into processed information. Due to the importance of this type of information for the process of establishing the optimal course of action, they are called priority information requirements - PIR and are formulated by the information and operations departments on behalf of the commander. During the planning and conduct of the operation, the General Staff may request information requirements - IR.

Intelligence Process

According to the Allied Doctrine, the value of the information can be highlighted when the association of information with other information already existing / collected or when analyzed according to the experience that the recipient of the information has. The data itself, collected by a sensor, has a relatively low level of use. Let's consider that if the format of the data collected from a sensor changes, this data can be transformed into information.

If the information are correlated with other information already known and if they are analyzed in correlation with past experiences (collation and processing), they will result into a new set of meanings with another informative value and then the process is called "intelligence".

By studying the relationship between data, information and "intelligence" we can conclude that the processed information is transformed into "intelligence" products that are obtained following a structured process, called in the NATO or Allied states doctrines, the "intelligence" cycle. Let's also note how the term "cycle" appears, as in information cycle. An approximate translation for the term "intelligence", within the Romanian military doctrines, is represented by the word "information". Although the two terms are similar, they do not represent the same content. The term "information" is less comprehensive than "intelligence", meaning that the information is transformed into "intelligence" products through the "intelligence" cycle. In the American approach, the term "intelligence" represents an important and distinct set of relevant information that exists in all categories of the cognitive hierarchy and is integrated into the command and control process. The information (including "intelligence") from all stages generates the common operational image. At the same time, the scope of the term information is wider in the context of the relationship "intelligence - relevant information - execution information". In a newer edition of the NATO Glossary of Terms and Definitions, "*The product resulting from the directed collection and processing of information regarding the environment and the capabilities and intentions of actors, in order to identify threats and offer opportunities for exploitation by decision-makers*. "[2]

Analyzing the difference between the terms "intelligence" and information of some Romanian military experts, the concept of "intelligence" represents the obtaining of relevant information processed (processed), as in processed through a cycle, for a comprehensive understanding of the operational environment, the actions and intentions of the enemy and for generating the common operational image.

I appreciate that, in the case of NATO multinational joint operations, "intelligence" does not mean information but it is a complex process by which the most probable enemy's intentions and course of action are determined. Within the basic systems and processes involved in the planning of the multinational joint operation - "intelligence" can have the attribute of: combat function, combat ability, cycle, process and system. From the evolution of the concept of command, control, communications, computers and military information system, C4I, which I present below, can be seen the place, the role and the permanence of the presence of the information component:

- C2 (command and control), represent the functions of basis of the managerial process; - C3 (command, control and communications), affirms the vital role of communications in the realization of the system and the development of the command and control process. In the Allied Doctrines there are different approaches to this acronym. Thus,

in the NATO Glossary of Terms, C3 represents the acronym for the terms Consultation, Command and Control, while in the Allied Joint Doctrine, C3I represents command, control, communications and information / intelligence. Following the study of the Allied Doctrines, we have noticed that such partially different approaches are very rare and do not influence the common understanding of the presented concepts;

- C3I (command, control, communications and information / intelligence), consecrates the role of information / intelligence in the current stage;
- C4I (command, control, communications, computers and information / intelligence), establishes the role of computers in storing, processing and transmitting the very large volume of information needed in the preparation and conduct of modern operations; allowed the appearance of the concept of leadership - decision in near real time;
- C4I2 (command, control, communications, computers, information / intelligence and interoperability) requires the need for a common vision of NATO states regarding the realization of information systems within the Alliance's operations. NATO uses the phrase C3I with the meaning "command, control, communications and intelligence", and the support / information support systems are represented by the communication and information systems (CIS).

According to the NATO Intelligence Doctrine, a "source" is a person or thing from which information can be obtained [3]. According to the same NATO Doctrine, the "source" represents the primary origin of the information, either that the information is owned by the source, or that the source demonstrates through its own activity, that the information exists[4]. A source does not have the ability to process information. The only change that the source can make to information is to change their format. This may, for example, consist of a translation from one language to another through human contact or a conversion of an image, from a visual image into a digital signal, by a satellite. The "collector / agent / agency / collection system" is the person or system that obtains the information from the source. The "intelligence agency" is defined according to the AAP-6 Glossary, as a person or organization engaged in the collection and / or processing of information [5].

An intelligence agency may collect and process information, or it may only collect and transmit it to another agency to process it. In the NATO Doctrine of "intelligence" it is stated that in one part of the spectrum of "intelligence" agencies are the infantry research structures that report on the activities of the enemy, and on the other part of the spectrum are a large number of government agencies that receive information. from a wide variety of sources and who have and apply a great power of information processing, in order to ensure the "intelligence" products at the strategic level. According to Friedrich W. Korkisch, member of the Austrian Delegation to the CSCS/OSCE, the sources of "intelligence" come from [6]:

- -information from signals (SIGINT) that are derived from the interception of communications
- -communication Intelligence (COMINT) and from other electromagnetic emissions
- -electronic Intelligence (ELINT);
- -information from human sources (HUMINT);
- -image information (IMINT);
- -information from open sources (OSINT).

4. Conclusion

As we can see above, intelligence is widely composed by pieces of information, that relate to a certain domain, category, situation or are used as whole. We can also see how intelligence is a way more complicated process, as it requires domains of activity and even specialists to analyze the collection of information. On top of that, the product, which we call

intelligence, has a very important role, as it not just information anymore, but information focused on certain topic that plays a role now. What results, is a valuable good, or product, that is sold by intelligence agencies to certain buyers(that can be individuals or even governments), and by buyers, I mean the final recipient.

We can talk about the information cycle even while delving deeper into the intelligence process, as these two interlock. From what I highlighted above, we can see how the information cycle goes on at the same time with the development of the intelligence process. Itis safe to conclude that the information cycle is a big part of the intelligence process, as the least gives meaning to the first, by taking it apart, working with it, replacing it and transforming it into relevant products and this whole process is just one stage that includes the information cycle.

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THE NECESSITY OF USING SENSORS FOR THE PREVENTION OF SURPRISE IN MILITARY OPERATIONS

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Abstracts: *Over the last three decades, the major changes of the security environment around the world have led to the development and implementation of advanced systems that can detect the situation or intent of an enemy in order to warn the decision-makers (military or political). These systems can detect, identify, warn and even track the enemy troops and technique, using certain sensors that are based on advanced technology, thus leading to the impossibility of enemy to realise the tactical or strategical surprise. The aim of this scientific work is to highlight some conceptual aspects in order to give some understanding about the importance and the need of using sensors in order to anticipate and prevent strategical or tactical surprise.*

Keywords: prevention, sensors, surprise, superiority, warn.

Conceptual aspects about surprise, prevention of surprise and countering surprise in military operations

In modern warfares, the surprise concept has been and will be an important study domain of scientific research for military theorists as well as for practical activity aimed at planning, organizing and executing.

Any analysis of the principle of surprise refers to Sun Tzu who underlined that "all warfare is based on deception. Hence, when we are able to attack, we must seem unable; when using our forces, we must appear inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near. "[1]

The notion of surprise, in the most general sense, singnifies the relationship realized, at a certain time, between two entities (distinct systems, different states, different armies, groups of states, etc.), having opposite objectives in which the actions of one system will find the other one unprepared, decreasing its reaction capacity or even eliminating it.

Surprising is an element that can decisively influence the position of a particular state in the context of its international relations and which may affect its interests if no concrete measures are taken to prevent it. On a military level, it has been and remains one of the basic factors that can decide the success or failure of combat actions or it can even bring the victory in a war. Despite the existence of arms control treaty, the modernization of the armed forces is particularly aiming at increasing the military capabilities and the speed of action of the air forces and of the reconnaissance and diversion forces, so that they have a real capacity to

realise the surprise when they act against an adversary who has adequate protection and prevention capabilities.

In the context in which the small states do not have advanced modern combat capabilities, able to cope with rapid actions carried out by the principle of surprise, I think that it is necessary that the small states must ensure the prevention of military surprise, through a correct, realistic and permenant knowledge of the international political-military situation, especially of the one of the area of interest. In this way, the interinstitutional cooperation can provide the informational support necessary for the implementation of measures and actions in order to ensure the prevention of surprise.

Surprise and the prevention of surprise are the missions of the combat forces. In this context it is noticeable that the airborne units, in the offensive operation, ensure the enemys military surprise by conducting combat missions deep in the enemy lines, the artillery and the anti-aircraft missiles are conducting the "harassment" and they play a big part in the tactical surprise of the enemy, and the reconnaissance elements have the mission to discover and, in some cases, track the enemies forces in order to prevent and counter the eventual attacks.

Assesing the security of information, the commander considers the importance of concealing intentions in order to ensure the successful execution of the forces maneuver in a favorable position which can provide optimal conditions to trigger the attack and he examines the optimal way and the specific protective measures to achieve surprise against the enemy and to protect own forces.

The main characteristics of the offense are: surprise, concentration of effort (forces), fast pace, daring, bypassing (overcoming) the defender and exploiting success. These characteristics, in combination with the maneuver, ensure that the initiative is maintained and the decisive advantage is obtained in the short term.

In order to obtain the combat surprise regarding the moment, place, manner and direction of the attack and holding the initiative, a decisive factor is knowing the enemys intention and prohibiting the enemys reconnaissance missions. By surprise we obtain: delay of reactions, disorganization and confusion of the command and control system, induction of psychological shock among the personnel and reduction of the coherence of the enemys defense.

Prevention of surprise is a principle that targets all the measures and actions performed in all phases of the military operation in order to place the own forces in favorable situations against the potential enemy, thus hindering his attempts to achieve the surprise. In other words, prevention of the surprise consists in obtaining the advantage over the adversary.

Countering the surprise consists of a set of measures and actions in reaction to the effects of the surprise by which the military structures act to achieve their goals with minimal losses in personnel and combat equipment.

In other words, obtaining combat surprise leads to diminishing the combat power of the enemy which allows the attacker to achieve success with less force than would be necessary in the same conditions without obtaining it. Prevention involves a set of measures and actions which lead to decisional, technical, informational surperiority and countering surprise is potentiated by prevention and is based on superiority on all stages of the operation and aims on hitting the enemy's "heart".

About sensors and their use in military domain

A sensor is a device that detects and responds to some type of input from the physical environment. The specific input could be light, heat, motion, moisture, pressure, or any one of a great number of other environmental phenomena. The output is generally a signal that is converted to human-readable display at the sensor location or transmitted electronically over a network for reading or further processing. [6]

A sensor is a tool, module or subsystem whose purpose is to detect events or changes in its environment and to send information to other electronics, often a computer processor. A sensor is always used in conjuction with other electronic devices. The sensors isue signals or can transmit different commands in the automation installations, when the physical size of the input reaches certain limit values, which by exceeding can determine in some situations: accidents, damage, fires, explosions, etc. A proper classification of the sensors can be seen in Figure 1.

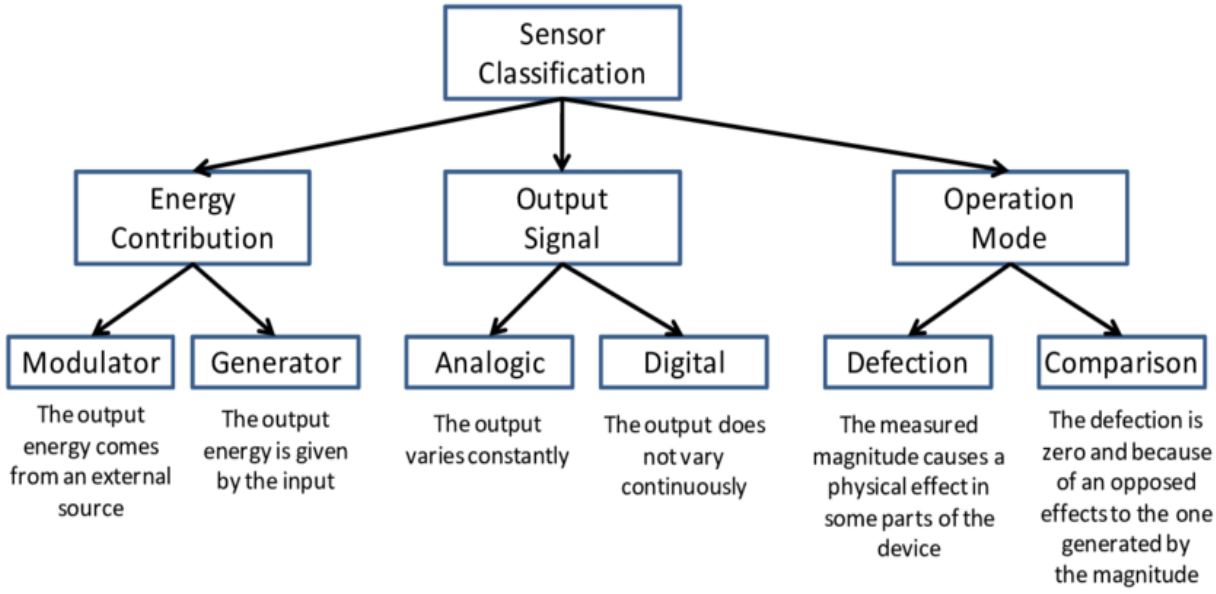

Figure 1. - Sensor Classification[8]

These devices are used in the military field, being installed on different types of technique and having different missions. The warning systems (terrestrial, aerial, maritime or space) have a wide range of sensors (infrared, proximity, motion, heat detection, etc.) that facilitate their mission. Sensors are used in environmental monitoring, weapon controls, communications and can be found in various security systems, detection systems,. Sensors are also used in battlefield surveillance systems for the conduct of modern warfare. These are deployed on land, aerial platforms, in space and underwater, in order to keep a permanent watch, monitoring a particular targeted zone.

For example, the types of radars which are used by the ground forces have many purposes such as enemy infiltration detection, artillery shell tracking or for early warning, search and control of air-defense weapons. Another example can be the surveillance aircrafts which can detect other aircrafts, can identify and track the ground troops or enemys ships or submarines.[7]

Nowadays, warning systems have in their composition a lot of advanced sensors capable of detecting any threats brought by the potential enemy. These systems have a critical role in a conflict environment or at peace.

In military operations, the proper use of different types of sensors with different purposes can bring the advantage on the battlefield by obtaining the surprise over the enemy or by preventing it. On the ground, the motion sensors can be installed in different positions in order to create a “net” capable of detecting and informing our troops about any troop movement carried out by the enemy. Ground radars or the surveillance aircrafts have the role to detect any ground or air activity such as missile launches, air attacks, ground redeployment of troops, etc., in order to inform the decision-makers about the intents of the enemy.

Conclusion

The major changes in the security environment have forced the military entities to research and invest in the devolpement and implementation of different advanced sensors in order to obtain, to prevent or to counter the tactical or strategical surprise.

Every military entity is using sensors in order to track their potential enemy and in order to gather all the possible informations about his size, his technology and most important his intentions. In a conflictual environment, using sensors in order to permanently monitor the battlefield is a must if we want to prevent the surprise.

High-tech surveillance systems can provide us valuable informations which we can use in order to destroy or neutralize the enemy forces. Modern military environments require reliable and proven technologies in which sensors are part. Sensors provide solutions to the defense systems by measuring, monitoring and executing complex tasks. These defense systems include radars, military vehicles, aircrafts, ships and satellites capable of working in the harshest environments even if they function in normal conditions or in combat conditions. These systems rely on advanced intelligent sensors in order to complete their mission (surveillance, intelligence, operations) and to assure us that we obtain the informational superiority in order to obtain the surprise against the enemy and to prevent or counter their attempts of realising surprise.

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THE INFLUENCE OF NEW TECHNOLOGIES ON CONFLICT ASYMMETRY

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Abstract: *considering that the concept of war itself is constantly changing and the rapid evolution of technologies has led to significant changes in the military field, we can develop the study on the future influence of these technologies in the urban combat environment. This evolution, both the doctrinal and the technological side of war, must analyze the need for staff to be able to cope with the demands of the modern field. Besides the modern equipment that the troops have to wear, it is necessary to train in conditions as close as possible to the urban environment in which the capabilities offered by the new devices can be implemented. By tracking how platoon commanders coordinate people and how they use the information provided by uavs, we can identify some limitations and correct the deficiencies that show up.*

Keywords: war, technologies, urban combat environment, modern equipment, capabilities.

If in the open field we can say that we know where the threat comes from having a frontal contact with the enemy, in the urban environment is needed 360 degrees of protection. Following the novelty aspects of urban environment analysis as the future battleground, I will begin my study by highlighting the use of the human component in the new confrontational environment.

Minimal use of the human factor on the battlefield

The use of UAVs (unmanned aerial vehicles*)* is not at all new, the first program called STAG One (Special Task Air Group One), which began in 1942, managed to create a drone to bomb a Japanese ship. These unmanned vehicles were equipped with a detachable cockpit to be controlled by the pilots, but these were built to be conducted by radio waves from another bomber who joined the devices. Since the beginning of the Second World War, we have noticed a high concern to build devices that allow a less exposure of troops. Over time, interest has increased in this area, and armed forces have begun to respond to terrorist bomb attacks launched from unmanned aerial vehicles. For example, the US attacks on a convoy carrying jihadist leader on November 14th 2001. This attack took place in Afghanistan following the terrorist attack on September 11th. Then the US Army and several CIA (Central Intelligence Agency) specialists launched an UAV called Predator that launched two bombs over that convoy. We can see in this retaliation of the US the tendency to protect the human factor against exposure to far too high risks. However, the army found this solution to respond quickly and violently against the al-Qaeda terrorist group. This response, so fast and without

any human risks from the US Army, is due to the remote control of the device. Also, the information which is transmitted could be analyzed, and thus the optimal response to the terrorist attacks was made. Over time, military experience in operating theatres has revealed the growing need for innovation in this area to reduce the number of casualties. Due to the predominance of guerrilla warfare elements, it was complicated for the military to anticipate a future action of the opponent. There was a need for thorough research of the area where troops would be shifted concurrently with minimal exposure of the human factor. American scientists at the Institute of Physical Science Inc. have developed in this regard Instant Eye, a UAV that facilitates the gathering of information and helps the platoon commander make the best decisions. This drone is very useful in reconnaissance missions and can be used in the urban area, reduced in size, allowing them to move around in buildings, around critical points, over hills and other hard-to-reach areas. The distance to which it can offer video images is 2 kilometers making it ideal for providing information in the near battle? This device can be used both during the day and night type regardless of weather conditions. Its four-prop shape gives it increased stability, which can reach speeds of 35mph.

Specifications:
Weight: - Aircraft: 1.2 lbs. (base flight weight)
- Shipping (base system): 19 lbs.
Size: - Aircraft (stowed): 9.75 x 16.75 x 2.25 in.
- Shipping (base system): 19 x 16 x 8.5 in.
Maximum Payload Weight: > 0.67 lbs.
Video Range: LOS, up to 2 kilometers
Speed: Hover to 35 mph
Endurance: Up to 30 min. (payload/wind dependent)
Service Ceiling: 12,000 feet MSL
Wind Station Holding: 30 mph

Without minimizing the usefulness of these devices, I must also point out that they also have limitations. These are noted in the list of specifications, where we observe a relatively short working time for a complex operation in the urban environment, as well as the ability to provide video images with a line of sight up to 2 kilometers. However, in urban areas due to high buildings, line-of-sight retention could force the operator to move in an unsecured space.

Marine's fighters have been trained since early last year to make optimum use of this drone. Exercises include maneuvering actions, both during the night and during the day. For nine months, they tested the device in various situations, managing to carry out research missions around obstacles as well as inside them. The qualities of this device are supported by Shaun Sorensen, SUAS (Small Unmanned Aircraft Systems) instructor with Training and Logistics Support Activity. He said: "We can take off in any direction we want, and we can hover if we need to, which is a significant difference when it comes to maneuverability. That technology is great". Regarding on some missions the soldiers will have to do, Sorensen added: "It reduces the need for forward observation… and can take some of the risk out of patrolling". Cpl Isaac Brown, an intelligence specialist with Task Force Southwest, mentioned the importance of protecting forces by observing the obstacles that may arise during combat actions "We can send this thing ahead and it can look for us. We don't have to send Marines not knowing what's on the other side of any obstacle. The Instant Eye is going to be a great tool for operations in Afghanistan; it allows us to go places we wouldn't necessarily want to for our first look. These systems are going to be invaluable to force protection."

The advantages provided by the remote controlled vehicles are some of the major ones, such as informing the platoon commander about the displacement of the enemy, the equipment at his disposal, and how many forces he has. It is critical to know this information

in time to avoid being surprised. The UAVs will help in discovering in advance the presence of enemies or will be able to detect the actions of the enemy. The significant advantage it offers compared to other UAS (Unmanned Aerial Systems) that have attached a camera with a memory card in which they can store the information, this device does not have storage media. Military unmanned aerial vehicles used in reconnaissance or attackmissions such as Raptor, Reaper, or Global Hawk do not have storage devices, and if they are shot down by the enemy, no information will be found that they can use. It is working to improve the capacity of the batteries so that they can provide more autonomy for these devices.

Considering the aspects presented, we can say that the future involves a reduction in the use of the human component in missions with a, particularly high risk. The degree of professionalization of the military will increase by training them in the optimal use of UAV or other devices that allow them to obtain information without being exposed. This kind of vehicle will be reduced in size and will be part of the military equipment, which is extremely reliable and useful in places with many munitions such as the urban area. Changing the space for military action and focus will be on the protection of forces and the training of troops in the handling of UAVs in the battlefield.

Effectiveness of robot use

The use of robots on the battlefield has been proven through use in various missions in combat theatres. They have taken specific functions, and with the help of these do not put the lives of the military in danger. For example, robots were used to evacuate the wounded if they were shot. Such a robot is the BEAR (Battlefield Extraction-Assist Robot) that is designed to save wounded soldiers without the need for other people to intervene. This mode of action avoids the exposure of other soldiers who might be injured. It can be seen in the picture below how the robot carries on his arms a humanoid manikin that he takes out of enemy fire. In this way, our troops can respond with fire from the shelter without being exposed and without any other casualties.

Another example of a robot that helps the military is LS3 (Legged Squad Support System). This robot can carry military equipment, supplies, or other materials that reduce troop mobility. It was launched in January 2012 when it passed the test of climbing and descending a hill. This robot can track the operator, can be controlled vocally and high mobility in urban terrain as it emerges from: “LS3 program demonstrated new advances in the robot's control, stability and maneuverability, including “Leader Follow” decision making, enhanced roll recovery, exact foot placement over rough terrain, the ability to man oeuvre in an urban environment, and verbal command capability.” As technical specifications, we can remember that it can carry up to 182kg for up to 32km without the need for recharging. By the fact that he can track his operator using a computer and can carry such heavyweight makes him ideal for missions up to 24 hours, significantly increasing the mobility and the level of military demand.

OFFSET

Taking into account the new weapons that can be used in the battlefield, the efficiency of using robots to reduce the exposure of troops and the shift of emphasis on force protection; we can easily realize the advantages of using UAVs in the urban environment. As we have seen in previous paragraphs, the focus in the future will be to use tactical, highly professional, mobile units capable of adapting to the new combat Endeavour. They will benefit from the latest breakthroughs in the technology area and will be trained to be able to use the technology to provide missions with minimal losses. Along with the certification of the use of these remote controlled devices on the battlefield, researchers from the DARPA have implemented a program to hire UAVs in urban combat. The OFFSET (Offensive Swarm-

Enabled Tactics) program aims to develop a platform to demonstrate the functionality of swarm tactics used by over 100 unmanned aerial vehicles. This program aims to provide swarm tactics as soon as possible, test them for effectiveness and try to integrate them into the battlefield. These swarm tactics will be used to protect the force, increase the firepower and improve the concept of ISR (Intelligence, Surveillance and Reconnaissance).

The mission of the DOD (Department of Defense) from 2016, where 103 micro-drones were launched in China Lake, California, is known, so the concept is not new. These small drones have managed to accomplish various missions such as flight in a particular formation, collaboration in the decision-making process, and self-healing ability when they have been damaged.

This program was created to develop tools to help tactical level forces that carry most of their actions in the urban environment. So it initiated a platform that would contain 250 autonomous drones to support small subunits. It is meticulous care to use the latest drone technology and their coordination programs. A capability that the program aims to develop is how it can translate the commander's intention as well as the extent to which these drones can independently carry out the concept that they want to put into practice. It is necessary to find new ways of communication and interconnection between man and drone. This interaction can take place through virtual reality or augmented reality or with the help of voice. All of these tactics that this program develops through the various experiments will be introduced into a system the commander can access. He can choose how to act according to the situation on the ground, thus having a background on how the devices will behave in a particular situation. The missions that these UAVs will be able to accomplish are specific to tactical level infantry units such as recognition, identification of key points, setting up a support point. With all these advantages offered by this program, the use of the human factor will be limited to those actions that require more complex decisions, with the emphasis being placed on the protection of the military and on the accurate information on the environment in which the military operation is to be carried out.

Conclusion

The urban area provides a unique fighting space that offers both the attacker and the defender a multitude of approach paths and the ability to benefit from fields of fire. Urban actions being divided into actions in the air, in buildings, the street and underground indicate the need for an informational preparation of the area more complex than for an ordinary environment. It is also necessary to ensure 360-degree safety, as an attack in the building can be combined with one in the air or the underground.

Specifying all these aspects, we have managed to outline the importance of urban areas in the future of armed confrontations as well as the motives for which future actions will focus in these areas. For these missions to be deployed in heavily urbanized areas of high population density, it is necessary to adapt the equipment used to minimize both the number of collateral victims and the number of victims belonging to their troops. Thus, it is necessary to use devices with different characteristics to limit the use of the human factor. They can provide particularly important information and, depending on their size and capabilities, they can infiltrate more and more into enemy space. Also, programs that offer virtual testing environments, as well as rehearsals of actions that predominate the use of unmanned vehicles, are vital for military training.

These unmanned devices can be controlled from a safe distance and can provide information that the platoon commander can use to make the best decision. Thus, the militaries that are targeting the enemy's target are no longer in danger, and they may be used in other forms of fighting. On the other hand, the use of robots in the urban environment has been tested in many missions, helping to preserve the integrity of the military by performing

extremely dangerous missions. Dangers encountered in the urban environment are incredibly complicated because of the many elements that can pose a danger. Both the buildings that can communicate with the subterranean area and the machines that can hide different explosives are elements that complicate missions in such environments. The use of robots helps the platoon commander; this being the most commonly used level in the urban environment due to increased mobility and adaptability and to protect his subordinates. Also, these robots, due to their characteristics, can remove the wounded soldiers from the enemy fire without the need for human intervention. Even if a robot has been taken out of combat, it cannot value a man's life.

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THE RISKS CREATED BY MALWARE ON PERSONAL MOBILE DEVICES USED BY MEMBERS OF NATIONAL SECURITY INSTITUTIONS

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Abstract: *The article addresses the issue of personal mobile devices from the perspective of the risk it presents to the members of the national security institutions. The paper analyzes in turn, the concept of spam, the evolution of malware sent by spam in the last 10 years globally, the risks arising from the faulty use of personal mobile devices by the members of the national security institutions. The article looks at some ways to improve the way of individual protection against spam and malware. The conclusion presented in the article is an alarm signal on the way the personal devices are used and the risks that malware can have on the members of the national security institutions. At the same time, this article presents essential tips on using devices to reduce the risk of infection.*

Keywords: Spam, malware, device, security.

1. Delimiting the concept of Spam and Malware

1.1. Presentation of the concept of Spam

The notion of spam has been present since the use of the written messages transmitted with the help of the postal services without having this nomenclature, referring to a large number of letters sent to a wide public, which presented a lot of attractive offers. In view of the huge workload involved in drafting and sending messages by physically moving from one potential client to another, this practice has been abandoned.

Spam did not have a significant impact in the early 1990s, when with the introduction of the Internet and the communication made through the e-mail service it expanded its coverage. Spam has reached epidemic proportions, with hundreds of billions of spam emails overwhelming the number of emails received without previously being requested.

In 1999, Melissa, the first virus to spread through activated Word documents with macros attached to emails, was spread in the digital world. The effect that the virus had on infected computers was to spread the entire list of victims' contacts by sending spam and collecting as many email addresses as could be attacked by future versions of Melissa. Melissa would have caused $ 80 million in damages, "according to FBI sources. [1] Without any anti-spam legislation in place at the time, professional spam has grown so much that there have been self-proclaimed spam, "Spam King" Sanford Wallace. True to his nickname,

Wallace was at one point the largest sender of spam emails and social media messages on sites such as MySpace and Facebook.

It was only in the early 2000s that governments around the world began to treat seriously about regulating spam. In particular, all member countries of the European Union and the United Kingdom have laws in place that restrict spam. At the same time, top email providers Microsoft and Google have been working hard to improve spam filtering technology. Bill Gates predicted that the famous spam will disappear by 2006.

The notion of "spam" [2] refers to a phenomenon that consists in the massive and sometimes repeated transmission of unsolicited electronic messages, the messages being most often commercial in nature, advertising for products and services. The term "spam" is not only reduced to unsolicited commercial communications, but also applies to other electronic communications, some being even attempts of electronic fraud with serious implications. In general, the sender of such unsolicited messages disguises or hides his identity. Although spam is usually associated with sending messages via e-mail, this phenomenon can also be attributed to discussion forums or instant messages.

Unsolicited e-mails received by a company can account for over 60% of all emails. For this reason, spam costs storage on email servers, additional internal traffic for delivery to employees, and the working time of the recipients. On average, each user can waste even 50 minutes a day checking, sorting and deleting unsolicited messages. In Romania, where there are over "3 million Internet users, the damage caused by spam amounts to about $ 270 million per year" [3], according to data provided by the Ministry of Communications and Information Technology.

1.2. Malware evolution over the last 10 years

Malware or "malicious software" is a term that encompasses any malicious software or code that damages systems by using them to obtain different products, such as access to certain accounts of key individuals within an organization, collection. different files or remote control and surveillance of the system.

The target of all these malware programs is the financial profit. The malware was not created to damage or damage the physical hardware of the computer system, the malware needs the hardware resources to be able to follow the instructions it has in the source code. Starting with the purpose of the Malware, it is differentiated by several aspects regarding the nature of the way it acts on the computer system. In the last 10 years, malware has evolved from infiltrating through various exploits of software to using exploits among hardware, the most notable case in this category being Specter and Meltdown.

Specter and Meltdown released in January 2018 are part of the "transient execution" attack category, which is based on hardware design flaws in speculative execution implementation, instruction flow and out-of-order execution in modern processing. Specter and Meltdown allow attackers to extract encryption keys and passwords from compromised systems, allowing other attacks dependent on access to compromised systems. Specter and Meltdown do not assume that the user is running a certain malware executable, as an infected JavaScript fact that demonstrates the potential of exploiting these vulnerabilities in a web browser.

Specter causes the victim to perform hidden speculative operations during the ordered chronological processing of the program instructions through which the victim's confidential information is revealed using a hidden information flow from the attacker.

Meltdown exploits an exceptional condition between RAM and privilege checking while processing an instruction. In combination with a side channel attack of the CPU cache, privilege level checks can be bypassed, allowing access to RAM used by an operating system

or other running processes. In certain circumstances, it can be used to read the data of the applications being run at that time.

Another particular feature of malware is the aggressive way it asks for different amounts of money, mainly in dollars or newer in different digital currencies like BitCoin or others. It is worth noting the evolution of the way in which hackers extorted computer users without their knowledge by using keyloger malware by which they transferred the amounts through payment of some services controlled by them. This practice requires a large number of hours spent in front of the screen to create subtle exploits that will slip under the antivirus radar and select the essential data for access to the bank account in order to be transmitted to the hacker. We must keep in mind that this operation was extended over a long period of time and it all depended on making payments online by the infected system user. This method was not cost effective over time, which is why hackers resorted to using ransomware.

This malware does not require additional effort from the hacker to steal financial resources, this ransomware acts directly in the infected environment without the need for additional user access. The drive involves first encrypting all user data, then requesting payment of a dollar amount in a virtual currency account for access to its data. In the case of ransomware, the content of the user's data and their value, is not the main objective for the hacker, being interested only in the amount of encrypted data and the number of infected systems. This type of malware attack is the height of spam so far, in the history of malware sent by spam, it has not been easier for the hacker to make a quick profit with minimal effort.

2. Risks arising from the misuse of personal mobile devices

If in the previous part of the article I addressed the problem of malware in the last 10 years in the area of computers, now I draw attention to mobile devices, smartphones, smartwatch, smart gadgets, etc. With a significant increase in smartphone usage, hackers have started targeting this market segment, where, surprisingly, the number of users at this time is 3.2 billion smartphones globally, which means that about 3 out of 8 people have one in the world. [4]

Most computer users know the importance of antivirus software, regardless of the operating system it uses. For smartphones, users are not aware of the security of installing an anti malware application. When looking at the Google Play portal or the Google Store, we realized that the total number of malware downloads does not exceed the figure reported above. It should be noted that not all available anti-malware applications have satisfactory feedback or are experiencing malware attacks. Given that 70% of web traffic in 2019 was done via smartphone, the risk of getting infected with malware is extremely high. [5]

The giant Google application provider, released the number of applications blocked in 2019, is 25,647, compared to 2018, when 108,770 applications were blocked. [6] We note that the number of blocking applications decreased by 76.4% compared to the previous year, this move by Google was taken to make a greater profit from the applications that want to be downloaded from the Google Store. At the opposite end, customer safety is reduced, which increases the risk of malware infections through sources certified by specialists in this field.

A little publicized case in the European area is the infection of 25 million smartphones with Android operating system, most cases were discovered in India, about 15 million, compared to the United Kingdom, where there were about 147 thousand devices infected. [7] The infection was carried out using applications downloaded from sources other than those recommended by the smartphone maker, applications that were found on the 9apps.com web portal, which was then owned by the well-known Chinese product sales company, Alibaba. The applications on that portal were replaced with applications that allowed malware access in their set of codes, plus the applications installed on the device required legitimate updates for other applications on the user's smartphone, these infected applications replaced the

applications from official sources. For example, a malware-infected application downloaded from the 9apps.com web portal was trying to replace applications on the device with similar malware-infected applications. The malware that infected all the applications on the web portal worked by posting pop-up ads forbidden to be published by the laws in force, which offered an amount for simply accessing the links.

As anti malware applications broaden their horizons to counteract new threats, malware becomes more and more persistent, as is the case with Xhelper malware, which, after 6 months of uninstalling from the device, continues to act as it did. at the beginning. The application in question affects the device by downloading other malware without the user's knowledge and permission and displaying prohibited pop-up ads. Xhelper deletes its fingerprint from the application that displays all the applications installed on the device. As in the cases above, the ultimate purpose of malware is financial profit by accessing advertisements published by malware. Xhelper has infected over 45,000 devices in the last 6 months, most in Russia and the US. [8]

Many users are not aware of access to all preinstalled or preinstalled applications, as they have included in the installation permission access to multiple device resources, for example, a camera application may have access from the moment of installation to mobile data. extra background, when you activate the GPS module or maybe even make a phone call. The applications I refer to are used by the user's settings, how they use the application, data about the time spent by the user on the application in question and the applications most commonly targeted by the user. The application developer uses the data mentioned above to improve the application or, as most often, to sell the collected data about the user to other companies.

Additional access settings with which the applications have been installed can be restricted in the application menu in the Android operating system. There is a segment of smartphone users who download premium versions of applications from various unprotected websites, possibly infected with malware.

Defective use of the smartphone involves the use of a set of basic settings, with which the device was prepared, which allows access to sites with dubious content, downloading applications from unknown sources, making online payments using a type application a browser that does not have site recognition features. All of these present a risk to the user. Last but not least, the introduction of personal data in most applications is not only a great danger to preserve personal identity, but also a violation of the right to personal data. The main risk is the theft of personal data due to the ease with which it is introduced in the phone applications, this risk being a medium level and with an average negative effect on the user. Secondary risk is the infection with malware that can take advantage of the exploits of the browser-type applications to hold credit card data, which negatively affects the user. The lowest risk as a probability but with the highest impact is the malware infection that gives the hacker access to all the data on the device. The hacker can use data from the device to create the entire social context of the target and then try to extort the target to get money or, in the worst case, infecting other devices or computers in the organization of which the member is a member is the target with her help.

3. Important measures to protect the device

Aldous Huxley said that the price of freedom is eternal vigilance, which is why the most important aspect in the fight against malware is prevention and not combat. To confirm the above quote, security specialists recommend a minimum of measures that must be implemented for the safety of the personal device.

The first step is the physical protection of the device, that is, setting a password that is sufficiently complex for unlocking it or using unlocking with the help of fingerprints, setting

the time after which the unlocking is done to be as minimal as possible. The second measure against malware involves the encryption of important data stored on the device, e-mails, documents in Word format, etc., this can be done through applications or by creating archives that can only be accessed with a password known by user.

The third step is the formatting to the remote preinstalled settings, in case the device is lost, at the same time with the same application, the device location can be obtained. Back-up is imperative, it can be done using data storage solutions in the cloud or on another data storage system, preferably disconnected from the Internet. In case of back up through cloud services it is recommended to encrypt the data and then upload it to the cloud.

The most important set of measures can be represented by the way in which the applications are downloaded and used on the device. Applications need to be downloaded from trusted sources with numerous recommendations, and then verified the application's access to smartphone resources, but if it has strange behavior, for example it requires access to download other applications, or perform other operations, must be uninstalled from the system. Under no circumstances is it recommended using an administrator or Power User on devices, as malware can infiltrate faster into the system due to disabling the security settings implemented through the User interface.

The operating system installed on the device must always be updated to the latest official version, distributed by the device manufacturer, the same treatment must be applied to previously installed applications. One aspect that many users overlook is the use of anti malware downloaded from a web portal that presents security.

The use of public Wi-Fi for online payments, important data transfer as well as downloading applications or other types of data is not recommended, as these networks do not have a rigorously implemented security regime. If the situation requires the use of the speed of public Wi-Fi networks, it is recommended to use a VPN application to encrypt the data to be transmitted to the receiver.

Conclusion

The domain of Malware is a complex and constantly changing, with increasingly intrusive and aggressive ways towards the end user, which makes us turn our attention to this domain. Given that in recent years, web traffic has shifted from computers to smartphones and knowing the recent history of different types of malware attacks, we must consider the possibility of a colossal attack aimed at users of devices. A considerable risk is posed by the inappropriate use of smartphones by the members of the national security institutions both for the safety of the individual and for the safety of the organization. The measures presented in the last part of the article are the methods by which the members of the national security assurance institutions can achieve a barrier against data theft and breaches in the security of the organization.

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ASSUMPTIONS AND ANALYSIS FOR ACHIEVING THE INTERDISCIPLINARY STRATEGIC MANAGEMENT IN THE MILITARY FIELD

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Abstract: *Upon the development of new technologies and the emergence of the new methods of achieving the objectives, new threaths against a military organisation, coming from both inside and outside, have been developed. Therefore, in order to accomplish interdisciplinarity within the organisation, I have pursued the objectives set, the way of analyzing the information, the processing of the information for the realisation of the strategy, its implementation and fighting against weaknesses during the monitory of the military's organization's strategy. In a constantly development world, interdisciplinarity has become essential for realizing the objectives of a military organization and within this paper work I have chosen to follow a military unit, where I am doing my work, using the SWOT analysis.*

Keywords: strategic management, interdisciplinarity, SWOT analysis, hypothesis, laws and military regulations.

I. Theoretical foundations of strategic management

Strategic management is a science that works with major intentions and initiatives,

taken by the general managers on behalf of the owners of companies that involve the use of resources in order to better the performances of the corporations in their external environment.

The strategic management of a military organization represents the cohesion of all the structures of the armed forces in order to fulfill the objectives and missions encountered, as these can be carried out efficiently, effectively and develop new methods of solving them.

Strategic management is the procedure of facilitating the management of an organization and the use of strategy to guide its actions. At the same time, it integrates the implementation of strategic actions related to structural and cultural factors.

Strategic management is a form of leadership that aims to ensure over time the best possible congruence between environmental requirements, manager's objectives, management and potential creation.

The strategic management procedure presents four steps: environmental knowledge, strategy formulation, strategy implementation, strategy evaluation.

Environmental knowledge alludes to the process of accumulating, examining, supplying information for strategic purposes and for the influence of the organization, the internal and external factors must be analyzed. In order to improve the environmental analysis process, the amount of effort and evaluation should be continuously implemented even after its execution.

Formulating the plan of action is the action of deciding the best way of action to achieve organisational objectives and therefore achieving the organisational goal. After the environmental scan, managers formulate different strategies.

The implementation of the strategy requires the strategy to function as planned or the implementation of the strategy chosen by the organisation. The implementation of the strategy includes the design of the structure of the organization, the distribution of resources, the development of decision-making and human resources management.

The analysis of the strategy is the final step of the strategic management process. The best strategy evaluation activities are: analysis of internal and external factors underlying the present strategies, measuring effectiveness and taking corrective action. The analysis shall ensure that the organisational strategy meet the organisational objectives.

These elements are steps that are scrolled, in chronological order, to create a new strategic management plan. Organisations that already have a strategic management scheme will return to these steps as required by the situation to make essential changes.

Strategic management is an continuing process. It must therefore be realised that each component synergies with the other components and that this synergy often happens in relation to simultaneousness.[1]

The following steps must be pursued to implement the strategic management process: setting objectives, analysing information, forming the strategy, implementing the strategy and monitoring the strategy.

The setting of objectives is to clarify the vision for the military organisation. This step is to identify three key sides: firstly, determine both long-term goals as short as and in the long term. Secondly, identify the goal-achievement process, and eventually convert the procedure for military personnel, give each person a responsibility with which they can be accentuated.

The analysis of information is a major step, as the knowledge obtained at this stage will outline the following two steps. At this point, collect as much information and data related to the unit's mission. The evaluation must focus on comprehending the neccesities of the military organisation so that the development of the organisation results in its development. Review any external or internal problems that may affect fulfilling your aims. Assure to identify both the strengths and weaknesses of the military organization, as well as any danger and conveniences that may appear along the way.

The first thing to do for the formation of a strategy is to reevaluate the data obtained from the completion of the research. Determine what funds the organization currently has that can get you to achieve your goals. The problems that the organisation meets should be prioritised by their priority for its accomplishment. As soon as priority is given, start formulating the strategy.

The successful implementation of the strategy is essential for the fulfillment of the organisation's work, being the action phase of the strategic management procedure. If the general strategy does not go well with the current form of the organization, a new form should be established at the starting point of this step. Every single one of the personnel must know the tasks and obligations and how they match with the general objective.

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[1] I. Popa, Management strategic, Editura Ecinimică, 2004, p. 34.

The analysis and guiding actions of the strategy include efficacy evaluation, constant examination of internal and external problems and correctional action when needed. Any proper examination of the strategy shall begin by defining the guideline to be measured. These criterions should reflect the objectives set out in the first phase. Establish your organization's progress by constantly reviewing the actual results from the action plan.

Monitoring internal and external problems will also allow for a reaction to any significant difference in the organisation's circumstances. You must take corrective actions if the strategy is not pushing the organisation towards its goal. If those measures are unefficient, then redo the strategic management procedure. As internal and external problems are constantly appearing, all data obtained at this point should be kept to help future strategies.

II. Interdisciplinary and strategic management in the military field

"Interdisciplinarity is a form of cooperation between different disciplines on a problem whose complexity can only be captured by a convergence and a prudent combination of several points of view."[2]

The main strategies for interdiscipline are: contextualization, conceptualization and problem solving.

Contextualization, within the military field, is a method of incorporating cultural disciplinary materials and personal experience. As such, contextualization can have different forms depending on the level at which it is conducted in the military organization. The contexts within the structures of the armed forces are analysed and processed.

The second strategy, conceptualisation, involves dissecting the analyzed and processed material in order to highlight the connection between the structures of the armed forces at different levels.

The third strategy, problem solving, involves the application of strategic management in different structures to highlight the effective solution to solve them and to achieve the desired goal.

In all three approaches, the modalities of achieving the prohibition vary according to the objectives of the military organisation.

III. Objectives of interdiscipline of strategic management

The main objective of this work is to design a strategic management model in order to achieve effective and effective interdisciplinarity.

For this I used the SWOT analysis. A SWOT analysis or a SWOT array is a decision-making framework to focus on strategically important elements in this mixture. SWOTa represents Strengths, Weaknesses, Opportunities, Threats. These four categories describe whether one aspect of the decision is negative or positive and whether it is external or internal to the organisation. A thorough SWOT analysis can be the backbone of a solid strategic planning.[3]

The specific objectives of this work are the challenges encountered in achieving interdisciplinarity, the methods used in strategic management within the military field and relations between the areas of the armed forces.

In order to achieve interdisciplinarity, their ability to create a similaractivity report was analyzed at the level of each structure.

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[3] R. Zlatian, Strategii: Analiza SWOT, Editura Aius, 2011, p.21.

The main methods used within the military field are contextualization, conceptualization and problem solving.

Due to the age of cooperation between the areas of the armed forces they are in close correlation, the differences that arise are achieved through contact with the external environment.

IV. Assumptions and analysis

The basic hypothesis of this project is given by the fact that interdisciplinarity in strategic military management is carried out easily.

Following the study of military laws and regulations, the long-term observation of the field of activity has concluded that their exact compliance leads to the achievement of the objectives of the battalion. Testing the assumptions of this research will be carried out at the level of a battalion.

To test that hypothesis we used the following research methods: extensive, intensive, founding, improved, transverse, longitudinal and laboratory and SWOT.

Table 1 performs the SWOT analysis of the military organization in which I operate.

Strenghts		**Weaknesses**
1. System organized due to military rules and regulations **2. Creation of qualified personnel**	**<-Intern->**	**1. Degraded or missing technical and technological systems** **2. Missing personnel** **3. Large workload** **4. Stress**
<-Pozitives->		**<-Negatives->**
Oportunities		**Threaths**
1. New personnel due to job stability **2. Emergence of new methods of problem solving**	**<-Extern->**	**1. Non-operationality of the military structure in achieving the objectives**

Tabel 1

V. Conclusions

The hypothesis tested was validated due to the system strictly created on the basis of military laws and regulations, although the lack of financial resources puts its mark at all levels of the armed structures.

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THE CHARISMATIC PROFILE OF THE MILITARY LEADER

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Abstract: *In the practice of leadership, there are several theories that try to explain the usefulness of using a certain style of leadership, starting from the classical theories of leadership, and finally reaching the modern forms of leadership, where one speaks of the leader transactional, transformational and charismatic leader. The charismatic leader is the one that best responds to the needs of the subordinates, is the one who, throughout history, has been noted in numerous conflicts, the one who has achieved the most resounding victories and whose names have remained imprinted in history. The objective of this paper is to present the way in which the qualities specific to the military leader with charismatic profile improves the leadership act and manages to impose itself among the subordinates.*

Keywords: charismatic authority, military leader, charismatic leader.

Introduction

The military leader must be the person who best realizes that, in order to be a good leader, he needs people over whom he can exercise influence, or that influence can never have the desired effects if his authority is not gained, if the leader is not accepted and respected by his subordinates, he will not have their support in difficult situations.

Over time, the charismatic leadership has shaped certain ideas; one of them given the way leaders are supposed to have some abilities, but it is not right.

Indeed, some qualities are needed, but in addition, a much more important role is played by the experience that, during his career, he will gain, because of his desire to understand, respect and work with man.

The military leader from the perspective of the charismatic leadership theory

Working with man is the most difficult activity that someone can do and assume taking into account several elements. But the satisfaction that we can achieve as a result is not comparable to anything else.

It is precisely for this reason that a charismatic leader will always enjoy respect and understanding from his subordinates.

One of the most important processes in military leadership is the decision-making process. The military environment is characterized by unpredictability and danger, and a military leader must be able to encourage his subordinates in limited situations; the driver's flexibility plays a very important role in the conduct of the decision-making process.

From this point of view, it is very important for a good leader to adapt to the character of the people, to know what and how to ask his subordinates, to try to integrate those who disagree

with him and to demonstrate them through deeds and positive things that he deserves to be respected. Not few were the cases where the best subordinates that a leader had were those who, at the beginning, contested his abilities, but who demonstrated, through what he expected of a leader, namely professionalism, that they must be listened to and respected.

The military leader is the leader who has the most difficulty in exercising his leadership, because of factors which interfere in the exercise of his authority and must possess characteristics which enable him to adapt to different situations, much more difficult and complicated than any other leader in any social entity.

One of the most important things that brings about the achievement of the performance and trust of the subordinates, is the way the military leader shows to those with whom he works the way he really is, because this has the effect, among his subordinates, of opening up their souls to him.

It is proven that, when one person opens up to another, if he tells her personal problems, involuntarily he also makes it more open to him, to tell him problems which are pressing on, to tell him things which, maybe, he didn't tell anyone before.

It is about the trust they gain from the person they are addressing and it is normal that when they realize that they can trust the leader, be even more open and speak to him matters of a strictly personal nature. Thus, he can learn the veritable opinion of his subordinates on certain issues within the subunit he is leading.

This shows very clearly that the leader fulfills another very important feature of the development of the leading position: of being a good psychologist.

The military leader's skills must be numerous, but in a more non-academic way, it is most important for the subordinates to see that their leader does not mix the "family" and "professional" issues and that he "leaves the problems at home at the point of control and takes them to leave". This only increases the confidence of the subordinates in their leader, because it shows them that they care for them, that they attach importance to them and that, in terms of their career, they put them first.

However, as is known, the status of a leader is not only given by the characteristics he possesses, but also by the way in which he uses certain qualities in a particular situation (e.g. How it works with persons falling under the theory category ”X” and ”Y” referred to in the previous chapter).

What is most important for a leader is to have extraordinary adaptability, to make decisions quickly and effectively in certain situations.

A good military leader, from the charismatic theory perspective, must possess capabilities such as: foresight, creativity, originality, diversified training, excellent knowledge in the field, sociability, ability in interpersonal relationships, availability to change, ability to take risks, self-confidence, emotional control, willingness to make or communication power, capabilities that can help him to implement successful leadership.

The creation of a relaxing climate, the involvement of all participants in the tasks of the group, the provision of confidence among the subordinates in their own right are just some of the characteristics of the charismatic leader, features which greatly help him in the exercise of his leadership, all this ultimately leads to the achievement of the group's operational objectives.

One very important thing to keep in mind when talking about a military leader from the perspective of his charism is the following: he must be respected by his subordinates and gain their trust.

All these features listed above are nothing more than a theory of this term by which a certain definition of the terms charisma and charismatic leader is sought.

As Carl von Clausewitz said, the essence of the improvement of the military leader lies in the "combined orientation of the forces of the soul toward military activity"[1]. From this expression, it can be concluded that a leader needs to focus his attention on the people he works

with, that he has to make every effort to understand it and its problems.

The manner in which the leader understands the employee's difficulties, his ability to empathy, can lead to the phenomenon of identifying his subordinates with him, and this can lead to the best results, to success, another factor determined in the achievement of the "charismatic authority"[2].

Applications of charismatic leadership theory

Due to the fact that the theory of charismatic leadership has been mentioned both in the category of classical leadership theories and in the category of modern theories, it shows an important aspect of what is supposed to be the charismatic leader, namely: Its usefulness in the organization's leadership process.

It is the charismatic leader who, over time, has brought the best results because of the way in which he paid strict attention to the people he worked with.

After all, the leader is with his subordinates in difficult situations, in situations where their life is endangered.

The toughest question for a leader to answer is: "How do I get people to go to death?" Because of the way of working with subordinates, because a climate is created for the development of the phenomenon of identification with the leader, because those involved in a particular situation take part in the decision-making, the charismatic leader manages to answer this question best.

By the fact that people are listened to, and by the subordinates see in command a person who possesses knowledge, is flexible, knows how to control and control his inner experiences, they have more confidence in the chances of success and the chances of getting out of a difficult situation.

At such moments we can see the usefulness of the charismatic leader, because unlike the authoritarian leader who goes on the principle that the subordinate must do something because he wants it, the charismatic leader increases the confidence of his subordinates in his own forces as well as in their leader, because it avoids tension, it avoids frustration among subordinates.

Another argument that demonstrates the usefulness of charismatic leadership is that no one will ever convince the wording “You Do so because I want it!”. The charismatic leader avoids this wording and focuses more on the way to influence, in a positive manner, the subordinate. He must use wording which, in addition to making the employee understand the complexity of the task, gives him greater confidence in his/her own forces and outlines his/her role and importance in the subunit to which he/she belongs very well.

A charismatic leader will always be attentive to what happens to his subordinates, will always be attentive to their reactions when he addresses the platoon, or subunit, in order to avoid undesirable phenomena occurring in the missions they have to carry out.

Due to the typical “manner” of this environment, the way that works predominantly with man, automatically, also works with his problems, because they have a family, and within it can have problems at home, have mother, wife, sick child. A good leader must be attentive to the reactions of his subordinates, talk to them, try to find out what he is doing, in order to find out whether the subordinate, who is in trouble at home, can participate in the task which his subunit has to do on that day, avoiding unwanted events and gaining trust from your subordinates as well.

The military profession brings us to difficult times, when we need help, support, collective support. A charismatic leader must understand something that some commanders seem to have forgotten: Their strength is that his people listen to him. A mission can never be carried out, if the subordinates have something personal with the leader, if his way of working does not match the requirements of his subunit. Thus, the way in which a charismatic leader

works with his people, the way he understands their problems, the way in which he lets his subordinates participate in the decision-making process, make the charismatic leader a model to follow, a commander respected by his subordinates, a person in which anyone can trust and rely on in borderline situations.

Conclusions

Given the vast list of characteristics of the military leader and the transformations that society, and the military environment, are undergoing, one important aspect can be seen in terms of charismatic leadership: It is the most appropriate form of organization leadership, whether civilian or military.

Following the use of such leadership and the fact that the subordinates observe the results of its use, the commander gains more quickly confidence from them, and assigning the charisma to the leader from them is only a matter of time. The use of this type of management also shows that the way the leader behaves with his subordinates, influences their behavior, with the trust of his subordinates progressively passing on from one to the other, and the charisma of the leader will gradually increase.

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RECONFIGURATION OF CONFRONTATION ENVIRONMENTS FROM THE PERSPECTIVE OF TECHNOLOGICAL EVOLUTION

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Abstract: *The present paper aims to investigate the reconfiguration of confrontational environments, which from our point of view must be analysed from the perspective of unconventional threats in order to give us an idea of future confrontations. These threats are a complex category that involves all the components of human life, making us the difference between combatants and non-combatants. Due to humanity's growing tendencies to progress it is expected that confrontational environments will feel strong reconfigurations especially in the cyber, psychological and informational spectrum. Technological evolution and free access for everyone can be considered as an unconventional threat in the 21st century and is a major factor in reconfiguring confrontational environments. Anyone with an internet connection and possessing the necessary knowledge can use new technology in unconventional attacks to affect civilian critical infrastructure objectives, as well as communications systems and information technology in any field.*

Keywords: unconventional warfare, armed conflict, military operation, future of warfare, confrontation environments.

1. Introduction

The evolution of technology reconfigures the character of war, by its very swift advance. The emergence of autonomous weapons, artificial intelligence, cyberwarfare and other technologies that influence confrontation environments, can lead to a new mode of combat in which the difference between combatants and non-combatants is no longer made. [1].

Due to these theologies, the unconventional threat is increasing. National defence systems must develop new doctrines, operating concepts, training, policies and organizational structures so that they can face the future of unconventional threat.

With the evolution of technology, weaknesses have increased, leading to new ways in which confrontations take place, especially from the perspective of unconventional operations that are based on exploiting the adversary's vulnerability.

Future military conflicts will continue to be one of the violent expressions of political, economic and social conflict. No military conflict, however insignificant, in any part of the world, can no longer be regarded and treated as an isolated fact, as a matter that concerns exclusively those directly involved. Each of these conflicts will increasingly require, for its resolution, a global solution, which implies the involvement of the international community. The wars and the military conflicts will also be carried out in the world view, under the

careful supervision of the cameras, of the sensors located everywhere and in secret, that is in the cyber, psychological and informational spectrum, using to the maximum the networks of all kinds and weapons. information.[2]

Regardless of the environment where confrontation will take place through the use of unconventional tactics, future confrontations will be catastrophes that will inevitably result in loss of civilian lives and material damage, which categorically affect the pretext of civilization.

The evolution of technologies will have a remarkable impact in the reconfiguration of the conflict deployment environments by modifying the meeting space of increasingly complex and performing military systems, which involve complex actions in all areas of activity. Technological innovation aims and aims at increasing the capacity of the force.[3]

The rapid development of weaponry and ammunition of any kind and of the fighting technique has led to the reconfiguration of confrontation environments from the perspective of the technological evolution by applying the latest results of science and scientific research in conflicts. This has led to an increase in the possibilities of target selection, the precision of their destruction, the increase, sometimes without limitation of the striking distance, the possibility of using the extra atmospheric space and keeping below control, as far as possible, of the side effects.[4]

Confrontation environment extends its manifestation in these conditions, it is very difficult to make a clear distinction between peace and war, between a conflictual and a non-conflictual situation, between military and nonmilitary conflicts.

Due to humanity's growing tendencies to progress it is expected that confrontational environments will feel strong reconfigurations especially in the cyber, psychological and informational spectrum.

2. The influence of technology on the reconfiguration of confrontation environments

Technological evolution and free access for everyone can be considered as an unconventional threat in the 21st century and is a major factor in reconfiguring confrontational environments. Anyone with an internet connection and possessing the necessary knowledge can use new technology in unconventional attacks to affect civilian critical infrastructure objectives, as well as communications systems and information technology in any field.[5]

In this context, the permanent reconfiguration of the confrontation areas becomes an imperative necessity of the national security forces that are able to make decisions at this level and must be thoroughly trained on the capabilities of the technical means used in the battle.[6]

A) The influence of drones

An important factor that influenced the reconfiguration of the confrontation environments through the evolution of technology is the development of unmanned aerial vehicles which has increased the possibility of conducting military operations in a more efficient and less risky manner due to the lack of human resources on board the aircraft.[7]

Through their mission of reconnaissance, surveillance, espionage, or as a lethal force, drones have forever reconfigured the way confrontations unfold and their place. Drones can be flexibly positioned near targets, are small and difficult to detect. Achieving objective surveillance requires long air resistance of unmanned aerial vehicles, which is particularly important when these operations may take several days. In this respect, aircraft without human crews exempt the necessary effort from the human resource to carry out the missions and maintain the operational pace.

Another important feature of drones, which has led to the reconfiguration of confrontation environments, is the possibility of them staying in the air for a long time thus

ensuring a continuous flow of information. And because they are much smaller than pilot aircraft, they can be undetectable. For this reason, national defence systems must also reconfigure how they manage to combat air threats.

A very big plus of using drones is the low cost of production. By this the technological advance leads to the increase of the air forces and to the reconfiguration of the confrontation air environment.[8]

The most important and one of the main reasons for which the technological evolution reconfigures to a great extent the confrontation environments is that the pilots are not endangered, these drones being controlled remotely, from a safe place.[9]

B) The influence of airborne lasers

One technology of the future that will further reconfigure the confrontation environments is that of airborne or space lasers, which will be used in destroying attack missiles during the launch phase. To do this, a number of 7 Boeing 747s will be equipped with a high-energy laser, and this system will attack missiles with 300-km blows, from an airplane flying at an altitude of 12,000 m.[10]

This new technology that has the potential to reconfigure in addition to the confrontation environment and how to conduct future wars works by utilizing laser beams that are concentrated by huge mirrors on small points in the lens. In this way the heat produced will be so strong that it will produce combustion of the target surface.[11]

The technological evolution and the new technical qualities of the laser will accentuate the decisive character of the confrontation by concentrating the action on effects and will diminish collateral loss.

C) The influence of autonomous weapons

These autonomous weapons are actually robots that are capable of making decisions without human intervention, they are still in the experimental phase, but their appearance in the future confrontation will reconfigure you from the basis and the way the future conflicts will unfold. Their main purpose is to eliminate the enemy forces and in addition to destroy all the enemy technique, without the risk of human loss.[12]

From the point of view of the costs and the efficiency of these weapons, they can lead to a reconfiguration in the environment of the conflicts, by replacing the human forces in the structures of the fighting forces. An infantryman will never be as effective as a robot that does not need food, sleep, has no fears or misses home and family, does not need education and most importantly has no feelings will not cause problems if a comrade is killed next to him. These autonomous weapons are a perfect killing machine.[13]

The main purpose for these weapons is to be airlifted and parachuted into the area where they want them to act, where they could hide to supervise, track and kill at the right time or when they receive order, after the specialists analyze the obtained data.

Another equally effective alternative to using robots in military conflicts is by using them as spies. These spy robots will look like animals and due to the special material, they will be covered with, they will have the advantage of being confused with vegetation. By equipping them with video cameras they will be able to transmit images and sounds from places where a human spy will never be able.[14]

3. Conclusions

In conclusion, the reconfiguration of the confrontation media is closely related to the evolution of technology, the technical and technological progress of the means of combat are mutually influenced by the process of reconfiguration of the media, they are permanently sustained. By discovering more efficient weapons a reconfiguration in the confrontation

environment is triggered, because we have come to the conclusion that we will always try to use the new technology because every little breakthrough in a confrontation matter.

The confrontation environment becomes more and more integrated, encompassing terrestrial, aerial, naval, cosmic and fully digitized components by extending the ability to use information and lead troops.

The evolution of the technology and the reconfiguration of the models of organization and composition of the combat units with the new innovative technologies have led to the reduction of losses.

By reconfiguring the confrontation environments from the perspective of the evolution of technology, it tends to reduce the persons engaged in the fight, thus optimizing the forces, focusing on quality in favor of quantity. Smaller, better-prepared and more manageable special structures are created.

The evolution of technology, especially in the computer environment, has led to the reconfiguration of the media by creating new types of threats. Threats such as those against computer systems, financial management, population records, banking systems, energy systems management, transportation or communications at national level that can have far more devastating economic effects than a war and can be triggered from various locations and by a small number of well-trained people. The advantage of these threats is that with relatively low costs they can cause quite large damage without exposing themselves to the risks.

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RECONSIDERATION OF THE WATER AND ELECTRICITY SUPPLY SYSTEMS IN LAND FORCES OPERATIONS

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Abstract: *The modernization of the technical systems used in the land forces specific operations is mandatory for the alignment of the Romanian Army to NATO standards and requirements, also for keeping a real, prompt and efficient capability. The general objective of the theme is to identify the deficiencies and problems arising in the use of water and electricity supply systems at the moment, to research the specialized market in order to identify improved possibilities to replace the current systems used by land forces and to establish which are the most suitable products available to meet the specific needs of the engineering troops missions.*

Keywords: engineering, tehnical systems, water, electricity:

1. The current stage of water and electricity supply systems;

The water and electricity supply directed to the land forces troops, in the military actions context, are the main missions of the maintaining the operational capacity task.

Maintaining the operational capability is one of the main missions specific to the engineering branch, along with mobility, countermobility and general engineering support. This can be defined as a set of procedures and measures taken in order to ensure the military actions continuity, in a defense scenario of their own troops, in the enemy ground depth or in any other situations considered a hostile environment.

The permanent and unconditional access to the troops and to the military technique, related to the land forces, to clean and potable water, as well as to sources of electricity during the entire period of taking the actions in any other places ,except for military or civil facilities permanently connected to these services, is imperative.

The deprivation or conditioning of their access to these two facilities can result in negative effects on the morale of the troops, the functionality of the fighting technique and the impossibility of using specific machines.

The impact created by the lack of those facilities will be felt directly by the personnel involved in carrying out the operations of the land forces by depriving it of drinking and utility aimed water, on the technique through the impossibility of performing the proper maintenance, turning them unavailable, and specific to the electronic devices, it will manifest by the impossibility of recharging the batteries, using the communication devices, the localization systems as well as the technical fighting systems operated on the basis of electricity.

Thus, both the water supply and the electricity supply of the forces that carry out their actions in a hostile environment, represent essential and mandatory facilities for high efficiency in carrying out missions.

The first step for the water supply and electricity supply reconsidering is to identify the shortcomings and of the technical systems used by the engineering troops at this moment.

The encountered deficiencies are usually associated with the moral and physical degradation of the currently used systems. The reduced amount of the maintaining the operational capacity missions specific to the forces represented the main factor in the process of updating the military systems, that determined to not be prioritized.

The problems associated with the technical systems specific to the water supply and the electricity supply identification was made during the use in the exercises and in the theaters of operations where the engineer troops performed their activity.

As a rule, in the case of electricity supply systems, the main shortcomings refer to their ability to produce electricity related to fuel consumption, which is much lower than the systems present in the actual market.

The impossibility of using the systems in bad weather conditions is another major disadvantage, given the missions in which the engineering forces should have the ability to act.

Engines chosen for generator systems, used by engineering troops, have a large cylinder capacity, the fuel consumption being unjustified in relation to the electricity produced. Also, the low temperatures may make the current systems unable to be utilized, the preheating installations are non-existent or mainly non-functional.

Another relevant factor is the noise generated by the generator systems during military operations. Within the operational environment, noise may represent an disadvantage, because our own forces are able to be exposed to the research of enemy forces. Another disadvantage created by the noise produced by those technical system is the discomfort, a factor that can influence the troops recovery.

In the case of the systems used by the engineering troops in order to supply the troops with water, the water treatment and decontamination facilities represent the systems used to collect the water from the natural sources (rivers, lakes, hydropower dams) located in the operational field and its processing for the purpose of drinking water supplying. . The systems currently used are composed by a multitude of sub-assemblies (generator, water collect pump, water purification and decontamination filters, storage facilities), which are difficult to use.

The main deficiencies identified in the use of water purification and decontamination systems are represented by the difficulty of the installation and use in the operational environment, the low water flow produced by the system and the inability to identify and replace consumable parts. The purification and decontamination of the water collected from the natural water sources is accomplished by filtering it through a successive series of filters, each having mineral particles intended to neutralize harmful bacteria, to neutralize any contaminated compounds, so that its purification can be carried out. The final result should not present risks in consumption. Maintenance of these systems has been difficult since they were introduced, the filtration systems being very expensive. Subsequently, these specific filtration systems were no longer commercially available, and maintenance of the systems became impossible.

2. Main objective;

The general objective of the theme entitled “Reconsideration of the water and electricity supply systems in land forces operations” is to identify the deficiencies and problems arising in the use of water supply and electricity supply systems from their implementation time to the present, to research the market in order to identify possibilities to replace the current

systems used by the land forces and to establish, after a similar systems study, which are the most suitable products available to meet the specific needs of the engineering troops missions.

The technical systems used in the operations specific to the land forces updating is necessary for the alignment of the Romanian Army to the NATO standards and requirements as well as for the maintenance of a real, prompt and efficient capability.

"The procedures, techniques, methods, structures and equipment must be adapted in such a way as to allow an increased speed in the deployment and use (dislocation) of the forces, and also in the circumstances that losses have occurred, they will be deteriorated in a moderate manner without blockages in vital areas, such as the ability to fire, information and communications."[1]

The land forces specific operations efficiency is determined by the continuous training of the military personnel, the participation into multinational exercises aimed for the standardization of the procedures used in the operational field as well as by the permanent updating of the technique, systems and procedures specific to all categories of the military.

"The contemporary society offers us the image of fluid systems, characterized by profound changes, sometimes surprising, which, in order to survive, are restructured, are redefineing their interests, reconsidering their laws / relationships and principles.

The priority objective of the restructuring and modernization process was the construction of a small, flexible, highly mobile, professionalized army, equipped with modern equipment, capable of fulfilling the mission of the provider of sovereignty, independence and unity of the state, of the country and constitutional democracy and to participate in the general efforts to strengthen and maintain security and peace in the Euro-Atlantic area and in the entire world."[2]

The reconsideration of water supply and electricity supply can be done only in particular, referring to the two specific tasks of maintaining operational capacity separately.

The reconsideration of the water supply of the land forces during the military operations carried out during peacetime as well as during the war, must take into consideration currently existing systems used by the engineering forces, as well as the deficiencies found during their implementation in their service so far.

3. Specific objective;

The deficiencies identified during the use of these systems are reffering to: the difficulty of installing the assembly of systems used to collect water as well as for its purification and decontamination, the low flow of drinking water resulting from the operations and the impossibility of ensuring a proper maintenance of the filtration systems due to the consumables supplier loss (filters, site, purification parts).

Poisoning the waters by placing corpses upstream of the locality to be occupied, is a practice used in military conflicts since ancient times and had as purpose the disease of the population dependent on the water source. Considering the evolution of weapon systems and the identification of pathogens and harmful bacteria systems, water contamination is a practice commonly used in 21st century conflicts. The identification of possible unhealthy agents that could be harmful to the military in the context of a military action is elementary. Thus, water purification and decontamination units require in their composition tools for determining the level of all compounds that could affect the health status of the military. These sets of samples that are currently in the equipments of the engineering forces, are presenting physical and moral wear and the permanent evolution in the chemical and bacteriological field dictates the necessity of updating.

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[1] *Romanian army transformation strategy*, București, 2007;

[2] Cpt.asist.univ. Aurelian RAŢIU, *The restructuration and modernization of the Romanian Army-Euroatlantic integration,* Sibiu, Revista Academiei Forțelor Terestre, Sibiu, 2006

The reconsideration of the electricity supply during the land forces operations and during the execution of the missions by the specialized troops of engineers can be realized considering the current technical systems used by the military, the deficiencies noticed by them during the long term use of the generator based installations.

The generators used currently by the engineering forces and the subunits serving these systems in missions, works by the principle of electromagnetic induction and converting the electrical energy obtained from the use of an internal combustion engine based on diesel or gasoline into three-phase alternating current.

The british scientist, Michael Faraday, discovered in 1831 the elctroagnetic induction. He discovered that an electric conductor, such as a copper wire, when moved into a magnetic field will generate electric current through it. Thus the mechanical energy given by the movement of the conductor is transformed into electrical energy in a magnetic field. "

The deficiencies found during the use of these systems practically, in the operational field, relate to the low efficiency obtained, the intensity and voltage of the electric current produced in relation to the consumption of fuel, the level of the noise produced during the usage, as well as the difficulty of connecting a complex electrical system, on different needs and not just singular ones.

The electricity generator type currently used by the land forces is known by lighting installations supply system, as this was its initial purpose. The constantly produced changes regarding the specific systems used by armed forces as well as the modernization of the technical defense systems require the update of the equipments currently used for the supply of electricity by the engineering troops.

Accepting new technologies and studying their use will represent an important step in the process of analyzing the reconsideration of water and electricity supply in land forces operations. The identification of the possibilities of continuous training in order to use possible new systems in the operations specific to the land forces and of the missions specific to the engineering troops is a key stage in the good functioning of the implementation of the current technologies in the maintain the operational capacity missions.

"Continuing the vocational training can change / improve professionalization. It represents a complex process of preparation, wich involves acquiring the knowledge and the ability to qualify for the actual position, multiple calification or recalification."[3]

Finally, the main purpose of the theme entitled: "Reconsideration of the water and electricity supply systems in land forces operations" is the discovery new ways to technologically update the systems currently used to provide these facilities to the militarry forces in the context of conducting operations in hostile environments. deprived of hydrological and electrical resources.

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LEADERSHIP SPECIFIC ELEMENTS IN IRREGULAR WARFARE

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Abstract: *Globalization has allowed subnational actors, previously minor, to step into the spotlight as modern powers with new and diverse abilities. They are motivated by the will to use this power recklessly and ruthlessly against governments, economies and civil society. Globalization has allowed modern organized crime, groups with access to high technology capabilities, with international coverage and private interests, without national elections to appear as new economic and military powers. At the same time, our physical and virtual borders are increasingly vulnerable to uncontrolled immigration, radicalized thinking, drug trafficking, infectious diseases and cyber intrusion. The network of these various actors constitutes a new dimension in the complexity of the threats, which forces the modification of the traditional thinking and methods if it is desired to maintain a strategic advantage.*

Keywords: irregular conflict, leadership, non-statal actors.

Introduction

Globalization has allowed sub national actors, formerly trivial, to become highlighted as up to date powers with new and various abilities. They are motivated by the will to use this newly acquired authority carelessly and brutally against the executive powers of the states, economic factors and civil society. Globalization has permitted modern organized crime groups with access to high technology capabilities, with international coverage and private interests, without national loyalty to appear as new powers with economic and military reach. At the same time, our physical and virtual borders are increasingly helpless to unrestrained immigration, radicalized thinking, drug trafficking, contagious diseases and cyber attacks. The network of these diverse actors created a new aspect in the complexity of the threats, which forces the modification of the traditional thinking and methods if it is desired to maintain a strategic advantage.

In response, people must develop a strong governing body capable of dealing with a wide range of evolving 21st century irregular threats to security and stability. Only intelligent leadership in the field of the 21st century can make this change, from reactive leadership to proactive and interactive leadership, by uniting all potential sources of authority. For leadership to be triumphant, better collaboration between administration, academic circles and the private sector is needed. There are also a variety of areas that require further development of future leaders.

1. The field of physical education in the training of leaders

The current efficiency of leadership is hampered by the failure to efficiently fuel investment in "human capital" in time; an insufficient understanding of the "human factors" in multifaceted operating environments; and the division of effort both in the public and in the private sectors.[1]

The very definition of leadership itself is controversial. US Marines, for example, acknowledge that there are two main goals of leadership - mission accomplishment and caring for people. Marines accept that leadership has many traits and principles but leadership by example is the best form of leadership. Finally, they accept that leadership is not a position but a process, and that this process is placed between the leader, the subordinates and the situation. Basically, everything else about leadership is up for debate.

The physical challenges that fighters bear in irregular warfare are very diverse and must adapted constantly. Their tactics require long periods of low effort, punctuated by short periods of high intensity effort. This fact is one of the various pros in asymmetric operations. When matched with other benefits - time is usually on their side. Excessive reaction by their opponent is a goal, and their own inactivity can create a breach in the vigilance / preparation of the enemy.

The belligerent with the numerical, technological and organizational advantage must be always vigilant in each area. This imposes a continuous stress on the physical and psychological resistance of the fighter in difficult ways to simulate in peacetime. Adding to this the factor of "war wear" on the home front and the psychological pressure felt by those displaced, a scenario arises where the normal limits of resistance might be extended to and over the breaking point.

Physical strength and agility are very important to the fighter, but resistance is utmost important in irregular warfare. The methods of cultivate the resistance, the conditioning of the provocative warriors, are very difficult to put in practice in peace time. Wear in the US Marines, NAVY SEALs and Rangers which are some of the harshest military training programmes is extreme. Recruitment pressures confirm the reality that some military members are simply incapable of the strength and resilience needed to be part of the said organisations. A numerically reduced force is reduced by its own conditions to eliminate those who fall.

One way to better simulate physical exertion in fighting is to devellop exercises based on the fight itself rather than just running, pulling, and abdomens. These exercises are very important for strength and resistence, but they need to be fortified by resistance exercises to heavy load, resistance tests with weight and long-term physical requirements (three hours or more of intense and continuous scheduled activity). This approach works well in initiation training, but it is necessary to maintain a high level training.[2]

2. The cultural field in the training of leaders

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[1] Irregular Warfare Leadership in the 21st Century, online https://slidex.tips/download/irregular-warfare-leadership-in-the-21st-century accesat la data de 04.01.2020.

[2] Joseph J. Thomas Leadership for the Long War: Developing 21st Century Warriors, online https://www.usna.edu/Ethics/_files/documents/Leadership%20in%20the%20Long%20War%20Thomas.pdf accesat la data de 04.01.2020

Special Operations Forces operators who studied and used cross cultural leadership in many areas affected by conflicts encoded the philosophy of driving from shapeless thoughts and emotions to demonstrating that leadership can be applied to war-torn societies. Leadership academies and schools must continue understanding and embracing these principles and apply to contemporaneous irregular warfare in all the war areas around the world. Tenzin Gyatso, the Tibetan Dalai Lama, said to his people in his book, "Ethics for the New Millennium":*"... when we increase our sensitivity to the suffering of the other by the intentional opening of the self, it is believed that we can gradually expand compassion to the point where the individual feels so moved by even the most subtle suffering of others that he becomes overwhelmed with responsibility towards others*[3]".

When missions are aimed at improving the hearts and minds of citizens and constructing their psychological security, then other programs and missions related to the same area can be correlated. On the other hand, short-term efforts are not likely to create the desired outcome, once the forces depart from a certain region, there is no efficient control to hold up the community's requirements. The battle of hearts and minds will be lost once more[4].

3. The intellectual field in the training of leaders

The intellectual field is a bigger challenge in today's struggle. An asymmetric environment requires a way of thinking that is not often found in basic preparation or application schools. The respective environments are planned around the attitude that skills and knowledge will be given and evaluated. Asymmetric warfare requires well-trained fighters, but this axiom is reminded "*We train for certainty and we educate for uncertainty*." In this context, education is vital.

The current military system must be based mainly on these disciplines which rightly form the "backbone" of training, leadership theorists, scientists that study behavior and organizational psychologists. By actively recruiting experts from the three latter areas, military service alumnae will help contextualize the past lessons and present struggles. While it can be argued that, for example, already offering such services, historians sometimes do not have the expertise or educational experience to be capable to suggest leadership development programs based on their remarks. Political scientists and historians are significant, but the conventional constraints of their disciplines often discourage or hinder their usefulness in determining specialized progress for the present or potential struggle.[5]

4. The field of long-term leadership development

Leaders should be able to evolve and sustain critical areas of knowledge through succeeding, linked careers, if opportunities are offered in a more rational and incorporated way. In the present system, early career retirees, who can without difficulty, have an additional 20 years of service to offer, have modest possibility of continuing to use what they have learned in life and experience in an impactful way. Changes can be made to help create a body of experts from the second part of the career, irregular war leaders, in a variety of fields.

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[3] Dalai Lama XIV, *Ethics for the New Millennium*, Riverhead Books, 1999

[4] Irregular Warfare: A SOF Perspective online https://www.globalsecurity.org/military/library/report/call/call_11-34.pdf accesat la data de 04.01.2012

[5] Joseph J. Thomas, Leadership for the Long War: Developing 21st Century Warriors online https://www.usna.edu/Ethics/_files/documents/Leadership%20in%20the%20Long%20War%20Thomas.pdf accesat la data de 04.01.2020

The five significant parts of a practicable lifelong management strategy include: permanence of excellence, incentives, recognition and employment, specialization and quality assurance.

Permanence of excellence

Provide career paths that target the most well-known and experienced leaders and experts in successive careers serving their nation. This continuity of highly developed expertise is a important part of achieving "positional advantage" against threats. In outlining this area there are a number of steps to accomplish it:

- Creating smooth transitions to the next careers;
- Clear linking of advanced schooling and preparation of skills for the following positions;
- Encouraging specialized accreditation;
- Creating coded positions by job categories;
- Encourage cross-training with external organizations besides the present employer;
- Breaking down internal and external award barriers;
- Widen the fast tracking alternatives for possible leaders.

Incentives and specialized motivation

Today's people have a number of learning, schooling and professional methods to choose from. In the present "free market" system, persuading possible leaders to decide a path that will best serve their nation it is most obtainable by providing incentives. These incentives - economic, professional and progressive - can have the effect of keeping and advancing the brightest minds to create a permanence of service for the future. Given the spectrum of threats that the world is facing today, an integrated stimulation network needs to be established, giving people opportunities to articulate their talents and improve themselves at the fullest, to be part of a team with a reason and ideological assignments and to work in positions that provide steadiness and security.

Recognizing and employing potential leaders

The society must be capable to discover aspiring leaders and then make available for them with the channels they need to best use their talents and, nonetheless, their passions. This endeavor should be applied to both the youthful generation of future leaders and well-known experts, whose knowledge and experience can be used in various sectors.

Specialization (Critical Skills)

Up-and-coming threats and evolving operating environments amplify the necessity for new expertise. However, the schooling organization and the training opportunities do not always maintain the same level with the ever changing realities of the irregular war environment.

Quality assurance and performance assessment

In the 21st century, with the means of communication worldwide and the ever growing globalization, people are gravely and irreversibly interconnected and co-dependent. Only one failure in the quality, nature and capability of a leader, can spread widely. The string of modern business managerial scandals and the absence of military leadership in the Abu Ghraib prison episode are vibrant examples of this malfunction. To keep away from these types of scenarios, better supervision and quality assurance must be developed.[6]

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[6] Irregular Warfare Leadership in the 21st Century, online https://slidex.tips/download/irregular-warfare-leadership-in-the-21st-century accesat la data de 04.01.2020.

5. Conclusions

The types of operations that modern armies faced in the 21st century, the security environment mandated an increased adaptability in service. Operational success requires leaders and organizations that can quickly recognize changes in the environment, identify critical elements in unfamiliar situations with less-than-perfect information, and facilitate timely action to meet new demands, all while under considerable stress.

The need to change the requirements and the way of training the future must be involved in a vast updating process, from the perspective of the current confrontation space. Future leaders must comply for irregular conflicts in all areas: physical, intellectual, moral and cultural, both in the short and long term.

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CURRENT ASPECTS ON IRAK'S MILITARY CAPABILITIES

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Abstract: *The republic of Iraq dominates the fertile crescent region of southwest Asia. Iraq is a land of contrast: desert plains occupy most of Iraq with the exception of the Tigris and Euphrates river valleys, which are the most fertile in the southwest Asia. Iraq's access to the Persian Gulf is limited to the Shatt al-Arab region. An area of historical dispute between Iraq and Iran, the Shatt al-Arab waterway provides Iraq with a narrow corridor to the Persian Gulf. The human resource is not an asset, in the case of Iraq, because, although the available labor force is a large number, not even in the case of war they can mobilize in a considerable number to be able to cope with the challenges that arise during the course of the war. Iraq is not extraordinary in terms of endowment, but is making great efforts to resolve the conflicts that arise. However, at present, Iraq has state-of-the-art equipment and this gives it an advantage to have the military capabilities needed forany war.*

Keywords: Fertile Crescent, resource, state-of-the-art equipment, military capabilities, terms of endowment.

Physical-geographical positioning of irak and significant historical references

Iraq is a country in the Middle East located in Southwest Asia at the confluence of the Tigris and Euphrates rivers, including southern Kurdistan.It has neighbors like Kuwait and Saudi Arabia in the south, Jordan in the west, Syria in the northwest, Turkey in the north and east Iran. This state also has a narrow coast at Umm Qasr in the Persian Gulf.

The Iraqi territory can be divided into 3 geographic regions with distinct net features: in the west a steppe area, in the center a wide plain, the Tigris and Euphrates fields, and in the east a mountainous region.[1]The mountains in the northeast, along the border with neighboring states Turkey and Iran, are high, with muddy terrain and provide very good protection for the Kurdish population.

The capital of the state of Iraq is Baghdad, a city located about 600 km inland on the Tiger River from the Persian Gulf that has suffered frequent flooding and is currently protected by the Samarra Dam.Even though this city has various industries, Basra, which has a population of 1,540,000 inhabitants, is the most industrialized city and on its territory is the most important port, located on the left bank of the river Shatt-al-Arab.The official religion of this state is Islam, with 35% Shiites and about 60-66% Sunnis [2]. Even though it is a minority group, the Shiites have taken over state control, and this has led to violent civil war and the creation of ISIS.

Before the war in 1991, Iraq was one of the largest oil-supplying states in the world. The most significant lands recognized as being oil-owned are in the Kirkuk region, but there are also many deposits of natural gas, iron ore, copper and others in the state territory.

Covering an area of 435,052 km^2, the population of the state is estimated 23,332,000 inhabitants, of which 64.7% are Arabs, 23% Kurds, and 12.3% are Azerbaijanis. Of the total number of inhabitants, 8.2 million represent the economically active population, of which 78% are men and 22% are women.

Baghdad (originally called the "City of Peace") was the capital of the Abbasid Caliphate from 762 until 1258. This city represented an important center for the Arab world until 1535 because since this year 3 provinces such as Mosul, Baghdad and Basra were incorporated into the Ottoman Empire.

In 1963, this regime was overthrown with the help of the CIA, the control of the country being taken over by General Ahmed Hassan Bakr, who led the Ba'ath socialist party.

Following these events took place the most important moment in Iraq's history: the beginning of Saddam Hussein's political ascendancy. His activity began with the dismissal of General Bakr and continued with his appointment as President of Iraq. After that, numerous events followed in which thousands of innocent people lost their lives, and the end result was not favorable for anyone.

The Iraq-Iran conflict lasted until 1988, when the parties agreed and signed a cease fire agreement. After 8 years of war, no important and significant land was gained. This war caused a real military imbalance in the Persian Gulf because Iraq caused huge losses to the Iranian army, and their own forces were strengthened within the limits of the possibilities.

Due to the fact that the Iranian military force was very weak and was a non-significant threat, Saddam turned his front to Kuwait, another neighbor of Iraq. *The invasion of Kuwait* was seen by Hussein as a way to raise the price of oil, making a major contribution to raising Iraqi revenues.

General elements on the doctrine and the military strategy

We can easily observe the elements regarding the doctrine and military strategy of Iraq in the conception of the defensive operation of the Iraqi Supreme Command in the operation " Iraqi Freedom ".

In order to achieve their objectives, the Iraqi forces used diplomatic means, which are key to achieving success. However, the price accepted by Iraq to pay it in favor of avoiding war had certain limits.

The Iraqi regime left with some beliefs to accept a solution to the war that was about to begin. These beliefs were as follows:

- at least some of their troops will withstand a degree of professionalism;
- coalition strength is less resistant to losses and time (delays);
- a plan can be devised to force the coalition beyond its threshold.[3]

From analyzing these beliefs, we note that there are two strategic objectives that the Iraqi army has, namely: extending the war for as long as possibleand the production of a large number of enemy losses from all points of view, without destroying Iraqi forces the power to repel American attacks.

The operation "Iraqi Freedom", following the conclusions reached by military analysts, it was surprised by the parties concerned regarding the equality of capabilities. These have been highlighted both in technology, training and in the military's ability to act. UK and US they were able to make full use of all the capabilities available to them at the time, but Iraq was experiencing a regrettable failure while trying to cope with the Allied forces.

A more dangerous threat was the paramilitary forces, whose main target was the lines the Americans used to supply themselves, but this threat, until the end, proved to be more of a past obstacle than a real threat.

Even though in the first months of 2003, the initial plans were for an air strike followed by a ground invasion, due to information about Iraq's intention to fire all the oil wells in the south, it was decided that the ground attack should be followed by the aerial one.

Unfortunately for the Iraqis, all the strategies they used were useless and could not avoid the failure they had, in the end.

Due to a bilateral agreement that exists regarding the withdrawal of US troops from Iraq, until 2011, Iraqis were forced to resolve their internal disputes without any help. However, this agreement allowed the Iraqi government to demand that the US military remain in Iraq after the end of 2011 and to continue to defend the country and to avoid foreign military intervention as much as possible.

Military capabilities

3.1. Human resource

As far as human resources are concerned, the total population of Iraq is about 40,200,000. Out of this total, 16,399,240 represents the available labor force and 13,283,385 represents the labor force that meets the conditions for working in the Iraqi army. However, the number of active personnel in Iraqi armed forces is only 165,000.

Despite the values specified above, in case of war, as it was during the second Gulf War, the population mobilized to contribute to the efforts made to defend the country, thus: the Iraqi armed forces had a total of 538,000 military troops out of which 375,000 from the Iraqi army, 2,000 from the Iraqi navy, 20,000 from the air force and 17,000 from the air defense and paramilitary troops 44,000, the Republican Guard 80,000 and the military reserves 650,000. [4]Unfortunately, however, it was not enough to ensure the success of the operations.

In conclusion, human resource is not an asset, in the case of Iraq, because, although the force available for work is quite large, not even in the case of war can they mobilize in a considerable number to be able to face the challenges that arise during the course of the war.

3.2. Endowments

Iraq is not extraordinary in terms of endowment, but is making great efforts to resolve conflicts that arise. With regard to the aircraft, their total power is 327, of which: 26 are combatants, 59 are intended for attack, 24 are special for transport and 78 are available for. The total number of helicopters with combat power is 179, and the helicopters specially designed for attack are 32.

In terms of terrestrial endowment, the values are significantly higher than those in air and naval endowment. Iraq has 309 combat tanks, 4,739 direct fighting armored vehicles, 44 special self-propelled artillery equipment, 120 towed artillery equipment and, last but not least, 30 missile projectors. All these facilities represent an advantage in carrying out military actions.

Finally, the chapter on naval endowment is the least developed of the three categories. The Iraqi Armed Forces currently has an almost insignificant number of active ships that they can use, about 60. But this is not the total, because there are 25 more patrol vessels. In the case of a war, this category would be a major disadvantage in carrying out military actions and in successfully completing missions.

3.3. Defense expenses

From a financial point of view, we cannot say the state of Iraq, because the representative values for the country's budget are neither too high nor the lowest. From the point of view of parity of purchase, according to the GFP, this state is on the 35th place out of the 138 states, the value being of $680,800,000,000$.

As for the defense budget, representative value is $ 6,055,000,000, and according to GFP statistics, Iraq is in the middle of all countries.

From the point of view of external debt, Iraqis are doing better, as they are 55th out of 138, their value being $ 73,020,000,000. This country also occupies a good place in statistics on foreign exchange reserves. The place occupied is 40, and the value is $ 48,880,000,000.

Presentation of the characteristics of the more new equipment

One of the newest equipment used by Iraq is Antonov An-178, a middle-class freight aircraft, produced by Ukraine in 2018 and is the only prototype debuted at the Paris Air Show 2015.

This aircraft was designed to replace the Antonov An-12, An-26 models, which were produced from the Cold War era and were used long enough. For this reason, the An-178 is in a continuous development process, in order to exceed the specifications and the advantages offered by the two outdated models.

An-178 is a model based on An-158, borrowing qualities of this model, but having a wider fuselage, which makes it a unique and very useful model. The power is given by the two Progress D-436-148FM turbofan motors, with 15,000Ib of traction each.This gives the aircraft a cruise speed of 500 miles per hour, with operating ceilings of 42,650 m. Its freight capacity is 22,045Ib over a distance of 2,500 miles, and a weight of 40,000Ib can only be transported over a distance of 620 miles.

The rapid evolution of the technological dimension has caused, during the last decades, major changes in all the areasof socio-human activity, but the most impressive and visible ones were in the military field, sometimes greatly changing the essence of the military actions. Almost all military specialists worked with classical concepts, such as space and time, which were profoundly altered by digitization, thus increasing the lethality and dynamics of military actions.

Due to the rapid evolution in this area, Iraq has decided to use, as of 2016, an unmanned aerial combat vehicle, CASC CH-4 Rainbow, very similar to the American MQ-9 Reaper drones. The CH-4 has been manufactured in China since 2014 and has a power output of a conventional 900 horsepower engine, and the speed it can reach is 350 km / h.

Being similar to the American drone, it has different precision guided ammunition, which can annihilate the opponent in a very short time.Although it has a lot in common with the MQ-9 Reaper drones in terms of specifications, the Chinese industry has made its mark on the aircraft's design.

In the near future, drones will no longer mean only certain unmanned aircraft used to spy, but also particularly quiet, very small-size aircraft with the ability to penetrate certain areas, gather information from sensitive strategic areas and to transmit the data and information requested by the secure operating bases in a timely manner.[5]

Conclusions

The architecture of our times, realized in the military field, recommends the use of robots because, by this way the risk of making mistakes will be reduced, the errors can be avoided which can be possible if the human factor is subjected to adverse conditions, such as stress, physical and mental wear and is beneficial because there is the possibility that they can be properly equipped and equipped with the most powerful weapons.

In conclusion, reviewing some of the countless interferences between the use of modern, existing processes and techniques, but also those that will appear in the process of leading forces and making decisions,we can say that they do not exclude each other, the application of the principle of surprise being dependent on the scientific analysis and the correct assessment of the multiple factors of the situation, but also of their implications in the process of fulfilling the proposed aims of the fight.

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ANALYSIS OF THE IMPACT OF THE INFORMATIONAL WARFARE ON THE NATIONAL SECURITY

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Abstract: *The art of war is based on deception. In general, the informational war generates the deceit of the enemy as well as its destruction. The ability to perform military actions consist in a few main requirements: command and control warfare, intelligence based warfare, electronic warfare, psychological warfare, economic information warfare and cyberwarfare, these having a high impact on national security. Each component can have a negative or positive color depending on who owns the information. From the point of view of national security, the information holds the power. Also, in different situations, the information establishes the balance between national security and human rights.*

Keywords: informational warfare, military actions, hacking, national security.

The concepts of 21st-century warfare, electronic and information systems define the term of informational warfare. In its essence, information warfare is about the way humans make decisions and the way humans think. Also, informational warfare is described by National security strategists through other terms.

This terms can miss the information related capabilities that materialize informational warfare as a whole and tend to focus on the government or military application of information. Concidering the conflicts that involve the manipulation, degradation, protection and deniel of information, can be distinguished seven forms of informational warfare:

- Command-and-control warfare- this type of war points to the destruction of the enemy's head and neck;
- Intelligence based warfare-its main objective is to denie, design and protect the systems that seek knowledge to dominate the battlespace;
- Electronic warfare-highlights techniques cryptographic;
- Psychological warfare -used to change the minds of foes, friends and neutrals;
- 'Hacker'warfare-computer systems are destroyed;
- Economic information warfare-channelling it and blocking information to pursue economic dominance;
- Cyberwarfare.

Command-and-Control Warfare

Command-and-Control Warfare is the integrated use of military deception, electronic warfare, physical destruction, psychological operations and operations security supported by

intelligence, to influence or destroy the enemy. The elements of command-and-Control warfare which have an important purpose in the overall effort, are the following: **electronic warfare**contein electronic protection, electronic attack and electronic warfare support; **physical destruction** points the sabotage or convert actions against indicated targets as a substrate command-and-control warfare effort; **psychological operations** are essential to the extensive range of US economic, informational activities, military and political and command-and-control protect operations and **military deception**.

All commanders should guarantee that key staff responsible for physical destruction, planning operations security and psychological operations and military deception receive initiation in command-and-control warfare. **PSYOPS** are an essential part of the extensive range of US diplomatic, informational activities and military economic.

An example of the reunion of the four classic elements of C2W-physical destruction, electronic warfare, operations security and military deception-into a single integrated C2W game plan it was during the buildup to Operation Desert Storm. Desert Storm was a textbook application of the C2W strategy. The coordination of the various C2W actions conducted by the coalition nations led to the key of the coalition's success. Desert Storm proved the effectiveness and relevance of command and control warfare to war-squadron aircrews and fighting commanders alike. Since then the United States has integrated the lessons learned during Desert Storm into revised joint doctrine, education and policy and made the focus of both C2W and electronic warfare more offensive. [1]

Intelligence Based Warfare

Information Warfare has existed since armed conflict began. As the versification of battle accelerates and information collection increases it is indispensable to have a means of synergistically combining organizational structure, advanced technological tools and mathematical analysis of information target vulnerabilities. [2] Intelligence is an activity that aims at preventing surprises, evaluating combat actions and finding goals. The main sources of information are classified into different categories: Signal Intelligence (SIGINT), Human Intelligence (HUMINT) and Technical Intelligence (TECHINT).

Winn Schwartauclassifies information warfare in three groups:

- Global information warfare;
- Corporate information warfare;
- Personal information warfare.

Examples of malicious programs

The military and political systems of command and control are based on extensive speeds of computer-based communication. Therefore, IW can influence military, political or economic goals through: sabotage of the economy, sabotage of development facilities, scientific research, conferences for journalists of important personalities, sabotage of satellite communications and destruction of the information network. One of the most illustrious viruses was the **Melissa virus**. Melissa scattered very quickly among Windows systems, infecting 90000 systems in a few days. Initially, he was not designed to destroy the systems, but then a message burst out some email servers.**Computer worms** are computer programs that multiply themselves. They use computer networks to copy to other computers, often without the influence of the man. The first known worm was designed by a Kornel University student during an experiment in 1988. He was accidentally released onto the Internet and

[1]Hutcherson, N., *Command and Control Warfare*, Air University Press, 1994, pp. 3-4.

[2]Adamiec, Raymond, *Information Warfare: Evaluating Information Targets*, Naval War College, 1996, p. 26.

damaged 6000 computers across the United States. [3]

Electronic warfare

The term itself is defined as a military action including the control or direction of electromagnetic spectrum energy to corrupt, deceive or attack the enemy. Electromagnetic Spectrum domination include: procedures to plase misleading images onto radar systems, procedures to control enemy radio systems, methods for incisive space operations where global positioning satellites may be destabilized.[4]

Electronic weapon systems contain sensors, such as radar, sonar and infrared; a communications links which take sensor data to the command and control center and jammers, bombs, lasers, missiles, these being output devices. At the technical level, there are many perspectives which may go across from electronic warfare to information protection. For example: guard band receivers used for jamming detection. Electronic countermeasures can be defensive or offensive.

At the initiative of friendly forces are conducted offensive activities. The examples are as follows:

- Jamming a command and control systems and enemy's radar;
- Using antiradiation missiles to destroy an enemy's air defence system;
- Enemy's intelligence and reconnaissance systems confusion by using electronic deception techniques;
- Neutralization of equipment and enemy's capability by using directed energy weapons.

The personnel, equipment, capabilities and facilities are protected by defensive electronic countermeasures. Force protection and self-protection measures are examples, but these are supplemented by the use of the following: radar jammers, towed decoys and infrared countermeasures models. For the modern warfare is essential the using of electromagnetic energy and operating in cyberspace. To organize operations military forces use wireless computer networks, to locate and detect the enemy use ground and air sensors, to communicate with each other use radious and to blind enemy radars use electronic jammers. [5]

Psychological warfare

Psychological warfare is a continuous process that cannot be specified in order of battle, named engagements or terms of terrain. Also, it cannot be governed by the laws, customs of war and usages and it is not against the opposing psychological warfare operators. Psychological warfare seeks to win military gains without military force.

According to studies psychology helped the warfare through the following aspects:

- Firstly, the psychologist can stimulate the soldier's interest by bringing it to his attention elements of the human mind which are kept out of sight;
- Secondly, the psychologist can use methods to combat the enemy's true feelings ;
- Thirdly, the psychologist can help the military by maintaining his sense of mission and of proportion.[6]

The psychological warfare activities must be integrated with those of higher and lower commands like combat operations. Also, in time of war, the morale of the enemy armed forces can be affected by any lowering of morale of the enemy home front while propaganda

[3]Damjannovic, Dragan, *Types of information warfare and examples of malicious programs of information warfare*, 2017, pp. 1045-1054.
[4]Wilson, Clay, *Information Operations, Electronic Warfare and Cyberwar: Capabilities and Related Policy Issues*, 2007, p. 6.
[5]Haig, Zsolt, *Electronic warfare in cyberspace*, 2017, pp. 24-26.
[6]Linebarger, Paul, *Psychological warfare*, 1954, pp. 1-37.

activities of a national agency aid psychological warfare efforts. Over time studies have proven that psychological warfare activities integrated with combat operations can highlight the following ideologies: perfecting and capitalizing the psychological effect of military events; loss of combat effectiveness which led to the lowering of the enemy's morale; producing a cumulative depression for a long time and encouraging desertion and surrender of the armed enemy or command structures. The content of psychological warfare is supported by the following aspects: the hirings are made only within the military field; propaganda is useless unless it has an audience; trust is the most basic aspect and the content of propaganda should be suggestive rather than arbitrary.[7]

Hacker warfare

Hacking is using the technology in different methods to solve certain problems that conventional techniques cannot.

Types of Hackers

- Black hat hackers- they are the malicious hackers who use the information obtained from breaking certain systems and programs in a negative way.
- White hat hackers- they are the ethical hackers and they are the ones that identify problems and vulnerabilities in order to remedy them.
- Grey hat hackers- these are those who identify their vulnerabilities and remedies, but they use these methods for profit or interest purposes.

Types of hacker attacks

- Denial of Service-these is a form of attack where a hacker floods a website with traffic requests in an attempt to bring down the server.
- Keylogging-a hacker can use a software to record a keystroke that is type on a computer keyboard.
- Waterhole Attacks-a hacker targets someone at the place where they are most accessible.
- Phishing Attacks-the hacker can take advantage of the vulnerability of emails.[8]

Information economic warfare

Economic intelligence puts the coordination of activities in the foreground, such as monitoring competitors and capitalizing knowledge. The main players in economic warfare are: world's nations, world's companies, civil society and the infosphere. Also, economic warfare is often confused with economic espionage, which is difficult to define both because it is difficult for companies to define in juridical terms and difficult to report.[9]

Methods and weapons of Economic Warfare:

- Fiscal methods and weapons;
- Monetary methods and weapons-stock exchange speculation;
- Trade related methods and weapons;
- Espionage methods and weapons;
- Head hunting;
- Biological economic warfare;
- Information as a main weapon-system.[10]

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[7]Lawton, Collins, *Psychological warfare in combat operations*, Department of the Army, 1949, pp. 5-7.
[8]Gary, Hall, Erin, Watson, *Computer hacking, security testing, penetration testing and basic security,* 2016, pp. 7-21.
[9]Online: https://www.academia.edu/35944442/ECONOMIC_WARFARE_AND_COGNITIVE_WARFARE, accesat în data de 09.01.2020.
[10]Herald, pocher, *Economic warfare. Heavy damage without bloodshed, 2015,* pp. 73-77.

Conclusions

From the beginning the information warfare has had a major impact on national security. The improvement of technologies highlights the problems and vulnerabilities both current and future. At the same time, the informational war can be used to successfully fulfill the objectives of the national strategy or to destroy them. The actions carried out at the national strategic level lead to an informational gap between vulnerabilities and interdependencies of a potencial adversary and what the adversary possesses.

Considering the offensive and defensive possibility of the information war, the positioning as a nation is an important factor in meeting the objectives of both the national strategy and the national security.[11]

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CURRENT CONCERNS REGARDING THE MILITARY CAPABILITIES OF SOUTH AFRICA

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Abstract: A*ccording to the research, the article synthesizes important aspects from the point of view of military capabilities. These are expressed by statistical data made by specialized online platforms. The article presents data on human capabilities, on the technique and weaponry available to the armed forces and on the manner in which the logistics resources are managed. Military capabilities are particularly important for the security of a country, and through this article is described the level at which South Africa is in terms of the risks to which it is exposed, the geostrategic position it has and the way it has managed to adapt over time to the requirements of armed conflict.*

Keywords: capabilities, geostrategic position, adaptation, military status, historical battles.

1. Generalities about South Africa and a brief history of the armed confrontations of South Africa.

The territory of South Africa covers an area of approximately 1220000 km^2. This country lies on the southern tip of the African continent, with 2798 km of maritime coast with an exit to the Atlantic and Indian Ocean.

South Africa is bordered to the north by Nambia, Botswana and Zimbabwe, to the east by Mozambique and Swaziland, and within the territory of South Africa is Lesotho, a completely independent country.

South Africa has been politically independent since 1961, when it was declared a republic. At present, the form of government of this state is the parliamentary republic. It is a multiethnic state, due to frequent colonization, with a population of approximately 55 million inhabitants. It has 3 capitals that perform different functions, Cape Town which is the legislative capital, Pretoria, the administrative capital and Bloefontein, the judicial capital.

Conflict situations within this territory were generated by several factors. The main causes were: the stones and precious metals found in the territory of this country, the conflicts between the states who divided the territory and last, but not least, the ethnic differences. All these have contributed to the main conflicts in this country.

From South Africa, prominent personalities were highlighted. One of them is Nelson Mandela, former president of this country and one who was an example of humanity for his fight against racism. Another important representative man of South Africa was Jan Christiaan Smuts, a states men and military leader, the one who signed both peace treaties that ended the First and Second World Wars.

One of the most important armed confrontations targeting South Africa was the Boer Wars or the Liberation War. This confrontation was a succession of two armed conflicts in which the British Empire faced boer (Dutch colonists from South Africa), conflicts that led to the disappearance of two South African republics. The first war took place between 20.12.1880 and 23.03.1881, and ended with the decisive defeat of the British. The second Boer War took place between 11.10.1899 and 31.05.1902, and the result of this confrontation ended with the victory of the British Empire. During the two World Wars South Africa was on the side of England and fought against Germany managing to conquer the so-called German East Africa.

If we take a look at the human resources of the first Boer war, 3000 soldiers from South Africa were involved, against only 1200 British soldiers. Human losses in South Africa were much lower than the British case, taking into account the number of people initially involved in the fight. The South African army recorded 41 dead and 47 injured, while the British Empire had 408 dead 315 injured.

Regarding to Boers tactic in this first war, they were dressed in rural clothes that were neutral to the colors of the African landscape, while the British uniform was a bright red, which is in stark contrast to the African landscape. This allowed Bouers, experienced keepers, to shoot in the British, even from long distances. According to some historians, the advantage of Boers was also a specific military tactic. Boers preferred speed, while the British were careful and disciplined. As for the second phase of the war between the two camps, the British Empire has prepared much better regarding the political pressures on the Boer.

Today, South Africa also has an important military power, being among the top 50 states in the world in this regard (34th place according to globafirepower.com), surpassed on the African continent only by Egypt and Ethiopia.

These attributes give to South Africa the opportunity to play an important regional role. However, the lack of consistency in foreign policy, as well as the lack of clear points on the diplomatic agenda make this relatively difficult.

2. Human capabilities of South Africa army

The South African Army, first formed after the Union of South Africa was created in 1910. It played a key role in controlling segregationist policies violence inside South Africa during the late 1980s and early 1990s.

The role of the army was fundamentally changed by the upheavals of the early 1990s and after 1994 the army became part of the new South African National Defence Force. The army is composed of roughly 66,300 active personnel, augmented by 15,000 reserve force personnel. The rank/age structure of the army, which deteriorated desperately during the 1990s, is greatly improving through the MSDS (Military Skills Development) system; young healthy members are being inducted into the regular and reserve forces every year. Due to the restructuring of the reserves, the exact number of reserves is difficult to ascertain. However the 2011/12 planning target was 12,400 reserves.

The importance of the GFP values consists in the fact that it relates the theoretical available fighting strength, in the case of a nation's complete population. Considering the population of South Africa which is of 55,380,210 (according GFP), only 47,4% represents availible manpower. Regarding to the army, reaching military age anually it consist from 1,7%, and just 0,1%, meaning 66,300 of the total population, as I said, is involved in military activities as active personnel.

3. Statistical data about military capabilities of South Africa

According to GFP (Global Fire Power), which evaluates each country based on individual and collective values, granting a PowerIndex score, South Africa is ranked to 32 from 137, out of the countries currently considered bz GFP. Its PowerIndex score is rating to 0,5405; keep in mind that 0,0000 being perfect.

Both the rate of the active military personnel, as well as the GFP score obtained for the military equipment that has South Africa, placed this country in the lower limit of the general score accepted.

The World Directors of Modern Military Aircraft the consider a sum of scores for an in depth look into de numbers available to anyone air force of world. Also, WDMMA made a ranking for South Africa, specifying what equipment it has and the score obtained according to worldwide ranking; so they have 206 total aircraft equipament, of which 17 fighter aircrafts, 17 for attack, 23 conveyors, 67 instructional aircrafts, 92 helicopters, and just 12 attack helicopters.

From the point of view of the land forces, Sout Africa has combat tanks, armored fighting vehicles, artillery for towing and rocket projectors. Naval strenght of South Africa has a total of 30 naval assets, including 3 submarines, 4 frigates, and the rest are patrol vessels.

Conclusion

In conclusion, South Africa has evolved greatly from a military and political point of view, considering the problems they had because of the factors listed in chapter 1.

From my point of view, South Africa has managed to become a powerful state of the African continent. It is impressive that South Africa has managed to grow so much in spite of all the multi-ethnic conflicts that have affected and are still affecting African society. Despite the fact that there were many divergences due to the colonists who tried to take over the power of this state, these struggles for power helped to increase the level of this state from all points of view.

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CONSIDERATIONS ON THE 21st CENTURY BATTLEFIELD

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Abstract: *The continuous evolution of the military technology directly affects the battlefield. Firstly, by eliminating the time for the intelligence process through live transmissions from the battlefield and by the capacity of weapon systems to hit targets at great distances, exceeding the territorial limit of any state. Secondly, new technology means new threats, new risks and more specialisation for using it. We need to be aware of the risks and threats that this new environment is providing. I will analyse the main risks and threats classifying them by their origin: military, natural and social. Being aware of those problems, that the new battlefield presents we can make more precise decisions and overcome the difficulties that are threatening our lives and operational power.*

Keywords: theater of operations, tactical unit, threats, lessons learned

The modeling of future combat actions depends both on the nature and the way in which the risks and threats are manifested, as well as on the means at their disposal and the way they are intended to be used. The armed struggle model can only be flexible, both in terms of action and reaction. In other words, the structuring of the armed forces must be done in such a way that, at any moment, force groups can be established to act or react appropriately [1].

The emergence of tactical level units, subordinated directly to the political decision-maker, operating at operative level to achieve major, sometimes strategic goals, is the result of new risks and threats specific to the current and future operational context. The complexity of the new battle space denotes their diversity and their detailed analysis is at least necessary, if not mandatory.

The deterioration of the security situation at the international and especially regional level requires knowledge of the main threats, risks and vulnerabilities our country faces in the context of the emergence and possible development of new forms of influence and constraint as a result of a mix of nonconventional and conventional components [2].

During the development of the National Defense Strategy for a period of time, it is necessary to consider not only the risks, threats and vulnerabilities of the state, but also their consequences on the development and integration of Romania in accordance with the Euro-Atlantic norms and directives. Unidentified and non-contracted in time (risks, threats, vulnerabilities, and their consequences) will have an effect both internally, regionally, and at alliance level. Of these, it should be mentioned [3]: the loss of Romania's credibility as a country firmly committed to European integration and the Euro-Atlantic area; the disorganization of the management and execution systems (political, economic, financial and military) at national level, in certain areas of operations, leading to the total removal of the

country from the regional and world information circuit; the failure of the reform process; lowering the living standard of the population below the tolerable limit and diminishing the biological potential of human resources; decreasing people's morale and trust in leadership factors; internal disturbances, having a direct effect on Romania's democratic stability; diminishing the combat power of the armed forces and compromising the credibility of the army as a force to prevent, discourage and thwart any possible aggression; the limitation in time and space of the ability of the armed forces to respond in times of crisis and war; the collapse of national independence and sovereignty, with direct effects on maintaining the unity and territorial integrity of the Romanian state.

In order to remove and mitigate the effects of the risks at the national address, firm and timely measures must be taken. If this does not happen in time, the risks will increase and the cost of a future intervention will be considerably increased. Thus, in order to avoid the accumulation of risks and threats, we must respond appropriately with the necessary forces at the required place. Due to its structure, endowment and training, the Romanian Armed Forces can not counteract the economic and social risks and its ability to respond to asymmetric and transnational risks is minimal. According to the decision of the national defense authorities, the army will work with the other system forces to combat these risks.

From a military perspective, following recent military conflicts, the risks and threats to the forces are:

a) military;
b) natural;
c) social.

Military risks and threats

• Possession of significant quantities of weapons, ammunition and explosives by the local population and use of their own forces under the pretext of rituals specific to their religious orientation;

• Use of diversion, sabotage or terrorism acts of diversified explosive devices such as: urous, arc, explosion, electrical, ammunition elements, remote-controlled detonating antenna systems; bobbins with a detonating wick attached to the pyrotechnic cap and a car alarm as the initiator ordered; canisters with easily flammable fuel attached to ammunition elements; grenades or other related ammunition in series; explosive materials masked in the form of ornaments (paintings, wall cases), toys, household appliances, etc .;

• Increasing use of improvised triggering devices in various forms; electrical clocks with automatic timer, which can be detonated at different time intervals; electronic timer controlled timers, made up of clock-integrated systems, along with other electrical elements, which we find in various forms; remote detonation radio systems, consisting of receiver and trigger; use the alarm clock or mobile phone as a trigger system - which operates at the scheduled time or when sending a message [4].

• Possession of weapons systems and explosive mixtures, such as: (a) the artillery (obstruction, tunnel and obstruction) obtained by scouring the buildings that were used as barracks during the war and which have been abandoned; increasing their power of destruction by means of changes to these systems, so that they can also use larger calibers; b) "timed" throwers placed on the chassis of motor vehicles, but also equipped with self-destruction devices; (c) light infantry weapons for isolated attacks, typically from insurmountable small groups (from one person to a few), chaotic organization, mainly targeting coalition forces (aerodromes, airports, logistic convoys, isolated military command centers, military personnel and humanitarian missions, as well as political leaders or members of local governments, as well as their own police forces; (d) sniper rifles fitted with shock absorbers, used from long distances to point targets of particular importance which are well

protected and do not permit proximity; (e) the masking of explosives in the suicide bombers' clothing, which allows them access to crowded areas, the effect of such an event having a great impact on the morale of the troops and the local population.

We do not have to exclude the possibility of using different elements of chemical cargo ammunition, launching systems for reactive blows or disguised self-guided missiles. Improving and streamlining the methods of using the weapon to carry out indirect attacks on the forces of its own forces led to remarkable remote attacks.

From my point of view, the main targets for the insurgent forces will still be airports / aerodromes. Attacks in their area have an increased effect on panic and sense of insecurity and affect flight activity for both military and commercial flights.

Natural risks and threats

In this category of risks and threats we can include conditions of weather condition, temperature, rainfall, specific relief forms, but also the vegetation and fauna of the theater of operations. To avoid the failure of the operation due to weather conditions unfavorable to its unfolding, weather forecasts are made and planning is made according to them. As for forms of relief, the military will be trained according to the specific area in which they will act, and they will be trained to know and be able to avoid the dangers of different species of snakes, scorpions or plants that can cause different diseases. Next, I will analyze these risks and threats, referring to the theater of operations in Afghanistan.

Joint type operations of types of forces are influenced mainly by weather conditions and weather conditions. In this case, we are talking about the special manifestations of nature, abundant rain, strong winds (creating sand storms), extreme temperatures for the human body, etc.

The operational capacity of the military and the equipment is affected by the high temperatures in the Afghanistan area, which is located in the middle of Central Asia and has an arid climate. Due to high summer temperatures and low winter temperatures, thermal discomfort is created that influences the military's combat capability. In desert areas, due to strong winds, there are sandstorms that stretch for a few square miles and decrease visibility to several tens of meters.

In the rainy season the operations will predominantly take place on the paved roads. This is due to heavy precipitation in the form of rain, which cannot infiltrate the clay soil, thus creating marshy areas that prevent or slow the advancement of the technique.

The actions in the mountainous terrain, especially in Afghanistan, are influenced by [5]:

- the divided part and the existence of hard-to-reach areas of land;
- limit the use of all categories of technique;
- the abundance of spaces on which fire cannot be executed and the hidden access routes known only by insurgents;
- reduced observation, orientation, targeting and fire correction;
- the existence of the possibilities of blocking roads and creating ambushes, etc.

Environmental pollution as a threat to the forces is represented by the possibility of infiltration of waste water into the ground due to the poor state of sewerage networks in most cities. This implies restrictions on water consumption, but also on products grown in the affected soil.

Another natural threat is the fauna and vegetation specific to Afghanistan. In most desert and mountain areas we find venomous snakes (viper and cobre), black scorpions, spiders, but not least the presence of plants that by touch or consumption can cause skin diseases or poisoning organisms. This raises the military's attention during the missions in these areas, which accentuates mental fatigue and diminishes combative ability.

Social risks and threats

The origin of these risks and threats stems from the ethnic and cultural differences between the coalition forces' forces and the host nation's population. In Iraq and Afghanistan, the risks arise primarily from the lack of education (about 60% of the population being illiterate) and, secondly, from the religious orientation of the population, over 95% being Islamic.

Based on what has been said above, the population can manifest: unexplained and uncontrollable reactions, religious fanaticism, aggression, emotional instability, low loyalty.

The unfavorable evolution of internal problems, which tend to become permanent, stemming from the instability of the security and economic system, accentuates the feeling of disappointment felt by locals. This can lead to a change in the population's attitude towards the ability of the coalition's forces to restore peace, creating a situation of continuous insecurity, which will continue to benefit insurgent forces.

For this reason, there is a tendency to attract members from the local administration or security structures and civil servants into resistance groups that act against the forces of the coalition but also threaten and blackmail the people used by their own forces - as interpreters - for obtaining information about the organization and deployment of missions.

In conclusion, the identification of threats and risks specific to recent theaters depends largely on the lessons learned from previous situations and events, the master's art and personal experience.

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THE IMPORTANCE OF SPECIAL FORCES IN MODERN MILITARY OPERATIONS

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Abstract: *The only military forces specially trained for the management of unconventional military crises are currently the Special operations forces.Special Forces are used in all types of operations and they have a high capacity to act independently or in cooperation with similar structures from the composition of the other categories of military forces and forces of the national defense system.Special operations forces are tools of national policy. Hence, tactical units are usually led from the highest levels of military command and employed to promote specific political or strategic goals. Consequently, special operations forces are regularly used to collect information that may not be acquired through other means, to influence foreign political or military conditions, or – which is a special task – to rescue hostages.*

Keywords: special forces, operations, cooperation, crises

1. General aspects about special forces

Special forces have made their presence felt throughout history in all eras. The methods used by some commanders to secure their victory against the enemy, apart from the classic ones used in the war, are identified and based on tactics and procedures typical of special forces actions.

The special operation forces (SOF) represent the specialized component of the army, with a high level of preparation and operability, able to act / react quickly, discreetly, timely and by surprise, in the areas of maximum risk during peacetime, in crisis situations or war.
They are intended independently or in cooperation with the other categories of army forces or with other similar structures within the country's defense forces, to defend the fundamental interests of the state. They are organized, equipped, prepared and used in accordance with the principles of a distinct operational doctrine, being led by a commandament with specific attributions and used in actions based on decisions taken at the highest levels of military-political decision.

Special operations forces are used throughout the range of operations and have a high capacity to act independently or in cooperation with similar structures in the composition of the other categories of military forces and national defense system forces.

Although, according to the number of persons executing them, the operations of the Special Forces can be considered tactical, their effect often contributes directly to the

operational and strategic objectives of their forces in the theater of operations and can follow immediate or long-term objectives. .[1]

The broadening of the spectrum of unconventional risks, the diversification of the typology of crises and conflicts generate multiple challenges, which require multidimensional reactions, based on mobility, diversity, coherence and complementarity both in the internal space and in the international space. Special Forces are the segment best suited to new types of asymmetrical threats and which can make a major contribution to crisis resolution.

In the opinion of some military specialists, the characteristics of success for the forces for special operations could be the following: the purposes and the means used will be predominantly non-military; the actions will have a not too long duration, in particular aiming to exhaust the opponent and obtain high value advantages; the beginning and the end of the actions will be difficult to determine; the actions will be led by generally small, very mobile and active formations; the clashes are sporadic, of little intensity, but in certain situations they can be internationalized and even globalized; they can be used for purposes other than those intended.[2]

2. Special operation forces in contemporary conflicts

Some of the main missions that have been entrusted to the special forces, were the ones to fight against terrorism.

Terrorism means the premeditated use of violence or threat thereof in order to inoculate the feeling of fear, with the intention of constraining or intimidating the government and in general the authorities of the state and the population, in order to achieve political, religious, ideological or economic objectives. .

Countering terrorism includes actions to counter terrorism and include:

- anti-terrorism - defense measures taken to reduce the vulnerability to the terrorist attack. Includes training and defense measures that address the desired protection, mission, infrastructure, personnel and available resources.

- counter-terrorism - offensive measures taken to prevent, discourage and respond to terrorism; provides response measures including prevention, punishment and rescue operations, release of hostages.[3]

In the face of the new forms of manifestation of the asymmetrical threats, also appeared concrete answers in the form of the preventive attacks carried out by the USA, against the terrorist organizations located in Afghanistan and later against the regime of Sadam Hussein, the spearhead in both cases constituting by the special forces.

On December 13th, 2003 the US military troops carried out the mission of capturing the dictator Saddam Hussein. The operation carried out by these was called „Red Dawn". This operation took place in the city of ad-Dawr and it was entrusted to the elite special forces team- Task Force 121 along with the 1st Brigade Combat Team .[4]

In the initial phase of the mission, the teams failed to identify and capture the target. An american soldier accidentally discovered a secret hiding place just before the mission ended. He was about to throw a grenade in that secret tunnel to eliminate any threat, but at that moment Saddam Hussein surrendered..[5]

The hanging of Saddam Hussein ended the life of one of the most brutal tyrants in recent history and negated the fiction that he himself maintained even as the gallows loomed

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[1]Crăciun, M. D., *Rolul Operaţiilor Speciale în conflictele secolului XXI*, Infosfera, 2011, p 55.

[2]Lucian Stăncilă, col. dr., *xxx, Forţele Speciale*, Editura AISM, Bucureşti, 1998, p. 11.

[3]Cf. Departament of Defense of U.S.A., Directive 0-2000.12. Subject: D.O.D. Combatting terrorism program

[4]http://usatoday30.usatoday.com/life/movies/2003-12-17-red-dawn_x.htmaccesat la 09.03.2020.

5Neville, Leigh, *Special Forces in the War on Terror (General Military)*, Oxford, UK: Osprey Publishing,2015, pp. 195–197.

— that he remained president of Iraq despite being toppled by the United States military and that his power and his palaces would be restored to him in time.

The death of tyrant Saddam Hussein meant for Iraq the end of 30 years of war, terror and fear for the civilian population.[6]

Another modern operation successfully completed by special forces was to capture Osama bin Laden.

After almost a decade of hunting by Osama bin Laden, a breakthrough took place in August 2010, when Bin Laden's most trusted courier was located and identified.The order to carry out the mission against bin Laden came on April 29, 2011, and shortly after eleven o'clock on the night of May 1, an assault team of SEAL operators and additional support members rose from Jalalabad Air Field. , in eastern Afghanistan. They have engaged in what the media has certainly called a "hidden" mission in Pakistan to capture or kill bin Laden. Following the operation, Osama was killed and the mission was a resounding success

Bin Laden was the most important leader of the quaelda terrorist organization. He has coordinated numerous terrorist operations during his life. Its elimination by the US special forces had a shocking effect on the Al Quaeda organization. Even after his death, some of his plans and ideas were carried forward by his subordinates. Because of this, the terrorist threats from al Qaeda are still present.

By the targeted killing of Bin Laden, it has already been believed that the US and international organizations have a strong influence on how to respond to terrorism. Significantly, on May 16, 2011, the United Kingdom Parliament indicated that the killing of bin Laden is not only a trend in the United States defense strategy, but also an emerging international political and operational orientation towards individuals and terrorist regimes. In a report, prepared by the House of Commons Library, which outlined future political-military and legal approaches to terrorism, Bin Laden's "targeted killing" had "significant implications" for how the United States and other countries deal with the issue of international terrorism.[7]

3. Conclusions

In conclusion, special forces units, although reduced in size, carry out missions of strategic importance. The fulfillment of these tasks can have effects both nationally and globally. Special forces are created to meet objectives inaccessible to conventional forces and especially when for political reasons, any other classic operation would be unacceptable.

The concepts of the use of the Special Forces will have an integrative character, offering solutions of evolution and action of these categories of structures. At the same time, account will be taken of the evolution of the laws and principles of the armed struggle, of interoperability with other structures of the army or of the allied armies, both from the conceptual point of view and from the point of view of the endowment with specific military technique.

Ensure the mobility and the possibilities of action of the special forces structures, in time and space, in accordance with the particularities of the probable areas of action, as well as their adequate endowment for the execution of the missions assigned to them so that the actions are carried out in a short and secret way are the basic requirements for the success of special operations.

The action of the special forces may begin a few months before or at the time of the outbreak of war. Also, elements of these forces can be infiltrated under different coverings on the territory of the targeted states, still in time of peace, which will act during the pre-conflict

[6] https://www.nytimes.com/2006/12/30/world/middleeast/30saddam.html accesat la 09.03.2020.

[7] https://commonslibrary.parliament.uk/research-briefings/sn05967/ accesat la 09.03.2020.

period and during the military conflict. The development of technology will also influence the management of special operations, which remain open to research, for the discovery of new aspects.

Considering that the current threats are very unpredictable, SOF must exist in any state, both as a body of specialists and as a dimension of the national security doctrine. They are not an alternative to the army of a state. SOF are a necessary tool to respond quickly, adequately and with minimal losses to current threats to national security.

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TOPICAL ISSUES REGARDING AUSTRIA'S MILITARY CAPABILITIES

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Abstract: *This paper presents the most important aspects regarding Austria's military capabilities. Also, in order to understand and analyze Austria from military point of view, we also considered geographical and historical aspects. These help us to understand certain strategies and decisions taken at a certain time. Austria is a military independent country, not being a member of the NATO alliance. This aspect influences to a certain extent the evolution of the country from a military point of view. Austria faces a number of obstacles in terms of army capabilities. Despite this, the country is making great efforts to ensure a stable security environment. Maintaining a safe environment for citizens is the main objective of the army. For this, Austria integrates all types of resources into a common framework. The armed forces and neutrality were the fundamental elements for gaining Austria's freedom and independence. But, since neither of these two elements could directly guarantee Austria's security, it decided to continue passive military neutrality during the Cold War. This phase lasted approximately until 1975 and was replaced by the active neutrality of the political intervention until 1995. Austria acted very carefully in relation to the security environment and the political environment. This moment was marked by the reaction of Austria, which decided to turn its army from a territorial defense force into a force capable of intervention, at least from a structural point of view.*

Keywords: capabilities, defense, evolution, member, security.

1. Austria - Historical and Geographical Landmarks

Austria, located in Central Europe, is one of the small countries, in surface area, being well known for its role in the existence of the Austro-Hungarian Empire. Throughout history, it has proven to be a country with a great political impact, until the time of the outbreak of World War II. This represented the core of power existing in the empire. With the outbreak of the First World War, Austria has taken on a number of responsibilities and risks that will lead it to today's state. The assassination of Archduke Franz Ferdinand in 1914 is considered to be the reason for the outbreak of war that will leave deep traces on all the countries involved. Austria's reaction to this event is unstoppable, which is why it declares war on Serbia. In less than a month, more countries such as Germany, France, Russia and the UK and later Italy are in conflict, triggering a series of events that will have a resounding impact on Austria.

In addition to the problems arising during the war, the empire also faces problems regarding the minorities that are led, with liberal and leftist political movements taking place

[1]. Between 1914 and 1915 Austria faced strong resistance from its enemies, with significant defeats, which reduced its level of combat and its ability to recover forces in order to win the war.

The year 1916 brings major changes in the Austro-Hungarian empire, beginning with the introduction to the power of Carol I, after the death of Franz Ioseph. The new leader is increasingly facing pressure from the led nations, so that they will gain independence in the coming years.

Until 1934, Austria continues to face political problems, failing to achieve one of its greatest goals: unification with Germany. Contrary to its wish, after 1934, Austria appears to be on a difficult road, having to cope with the pressures of Nazi Germany, with huge losses in terms of human and economic-financial resources. It is fighting in World War II for Germany, on the eastern front. The campaign against the USSR brings even greater losses to Austria following the devastation of the territory by the enemy.

In 1943, it is time for Austria to move out of the dark zone so that, with the agreement of the United Kingdom, the US and USSR, it is backed up for independence. The agreements regarding the country's independence are finalized in 1945, when the second republic is constituted.

From 1945 to present Austria has encountered a series of events on the political scene, events that determined the existence of the state today. The important events of this period are represented by the following: in 1955 the Constitutional Law is voted, in 1966 the first majority government is obtained after the two wars, in 1980 the representative image of the political area is finalized, in 1995 it comes with Austria's accession to the European Union..

The course of Austria was not an easy one, for which the image and status of the country today is the result of all major events with direct influence on the country, all the decisions made and the goals that Austria has had along the way. of time, both as an independent state and as part of the Austro-Hungarian empire.

In the following I will present some geographical aspects and references regarding the country's resources and economic-financial elements.

Austria is one of the countries located in central Europe, occupying an area of 83 855 km ^{2,} this number representing about 25% of the total area of Romania. Recognized as one of the countries where the mountain predominates, the Alps occupying about 70% of the entire territory, Austria can boast some of the most beautiful settlements, such as Vienna, the capital of the country or the cities of Salzburg, famous for its old center. UNESCO heritage, the city of Feldkirch with a wonderful view, the city of Innsbruck suitable for those who are passionate about adventure and skiing or the cities of Graz and Klagenfurt[2], known for the many prestigious universities or festivals that take place every year. These are tourist attractions that, besides the fame they bring to the country, also bring an important financial contribution to it.

From a hydrographic point of view, Austria is crossed from the west to the east by the Danube river, for a distance of 360 km, the most important tributaries of the river being: Inns and Enns. Although it is crossed by Europe's most important river, the hydrographic network represents only 1,426 km $^{2.}$

Another significant and beneficial aspect of the country is that 45% of the total area of the state is a forested area, with Austria being one of the best ranked countries in this respect. The flora and fauna are specific to the central area of the continent. Also in this area, Austria has 100 nature reserves, a national park and 100 landscape reserves, which is an appreciable aspect considering the small area of the country.

Austria's main natural resources are oil, iron ore, magnesium, lignite, granite, salt, copper and increased hydropower.

On the economic side, Austria is one of the most developed countries in the world, with high standards of living. Most of the revenues are due to tourism, with Austria hosting over 15 million tourists annually. Also, the important events of the economic-financial sector are represented by the purchase of Porche Holding, Volkswagen Group and the Romanian Commercial Bank in 2005.

Another factor that keeps Austria at a high level in the economic field is the energy industry. In this sector 60% of the energy used in the country is the product of renewable like wind energy and solar energy. This percentage is significant and maintains the stable economic-financial framework, with the possibility of future development and technological advances that have an impact on the state and its responsibilities.

2. Regional and Global Organizations

At the international level Austria is a member of the following organizations: UN (United Nations), OSCE (Organization for Security and Cooperation in Europe), OECD (Organization for Economic Cooperation and Development), WTO (World Trade Organization). She is not a NATO member, but is part of the NATO Peace Partnership [3] since 1995.

Its membership in all these organizations represents for Austria an important factor in maintaining the economy at a high level and identifying ways to prosper from this point of view. Also, the financial security of the citizens of the state is guaranteed, as well as the unemployment rate that has been declining for the last 5 years, at the moment being 5.4%.

The UN, the most prestigious organization in the world, established in 1945, after the end of the Second World War, has the main objective of maintaining peace in the world and creating a safe framework for all the citizens of the 193 member states as well as those of the world. That is not part of the organization. Austria has one of the specialized agencies of the UN, namely the IAEA (International Atomic Energy Agency), headquartered in the country's capital, Vienna. The objectives of the agency are represented by the scientific development in the field of the use of atomic energy and the implementation of the research results in order to maintain peace. This is very important because Austria aims to have a stable and difficult to destabilize security framework. One of the most important goals of the United Nations is to maintain peace, especially in conflict areas that are very difficult to control and have had a significant number of victims. Austria is constantly promoting the objectives of the organization and is actively involved in its actions.

The Organization for Security and Cooperation in Europe (OSCE) is the largest regional security organization in the world. Based in Vienna, the OSCE comprises 57 participating states. Based on a comprehensive catalog of political commitments and obligations, he directs his efforts on fostering security cooperation and conflict prevention [4], using a number of institutions, instruments and specific field operations. This comprehensive security concept comprises three major OSCE dimensions: the political-military dimension, the economic and environmental dimension, and the human dimension. Regarding cooperation, at the headquarters in Vienna, the 57 participating states and their partners are integrated in a permanent dialogue in the Permanent Council and its sub-committees. Apart from the Forum for Security Cooperation, OSCE office supports also conferences of permanent bodies under the Treaty on Conventional Armed Forces in Europe and a series of meetings to check on compliance and fulfillment of specific obligations.

Austria has a particular role because in most cases it plays the role of mediator within the OSCE. The country can rely mainly on the experiences and priorities of its foreign policy. This generates actions to strengthen security in Europe. Resolving conflict warning and combating threats transnational internal security and recovery confidence in a common area are among the challenges and priorities management Austrian.

In addition, I will present some essential aspects regarding the Organization for Economic Cooperation and Development (OECD). This organization is responsible for analyzing, understanding, explaining and solving economic phenomena at international level and especially at Member State level. With 36 members, of which 24 on the European continent, the OECD aims to improve the economic processes and public policies promoted by the member countries and, at the same time, wants to develop a common intergovernmental economy. AUSTRIA is a member of the organizations since 1961. As part of this forum, the land it manages well the domestic economy and implement strategies adopted by the organization having successfully. This is due to the specialized studies in the field and the modification of the elements that did not allow a rapid and efficient development of the economic sector.

Next, I will present the most important partnership Austria has, a partnership with direct influence in the field of security and responsibilities of the country's armed forces. It is about the partnership with NATO.

NATO-Austria relations are conducted through the Partnership for Peace (PfP), which Austria joined in year 1995. NATO and Austria have a dynamic collaboration in the context of operating OF THE peace support and have developed practical cooperation in other areas [5]. Austria worked with allies and security operations and peacekeeping in conflict zones or unstable as Bosnia and Herzegovina and currently has personnel in Afghanistan and Kosovo.

The cooperation between Austria and NATO determines the existence of benefits in terms of capabilities and interoperability. Having the status of a center of education and training in the field of peacekeeping, the International Center of the Armed Forces of Austria promotes the concept of interoperability, providing training and improvement to allies and other partner states.

Courses center's activities centered on mostly on crisis response operations, but at the same time provides training for peace support operations.

Starting with 2014, the initiative regarding the concepts of interoperability has expanded, activities in this area being carried out by 24 members, as well as other partners who have been chosen to get involved in this endeavor. The main objective of this strategic initiative is the development of operations to which NATO is a part and the creation of new concepts and theories that maintain the standards of the alliance at the highest level.

In addition to the above, scientists from Austria participated in numerous scientific research workshops and seminars on different topics, including preparation against bio-terrorism, threats, as well as prevention and combating.

3. General Elements Regarding Military Doctrine and Strategy

The Austrian Armed Forces consists of a single branch called the Bundesheer (Federal Army). The branch known as Flieger division is also part of this branch. Austria does not have a navy. This work is determined by the position size of the state in the center of the continent. The armed forces and neutrality were the fundamental elements for gaining Austria's freedom and independence.

For a long time, Austria was at the center of European traffic, between east and west, on one of the main trade routes of the continent, the Danube river, and between north and south through the alpine passes. Austria today is a relatively small nation, slightly smaller than the state of Maine, with a population of approximately 8.7 million inhabitants. Although modern Austria is a small remnant of the old Austro-Hungarian empire, it plays a strategic role in Central and Eastern Europe.

Austria has acted very carefully in relation to the security environment and the political environment. This moment was marked by the reaction of Austria, which decided to turn

its army from a territorial defense force into a force capable of intervention, at least from a structural point of view.

Driven by the desire to win the internal political position and to keep Austria engaged in the development of European security structures, until 2008, the Austrian Minister of Defense, Norbert Darabos, supported and achieved a strong reorientation of the mission of the structure he leads. This reorientation was determined by two factors.

First, he argues that territorial defense is not significant for Austria or Western Europe. In this way, by directly involving the actions carried out by the organizations that provide security and of which Austria belongs, the costs of defense can be reduced, but at the same time the internal and external security environment becomes much more solid and prepared to cope. all threats.

Secondly, Austria should, in a multilateral context, be an active participant in European security structures and international missions. In a November 2007 address to the Attache Corps, Darabos said: *"The new orientation of Austrian security policy undoubtedly and above all means Europeanization. putting our entire security structure in a European context[6]".*

In the current transformation phase of the Austrian Armed Forces, its aim is to position it in an orientation framework for the future positioning of Austria within the framework of European and European security architectures. It is recommended to change the configuration of forces, to obtain a modern and professional framework, in order to increase the capacities of international cooperation, including the rapid deployment and the operational training, but with a reservist component. This is a luxury that can only be allowed at a certain level of political marginality.

4. Austria's Military Capabilities

In order to achieve all these objectives and to participate in maintaining a stable security environment, Austria focuses its armed forces both on the national interests and on the interests of the alliances and organizations it is a part of.

In order to be able to understand the fighting capacity of the Austrian army, in the following I will present some aspects that refer to the country's military capabilities, from the perspective of human resources, the endowment of the army and the defense expenses. Creating a context based on these elements will be able to define Austria's role as an actor on the international stage.

5. Human Resource And Military Technique

Given that Austria is a small country, with a population of approximately 8.8 million inhabitants, human resources for the defense of the country are effectively managed so as to ensure the protection of the state and its citizens. The labor force currently available in Austria represents 45.7% of the country's population, which is about 4.1 million citizens. The recruitment of the members of the armed forces is based on compulsory service. After reaching the age of 18, all those eligible for military service, 41.1% of the available workforce, go through a 6-month training process.

After completing his military internship, the citizens are integrated in the reserve personnel category, for eight years from the moment of completing the training process. Annually, those who reach the age of 18 represent 1.1% of the total population, approximately 95 thousand young people. Of course, among those who have to go through this stage, there are people who, for different religious reasons, personal beliefs or advocating nonviolence, can refuse to go through this process. Instead, they go through an internship with nine months of civil service. After 1998, both men and women can go through one of the two internships. The training of the officers of the Austrian army takes place in one of the oldest military academies in the world, the Austrian Terezian Academy. It was established in 1751.

Between 1997-2008, the academy was a college that had courses for 4 years. The studies were completed with a master's degree in military leadership. In 2008, the study period was reduced to 3 years, graduates obtaining a bachelor's degree. The year 2003 was a first in the field because the first four women from Austria finished the academy. Since 1959, over 3,600 young officers have been graduates of the military academy. Since 2000, each of the cadet classes has been awarded the title of Kaiserjäger (Rifles Royal), to honor the memory of the brave national heroes who served Austria during the empire's existence.

The military personnel of the Austrian armed forces represent 2% of the population of the whole country, 172,500 citizens. Of these, only a percentage of 0.3%, 22,500 are active military, the difference being part of the army personnel reserve.

In terms of endowment, the Austrian army occupies a significant position, having equipment and technology, which allow it to create a stable security environment and to be a reliable ally for the member countries of the structures of which it is part. The Austrian Army has the following categories of armament: *„aircraft available: 125; fighter jets: 15; training aircraft: 35; transport aircraft: 11; attack aircraft: 15; helicopters: 64.Ground forces have the following technical categories: tanks: 56; armored fighting vehicles: 290; artillery: 84''.*

The disposition of the country in Central Europe determined that the Austrian army did not have naval forces. The GDP allocated by Austria to the Armed Forces is of this 1%, due to the significant economic growth of the last period, as a development of the tourism market and of the car manufacturing industry.

Austria is a country with great economic potential and manages to meet all the challenges. At the same time, he manages to maintain a high level of the army, by training the military and possessing a modern technique. Although is a small country, Austria has clear goals that are successfully accomplished every time. Austria's potential to cope with security threats is high, which is why it is a reliable ally for the states it collaborates with.

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THE COMPLEXITY OF THE ACTIONS CARRIED OUT BY THE US SPECIAL FORCES IN OPERATION "*JUST CAUSE*" AND THE RESULTING POLITICO-MILITARY CONSEQUENCES

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Abstract: *Along with the evolution of technology, the way in which military conflicts occur and develop will fundamentally change. The sustained knowledge of the trend of armed conflict and comparing the situations in the current military action to the previous ones are the basic tools for successfully carrying out future military actions. The constant progress in technology determined the Special Forces to constantly adapt their course of action. The techniques and procedures used in the past by the Special Forces in different situations have made their permanent contribution in avoiding the errors and situations known as problematic. This paper aims at analysing the challenges which the Special Forces had faced during operation "JUST CAUSE" and its impact on the international relations in that period.*

Keywords: Special Forces, JUST CAUSE, Panama.

1. Introduction

The Special Forces, the best-trained structures of the world's armies are ready, at any time, to respond to the challenges that endanger the international security environment. The initiative of each state to develop the capabilities of these forces and to provide them with the most performant technology elements: equipment, fighting technique, and weapons, has emerged due to the fact that state and non-state actors are constantly concerned for national security and human protection against any kind of threats.

The special operations carried out by The US's best trained forces over time, exposed complex processes, measures and tactics, which contributed to the success of the the following missions or made them more difficult to accomplish. Thus, acting under the "shadow of confidentiality" and taking major risks, the Special Forces made up a set of „lessons learned" relevant for subsequent operations, based on the experience gained during the operations carried out in the past. So, "Just Cause" operation was one of the successful operations carried out by the US Special Forces. It helped the participating military personnel improve their way of planning a mission and adapting their techniques and tactics to the specific combat requirements. At the same time, it made a significant contribution to the evolution of the entire department of Special Forces operations.

2. The historical analysis of the confrontation area

The Republic of Panama is a state which unites Central America with the southern part of the American continent. "*It is bordered by Costa Rica to the west, Colombia to the southeast, the Caribbean Sea to the north, and the Pacific Ocean to the south and covers an area of 75,517 km².”[1]* Initially, Panama was part of the Spanish colonies but it gained its independence in 1821. In the same year, Panama joined the confederation of Gran Colombia. After that, it gained its independence in 1903 by receiving support from the United States of America.[2]

In 1903, through the Hay-Bunau-Varilla Treaty, the Republic of Panama agreed to allow the United States to build a canal along the narrowest part of the isthmus to link the Atlantic Ocean to the Pacific Ocean. For more than six decades, the Panama Canal has played a key role in US strategic and commercial interest. As the Panamanian nationalists were disturbed by the increasing presence of the United States in their country, an agreement was reached, in which the United States undertook to yield control of the Panama Canal until the beginning of 2000. A clause was inserted in the ratification of the treaty, which allowed the US to defend the Panama Canal after 1999, in the event of a disruption in the channel's operation. It was also mentioned that this clause should not be viewed as the right of the United States to intervene in the international relations of the State of Panama because it would thus violate its sovereignty.[3]

3. The previous political-military context and the purpose of the confrontation

In 1983, after the death of Omar Torrijos, the dictator of the Republic of Panama, Manuel Antonio Noriega becomes the chief commander of the National Guard (Panamanian Defence Force - PDF)[4]. A former recruit of the Central Intelligence Agency (CIA), Noriega served American interests since 1970 to prevent the spread of communism in Central America. In 1984 Noriega committed fraud in the Panama presidential elections, in favour of Nicolás Ardito Barletta, who was supported by US President Ronald W. Reagan. One year later, the leadership of the US administration sends Noriega his first warning. The US concern over Noriega started once with the discovery of his monopoly over political power and involvement in drug trafficking.

The first public confrontation between Noriega and the United States took place in June 1987. This resulted in accusations of complicity in the assassination of Omar Torrijos, electoral fraud and the assassination of the opposition’s political leader, Hugo Spadafora. The accusations were made by Colonel Roberto Diaz-Herrera, the former chief of staff in PDF (Panamanian Defence Forces). All this was in response to an "action and reaction" process between the United States and the dictator's supporters. Later a pro-Noriega group attacks the US embassy. Until 1989, Noriega constantly harassed US citizens in Panama. At the same time, he remained involved in drug trafficking and, as a last resort, cancelled the election of the opposition candidate, Guillermo Endara, as president. This was the moment which determined the intervention of the US Special Forces in Panama. Concerned about the situation of US citizens residing in Panama, President George W.H. Bush, deployed 19,000 troops for the protection of its citizens. The growing tensions between US and Panamanian forces culminate on December 16, 1989 with the killing of one US military and the serious injury of three others.

Following this attack, the US intervened in Panama both for the protection of its own citizens and restoring the democratization process in the Republic of Panama.

4. The outbreak and the evolution of JUST CAUSE operation

The US Air Force deployment of troops began on December 19 with the Washington Rangers troops in 13 C-130 aircrafts, a battalion from Georgia in 12 C-130s, and a C-141

heavy transport aircraft. On the same day, two battalions of airborne troops were deployed to further strengthen US forces by using 21 C-141 troop carriers. The aircrafts deployed for the operation "Just Cause" reached over 300 units, carrying a total of approximately 26,000 US military.[5]

The ground forces consisted of two infantry battalions, 5 light infantry companies, one cavalry detachment and two public order companies, equipped with 28 armoured vehicles. These were complemented by 5 detachments of the air forces, 400 soldiers from naval forces on combat vessels and 18 paramilitary groups, the Battalions of Dignity.

The raid began on December 20, 1989, at 01:00, with an assault on multiple strategic locations: Punta Paitilla Airport and a PDF garrison, where Noriega had one of his residences. During this first attack managed by the Special Forces, an ambush organized by the Panamanian troops resulted in the killing of four servicemen of the US SEAL troops and wounded nine others.[6] The attack on the main command centre of the PDF, La Comandancia, caused the most losses in both parties, but especially among the civilian population. The destruction of the main command thus affected the organization and coordination of the Panamanian military forces. The attacks on the secondary command points continued until the end of the day, when, around 6:00 pm, members of the Panamanian troops surrendered or fled the. The following night operations were carried out to stabilize the situation and disband the rebel groups.

The neutralization of the Panamanian troops was a success for the American forces, but the one who triggered this situation, Manuel Noriega, managed to escape. The existence of a million dollar reward for his finding and delivery was the reason why Noriega tried to obtain political asylum at the diplomatic embassy of Vatican in Panama. In this context, the first measure taken by the commander of the South American troops (General Maxwell R. Thurman) was to arrange the military around the building where Noriega took refuge, securing the area. As a place of worship, the Americans could not storm the building. The Vatican has resisted US demands to surrender Noriega's custody so US forces have found another solution to end this mission.

The Americans organised an elaborate psychological operation masked under the pretext of encrypting the negotiations for Noriega's surrender which consisted in constantly broadcasting rock music for 6 full days in the speakers located around the asylum building of the Panamanian dictator. That operation ended successfully on January 3, 1990 when the dictator Manuel Noriega surrendered to the US military and was arrested.

5. The political-military consequences of the operation

Although successfully concluded, the US military intervention in the domestic politics of the Republic of Panama has been condemned by all international organizations and their Member States as illegitimate, in flagrant violation of international law and in violation of human rights.

Although involuntarily synchronized with the Romanian revolution, the operation of the American Special Forces created worldwide speculation about a possible agreement between the US and USSR to trigger a third world war. The firm statement of the Soviet government, condemning the US intervention in Panama (*"manifest violation of the fundamental principles of the UN Charter "*)[7], however, shows that the US has never had an agreement with the Soviets in this regard.

The official reports stated that 254 civilians lost their lives as a result of the confrontation. In terms of military personnel, the US recorded 23 killed and 322 wounded, relatively small numbers compared to PDF, which lost 297 soldiers, had 123 wounded and 468 detained.[8]

From a political point of view, the benefit for the Republic of Panama was the installation of a new government and the validation of the previous presidential elections, after which Guillermo Endara was declared president. The United States and the Republic of Panama have strengthened their collaborative relations, with US President George W. H. Bush declaring that the intervention had no other purpose than to rescue the Panamanian and American population residing in the republic from the dictatorial leadership under which it had been.

6. Conclusions

In the next one hundred years or maybe even less, due to the accelerated technological development, the causes and the manner in which the military conflicts will unfold will fundamentally change. However, military art will continue its evolution based on these "sediments", placed by each control generation at its "writing". The way in which this will manifest itself will probably change in the pace of humanity's progress, but each previously recorded element of knowledge will bring an extra to the one who will take it into account and make the most of it in its missions.

The Special Forces, a small military force with superior training, disciplined and successively fulfilling the mission steps, which acts according to a plan, can neutralize a double or even triple military structure as numerical magnitude, which acts disorganized and without following an algorithm or a predetermined sequence.

Consequently, the Special Forces need to constantly adapt their doctrines in order to fulfill their future missions, by taking into consideration the changing environment and the accelerated technological development.

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BLACK ORCHESTRA – THE CONSPIRING GROUP OF XXth CENTURY

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Abstract: *A large variety of research was performed in order to discover more and more knowledge about one of the most consequential events of the XX century, Adolf Hitler's rise to power and the consequences over the whole world of his leadership. Despite of having a lot of opponents, there are not so many approaches in paperwork above his conspirators and their plots against his authority. As a matter of this fact, this article aims clarifying who these conspirators were, what positions they held in Germany before and during The Second World War, why they were attempting in overthrowing Hitler's regime, how these attempts took place and, finally, to what end they came.*

Keywords: SchwarzeKapelle, Black Orchestra, Operation Walkyrie.

Introduction

With the occupation of Chancellor (1933), followed by the takeover of the entire leadership of Germany (1934), Adolf Hitler manages to win on his side a lot of supporters who will have a great influence in his act of leadership, including during the WWII. However, as a result of the actions taken by the new leader, with the potential of having many destructive effects, eventually leading to the destruction of Germany, many important personalities from both the General Staff of Germany and the civilians with high positions in Germany state, considered absolutely necessary to implement any method to take over the state leadership, with the assumed risk of killing Hitler. All the personalities involved in these acts of retribution of the conductor were associated with the name of "Black Orchestra" ("SchwarzeKapelle", in German). Whether initially they were great followers of the Fuhrer, disappointed by his orders aimed at mass murdering Jews and triggering a war, or against it from the beginning, the members of the Black Orchestra laid the foundation for numerous attempts to take power, in order not to see their own country destroyed.

Group establishment

Since the beginning of threatening the old system, the resistance movement was convinced they need to replace Hitler, along with his regime. The purpose of this movement was to get back the state on its feet and to avoid the unpleasant situation during the First World War. The distrust of the new leader of Germany made its appearance with his violent acts; for example, "Night of long knives". As a result of this event, about 100 people (mostly members of Sturmabteilung, a Nazi paramilitary organization) were killed for political reasons, namely the threat these members posed to Hitler's regime. This act was to be one of

the first indicators of the grim intentions of the new leader, raising at the same time numerous suspicions.

The decisive moment, which led to achieving the group "SchwarzeKapelle", was represented by a conference held by Hitler with the main military officers (November 5, 1937). During the conference, „he requested: in the interest of a long-term German policy, that his exposition be regarded, in the event of his death, as his last will and testament. Germany future depended on acquiring adequate Lebenstraum and her first objective must be to secure her eastern and southern flanks." [1] It was obvious that to strengthen the southern and eastern borders, it was necessary to annex Czechoslovakia, Austria and Poland. All this plan had only one concrete result, namely the entry into a short-term war that would end with the conquest of Russia. At the end of the conference, Hitler encountered a variety of adverse reactions from the public, most participants regarding suspicious what they had just heard.

General Ludwig Beck (1880–1944) (Figure 1)

One of the deeply annoyed participants was Konstantin Von Neurath (Minister of Foreign Affairs, 1932-1938), who, two days after the conference, ignoring the oath taken, meets with General Ludwig Beck (Figure 1) and General Werner von Fritsch to discuss methods to abandon the leader's war plans. Eventually, Neurath and Fritsch agree on Hitler's announcement of the dangers of a potential war, Beck, considering, on the other hand, the advice as being unnecessary and rather suggesting the complete removal of Hitler. Finally, following the failure to advise the Fuhrer on the annexation of Czechoslovakia, Beck made the decision to resign, thus becoming, with the second half of 1938, „the recognized leader of the conspirators against Hitler and was seen as a possible president of Germany with Hitler out of the way". [2]

Carl Goerdeler (1884–1945) (Figure 2)

This group, however, had not only a leader of the military personnel, but also a leader of some highly influential people outside the system, this leader being represented by Carl Goerdeler (Figure 2). „Goerdelerpublically opposed German rearmament and the Nuremberg Laws. As mayor of Leipzig, he refused to pull down the statue of the Jewish composer Felix Mendelssohn or to fly the swastika flag over the city hall"[3]. Considering that in his absence, the statue was torn down, he requested resignation. Despite its popularity, the request was accepted. In the years to come, he is trying to attract as many followers as possible to overthrow the Nazi regime.

Another character of special importance in the grouping of the Black Orchestra is Admiral Canaris (the leader of Germany's secret services, Abewhr). As early as 1934, Canaris predicted the destructive effects that Hitler and his Nazi regime would have on the state of Germany. Thus, in the coming years, he will try, along with the other members, to remove the Fuhrer.

The plots against the Fuhrer

Without much success on his own and with quite a few followers for conspiracy plans, Carl Goerdeler reaches Beck's conclusion, who he manages to meet only in 1940. Despite the fact that the Black Orchestra was made up of highly influential people, with knowledge in all areas, Hitler was a hard-to-reach outfit.

First, although there were enough people who did not like his atrocities, most of his close friends either did not want to betray his oath or remained on Hitler's side, since he did not show any obvious signs of failure. A good example in this case is Erwin Rommel, one of Hitler's most basic tactician. With the gradual collapse of the Nazi regime, Erwin Rommel began to lose hope in Fuhrer, so he became an actor of interest to the Black Orchestra.,, Rommel even met with members of the SchwarzeKapelle, but he was against the plot to assassinate Hitler. The General believed that Hitler should be arrested and then put in front of a judge". [4] However, Erwin Rommel, finding out about a murder plan (Operation Valkyrie), tried to warn Hitler about giving up the war, but he was unsuccessful. Erwin Rommel ends his life a few days after a car accident alleged to be a suicide.

On the other hand, the Fuhrer was a very well protected person, having a "bodyguard of about 40 highly trained and loyal SS officers. ,,It was estimated that upwards of 100.000 agents of various internal security organizations were continuously at work to uncover exactly what the SchwarzeKapelle was up to – the overthrow of the Nazi Regime"[5]. Even when he was outside a building, Hitler lacked special protection, being considered that ,,Hitler's cars were big Mercedes-Benzes, including a huge 7.7 liter Model W150, his favorite. Each had bulletproof glass and reinforced body-work, including armor in the doors and underside to protect against bombs embedded in the road".[6]

Among the first assassination attempts of Hitler, one was prepared by Gen. Henning von Tresckow. ,,Along with his staff officer, Lt. Fabian von Schlabrendorff, and two other conspirators, both of old German families who also believed Hitler was leading Germany to humiliation, Tresckow had planned to arrest the Fuhrer when he visited the Army Group's headquarters at Borisov, in the Soviet Union. But their naivete in such matters became evident when Hitler showed up—surrounded by SS bodyguards and driven in one of a fleet of cars. They never got near him"[7]. The next assassination attempt dates to the beginning of 1943, materialized by Operation Flash, which was also carried out by Gen. Trescow and Lt. Fabian. This plan began with designing a bomb, by the two, in the shape of two bottles of Cointreau; the packing ensuring the explosion inside the package, without the need of other interventions. The usual course of the Operation would have been Lt. Fabian to offer the package of a colonel who was to be a passenger with the Fuhrer in the same plane, in order to reach a Fabian's "friend", following that in the plane, the bomb, in fact, to explode.

Things didn't go as planned. The conclusion reached after receiving the unexploded package was that Lt. Fabian, before offering the package, moved its safety, its detonation being, finally, impossible. ,,Undeterred, the conspirators tried again a week later, this one a suicide mission. It, too, failed. Four more attempts were made on Hitler's life between September 1943 and February 1944".[8]

In 1944, Hitler's largest assassination attempt, Operation Valkyrie, was recorded, which occurred more precisely on July 20, 1944. Considering that the Wehrmacht had begun to take charge and sought out members of the Black Orchestra to arrest them, and Colonel Claus Schenk Graf von Stauffenberg found out on July 18th that he was a target, the Orchestra's plan to remove the Fuhrer could not have expected any delay. Thus, on July 20, Col. Stauffenberg has used for the last time his position for taking part in a conference held by Fuhrer together with 20 other generals. Its purpose was to inform Fuhrer about the assignments with new officers of two divisions, but primarily, to blow up the conference room with the help of two bombs.

Considering that during an African Operation, Stauffenberg was left with only one eye and only 3 fingers out of 10 in his hands, he managed to drop only one bomb. The time it should have exploded was 30 minutes, but considering the very hot weather outside, he apologized and left after the first 20 minutes. Noticing the explosion, he leaves satisfied, with the assurance that Hitler is dead. ,,As soon as word came of Hitler's death, the conspirators

planned […] to occupy the key strategic points and communication centers of Berlin (notably the main radio transmitter), arrest Goebels, and proclaim General Beck provisional chief of state until a legally constituted civilian government could be installed. The ultimate purpose of the conspiracy was to offer the Western Allies an immediate ceasefire as the prelude to a negotiated peace".[9]

All of this could have been applied if the briefcase containing the bomb had not been moved by Col. Heinz Brandt behind table foot (made of hardwood) that protected The Fuhrer during its explosion. Although close to the long-awaited result of the conspirators, this operation failed, resulting in the death of 3 officers, severely injuring others, but Hitler being minor injured. It is worth mentioning that the meeting was scheduled as taking part in a bunker, not a room with a large surface. In this case, in the initial situation, the explosive brought by Stauffenberg would have been enough to kill all the participants in the bunker.

The consequences of Hitler's overthowning attempts

With the failure of Valkyrie Operation, the activity of the Black Orchestra ended, due to the fact that all the members were captured and executed. Given that Stauffenberg was the only one missing during the explosion, he was considered the prime suspect. Following this event, several events occur:

1. Stauffenberg and 3 other conspirators are arrested and shot in the prison yard, one after another. „Just before he was shot, Stauffenberg shouted: Long live holy Germany!"[10]

2. On the night of July 20, 1944, Hitler addressed the population by radio, which he had not done for several months, with the purpose of transmitting two news items: the fact that he was unharmed and the unsuccessful attempt of some officers to assassinate him. Along with these, he added his own intention to punish personal found guilty in a merciless manner.

3. The next day is marked by informing the heads of the new committee of inquiry (which had recently reached about 400 people) and setting instructions regarding the judicial procedures. Also on this day, Hitler decides that the culprits who held military status should be punished by hanging, a method considered embarrassing for any military.

4. Any resistance of the Black Orchestra ceases, its followers being hanged in the days that follow, their wives finding their end by starvation, and the children being divided into SS families and giving them other names.

5. In the following weeks, more and more people are arrested and they get hanged or shot, whether or not they had any connection with a conspiracy group. It was estimated that around 7000 people were arrested, finally finding their ends. „After the war, German documents revealed that 4,980 people were executed in Germany in the weeks following the assassination attempt".[11]

6. Outside the borders, Franklin D. Roosevelt denies that he knew anything about the existence of a possible conspiracy group against Hitler, Churchill, adding, however, that this news is not too shocking from a regime that favors violent acts as those already known. The Soviet Union, although it had no initial reactions, on July 23, 1944, Stalin's followers asserted their beliefs as follows: „ Hitlerite Germany will be driven to her knees not by insurgent officers, but by ourselves and our Allies!"[12]

Final considerations and conclusions

When it comes to overthrowing the Nazi regime, perhaps the most representative images could be illustrated by the plans developed by the "Black Orchestra". This was the name given by Gestapo to that group of extremely influential people during Hitler's tenure, who had tried to liberate their homeland from his destructive decisions. Despite not having the expected result, that of the Hitler's assassination , this group, led mainly by General Ludwig Beck and former Leipzeig Mayor Carl Goerdeler, the members of the Orchestra made

sufficient efforts to prevent Germany from being recognized in history as completely wanting pain and having the desire to destroy.

When we talk about "Black Orchestra", we refer to patriotic people, with important functions, who were accustomed to seeing a whole state, populated by people who continue their progress after the shame suffered by the First World War. Among the attributes and names that will forever define "SchwarzeKapelle" are: Flash Operation (1943), Valkyrie Plan (1944), Gen. Beck, Carl Goerdeler, Admiral Canaris, Major Hans Oster, Claus von Stauffenberg, Henning von Tresckow, Josef Muller, Erwin Rommel etc.

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GUIDELINES FOR THE DEVELOPMENT OF FUTURE MILITARY LEADERS FROM THE PERSPECTIVE OF THE CHALLENGES IMPOSED BY ASYMMETRIC CONFLICTS

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Abstract: *Asymmetrical conflicts occur throughout history, starting from the heyday of the Chinese and the Roman Empire, these having a high degree of asymmetry, especially due to the complex systems of political, economic, cultural-social organization, and not least, military. Later in the modern and contemporary period, we note the presence of colonial wars, guerilla wars, the two World Wars, all these armed confrontations were mainly military conflicts dominated by a high degree of asymmetry. Military leaders must manifest a set of intellectual qualities, perhaps even more than physical ones. If we talk about the future, the military leaders will be in a position to detach themselves from the subunit and will enter the position of rear operators, increasing the distance from their subunits, both at the micro and macro levels.*

Keywords: asymmetrical conflicts, strategies, military leaders.

1. Introduction

Conflicts have been constantly changing, evolving with humanity. Today, more than before, the presence of asymmetry marks the physiognomy of today's military confrontations, making the battle space more dangerous than ever. From the point of view of scientific research, conflicts are purely asymmetrical, an equality relation can be used to define the two. We say this because the symmetry refers to a perfect field, or almost perfect, that does not go out of the pattern, stuck between boundaries, on the other side, the asymmetry leads us to imbalance, action to move and disorganize, in order to reach a new shape of organization.

2. Conceptual approaches

If we want to make a diagram of the asymmetric conflict, we must start from a more complex definition of the concept of asymmetry. A comprehensive definition for the definition of asymmetry is formulated by Brigadier General Dr.Vasile Paul, in a study published in the newspaper "Military Observatory", as follows: "Asymmetry in the field of military and national security issues represents action, organization and thinking (conception) different from that of the adversary, in order to maximize their own advantages, exploiting the

weaknesses of the adversaries, obtaining the initiative or gaining freedom of action. It can be: political-strategic, military-strategic, operational or a combination thereof."[1].

Asymmetrical conflicts occur throughout history, starting from the heyday of the Chinese and the Roman Empire, these having a high degree of asymmetry, especially due to the complex systems of political, economic, cultural and social organization, and not least, military. Later in the modern and contemporary period, we note the presence of the colonial wars, the guerilla wars, the two World Wars, all these armed confrontations were mainly military conflicts dominated by a high degree of asymmetry.

The Cold War, or the post-war period, as it is also known, is gravitated by a planetary asymmetry, in a confused world, full of uncertainty and a precarious political situation. From the asymmetrical conflicts and wars present in this period, we note the following: those in Vietnam, Korea, Pakistan, India and Afghanistan, the Gulf, the Latin American military revolutions and counter-revolutions, all post-war armed conflicts can be classified as asymmetrical, with the two poles of power standing on the sidelines as referees, spectators or protagonists.

As we have already understood, the aim of asymmetrical wars is not to confront two groups of unequal forces, but it focuses on finding and using the inferior force, both qualitative and quantitative, of strategies. and unconventional answering techniques, in order to balance the game table.

Terrorism is the most likely area of manifestation of the asymmetric war, being an international factor of major concern, the triggering reasons for it: ethnic, religious, nationalist, political and economic, not ceasing to disappear. In addition to this, the other areas will continue to be manifested, with a large part of them already present on the political-military scene of the world, stretching for several decades.[2]

3. The physiognomy of asymmetric conflicts and strategies for their management

Future conflicts, at least in the short term, are likely not to engage massive forces face-to-face, but will aim to combat various small groups of fanatical terrorists, which may use mass destruction capabilities, other sophisticated tactics and technologies, or, conversely, relying on trained and indoctrinated fighters to be willing to sacrifice at any time without any hesitation, but leaving behind many human victims, generally innocent.

If we talk about types of asymmetrical conflicts, they can be classified as follows:

1. Military:
   - Non-contact war
   - Disproportionate war
   - The People's War (total)
   - Guerrilla
   - The armed revolution
   - Civil war
   - Terrorism
2. Violent and non-violent
   - Low intensity and medium intensity conflict
   - The psychological war
   - Information and media war
   - Ciberconflictul
3. Non-military

[1] Gl. bg. dr. Vasile Paul, *Asimetriastrategică*, Observatorulmilitar, nr.18, 2001.
[2] B., H., L., Hart, *Strategia. Acţiunileindirecte*, EdituraMilitară, Bucureşti, 1973, p. 368.

• Damming
• The embargo and the economic blockade
• Ethnic separatism
• Boycott

As we have mentioned above, in asymmetrical conflicts, not the major force from the qualitative and quantitative point of view must always be victorious. the regional political context, by the evolution of the society in which the conflict takes place, without diminishing the role that military leaders must assume.

In order to be able to manage optimally the situation caused by the emergence of asymmetrical conflicts, and not only, the Military Strategy of Romania implies that the military leaders of the future must be educated on the following development strategies:[3]

- development of a coherent organizational culture, allowing the training of military leaders in all areas of national security and defense;
- streamline the process of selection, training and improvement of military leaders;
- permanent adaptation of the training of military leaders to the new challenges of the security environment and technological development;
- training the new generation of innovative, flexible, efficient military leaders, with experience in theaters of operations and in allied command;
- ensuring the professional training of the military leaders in order to fulfill the requirements at national, community and ally level.

The world has become more and more polarized over the last three decades. Even if today a gradual fading of this trend is observed, the strength of the pecuniary assets and the rapid technological development present in some countries, on the one hand, and the information, technological and money poverty in other countries, on the other, it shows us clearly that the world of the 21st century is still governed by asymmetry.

In order to achieve the performance objectives, the leaders, especially the military ones, must have a series of qualities, in accordance with the new challenges determined by the typology of conflicts, which make them good planners, visually commanded and, especially, good negotiators, diplomats, people with cultural openness, visions of what it means to be successful, with minimal losses.[4]

Some possible strategies for managing asymmetric conflicts, which military leaders can use in managing asymmetric conflicts, can be:

- Protectionist strategies;
- Identification strategies;
- Coalition strategies;
- Neutrality strategies;

Protectionist strategies. This type of strategy marks the materialization of policies of offensive intimidation of hostile regimes, on the one hand, and of imposing a behavior in force with the interests of the stronger state, on the other.

As an example, here we are talking about President Clinton's counter-proliferation initiative, which aims to ban the access of the third world to modern technology, for the purpose of protecting the US military, while also re-focusing on developing technological

[3] http://legislatie.just.ro/Public/DetaliiDocument/182367, accesatîn data de 06.02.2020.
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capabilities, on dynamic, predictive and rapid actions, non-contact warfare, cosmic, air and maritime supremacy, information supremacy and zero losses.

Identification strategies. When we talk about identification, we are talking about drawing a line, after which we place the positive and the negative, the good and the bad, on the left and the right, and the respective line is a median that separates us.

Switzerland has shown that getting out of this stream of common values can be extremely beneficial, even if it is asymmetrical with most countries in the European Union.

It is not an isolation in the true sense of the word, but an "exit to the shore", that is, an exit from the flow of threats and influences. The question arises, however: Is this still possible in this age of globalization? Not only is it possible, but it is (and will be more and more) and necessary. Entities cannot lose their identity.

Coalition strategies. The accession of the countries of Central and Eastern Europe to the European Union and NATO, does not aim at the emergence of a force that dominates the planet from the military-political point of view, but to obtain and ensure a horizon of strategic security, stability and mutual support, so that the own problems of the states can be solved and the quality of life of the citizens increase.

"The consequences of a threatening instability in the international environment can be very important, but it is only a symptom, not a threat in itself. The threat in the contemporary system results rather from the lack of understanding both of the causes of instability and of the manner and means by which conflicts are dealt with resulting from various manifestations of political, economic, social and military imbalances ".[5]

Neutrality strategies. These are not necessarily strategies, but are more directed towards the policy area. However, today we live in an interdependent world, therefore such an asymmetrical conflict management strategy is not beneficial, not a military one, but more a political one.

Neutrality strategies have as fundamental concept the non-engagement and even the non-involvement. This involves a certain type of economic strategy, informational strategy, cultural strategy and, of course, military strategy, operating not with concepts of engagement in confrontation, but with concepts of non-employment, which may mean isolation, restriction or collaboration. limited, in a world that is always changing, that will never be possible.

4. Implications for training military leaders

Military leaders must manifest a set of intellectual qualities, perhaps even more than physical ones. If we talk about the future, the military leaders will be in a position to detach themselves from the subunit and will enter the position of rear operators, increasing the distance from their subunits, both at the micro and macro levels.

Asymmetrical conflict management operations are not conducted according to strict patterns but require innovative ideas that are sometimes difficult to express, but whose effects can be decisive in the tactical field operating environment or in the work and effort of the structures that help. when completing the mission. This quality should not be confused with indiscipline, with behavioral non-conformity, which can be dangerous in asymmetrical conflict management operations.

By designing the strategy at the action level, we find that each phase of the action, both in time and especially in space, physically and intellectually demands the presence of the military leader. He must be the motivational engine, identify when and where the main effort must manifest, which is the acting structure, and which is the supporting structure.

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[5]S., P., Huntington, *Ciocnireacivilizaţiilorşirefacereaordiniimondiale*,Editura ANTET, 1998, pp. 178-191.

"Civil and military colleges and universities aim to lay the foundations for the relations between social structures, engaged in action in peace or conflict. Institutions must address in the curricular area those areas of interaction that bring a higher quality in the development of the abilities to lead / conduct the activity within heterogeneous organizations. "[6].

The international security environment is a changing one, the political, economic, military, social events occur extremely fast, the information flowing instantly. Mr. Major General dr. (Rz.) Vasile Roman, it is precisely because of this that leaders can no longer work in a vertical chain of command, they need to be aware of the need for network work.

The development of asymmetrical conflict management processes, and of military leadership training, is increasingly demanding training institutions and training centers. The training, education and training in this area aims to identify the skills and competences needed to be developed individually.

The process of accumulating knowledge is both one specific to the activity of educational institutions and one specific to one's own experience. The skills relate to the person, the desire to excel, the effort made in personal and undoubted development and the innate qualities.

5. Conclusions

Leaders must acquire that knowledge and develop those skills that place them above the organization and operating environment. In this way they will be protected from the abundance of information, which often blurs the image of the operation and the clear vision in the space and time of the end state. By situating themselves at this level, they will understand how far personal involvement must go and where responsibilities and freedom of action go to subordinates / agencies.

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[6]Ibidem, p. 335.

ASYMMETRIC WARFARE AND HYBRID WARFARE. IMPLICATIONS FOR MILITARY DECISION MAKING PROCESS

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Abstract: *We all know that on battlefield each man is waiting for a decision from his most experienced superior,but here is one question. "Are asymmetric warfare experience and hybrid warfare experience, the same?" In order to answer this question we will debate both concepts and their implications for Military Decision Making Process and talk about Afghanistan War (2001 - present) and Ukrain War (2014).*

Keywords: Asymmetric warfare, Hybrid warfare, MDMP.

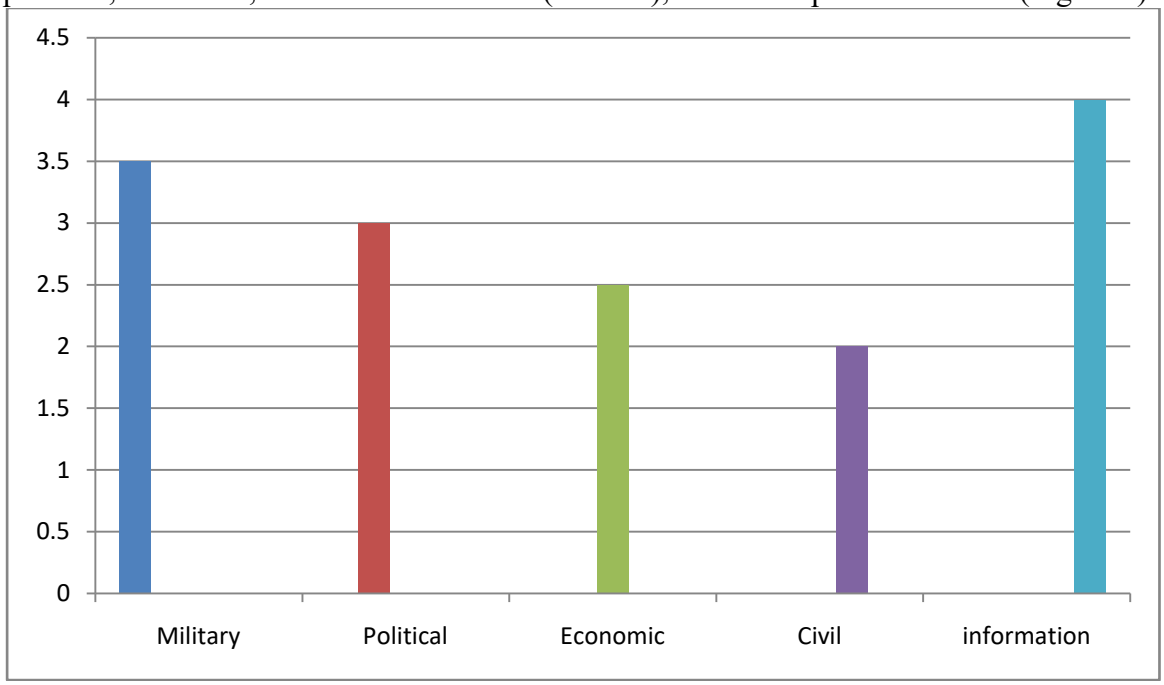
1. Introduction

Thousands of years ago, the war had a completely other face, but it evolves as fast as the humankind done it. During history people fought for any reason as food or hunting grounds, at the beginning, for resources and power in antiquity, religion in the middle-age and now for concepts and ideas. As we evolved, we developed new techniques and types of war, all conducting to asymmetric and hybrid warfare which are used today. Also with every new type of war, a new decision making process appeared, evolving from a tribe chief decision to the most complex Military Decision Making Process which we are using today, but even we use it in the same time, it have different implication based on which war we are involved.

2. Definitions of concepts

First of all we will talk about the difference between two concepts: **asymmetric** and **hybrid warfare**. The history of war starts at the same time as the history of mankind, and also the asymmetric warfare starts with it. There is no war that we can say about it that was no asymmetric entirely or in some phases. In "Art of war" of Sun Tzî or "Arthashastra" of Kautylia, we can find perfect descriptions of asymmetric warfare and also great methods how to use it effectively to reach our purposes. Those two military artworks are used even today in many disciplines from military to economics, and they help us to find a way to exploit the differences and use them as a advantage to get at the final phase with less costs and as many life saved as possible. The term **asymmetric warfare** is based on differences between belligerents, in one side there is an army with high manpower and high technology resources, which can operate in any environment, from land and sea to sky and space, and on the other side there is a small army, less trained with lower resources, limited to only one environment, land in case of terrorists cells or sea for pirates cells.

The second term of our topic is hybrid warfare, which is described by US Army chef of staff as "combined dymanic and diverse methods of unconventional, irregular, terrorist and criminal war capabilities"[1]. Also also in NATO the hybrid threat is used as "opponents capable of using simultaneous conventional and unconventional methods to reach their purposes"[2]. In this type of war we are talking about many instruments of power as military, political, economic, civil and information (MPECI), used in a specific manner. (Figure 1)



(Figure 1)

The hybrid warfare is not based only on military concepts as war was till present, it is based on each domain in part which have the same goal. According to Carl Builder this war is going to involve new technologies, low intensity capabilities, improved sensors, non lethal weapons and robotics, which suggest that the new type of war will be more efficient for any kind of resistance as guerilla war[3].

3. Aspects Regarding Military Decision Making Process

After we talked about both concept in chapter 2 it's time to talk about MDMP or Military Decision Making Process, which is used by U.S. and also Romanian army to take decisions at high levels as battalions or above.

The military decision making process (MDMP) ”*is an iterative planning methodology to understand the situation and mission develop a course of action, and produce an operation plan or order. The MDMP helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process, consisting of seven steps with inputs and outputs, helps commanders, staffs, and others think critically and creatively while planning*”[4].

Those seven steps are:

1. "Receipt of Mission;
2. Mission Analysis;
3. Course of action (COA) Development;
4. COA Analysis (aka Wargaming);
5. COA Comparison;
6. COA Approval;
7. Orders Production, Dissemination, and Transition”[4].

Even this process have a strict form, is influenced by the type of war in which is used. For example in asymmetric warfare this is the main structure, because there are force on force engagements and implies only military decisions and orders. During the Afghanistan War which started in 2001 with Operation Enduring Freedom and continued with Operation Freedom's Sentinel in 2015, a coalition of over 40 countries used the base lines of MDMP in order to take decisions for the following combats and phases of war. Even is a very meticulous work to do for the entire battalion staff, it also implies a huge technological development of logistics. For example MRAP or Mine-Resistant Ambush Protected which was developed as a countermeasure for ambushes an IED strikes.

Another produce of MDMP regarding asymmetric warfare is the change of procedures, from conventional combats to strategic strikes, which implies less troops deployed, less resources consumed and less risks. For example Operation Neptune Spear ordered by U.S. president Barack Obama and conducted by CIA and Team SIX, in Abbottabad, in order to eliminate Osama bin Laden, involved months of planning and intel collecting, using high tech surveillance, but it took only 40 minutes on ground using 2 helicopters and a group of navy seals. This strategic strike eliminated the head of al-Qaeda and give a huge ground shake to the terrorist organization.

Another implication of asymmetric warfare is the approach of civil institutions and how we manage our forces to support and sustain them in the future. In Afghanistan war, coalition forces are conduction Operation Resolute Support, which *"is a NATO-led, non-combat mission to train, advise and assist the Afghan National Defense and Security Forces (ANDSF). It was launched on 1 January 2015, following the conclusion of the previous NATO-led International Security Assistance Force (ISAF) mission, and the assumption of full security responsibility by the ANDSF. The Resolute Support Mission works closely with different elements of the Afghan Army, Police and Air Force."*[5] But the mission include also other functions in several areas as:

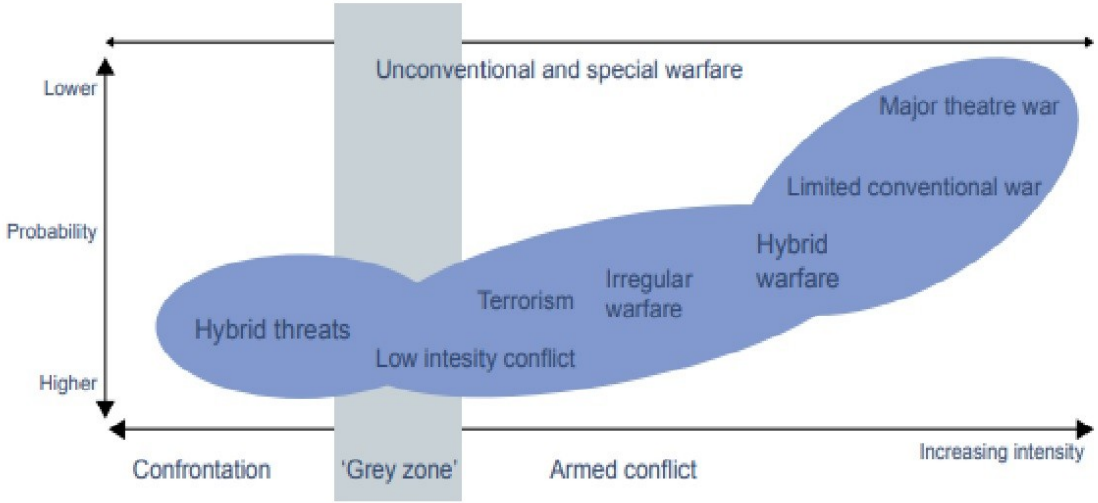
- *operational planning;*
- *budgetary development;*
- *force generation process;*
- *management and development of personnel;*
- *logistical sustainment;*
- *civilian oversight (in order to ensure the Afghan security forces and institutions act in accordance with the rule of law and good governance).*[5]

4. Implications of Hybrid Warfare in Military Decision Making Process

It's clear that the face of war is changing everything around it, especially decisions, but in our case, asymmetric warfare, every point of action, political, military, economic and civil, have the result, a military action to increase chances of eradicate terrorist cells from Afghanistan.

On the other hand we have the hybrid warfare. Even if talk about MPECI in both concepts, there is a major difference. In first case every aspects and implication in asymmetric warfare conducted to military part, but in this case, for hybrid warfare, the military role doesn't have the same impact. Of course we use it, but not as a final system that is used to obtain the success and to complete our objectives, we use it as a component of a complicated process and this aspect have influence over the MDMP.

According to Sean Monaghan at one point of hybrid warfare evolution, irregular and asymmetric warfare could be just a part of hybrid warfare as he explained in an information note addressed to MCDC Countering Hybrid Warfare[6] project with Figure 2: Hybrid threats and hybrid warfare shown on a ‘continuum of conflict’.



(Figure 2)

The MDMP will change in this type of war, not structural but for the level of decision and how it will affect the war at all. Donbass war is the main event of hybrid warfare, even if is an armed conflict, it started in 2014 with protests by Russian-backed anti-government groups took place in the Donetsk and Luhansk of Ukraine, where we have the first element of hybrid warfare, civil. It continued with the annexation of Crimea by Russian Federation just a month after, which is the second element of this type of conflict. Also in the same time there ware many fake news spreading on the internet and social media, and after those elements were involved, it was a small step till March 2014 when the military element appeared as Donetsk and Luhansk People's Republics. According to the Ukrainian government, at the height of the conflict in mid-2014, Russian paramilitaries were reported to make up between 15% to 80% of the combatants.

In this case, decision making process may have the same structure but it's changed by the inputs, where we don't have only military inputs and implications as we had before, but we have to use the process on every hybrid element.

5. Conclusions

In conclusion we can say that Military Decision Making Process is a standard operation but everything have implication in giving the right order. New technologies, logistics, procedures, weapons, politics, economy, etc., everything conduct to an evolved process, especially if we talk about asymmetric and hybrid warfare. Those two types of war have no limits in planning according to such a huge variety of inputs.

From my point of view future leaders will have to see hybrid warfare and asymmetric warfare not just as famous generals saw it before or as a military manager, they have to see it also as an "engineer" or an "architect" who analyse each material, each exterior aspect which could damage the complex plan design called war.

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CONSIDERATIONS REGARDING THE PSYCHOPATHOLOGICAL EFFECTS OF THE BLAST OF IMPROVISED EXPLOSIVE DEVICES ON THE HUMAN BODY

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Abstract: *In the pages which will follow I will be presenting in the beginning few information about the psychopathological effects of improvised explosive devices blast on the human body. In the first part I will inform you about IED`s and their evolution over time. Then I will show you how to neutralize and combat these devices. The purpose is to destroy the networks that financially and materially support the making and use of these devices.In the second part I will analyze the physical effects of the blast on human body, abd I will determine how affected the human body is by these effects. At the end of the project I will analyze the psychic effects caused by the blast of IED`s, and determining if romanian soldier are affected by post-traumatic stres disorder(PTSD), due to the exposing to the IED`s blast.*

Keywords: Improvised Explosive Device, Explosive Ordnance Disposal, PTSD;

INTRODUCTION

An improvised explosive device (IED) is a bomb built and developed to serve purposes other than military ones. It can be built from conventional military explosives, such as artillery blows, to which a detonation mechanism is attached. IEDs are frequently located on major roads in the conflict zone.

Improvised explosive devices are generally used in large-scale by insurgents in terrorist actions or in asymmetric wars. In the second Iraq war, IED`s was widely used against US military troops and, by the end of 2007 that proved to be responsible for more than half of the war's deaths. They have also been used in Afghanistan's by terrorist groups, since 2001 and so far, representing the cause of death of more than two-thirds of the victims in the coalition.[1]

NATO defines improvised explosive devices (FDI) as being those devices manufactured in an improvised way that have a destructive capacity that incorporates chemicals, with harmful or lethal effect, designed to destroy, invalidate, distract or harass. They can be designed from military articles, but are usually designed from non-military components.[2]

An explosive device is considered to be improvised when one or more of its following component parts such as: the type of explosive, the source of initiation, the trigger or the detonation mechanism, the shell, is altered in such a way that it no longer corresponds to its original function for which it was designed.

An improvised explosive device may have the amount of explosive coming from military ammunition, commercial explosives or improvised explosives.

The components and design of the device can vary from simple to complex, and IEDs can be used by a variety of state and non-state actors. Non-state actors may include terrorists, insurgents, drug dealers and criminals.[3]

IEDs are used by terrorists to destroy vulnerable targets, and by insurgents, as weapons, against a stronger enemy. They can be achieved at a relatively low cost, being easy to build and their effect can achieve both tactical and strategic results.

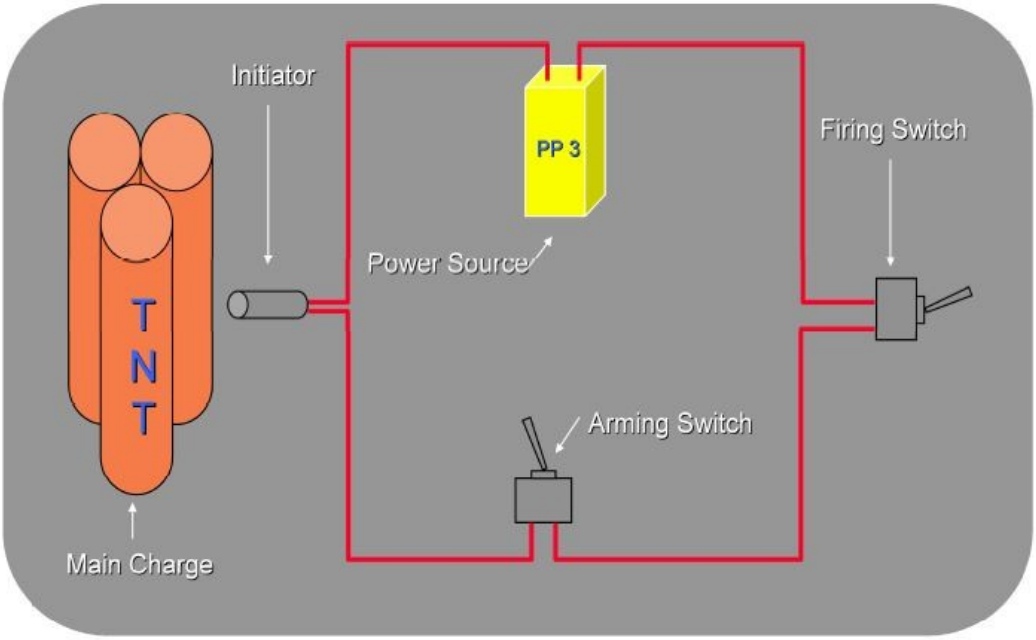

Fig. no. 1: Scheme of an improvised explosive device.[4]

The use of improvised explosive devices by the enemy leads to the achievement of both tactical and strategic objectives. The objective of the opponent, beyond the victims, is usually to psychologically traumatize the local population or even the population of other nations by creating fear, instability or discomfort.

1. Type of IEDs:

Improvised explosive devices are very large and can contain many types of initiation systems, penetrating materials and different types of explosives. DEIs designed to injure or destroy personnel may contain sketch-generating objects, such as ball bearings, nails, various small metals or even small rocks.

IED`s can be triggered by various methods, with the help of infrared and magnetic sensors, through the trigger wires or they can even be remotely controlled.

IED`s vary depending on the type of explosive used, the assembly method and the detonation method, their diversity being limited only by the human imagination.

Commanded IED: The commanded explosive devices are used to carry out ambushes. The attacker places the device in a place frequented by the target, often the place of disposal of the DEI is at a mandatory crossing point or a vulnerable point. Previous attacks have shown that the attackers place the devices at a distance of about 20 meters from a vulnerable point, also, the attackers, use a sign that does not come out in the records of their own forces to mark the position of the device, so that they can initiate DEI at the optimal time.

There are many ways in which improvised explosive devices ordered can be initiated, but by far the most commonly used are those commanded by wire (Command Wire) and radio

waves (Radio Control). Initiation by wire is by far the simplest method of detonating a DEI. In order to carry out this type of order, a connection with the help of wires is established between the main load and the power source. The main advantages of this type of control are the simplicity and the fact that they are not affected by the electronic countermeasures; The disadvantages would be that the method of execution is time consuming and the terrorist is exposed during the operation.

The radio-controlled DEIs have appeared with the technological development, which have many advantages for the attacker, such as lack of wires, reduction of planting time and reduction of clearance indices, but also disadvantages, the biggest being the fact that these initiators can be ordered from several sources that emit radio waves, because of this the terrorist is in danger of a possible detonation of the device during the planting operation.

Victim operated IED (VOIED): The victim's improvised explosive devices bear this name because they are initiated by the actions performed by the target. This type of device has caused more casualties among EOD operators than all other types of IEDs.

The first device with such a trigger mechanism (VOIED), was on January 13, 1970 and consisted of a kilogram of explosive and as an initiation system had a clamp for clothes. Most likely this simple system of initiation was taken from a military publication, and is now being used by terrorists in the preparation of IEDs.

The initiation system with the clamp for clothes works by connecting an electrical cable to each of the inner faces of the clamp with the aid of pioneers, the electrical circuit being kept in the open position by a piece of insulating material located between the two pioneers. When the isolator is removed, the clamp spring forces the two pioneers closer and the circuit closes.

Following the terrorist actions in the theaters of operations in which improvised explosive devices used by the victim were used, different methods of device initiation were discovered, such as: traction initiation, photo-sensitive sensors, infrared sensors, pressure initiation or initiated by cutting one of the wires of the device.

2. Current approaches on how to combat improvised explosive devices:

Counter Improvised Explosive Devices (C-IED) refers not only to stopping or neutralizing a DEI once it has already been planted, but also to identifying and disrupting the networks that create these devices.

The Alliance focuses on reducing the frequency and severity of IED attacks, while also monitoring the networks that support their making. C-IED troops are refined through activities at NATO headquarters in Brussels, the United States and the various Centers of Excellence (CoE). The activity of these large centers focuses on training and training personnel, developing technologies aimed at defeating DEIs, transmitting information and gathering non-NATO actors to destroy the network before DEIs kill or injure troops and civilians.

C-IED operations often focus on the device; however, the device is an end product of a complex set of activities that the opponent performs to achieve their goals.

An IED attack is the result of a planned operation that can have both tactical and strategic effects, not only because of the military value of the target, but also because of the psychological effects caused on the local population, on an extended region, even affecting the leadership. political. The plan to combat improvised explosive devices is designed to address all levels of war. Actions at the strategic level include the coordination of all instruments of national power, the collaboration and cooperation of institutions with a role in national defense in order to prevent the financing of the enemy, access to safe areas or conducting activities of misinformation of the population.

3. Types of trauma caused by explosions

Direct or indirect exposure of the human body to the detonation of improvised explosive devices can produce a set of traumas, the severity of which can be amplified if the detonation occurs in a confined space. These traumas are classified into two major categories established according to the exposure to the DEI explosion, usually the direct exposure on the explosion is identified with the primary traumas, and the indirect exposure is identified with the secondary traumas, the latter being divided into three categories.

The primary effects of the explosion occurring on the human body are caused by the collision between the shock wave resulting from the explosion and the human body. The shock wave, due to the high pressure, causes damage to the ears, lungs and internal organs.[5]

Side effects are characterized by sketches or fragments of certain objects that come from the component elements of the improvised explosive device or from objects near it. Usually these sketches and fragments resulting from the explosion have a very high propagation speed, and the collision of these fragments by the human body can cause injury sometimes incompatible with life. Another side effect is generated by the blast of the explosion that projects the body into the objects near it.

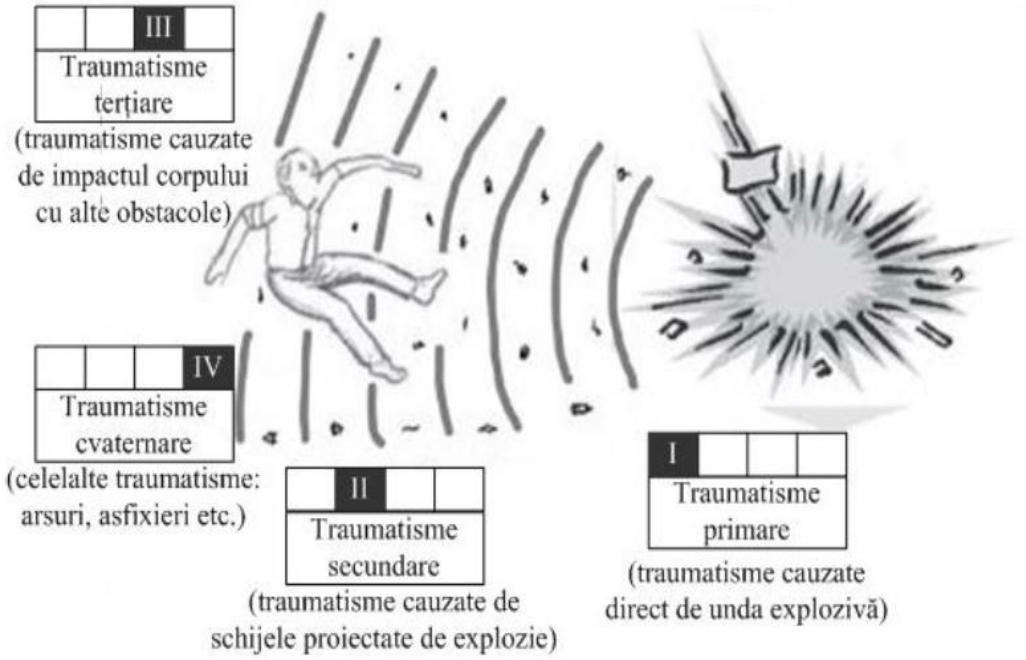

Fig. no. 2: The traumas suffered by the human body.[6]

4. PTSD identification in Romanian Army

The activities performed by the military, specific to TO, are the main factor responsible for generating stress. But even the high standards imposed by the military organization or even a long periods of time spent away from family, can generate certain emotions, also characterized by stress.

In some situations, such as fighting in direct contact with the enemy, the stress generated by the specific experiences of the moment have been adapted and have led to performance up to a certain level. However, when a stressor is intense or persistent it becomes detrimental to performance

Posttraumatic stress disorder, manifested by the presence of specific symptoms, on the military exposed to one or more events with traumatic effect, is identified with feelings of loneliness or fear. A military man can be diagnosed with post-traumatic stress syndrome, only

if he has been exposed to a traumatic event and has symptoms for more than one month from exposure

Post-traumatic stress disorder can occur either from direct exposure to a traumatic event, but similar effects are also produced when the subject witnesses such events.

The most commonly reported cause of post-traumatic stress among the military is represented by the repeated presence, during the military career, in international missions, where the probability of exposure to traumatic events is much higher. Exposure to actions that endanger life has been classified as a leading place, but there are other specificities of the combat theater, of lower intensity, which contribute to the appearance of personality disorders, such as the unpredictable work program, the increase of the number of hours, work conditions, environmental conditions, sleep conditions, food conditions, lack of privacy, etc. These stressors of reduced intensity produce the disease according to the individual, conditions that persist only for a short period of time, which allow the individual to recover quickly.

The specific symptoms of this disorder can vary greatly from case to case. Usually, the individual has repetitive and involuntary images of the traumatic event, most often accompanied by the inability to remember important parts of the event.

Nightmares or unpleasant dreams are an example of a relapse of the traumatic event. These flashbacks can occur for a few seconds, hours, or days, and the person manifests as if the stored activities would take place at that time.

Post-traumatic stress is often identified with the increased sensitivity of the individual to potential threats that may be associated with the traumatic experience. For example, a military man affected by the explosion of an improvised explosive device detonated by suicide, has a sensitivity towards persons with physiognomy and kept close to those of the terrorist who detonated the DEI. Therefore, the affected individual is subjected to considerable efforts to avoid persons, activities or thoughts that can be correlated to any extent with the traumatic event.

The staff affected by this syndrome face cognitive difficulties manifested by the inability to concentrate on tasks, memory loss or the difficulty encountered in carrying on a conversation for a longer period of time. Due to the problems caused at the cognitive level, certain sequences during the traumatic event are missing from the patient's memory, which leads to the misinterpretation of the event, with the consequence of blaming others or in some cases self-talk (for example: "It is my fault that I did not suspect the package as a potential IED ").

Emotionally, individuals may experience intense anger, hyper energy, feelings of guilt. They can engage in entourages in which the excessive consumption of alcohol or other substances with hallucinogenic effect predominates. They may exhibit self-destructive, self-destructive or suicidal behavior.

People affected by this syndrome have social and professional difficulties. In the social plane, the family and social relations are reduced, while in the professional plane the post-traumatic stress is manifested by absenteeism and the reduction of the performance.

To identify PTSD in the Romanian military I applied a questionnaire consisting of 20 items. The questionnaire was designed in such a way as to ask subjects about the emotions experienced after exposure to a traumatic event, thus the experiences manifested by them being identified with acute stress disorder, adaptation disorder or post-traumatic stress disorder.

On the evaluated soldiers, there was no case in which the post-traumatic stress disorder was present. However, the military who have performed a single mission in the theaters of operations are less prone to the risk of posttraumatic stress disorder.

The researches did not confirm the presence of the post-traumatic stress disorder on the evaluated military.

CONCLUSION

About two-thirds of military personnel diagnosed with post-traumatic stress had the effect of improvised explosive devices. The explosions cause major damage to the central nervous system, as a side effect, as it directly affects the brain through the effects produced by the detonation. The effects of the explosion also cause injury to other vital organs, leading to respiratory arrest or other traumas incompatible with life. Direct injuries to the brain are the result of rapid changes of the pressure, impact with other objects propelled to the head area, or body collisions with other solid or sharp objects.

In order to ensure the physical integrity against the effects of the explosion, the troops specially trained to act in such situations (EOD), use special protective equipment, equipment that evolved with the development of the technology but especially with the need of the operators to face the challenges encountered in the areas. in which improvised explosive devices or unexploded ammunition were discovered. However, for the protection of the civilian population, training was made in which minimal methods of reaction were brought to the knowledge when a IED was discovered.

Unfortunately, the effects of detonation of improvised explosive devices cause serious physical injuries, which can be discovered at a first specialized medical intervention, but the psychological traumas caused by DEI are very difficult to detect, manifesting through a different behavior of the victim compared to the moment. prior to exposure to the effects of the explosion. These psycho-traumatic effects can also occur in the absence of direct exposure to the explosion, only by watching a shocking event. These effects cause multiple personality disorders, different from victim to victim, being the duty of special rehabilitation centers to help the social reintegration of the affected persons

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FUNDAMENTAL ASPECTS OF FRANCE'S MILITARY CAPABILITIES IN THE CONTEMPORARY WORLD

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Abstract: *France represents for Romania a NATO ally, but also an old friend. In order to be able to interoperate with the countries of the alliance, it is first and foremost necessary to know as much about them, especially about the new technologies used and compatibility with the technique used by Romania. The main objectives of the French and Romanian armies are to defend the national territory, to protect the country's interests and to maintain global stability. My work will contain a brief presentation of France's military capabilities. In its composition there will be a brief presentation both geographic and historical of the country. The main topic will be the presentation of the latest technology used by the French troops.*

Keywords:*alliance,military capabilities, country, technology, troops.*

Geopolitical position

France, officially the French Republic, is a unitary constitutional republic with a semi-presidential regime, much of its territory and population being located in Western Europe, but which also includes more regions and territories throughout the world. Its capital is the city of Paris, the official language is French and the currency is the euro. The national motto is "Freedom, equality, fraternity", and the flag of France is composed of three colored vertical stripes, respectively in blue, white, red. The national anthem is La Marseillaise.France is located in western Europe; has an exit to the Bay of Biscay, the Atlantic Ocean, the Channel and the Mediterranean; is located between Belgium and Spain, south-east of the United Kingdom; it is the largest western European nation.[1]

The name of the country comes from the Franks, a population that conquered in the fifth century the territories in which France is now. Clovis expels the Romans and ends the Gallo-Roman period. France was born, in fact, in the 9th century, with the Treaty of Partition of the Empire of Charlemagne (Charlemagne). King Carol the Chel (Charles le Chauve) will try to form a kingdom, but a model of effective royal power will be transposed into practice by Hugo Capet (Hugues Capet) in the tenth century.[2]

France is a founding member of the United Nations and is one of the five permanent members of the UN Security Council vetoing their decisions. France also participates in most UN agencies and is one of the great powers in international relations, with major importance in Africa and the Middle East.

France is a peace-loving country. It has no territorial ambition and knows no declared enemy. Any action aimed at maintaining peace. But she has some interests to defend, has some responsibilities and plays a worldwide role.

The armed forces of France comprise the French ground army, the French navy, the French air forces and the national gendarmerie. The President of France heads the armed forces, entitled "chef des armées" - "chief of the armed forces". The president is the supreme authority on military matters and is the only official who can command a nuclear strike. The main objectives of the French Army are to defend the national territory, to protect France's interests abroad and to maintain global stability.[3]

France's newest military equipment

Felin or Fantassins Equipements Liaison Intégrés, under the original name, represents the French version of modern infantry equipment manufactured by Sagem in partnership with other military companies: Nexter, Thales, Renault Trucks Defense, MSA Gallet or ELNO. The concepts of the development of the "soldier of the future" French began to take shape since 1999 when the first prototypes appeared for testing by the army, and in 2010 France ordered 22,600 systems of this kind.[1] In 2014, the new system entered the equipment of the French troops after it was shown its effectiveness in the operations in Mali. The system weighs approximately 24kg in the Grenadier version and has been designed modularly so as to adapt to the different types of missions and functions of each military within the platoon, being able to be used even in vehicles, light armored vehicles or aircraft integrated on VAB and VBCI. Thus, 5 variants of the system were made: section or platoon commander, machine gun, sniper, grenadier. The standard system comprises the FAMAS base weapon and 24-hour supplies that include the fire unit and food. The equipment consists of:

- Portable computer;
- Fighting suit and helmet with ballistic protection;
- A radio for voice and data connection;
- In-vehicle integration kit and combat support;
- Information synchronization function between vehicles and section commanders;
- Individual energy sources, battery chargers;
- Electronic waistcoat, for system accessories;
- Non-bulletproof vest, with flexible shield plates but also some fixed ones, with high hardness.

In the years before and after World War II, the French arms industry seemed to have been overtaken by its foreign competitors in the development of small arms, but with the FAMAS assault rifle it did better than catch up; It is a very modern, very effective weapon, and a good example of the "stocky" character characteristic of compact models, in which the trigger assembly is placed in front of the magazine. Even so, yet the FAMAS is particularly short and handy, and must be one of the smallest assault rifles currently in use. It is now the regulatory weapon of the French army since the 1980s. The production of FAMAS ceased in 2000 with the closure of the site of the arms factory of Saint-Étienne4.

Its maintenance is now provided by the Nexter Mechanics factory in Tulle. The first examples built were distributed to certain parachute units or to the special forces; French troops used it in 1983 in Chad and Lebanon. The FAMAS is easy to recognize, as its external appearance is unlike any other. It uses the American 5.56mm M193 cartridge and has a long carrying handle above the body of the weapon which supports both the sight and the handlebars.

The stock is imposing and massive. An alidade placed at the front of the barrel makes it possible to launch grenades. It is possible to attach a small bayonet, and a bipod completes the

standard equipment. The fire selector has three options: shot by shot, automatic, burst of three shots. The device which controls the latter possibility is housed in the stock with the trigger assembly which is of a rather complex mechanism. We used plastic wherever we could and the finish was not the subject of any particular care: this is how the barrel, made of steel, is not chromed internally. Despite its particular appearance, the FAMAS is easy to handle and use, and its operation presents no particular problem.

Aiming and throwing grenades have been specially studied for greater convenience. In service, the weapon proved to be of a simple handling. We have even been able to reduce training costs thanks to a version which uses compressed gas cartridges, which projects pellets, during target shooting exercises: this weapon is, moreover, entirely in accordance with the regulatory model .

The FAMAS is an assault rifle of a bullpup type design which has a maximum length of 488mm. The FAMAS can be used by both left-handers and right-handers by changing the configuration of the ejection window; this implies an inversion of the cheek support as well as a disassembly of the weapon in order to reverse the extractor and the shutter located on either side of the removable head in the breech. The FAMAS sighting system is mounted on the upper part of the handguard, allowing effective shooting up to a distance of 300 m.

The unique combat rise is adjustable in height and direction. The flap eyecup holder allows you to choose a device adapted to visibility conditions. The FAMAS has a bipod for shooting, the feet of which are placed on each side of the weapon in the folded position. Its version equipped with a Versatile Handguard Handle (PGMP) allows you to mount a Scrome J4 scope, a clear viewfinder (red dot) Aimpoint or even a device for assisting with night sighting.[4]

(Figure 1)

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FINANCING OF NATO OPERATIONS

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Abstracts: *International security environment is very far from being stable and secure. The essential purpose of NATO is to guarantee the freedom and safety of all its ally by the instrumentality of political and military measure, in the same manner with the North Atlantic Treaty and with the principles of the United Nations Charter. This paper analyses the financing of defence from the point of view of military budget, civil budget and investments programmes.*

Keywords: budget, military, NATO, funding.

Introduction

As we already know, „*NATO (North Atlantic Treaty Organization) was established in 1949, in the first years of the Cold War and the hegemony of the former Soviet Union in Eastern Europe. In the same year, twelve countries signed up for the new policy and the new one military alliance. These countries were the five signatory countries of the Treaty of Brussels in 1948 (Benelux countries, France and Great Britain), United States, Canada, Iceland, Portugal, Norway, Denmark and Italy. Later in 1952 Greece and Turkey became NATO member. In 1955 the alliance joined West Germany as well. The Alliance then remained in the same formula for almost a quarter of a century, until 1982 when Spain joined*". [1] The next enlargement of the alliance took place in 1999 with the end of the Soviet era. In that year, they gained the status of members of the alliance for three states, Hungary, Poland and the Czech Republic. The famous three Baltic states of which Lithuania, Estonia and Latvia belong, joined the alliance with Romania, Slovenia, Bulgaria and Slovakia at the beginning of 2004. Other new members joined the alliance in 2009 and these are Croatia and Albania. The newest member to join in 2017 is Montenegro. NATO is currently made up of 29 Member States. [2][3]

Funding

Expenditure on NATO administration is funded through direct and indirect contribution of those who are members of the alliance.

Indirect contribution - the largest - includes allied participation in NATO-led operations and missions. [4] The direct contribution funds „*the capabilities and initiatives that serve all the interests of the 29 NATO member countries, among which we can list common air defence or command and control systems*" [5]. They are not the responsibility of any member state within the alliance. These costs are collectively borne by the administration of the commune financing. The 29 members contribute according to the total gross national income on the basis of the agreed cost sharing formulas. [6]

NATO's joint financing divides the main budget into the following: „*civil budget, military budget and NATO Security Investment Program*".[7] A set of common rules establish common and agreed rules after a framework of accounting care to ensure proper management of the funds.

Projects can also be jointly or multinational funded, which can be important for participating countries as they can identify their financial requirements, priorities and agreements. As we noticed, „*NATO provides political support and financial oversight. The financing process is overseen by the North Atlantic Council, managed by the Resource Policy and Planning Board, and implemented by the Budget Committee and the Investment Committee*".[8]

Civil Budget

The civil budget finances „*personnel costs, operating costs and expenses with international personnel operating in NATO headquarters. The North Atlantic Council approves the civilian budget and correlates spending with the Alliance's political priorities*". The main civil budget for 2018, excluding pensions, was accepted at the value of 202 million Euros, up 4.6% compared to 2017. [9]

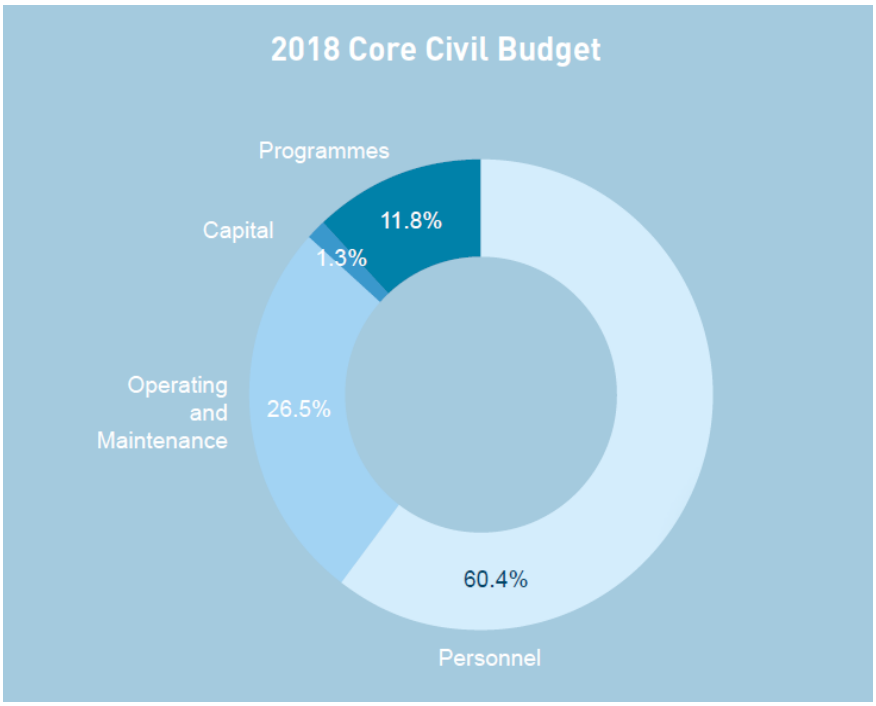

Figure 1. 2018 Core Civil Budget [10]

MILITARY BUDGET

The military budget covers the operating and maintenance costs of NATO Command Structure and other military entities within the alliance. It is composed of 37 other sub-budgets, financed by contributions from the defence budgets of the alliance member states according to the cost-share formula, usually through the Ministry of Defence (MoD)

„The Military Budget is approved by the North Atlantic Council, overseen by the Budget Committee - with presidents from all NATO member countries - and implemented by the individual budget holders. In any case, the financing of military personnel remains the

responsibility of each state. The military budget allocated in 2018 was worth 1.3 billion Euros."

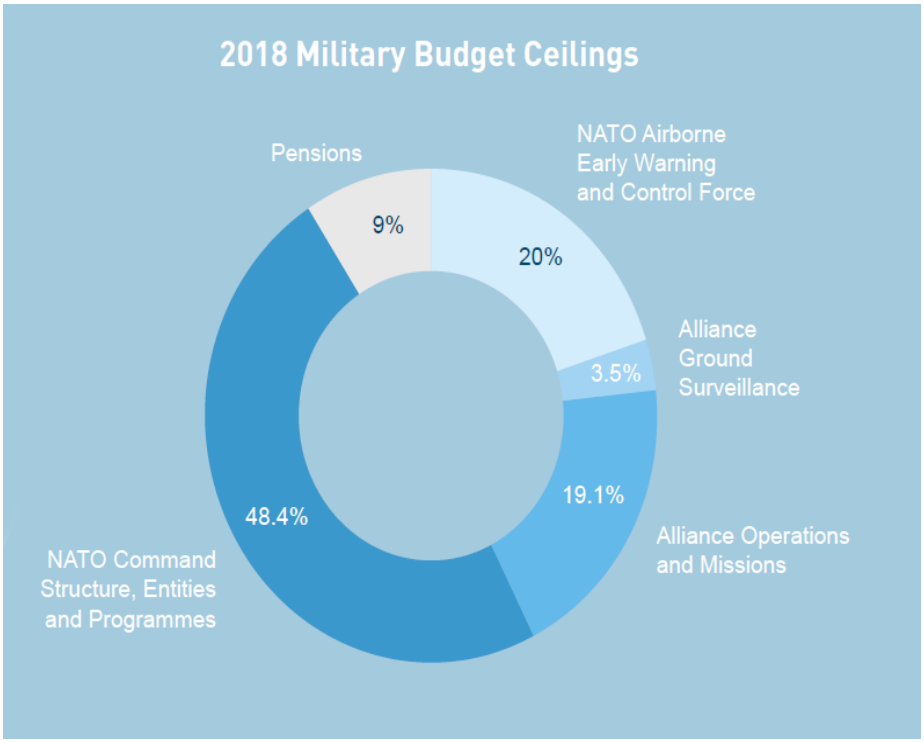

Figure 2. 2018 Military Budget Ceilings [11]

NSIP

The NATO Security Investment Programme (NSIP) is the North Atlantic Treaty Organization (NATO) programme of capital investment in military capabilities that exceed the national defence requirement of individual nations. It was setup in 1951 as the Infrastructure Programme to contribute commonly to the funding of infrastructure throughout the NATO member states. The main goal of the NSIP is to enhance peace, security and stability, through reinforcement and maintenance of a solid link demonstrating strong affirmation of NATO solidarity by sharing the roles, risks, responsibilities, as well as cost and benefit that bind the alliance together. [12]

The NSIP represents one of three NATO resource pillars, beside manpower and budgets. Based on the requirement identified by the NATO Defense Planning Process (NDPP), the three pillars deliver the capabilities required to fulfil the NATO Level of Ambition. „*NSIP covers major construction and command and control system investments, which are beyond the national defense requirement so individual member countries and supports the role of the NATO strategic commands by providing infrastructure and facilities for airdefence, communication and information systems, military headquarters for the integrated structure, critical airfields, fuel systems and harbor facilities*". [13]

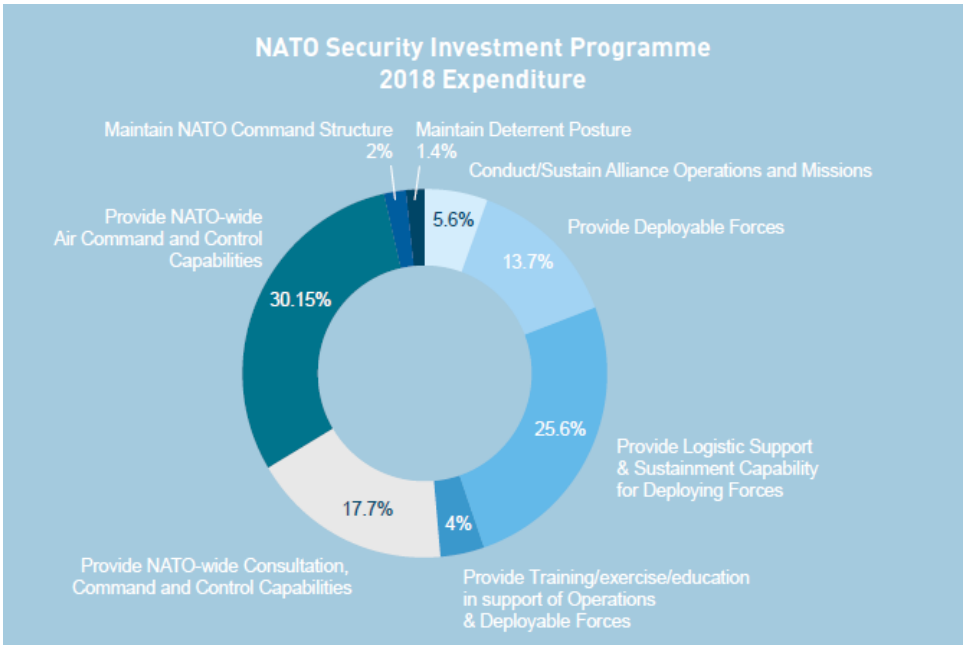

Figure 3. NATO Security Investment Programme 2018 Expenditure [14]

CONCLUSION

NATO defines defence spending as a payment made by the governments of each country in accordance with the needs of the armed forces. The main component of the expenses is the payments with the Armed Forces financed by the defence ministries. Armed forces include the „*Land, Maritime and Air forces as well as Joint formations such as Administration and Command, Special Operations Forces, Medical Service, Logistic Command*" etc.

Other forces such as the Ministry of Interior, troops, national police forces, gendarmerie, carabinieri, coast guards, etc.

In such cases, expenditures are only necessary to a certain extent because they include only units that operate as a military unit, have military equipment, operate under the direct authority of a military force, can be deployed, and can support other military forces outside. of the national territory.

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TOPICAL ISSUES REGARDING THE MILITARY CAPABILITIES OF THE HYBRID WAR

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Abstract: *The hybrid war knows no bounds. Action in the new battle space requires rejecting common assumptions about time and space, because such attacks, through modern information and communication networks, can be carried out from anywhere in a very short time. The processes of globalization have not only impacted on the evolution of civilization, but also on the development of new threats to it. It is true that terrorism and national threats have changed under the influence of the process of globalization and the methods of information on the Internet. The strategic advantage is no longer in the fighting power or in the geographical location, but in the information and knowledge of computer use. International cooperation and information exchange are essential for effective prevention of hybrid threats.*

Keywords: hybrid war, battle space, new threats.

1. Introducere

In the reference dictionaries, the term "hybrid'' is correlated with various fields such as biology and agriculture. It refers to what is composed of two elements of an abnormally different nature. It was only in the early 2000s that the term hybrid was first used in association with armed conflict.

William Nemeth was one in this domain to use the name "hybrid war" to characterize the Chechen insurrection, that was describe as a hybrid war figure and the contemporary form of guerrilla warfare [1] to the extent that this war constitutes a continuation of pre-state warfare that has become more effective because it employs both modern technology and modern mobilization methods [2]. From the same move, Max Boot sees Russia's recent interference in Crimea as an case of a hybrid war in which special forces have been deployed "little green people".

General James Mattis and Colonel Frank Hoffmann, who intend to learn the first lessons of the chaos that has gripped Iraq, define the hybrid war in an magazine published in the US Naval Institute Process. According to them, we can expect unorthodox attacks or random acts of violence by sympathetic groups of non-state actors against our critical infrastructure or our transportation networks. We may also see other forms of economic war or crippling forms of computer network attacks against military or financial targets [3]. The term was then used again during the Israeli war facing Hezbollah in Lebanon. Israel finds itself in difficulty in the face of an adversary who, remaining irregular and asymmetrical, is shown to be able to manipulate and protect firepower by technical resources, such as they would be radio controlled rocket or drones, used so far for the sole benefit of the ordinary

national armies. More recently, the notion of hybrid has appeared in Russian armed interference in Estonia (2007), Georgia (2008) and Ukraine (2014).

2. Development of hybrid threats in the NATO concept

While the idea of hybrid war, occasionally named non-linear war has been the subject of debate in recent years, especially in academic circles, the definitions of UE and NATO in the materials are quite recent. In addition, since 2014, NATO sound to have favored the expression hybrid war and hybrid war practices over hybrid threats. Thus, for the first time, NATO defines hybrid warfare, in an article from 2010, as threatening those posed by opponents, with the capability to simultaneously engage conventional and non-conventional resources adaptive in chase of their purposes [4]. The emergence of the notion in NATO is undoubtedly related to the presence of General Mattis at the institution, who turn into commander for transformation and who then desired to assume the forthcoming military provocations of the Alliance, in the situation of Russian interference in Georgia and Estonia.

According to some experts, the crisis in Ukraine in 2014 represents a considerable strategic break with the global order. NATO delates Russian action in this country, seen as a threatening to Euro-Atlantic safety, though Ukraine is neither UE nor NATO member. Previous in time Alliance Secretary General A. Rasmussen says Russia has aspirations that encroach Ukraine and could assault a Baltic country to analyze the solidarity of the West. They were therefore based on violating territorial integrity in Crimea and destabilizing Ukraine, as well on disobedience with international law. Therefore, the Alliance decides to stop collaboration on joint plans with Russia, holding conference at high-level military channels to avoid misunderstandings. In addition, the Russian-Ukrainian crisis pushes the member countries of the Atlantic Alliance and the Union Europeans to engage in a highly publicized military reinsurance and security process: that it is a reminder of the content of solidarity Article 5 of the Alliance Treaty or the establishment of new different nations headquarters, the organization of activities and maneuvers in the countries of Central and Eastern Europe, including the Black Sea or national agreement regarding new military procurement and a relative increase in defense budgets.

NATO also specifies that the use of hybrid conflict strategies isn’t new, what is change for Alliance is how a broad gamut of military, civil and political tools are involved and consistently appliquéd targeting specific weak points of NATO target global organizations to realize strategic goals. It also takes over some modern hybrid war scenarios that go beyond a mere military threat, such as cyber attack and false information campaigns including directed and integrated economic and political pressures. It is clear that this new type of actions scenarios may create one dispute to other and that, in isolation, they are not necessarily illegal. On the other hand, when applied together, they are furthermore probably to overhang an allied region or even the integrated Alliance.

3. A problem at the heart of European security policy

Since taking over the position in November 2014 of F. Mogherini as head of UE external affairs and security policy, but as well after the offensive of Islamist threats in Europe and result the Ukrainian slump, UE wants the countermeasures against hybrid threats as one of its priorities. Prior to this, the hybrid problem did not appear in conclusive European files. In 2015, one month later the Chalie Hebdo attacks, UE defense ministers met informally in Riga to talk current affair and to arrange for the June 2015 European Defense Council. Discussed the UE's countermeasures to hybrid threatening and stresses the demand to strengthen UE-NATO collaboration in their area.

Therefore, the international situation at that time was especially worrying, more in Ukraine, affected by bloody terrorist actions purported by Daesh. Based on the 2014 definition of NATO's hybrid war at the Summit in Wales, the UE provides further explanations on how the adversary can operate in the context of a hybrid war, but also the weaknesses of member states in the face of attacks. hybrid. These can cover areas as diverse as the use of information services, IT operations, economic pressure or the use of conventional forces. The aggressor's goal is to destabilize the adversary through various methods, such as sabotage, interruption of communications and other services related in particular to energy. The attacker can act through proxy insurgent groups or can justify interstate aggression under the pretext of humanitarian intervention. Massive disinformation campaigns are an important part of a hybrid threat. The ultimate goal is to influence or even politically dominate a country using a comprehensive strategy. Moreover, an significant fact of hybrid war is that of generating ambiguousness between the people.

In order to combat hybrid threats, the UE in particular recommends strengthening the resistance to cyber attacks, but also terrorist or criminal acts. Though terrorist actions and are not in themselves hybrids, performer of hybrid threatening can aim and enlist vulnerable people in world and radicalize them by using media, including social media on the internet and prosecuting groups, and using propaganda. Therefore, this consideration suggests that actions and organized crime are threats in thin new domain just when the performers of such acts resort to misinformation and propaganda.

4. Threats, conflicts and hybrid wars

In academic areas, hybrid war activities are associated with very all kind of actors, but is clear that Russia occupies a prominent place in the debates on this subject.

The concept of hybrid threats and that of hybrid warfare, used by NATO, are words that evolve, depending on the global case. One of the definitions offered by NATO appears in the case of Russia's interference in the countries named before. First, the idea of hybrid threatening refers to the concurrent use of all kind of means. Then, when the Russian versus Ukrainian conflict appeared, the hybrid war means the implementation of the necessary means to destabilize the opponent. The UE unveiled their definition for hybrid war in 2015, when France was the target of violent terrorist actions. While this interpretation is mostly created by that of NATO, this one offers specific details about the nature of operation of the hybrid war, as propaganda, deception, sabotage and other non-military tactics [5]. The hybrid attack aims to use the weak points of the countries and stop a collaborated response from the special organizations. Later, the Alliance created its own measures to combat hybrid terrorist actions, where the actors were now state or powerful organizations. The Islamic State, in fact, use some simple hybrid measures, as well as a well-designed network.

Hybrid war methods are studied as a serious challenge for security by the international organizations, working since 2015 to evolve, in cooperation, a strategy to combat hybrid campaigns to help member countries combat this threatening. The best response suggested by the security departments revolves around the following issues: improving knowledge of hybrid practices, effectiveness of prevention and response to the. While the two organizations are committed to supporting member countries in the fight against hybrid threats, they underline that the main duty stands for each member states.

The UE and NATO are taking concrete measures to combat the threats of hybrid warfare. First of all, to study these better, since 2016, the UE has a unit responsible for centralizing and exchanging information on this issue. As of 2017, NATO own an corresponding department, which would offer the necessary information from UE. Second, cyber defense is a priority. States have received strict recommendations from the UE to develop their cybersecurity strategy. In addition, NATO and the UE are beginning to integrate

cyberattacks into their joint and non-joint exercises. Recently, the vulnerability of critical infrastructure and propaganda has also been included in the training scenarios.

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INFORMATION WARFARE: CHARACTERSITICS, PARTICULARITIES, EFFECTS

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Abstract: *This paper focuses on Information Warfare which is a relatively new form of conflict, specific to the end of the 20th century and the beginning of the 21st century and which, through its operations, is an important instrument of strategic discouragement both globally and in different theaters of operations. The paper presents the fact that this type of war aims in particular to affect the public opinion or the personnel of the opposing army, representing a technique of weakening their power by using means of psychological influence. Also, this work will focus on the characteristics of the information warfare according to the current evolution of the operational framework and on the components of the information warfare. In the end, this paper concludes with emphasizing the importance of the informational warfare as a specific form of confrontation in the current context.*

Keywords: intelligence, information warfare, information operations, dimensions.

What is Information Warfare? What does it mean?

There is no one correct answer to this question, because this type of warfare can be defined in many ways. The Department of Defense (DoD) of United States defines IW (Information Warfare) as:

> *”Actions taken to achieve information superiority by affecting adversary information, information-based processes, information systems, and computer-based networks while defending one's own information, information-based processes, information systems, and computer-based networks.”* [1]

In the same way, the Department of Defense of United States defines the *information superiority* as:

> *“the capability to collect, process, disseminate an uninterrupted flow of information to achieve or promote specific objectives over a specific enemy while exploiting or denying that ability to the enemy.”* [1]

In other words, the information warfare represents the creation of alternative realities by perverting the objective truth - realized on the basis of concrete facts, data and arguments - its convolution through the use of a combination of elements, facts and pieces of truth selected, interpreted, combined with altered judgments through the use of syllogisms, sophisms, propaganda, forced interpretation, everything cluttered with a multitude of lies.

The main objective of the information warfare is to determine, to control or at least to alter the strategic decision, foreign policy, security and defense, perversion or obstruction of

the instruments intended for the military component of a state, and to make it difficult to operate, if not even the blocking of elements related to the security of a state. The instrument and mechanism to achieve this objective is to determine the public, the citizens, the prepared and conditioned pressure groups, organized and directed, to press the authority and to remove it from the position of decision-maker. [2]

Thus, the characteristic elements, the principles and the fundamental values of the open, democratic society against their states and institutions are exploited. An undermining from within by building groups of enemies "in the fortress". Moreover, the approach is unitary, integrated, and not infrequently a fact or a component of the information war, taken separately, appears only as a strange, a singularity, an accident, not an aggressive act planned next to a suite of other elements. The insidious mode of action and this integrated approach create the advantageous elements of credible denial of such an act of informational aggression on a target population.

A scientific approach to this new type of war was made even in the cold war years, when the need for information made it possible to perfect it based on the impetuous development of information technology. Identified and quantified in the middle of the decade, the informational warfare was officially recognized by the politico-military thinkers as a distinct type of war, just as important as the terrestrial, maritime, air and space. This recognition is determined primarily by the understanding of the reality that humanity has entered the information age.

The technological revolution in the field of computers and communications has made the importance of information grow faster than before, which has led to its collection, processing, storage and dissemination over longer distances and to more users. In these circumstances, it is understandable the increasing concern that states attach to the information war as a political war, as part of the state policy, both for the promotion and protection of national interests.

The information revolution and the information warfare.

Initially, the information revolution evolved in three phases, as follows [3]: *between 1837 and 1963*, it was characterized by the development of telegraphy, radio and wired communications, which allowed important control over the sources of information. Gradually, within this stage, the tendency to centralize the information systems was manifested. *The second phase* began in 1964 with the construction of the IBM-360 family of computers and ended in 1990; during this period of time it was a big development of high-performance communications and information systems, aimed mainly at the large users of information (organs of the state administration, economic corporations, defense and national security). *The third phase* began in 1991 and can be defined as the era of distributed information, computers and the Internet, based on the use of technical means of computing and communications constituted in high-performance networks. The new scientific achievements, the miniaturization of the equipment and the low price of these have determined that the company, in general, will become predominantly informational, and the computing power will double every 18 months. Internet access is now available for both institutions and individuals, becoming a major tool for the proliferation of knowledge, information and communication.

The computer age has created capabilities for obtaining, evaluating, using, transmitting and exchanging, at high speed, large volumes of information addressed simultaneously to multiple users. Information has become the main strategic resource of each nation. This has been emphasized since 1981 by US President Ronald Reagan, who, in his national security strategy, mentioned that "information is the fourth dimension of national power" [4]. Of course, under these conditions, the possibilities of malicious exploitation of the vulnerabilities

of the information systems, especially of the communications networks and their computers, could not appear, affecting both their technical structure, but, especially, the informational one, by attacking information sources, databases, data transport channels, processing and dissemination points, operating and management systems and other software products made by specialized companies or by users.

Information Warfare: philosophy, features and dimensions.

Information warfare is the form of conflict specific to this turn of the century and millennium, because it responds to some of the objections brought by both politicians and geo-strategic analysts or military planners to the classic forms of conflict. What is new and characteristic of the information warfare is the possibility to manipulate the information conveyed in the information systems and tools necessary to form and direct this information.

Information has become a true strategic raw material essential to the autonomy of decision and the success of any policy. In order to satisfy the interests of national security, the dominance of the information spectrum is as critical as it was and is still the occupation of the land or the domination of the airspace, the classic military strategy and tactics. In the next stage, the information warfare will play a decisive role in the political, economic and military life of any state. It is a reality that, although it does not have a universally accepted definition, it offers certain coherence to all information-related activities. The main features of the information war are distinguished by their very complex nature:

- Difficulty of specifying opponents;
- The absence of geographical and / or temporal boundaries;
- The multitude of targets;
- The lack of quick methods to remedy the consequences it generates;
- Use of relatively simple, cheap and widespread technology;
- Difficulty establishing clear and precise responsibilities regarding domain management;
- The relatively low costs of carrying out information operations in relation to the results that can be obtained;
- Increased handling possibilities;
- Deleting differences between command levels.

The information war is accompanied by new means of action / influence that circumvent the conventional power and the borders of the states. Many of these means act directly at the level of command and control, will, information, as well as the essential elements of the state infrastructure.

Also, the information warfare aims to avoid conventional conflicts, the production of victims and damages, by using these new means that are on the border between the conventional state of war and the conventional state of peace. The information warfare aims at structures of the political, economic, social or military domain, not only to destroy or paralyze them, but especially to influence their decision-making processes. Thus the transition from the organized violence stage to the hostile influence stage is made. In conclusion, the information war can be viewed under seven aspects or, in other words, depending on the attack-defense strategies constructed and the information weapons used, they have seven different dimensions [5]:

- Command and Control Warfare (C2W) – It is the exclusively military form of the information warfare; it aims to annihilate the command and control systems of an adversary by integrating psychological operations, security operations, misleading, electronic warfare and physical destruction;

- Intelligence Based Warfare (IBW) – It is the classical intelligence and consists in designing, protecting and annihilating systems that contain sufficient knowledge to dominate a conflict area;
- Electronic Warfare (EW) – Uses electronic technology and specific techniques for the domination of the electromagnetic space;
- Psychological Warfare (PSYWAR) – Uses information to change the attitudes and options of friends, neutrals and opponents;
- Hacker Warfare (HW) – It consists of passive and active attacks with malignant software on computer systems;
- Information Economic Warfare (IEW) – It seeks to block or channel information in order to obtain economic supremacy;
- Cyber Warfare (CW) – It includes actions aimed at information technology, computer and communications networks, as well as other critical targets of information infrastructure, for neutralizing or destroying them through information terrorism, semantic attack, simulation operations and other actions on information structure or technical equipment (hardware).

The principles of informational warfare

Informational warfare is one of the forms of continuous warfare; it is based on the control of information vectors. It has gained a global dimension. In the American vision, it is one of defense. The French consider that it has three dimensions: the war for information (the fight for obtaining information), the war against information (protection of information) and the war of information (which means the information poisoning of the enemy).

The principles of informational warfare are:

- the principle of continuous search and timely analysis of information;
- the principle of informational dominance;
- the principle of the informational initiative;
- the principle of protection of own information;
- the principle of information technology;
- the principle of informational intoxication of the enemy.

Information means not only human and technical ability to collect data, but also the ability to interpret and transform it into useful information. Such ability is essential in the information war. The war is based on deception. In order to be captured, the enemy must be beaten and then attacked where he is not prepared and harassed until he gives up. In order to have the maximum gain, a state must be conquered intact, and this is possible by defeating the enemy's plans.

The weapons of informational warfare are: computer viruses, worms, Trojan horses, logic bombs, trap doors, chips, nano-machines and microbes of electronic jamming, high energy radio frequency weapons and electromagnetic impulse bombs. The information war is produced by companies and armies with a high level of technological development. Its weapons can only be used against an enemy with the same information capabilities. By using them, it aims to disorganize the mental processes involved in the regulation of behavior.

Conclusions

In conclusion, the transformations of the 21st century also influenced the way the conflicts unfolded. The wars are no longer won in trenches, in the physical plane, through classic military actions, but in front of the computer, through information and the battle of the brains. Informational warfare involves the use, instead of conventional weaponry, of diversion, espionage, manipulation, misinformation and distortion of reality, and the

numerical force has been replaced by armies of trolls. What did not seem long ago in the realm of a distant future is happening now: reality can be altered by changing people's opinions. All this is propagated through technology.

The technological development has led to the improvement of the concept of war and its translation into the information area. The easy access to information, due to the globalization and use of communication technologies, also has a reverse of the medal: it facilitated its alteration and the possibility of its use as a weapon in a conflict developed in the field of technology. Also, the information, so important for the strategic component and indispensable from the point of view of the decision-making autonomy and of the implementation of the state policies, has become a control mode, which is making it extremely difficult to distinguish between possible external influences and implications and reality.

Taking all of the above into account, it can be stated that information warfare is the most complex and multilateral form of attack on information, in order to achieve information superiority. Taking into account the continuous evolution of technology, we can emphasize the particular importance of the information warfare as a specific form of confrontation in the current context.

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MOBILITY OF ARMORED VEHICLES AND THE CHARACTERISTICS OF THE TYPES OF STRATEGIC, OPERATIVE AND TACTICAL MOBILITY

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Abstract: *The fully not knowing of the context in which infantry troops will accomplish their missions makes their equipment as well as their architecture to be adequate for unexpected situations. This situation involves increasing their ability to adapt to various situations, by accepting principles such as mobility principle. The mobility is a very important requirement for achieving the objectives of military actions and achieving success. The object of this article is the armored vehicles and their mobility capacity. The purpose of the article will be achieved by identifying the characteristics that give better mobility to military vehicles on the battlefield. The methodology of identifying the relevant characteristics for mobility includes some scientific research methods. The research will be performed on the three levels of conducting of a military conflict that have a major influence on mobility.*

Keywords: mobility, strategic, operative, tactical.

Introduction

One of the important factors that ensure the maneuverability is mobility. This creates for the troops and the fighting technique, the possibility to perform the maneuver quickly. In this sense, mobility is the ability of troops to execute rapid maneuvers, in any place and in any direction imposed by the battlefield, regardless of the conditions of field, time, season and weather, to make the most of their combat possibilities in order to fulfill their missions. [1]

The mobility of armored vehicles is a very important factor. Its importance has been emphasized in the conflicts that have unfolded over time. For example, since the two wars in golf (1991 and 2003), it has been shown that the units and large units of the international coalition equipped with light armored and relatively small number of tanks, but of last generation, have won against the Iraqi divisions that were heavy and almost unfit, equipped with tanks from the 2nd and 3rd generation.

The subject of this article is the mobility capability of armored vehicles on the battlefield,

The purpose is to identify the technical-tactical characteristics of the vehicles with implications on their mobility.

In order to achieve the goal, the following requirements will be formulated:

1. Identification of the characteristics that influence the strategic mobility;

2. Highlighting the characteristics with implications on operative mobility;
3. Analysis of the characteristics relevant to tactical mobility

Strategic mobility

In the military strategy, as in the whole military art, there has been a revolution, determined in particular by the unprecedented development of aviation of all types, surface naval forces, nuclear submarines, airborne and airborne troops. The ground forces were endowed with the 4th generation armored, capable of great mobility and fighting power. This revolution has led to a great strategic mobility that makes it possible, through operations of force projection, to carry out military actions in any area of the earth.

From these considerations, it can be stated that strategic mobility represents the ability of a military structure to execute the transport of its forces over long distances, in order to achieve a strategic objective. [2]

Mobility at the strategic level depends mainly on the means of transport of military vehicles and their characteristics. The transport of military vehicles is carried out on the railway by means of the trains of large capacity, on water with transport vessels and by air with specially designed airplanes to lift very heavy loads into the air.

The transport of military vehicles by rail, water and air implies the following constructive limitations:

- must not exceed the maximum permissible weight;
- must fit in the dimensions supported by the means of transport;
- be provided with anchoring systems;
- have a powerful propulsion system that allows them to embark on the transport platform;
- be provided with clamping systems (rings, hooks, metal straps) in order to be boarded with cranes;
- have their own immobilization system active during transport.

Operative mobility

Operative mobility implies the possibility that armored vehicles can be transported or moved with their own fuel resources on routes specific to the operational level.

The conditions of high operational mobility are:

- maximum average speed of travel;
- the reduced time for carrying out maintenance activities and the existence of a professional crew to intervene and to remedy any technical problems quickly;
- the comfort needed for the crew members in such a way as to maintain the best possible physical and mental condition;
- the existence of a transport compartment under optimal conditions of food and water;
- the existence of a space for rest of the crew members, in the case of traveling longer distances.

In order to achieve operative mobility, the use of armored vehicles on wheels is recommended because they have a higher speed than the tracks, they provide much higher comfort, they are less noisy on the road and they can be moved with the vehicles of the logistics structure, which are generally driven on wheels, thus ensuring the convoy to be compacted. [3]

Tactical mobility

Tactical mobility represents the maneuverability of forces in the tactical field. Armored vehicles contribute considerably to achieving tactical mobility by being able to easily

overcome obstacles, to have a high speed of movement even in rough terrain, not to be negatively influenced by the climatic conditions, to behave efficiently regardless of the season and have the same travel regime regardless of night or day. [4]

The conditions of high tactical mobility are:

−maximum average speed of travel;

−the rapid and low energy consumption of various obstacles;

−the ability to be easily maneuverable under any conditions by being able to easily change the direction of advancement at any time;

−the possibility to immediately adapt the speed of travel to the terrain conditions.

The technical characteristics of armored vehicles that have a major influence on tactical mobility are:

− characteristics of the engine, transmission and auxiliary installations;

− performanțele sistemului de propulsie și suspensiei;

− total weight and weight center.

All these characteristics are grouped according to the systems that make up the armored vehicles as follows:

−characteristics related to the geometry of vehicles;

−characteristics related to the energy aggregate;

−characteristics of the rolling system.

Geometrical features

The geometrical characteristics of armored vehicles that have a significant influence on mobility are: the width of the vehicle, the ground guard, the angle of attack and the clearance angle.

The width of the armored vehicles affects the mobility at the level of: their transportability, influencing the strategic and operative mobility more; crossing very steep slopes; performing tight corners, moving through narrow colors, etc.

The ground guard is given by the distance measured from the ground surface level and the lowest point on the armored casing. [5]

If the vehicles are moving in the marshy terrain, because of the heavy weight, they sink into the ground. If it sinks to a depth equivalent to the measure of the ground guard, they remain suspended and thus the ground can no longer react on the propeller which becomes useless in this situation. The grip decreases until the wheels or tracks start to slide, and the vehicle becomes stationary.

The ground guard is currently affected especially by the fact that the armored casing at the bottom of the vehicles is supplemented as a protection measure against mines and improvised explosive devices installed on the communication channels. This reduces the distance between the surface of the ground and the lower part of the armored housing, which leads to decreased mobility in rough terrain. [6]

The angles of attack and clearance have a direct influence on the way of overcoming obstacles. They are the angles formed by the tangents to the propeller and the surface of the land. If the lower end of the housing exceeds the propeller profile, the tangent goes to the end which is usually the bumper or towbar. The most difficult obstacle to cross is the one in the form of a step or a longitudinal slope. If the angles do not have a proper opening these obstacles are practically impossible to overcome. [7]

Energy characteristics

The energy characteristics are grouped according to the components of the energy aggregate. The performances of the energy systems components are measured by:

- he engine: the power and the torque and the number of speeds at which these parameters are put, the actual efficiency, the behavior in case of overload; the cylindrical capacity, the volume and the space occupied inside the assembly, the

weight that affects the total mass, the fuel consumption, operating regime under special conditions;

- transmission: the type of transmission (mechanical, semi-automatic or automatic), the regime in which it changes the moment and speed, number of steps, efficiency, effort made to shift from one gear to another; what influences it has in the turns, how much power is lost during the turns;
- braking system: the braking space depending on the speed, the resistance to prolonged operation; the behavior in the slope, ramp or uneven terrain, effort made in operating the system and the control capacity.

The characteristics of the rolling system

The indicators of this system that influence mobility are grouped on the two components of the system:

- suspension: elasticity, damping capacity, shock taking capacity and overload behavior, shock absorber cooling system;
- the propeller: the type of propulsion (wheels or tracks), the dimensional characteristics of the tires or tracks, the characteristics that influence the angles of attack and release, the operating regime in case of overload or special conditions of terrain, the running time depending on the terrain and distances covered.

Important factors that influence the mobility are also represented by the operability of the crew:

- the maneuverability from the inside depends on: the way the optical systems of observation of the external field are organized, the way in which they are kept clean during the movement, the gyroscopic balancing of the optical systems of vision, the communication system;
- the maneuverability from the outside depends on: the way in which the connection with the inner crew is realized, the navigation system, the quality of the cooperation with the inner crew;
- organizing the interior elements: the place of disposal of each crew member; the configuration, the way the control panel is configured and the access to the actuation mechanisms, the comfort inside provided by the existence of the ventilation and temperature control systems.

Conclusions

Mobility is possible through the operation of a complex system consisting of the energy aggregate, the rolling stock and the geometry of the vehicles. The engine, transmission, braking system, thruster, suspension, sight and sight systems and their control elements, but also the geometrical characteristics of the vehicles are the elements on which the performance level of mobility depends. In conclusion, mobility is the ability of armored vehicles to be transportable, but above all, to move alone with the help of their own resources in the tactical field with a defining role in troop mobility and maneuverability.

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CORRELATION BETWEEN THE SURPRISE, INITIATIVE AND FREEDOM OF ACTION AS PRINCIPLES OF ARMED STRUGGLE

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Abstract: *In this presentation we want to define those three principles of armed struggle to establish the importance they have and how they influence military actions. We will try to find the correlation between them from that, historically, it has been shown that these principles are closely related, because they can not see one without the other during the fight. After establishing the correlation between the three principles of armed struggle, we refer to the "Six Day War" (June 5 to June 10, 1967) and will present how these principles have influenced during military actions, the success of Israel in increasing its land area three times in a very short time.*

Keywords: surprise, initiative, freedom of action, armed struggle.

1. Introduction

Today, its conventional forces and Western difficulties in coping with asymmetric or hybrid opponents, same struggling in various theaters around the world, from terrorist groups in the Sahel, the Russian separatist militias in Ukraine. However, weapons, means of acquisition targets, so-called system of command and control (C2) have never been as efficient in doing so, in light of scientific progress extraordinary in recent years, consider Drone MALE , high-precision missiles, attack helicopters and even individual combat equipment, have made tremendous progress.

The complexity of war, armed struggle, are all violent actions "carried out in an organized manner between two groups of forces aimed at cross-purposes, content, scope and intensity of action is determined by the goals of the war, its essence social-political character and traits and the quantity and especially the quality of fighters, weapons and military equipment. "

Consequently, armed struggle is determined by the destructiveness of the means employed, the diversity framework of the criminal, of a violent conflict of the relationship, and not least, the quantity and quality and technology forces used. As a phenomenon mainly in the war, armed struggle is governed by a series of its own laws whose knowledge is essential in terms of their applicability.

The laws of armed struggle have an objective with a high degree of generality. This is an absolutely necessary tool in the armed confrontation. Knowledge and proper use of these laws is theoretical and applicative fundamentals needed to conduct effective military action.

Narrow laws of armed struggle took various forms. For the purpose of military theorists are two classifications of the laws of armed struggle.

The first classification refers to laws that expresses the relationship between the phenomenon of armed struggle and other areas of society. Specifically, it refers to the relationship between armed struggle and economic side, political, technical and scientific. These laws are known as general laws of armed combat. General laws are "dependency law of armed struggle to the economic, social and human factor role in supporting the law of armed struggle."

2. Overview of current operational field.

Despite this technological superiority, and successes significant as conducting operations Serval 2013 Mali, a more objective shows that remain predictable for our potential enemies, they adapt to the end of our thinking tactical framework of our commitment legal and ethical in our modes of action and our blind trust in long-term efficacy of certain operational functions such as air strikes, using special forces and counterinsurgency doctrines.

Therefore, it is clear that no surprise that we can not have the initiative to the enemy camp, which often is one step ahead, anticipating watching our reactions and our vulnerabilities. Of course, we're looking for good reason to return to the fundamentals of military science to effectively use weapons combined and joint struggle missing the "amalgamation" of nonconformity must allow transcending orthodoxy tactical, operational, even strategic in one instance superior. In short, I broke an old balance to favor war as a science to the detriment of art.

Also, we find the technology required for this outburst springs inevitable operational imagination or through high-tech fighting machines, even if they are digitized, precise and powerful. The latter are obviously imperative to protect our forces, to support the soldier in contact to detect opponent then destroy it, but they should only lever handle and not the heart, but rather equation initial this one.

Consequently, it should consider the modes of action of tomorrow must be reflected, shaped, developed first by a deep knowledge of the lessons of military history, then by reading really assimilated thinkers, principles and reflections, the art of war.

Indeed, if contemporary military deployments shows new vulnerabilities of our deployed forces, especially the progressive abolition of humanity in technology, legacy of the past was recovered today in maneuvers and employment soldier before the recent crisis. But only a better impregnation of military history in units and rulers should open new perspectives of "genius" military combined with progress, they will guarantee freedom of action, surprise and initiative.

3. Technology, a new vulnerability.

In theaters from early this century, all Western armies have installed or implementing high-tech equipment, a prosthesis or continuing as a fighter augmented to use scientific vocabulary of the moment. There is, in particular, means more impressive information in image acquisition, electronic warfare and cyber world.

Tools aggression, guided by GPS and laser, capable of hitting a vehicle at a distance of tens of kilometers or even attain ranges of several hundred kilometers (cruise missiles) are widely used in missions that are mainly related to the fight against the insurgency, especially in populaţiilo fighters on the battlefield.

However, there are also some negative consequences, such as decision making chain, faced with the Magma data can slow down and deprive commander, as his subordinates, retrospective necessary to discern the fundamentals of noise on the ground, each lost in networks and various other digital displays.

With all these technological avantantaje we see an infantry harder (body armor, ammunition ...) to reduce mobility - remember that maneuver remains the combination of fire and movement - for machines designed for conventional conflicts and lack of good staff to control areas with amazing dimensions.

4. The conceptual principles envisaged.

However, the principles on how permanent are to be updated constantly, using logic and experience or by using military culture concerned. Also, we can say that the dialectical development can be articulated around the principles of initiative, freedom and surprise.

Armed with this observation and these different perceptions, it seems that the principles of war are based, regardless of age, on:

- *The principle of achieving surprise:* It is seen in the history of military art as a basic principle and defining success in military actions. In theory and practice of military surprise the enemy is a vital condition for carrying out tasks with maximum efficiency and minimum allocated resources. This means hitting the enemy in time and place, using means which it did not expect.
- *The principle of avoiding the surprise:* It requires a complementary relationship with the principle of surprise. Avoiding conditions to intercept includes all measures and activities identified and executed at any time of the armed struggle in order to avoid critical moments or unfavorable own forces.
- *Freedom of action:* refers to the ability of forces to take place and act to amplify the effects and achieving a favorable operational framework. This principle is closely linked with the principle of initiative and surprise maneuver and requires adoption of an attitude offensive military operations.
- *Principle of initiative*: It is closely linked to the principle of surprise and freedom of action, and involves the selection, organization, coordination and combining the best types of action depending on the time of surgery.

Other concepts derive from the founding principles or are just corollaries or constituents. It is therefore a problem of reflect back on these principles to demonstrate their universality and to rebuild on a more low as stretching, but more complex and extensive as universality: if British 10 principles, or among Americans, nine principles, and for us 14 principles.

5. The materialization of principles studied in the War of six days.

At the beginning of the year1967political observers considered not imminent outbreak of war between the United Arab Republic under the leadership ofGamal Abdel Nasserand Israel. Henry Laurens does not agree with the theories of culpability unilateral belligerent parties, but believes that the 1967 war was caused by errors diplomatic and strategic interests of both parties.

On May 22, 1967, Nasser continued the policy of belligerent provocation by blockingStraits of TiranIsraeli water transport. The maritime blockade restored the status quo which in 1956 led to the conflict with Israel.

Also Nasser overestimated the military power of Egypt and considered that Israel is unable to start a war on two fronts without the effective support of US Who, in 1956, he was involved in military Vietnam conflict. It seems that the Egyptian General Staff there were forces that promoted an exacerbation of the conflict with Israel. These forces elaborated plans for a military occupation of the DesertNegevTo ensure territorial link with Jordan.

These plans were rejected by Nasser, who is considered a representative of the forces "progressive" in the Islamic world and show critical of the "reactionary forces" of Jordan, Saudi Arabia and Iran. By blocking the Strait of Tiran, Nasser gained immense popularity in

the Arab world. Became the protagonist of anti-Israeli propaganda, Jordan Nasser managed to attract coalition was to convince then Saudi Arabia to support, with some reservations, because Egypt.

As a politician, rather moderate, Nasser was simply driven by the dynamics of this propaganda and encouraged the media to spread slogans announcing the imminent destruction of Israel. In general, the West rejected with indignation formulas and Arab propaganda slogan "Throw them in Hebrew the sea, 'which was not expressed politically, but in some satirical comments in the press. This kind of propaganda proved to be disastrous for the image of the Arab world, discrediting the Palestinian cause, particularly in Europe.

General Staff of the Israeli Army tried to convince the Israeli government of the need to react to block military Straits of Tiran. It seems that this incident has surprised the Israeli army because intelligence had failed to recognize the finality often contradictory actions initiated by Nasser. Prime Minister Eshkol sought further settlement of the crisis diplomatically. Internationally, loom critical of blocking the Strait, but initially both Washington and London have expressed against a war caused by this crash.

De Gaullewent even further and said Israeli Foreign MinisterAbbaEbanthat France would oppose the party will trigger war. Although President Johnson assured Israel of American support, Nasser interpreted these reactions diplomatic as encouragement of its policy focused on a challenge aimed to weaken not only Israel, but Saudi Arabia and Jordan as allies of the US Therefore, Nasser refused all proposals aimed at finding a compromise on blocking the Straits of Tiran.

There was recently just interests of Israel or Egypt, but the issue of control over oil reserves and financial potential of the Middle East. An involvement of the US and Britain in the conflict with Israel would have caused greater popularity of Nasserism in the Arab world and thus its credibility in the region of the Soviet Union.

Unhappy with the expectation attitude of the West and the Eshkol government, General Ariel Sharon did not hesitate to talk about the possibility of a coup[5]. After the accession of Saudi Arabia to the Egyptian-Jordanian coalition Israeli government it has undergone a lot of pressure from the military and right-wing domestic opposition, which demanded urgent action against military threats and challenging strategic positioning of Egypt.

In order to reach a national coalition Israeli government of Levi Eshkol was dissolved on June 1, 1967. Prime Minister Eshkol made afterwards a Government of National Unity, the Moshe DayanHe was appointed Minister of Defense and the leader of right-wing opposition blocGahal,MenachemBeginHe was appointed minister without portfolio. The two politicians have openly supported territorial expansion of Israel, especially in the West Bank.

On June 4, 1967, US President's advisor on security issues signaled by a memorandum approving Israeli military action. On the same day, given the strategic advantage obtained by blocking the Strait of Tiran by Egypt, the Israeli government decided to start the military offensive against the Arab coalition.

Yom Kippur (Day of Atonement) - is the most important of the three major Hebrew holidays. It is a very sober and austere celebration, which includes a 25 hour absolute fast which marks the Day of Atonement. In theToraIt is called Yom haKippurim("atonements Day"). It is the last of the ten "Yamim Nora" ("Days of Penitence" or "reverent fear") beginning with the Jewish New Year Rosh Hashana.

In terms of chronology armed confrontation, and the principles applied in its caddrul, deduct the following correlations:

- June 5 - Israeli Air Force bombing simultaneously, starting at 7.45, eleven Egyptian air bases, destroying so much of Egypt's military aviation - the principle of surprise.
- June 6 - Israeli troops occupyGaza Strip. Israeli tank units entering theSinai Peninsula - freedom of action and initiative.

- June 7 - Israel conquered the left bank ofJordan and the east JerusalemWhich will be annexed to Israel on Tuesday June 27, 1967.
- June 8 - Israeli tanks are up toSuezcanalAlthough Egyptian forces were numerically higher than the Israeli conflict in this area.Egyptsurrender - the principle of initiative.
- June 9 - Israeli armed forces attackedSyriaand conquer, as fierce fighting, most of the Golan Heights Including city Quneitra (Al Qunaytirah ').Gamal Abdel NasserPresident of Egypt declares his resignation, but will withdraw the statement a day after massive demonstrations in his favor.
- June 10 - Cessation of hostilities. After the war, Israel dominates an area almost four times higher than at the beginning of the war. 400,000 Palestinians fled to Jordan.

The mutation may impact the deepest and most serious long-term consequences sparked by the war of six days occurred, even in the midst of Israeli society. Radical change became apparent in the last few years, when Israeli right itself, headed by former Prime Minister Ariel Sharon has officially accepted the impossibility of perpetuating the occupation of Palestinian territories inhabited. The Volt, which became necessary fully preserve the democratic character of the Hebrew state - the only state law in the entire region - would disrupt the Zionist movement and to soldiers turmoil accompanying dismantling settlements in the Gaza Strip and retragarea Hebrew in Israeli military zone.

6. Conclusions

Place a few questions of present policy, wars, armed conflicts, the resurgence of violence and the principles governing them: The so-called war continuously changed or will change the nature of a war? State policy, ie the interest of state and international politics are in a relationship of completeness, subordination, mutual influence, cooperation or mutually exclusive? It has been or will be replaced war as a form of human action regulated internationally as a policy instrument, with violent action, unexpected and arbitrary? What causes the proliferation of violence and how they can be eradicated? Who exactly proliferating violence? Who controls it? Who owns? What is the role of militaries and armies in managing violence?

USA bring new elements in the war. This is required by company type transition from industrial and post-industrial society of information programs and special role of the US in this phase of globalization. Americans have developed several concepts outstanding in both the analysis and configuration war (war of low intensity, medium intensity and high intensity warfare regional war continuous warfare network) and in terms of principles preparation and unfolding (principle of high tech, IT principle, quick action principle, the principle of network), which basically revolutionized or are about to revolutionize the military art.

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INFORMATION WAR: INTIMIDATION, POWER AND CONTROL

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Abstract: *The war has acquired increasingly more refined forms, and the old paradigms are losing in front of these types of threats. Conquest of the minds hearts of a population has surpassed the conquest of territories in the classic sense. The target audience is carefully evaluated and the psychological operations, impact images, misinformation, propagation, aim to create a predefined perception. The society has a great deal of attention deficit and Russia is looking to exploit this issue through a multi-level information war. Russia's actions can be sketched in four major directions: Divide, Distract, Dismay and Deter. The brain of the whole operation, most likely located at the level of the Russian Federation's military body has the power to adapt and capitalize in real time any opportunity that has arisen through global, regional and local events.*

Keywords: Mass media, Rusia, Manipulation.

1.Introduction

The best "public property" that a state can offer is security, but this depends on the perception of the public. Distorting this perception, thru disinformation and propaganda is one of the key-points of informational war.

Experts say that informational war is a long-term phenomenon that can take up to tens of years, eroding the security and defense system. To obtain these results, the writer and analyst of the Russian propaganda, Ben Nimmo, has emphasized 4 strategies used in informational war (the 4Dapproach):

• Rejection- negating the action that contravene the promoted messages. The Russian propaganda is based on conspiracy theories.

• Denaturation- deforming the facts thru changing the context or falsification. The purpose of this actions is to speculate the people's perceptions and their emotions to endorse existent stereotypes

• Distracting the attention- misleading the public's attention from not wanted events. This aware inversion leads to numerous interpretations, mostly wrong, about the purpose and objectives in cause.

• Discouragement- using intimidation elements. The objective is to plant distrust and confusion among the population.

Focusing our attention on fictive events, the Russian mass-media managed to distract the attention of reporters and to confuse the public. It's propaganda network offers itself a

plausible credibility and permits it to follow with it's objectives in such a manner that attracts the attention of NATO and of the Occident.

By spreading false news and offering theories about many important events thru a multitude of platforms, Russia succeeds in the practice of disinformation thru distraction and confusion.

Russia tries to hold the control over the perception of events thru orienting the emotions of it's public and using confusion, deception and doubts as instruments in this purpose. The Nord Atlantic Alliance has to approach these tactics and to adapt to the strategy of the 21st century informational war's tactics.

2. The trolls factories, the weapon of the informational war

One of the most important weapons of the Russian informational war is represented by the "trolls". "Trolls" are groups of paid youngsters which identify sites and media instruments very well visited where they insert comments to manipulate the debates of the readers to conclusions set by the financer-The Russian Federation. The process has been shown by people on the inside, who worked with these factories of the parallel truth.

Trolls work in teams of 3 and attack simultaneously one article which appeared in electronic format on sites of the most famous televisions, medias or NGOs and professional publications about military exercises done by NATO, social crisis. One of these trolls launches a comment with an extreme idea, the second one replies, from contrary positions, while the last one draws the line and the conclusions of the dispute in the favor of the financer.

The most important troll factory used in the informational war from the East of Ukraine, which is projected over the whole world, is situated in Olgino, a suburb of Sankt Petersburg, the natal city of Putin. The second troll factory named "Internet Research, Inc." has moved at the start of 2016 from Olgino to Savushkina street nr 55, in St. Petersburg. To this location we can add Perekatny, a suburb with 244 residents, Yablonovsky with o population of 30518 in the autonomous republic of Adygeia from North Caucaz, Zelyony Gorod a suburb of Nizhny Novgorod.

The Russian informational war doesn't hit only the states of the post-soviet space or the Eastern Flank of NATO but attacks the hearth of Europe. Germany found out about this when they met a real offensive that had as objective the removal of Angela Merkel with the waves of refugees. The Russian media invented a 13 years old girl from a family originally from Russia who would have been raped in Koln. The news had brought public manifestations instigating the 2 million Russian citizens from Germany. The magnitude of public manifestation was amplified by the Russian news network Sputnik. Germany reacted by sanctioning the informational operation blaming it of falseness, but the damage had already been dealt.

Another target of the informational attacks is USA. The troll factory posted and financed by St. Petersburg produced a new infamy, a disinformation thru a huge lie, to affect the fundamentals of the enemy's image, USA, while compared with the muslin world, but also influencing and altering international media and of virtual space and have decided to post and share a clip of an American soldier shot a copy of the Coran. The clip showed a man wearing American soldier clothes and shots 3 rounds in a blue book, apparently a copy of the Coran. The clip generated an inexplicable interest in Russia, being violently critiqued by the muslin community in the country, even if the clip doesn't reflect clearly that it is an American soldier, it being a fake. In the clip there is a black man, to reflect that he is American, who is wearing the American uniform and is testing a SMG Saiga 401K of Russian origin. The man shots 10 rounds towards a blue book with Arabic writing on the cover which looks like the Coran. From the 10 rounds 3 hit the book while the cameraman with a non-American English

accent says obscenities and says that the weapon is not of quality. The clip is commented in English with a bad grammar and closes with the conclusion that American weapons are the best. The clip was posted on YouTube by Derr86e and claims that he convinced his Russian friend not to buy the weapon showing how poorly the weapon performed thru the clip. The user has only this post and has disappeared since then. The YouTube video was registered by Mayaese Johnson which on Google Plus says he is working for a high school in Moscow.

In the case of Romania, the mass-media institutions are aware of the existence of informational war, but promotes articles in which they promote scandals, over auctioning and magnifies the relevance of the news, the cheap breaking news, which affect the base message of the news. Showing without mind of any source of Russian propaganda and declarations of Russian officials which grow the ratings, without a realistic evaluation of the message, a counter-message, an expert opinion on the matter to decrypt it for the public or even a commentary on the subject are in favor the informational war. This procedure makes it that every piece of news from Russia to be amplified and the shared irrelevant of their source or content. At the start of January 2018, the news says: "Russian put a new aerial system S-400 Triumph in Crimeea". To this piece of news, we add the words of Viktor Sevostanov, high ranking in the Russian air forces: "the new system that is supposed to defend the Russian borders can be swapped to an offensive one in less than 5 minutes". The announcement generated panic and fear among the Romanian population and by presenting Russia as a power that can destroy both nuclear and military the state of Romania (but also those with an opening to the Black Sea) because of the measures NATO took to reinforce the Eastern European flank. Such subjects are debated every including socializing platform Facebook. Thru some persons who assume Romanian identities, they restart subjects that the large public has access in the media, but presenting them deformed to fulfill their own objectives of strategic communications.

3. Counter measures to the informational war

On the long run, in the case of informational war the best reaction is education. Introducing in the curriculum starting in middle school of some course for ethic and civic spirit, in which to present the informational war, but also elements of raising the critic spirit, separation of critics from criticism, learning the main basic element of public phycology and its functioning mechanisms, the structure of a lie, elements of manipulation and propaganda. All these lead to forming a balanced personality and of a citizen who has the instruments, capacity and knowledge to beat informational war but also to evade its effects. But such a step needs a period of at least 20 years, a generation that confronted these elements so that we can have citizens that are immune to informational warfare.

Specialists say that for a short time horizon, but speculative for the future, we can forecast the necessity of utilizing some techniques, methods and optimal procedures to manage an informational war. Understanding the surrounding reality, in which this war is present, must be doubled with the assumption that at the level of security documents, the responsibilities of institutions in insuring security, but also with charging an institution to be inseparable and interconnected which has as duty counter measures of informational warfare.

Then it is necessary taking an official website of the elements for decrypting and exposing the informational warfare instruments. On the website of Homeland Security of the USA there are daily post of the type: "the lies that the Russian Federations says about…". It is an official and authorized source where such elements can be found. Another technique used is the introduction in a non-governmental website of stopfake type. Such a website is the one from Mighila from Kiev where there all the misleading content is found by its volunteers.

The mediatization of crude cases, as components of informational war is also useful. In this situation there are the stratcom groups, of strategic communication, institution at NATO

and EU level. Other experiences that can be that could be shared are the studies of The Excellence Center from Leetonia for strategic communication in the Russian speaking space.

Another technique of counter measure for troll war influence even more elaborate from mediatizing messages and commentaries to deleting them, taking some personal elements such as identities, existing profiles or e-mail addresses, commentaries or even stopping access to other messages.

Another measure can be naming an institution/ organization which has as objective the integration of defense actions in the informational war. It exists as CSAT and it has to name the institution that will align the efforts of the other institutions, it will set the informational war strategy and will set the instruments that will counter it, which includes demitting the promoted items; exposing opinion formators and the themes included in informational war; exposing the procedures and components from psychological and setting it's contracting; determining the resources needed for internal informational war and sustaining the diplomatic public effort and utilizing resources for the informational war between Russia and Romania in 4^{th} spaces.

4. Conclusions

The Russian Federation's informational war hits political level as well as social life visiting foremost the methods of influence in political decisions, military, strategic and security, thru mass media and public space, the creation of opinion groups and public pressure. Opinion formers, journalists, bloggers adopt hard to spot positions which promote one sequence or another, a theme or another from a psychological operation. It is hard to appreciate if it is all about a blindly exploited, under an order, or paid to enhance that activity. The job to determine its tractability is handed to the specialized institution.

The threat being to NATO, the security strategy that must be adopted has to be on a NATO level, which implies coordination but at the same time it is necessary that each country to apply the most efficient measure for informational war. The new security strategies imply adapting structures, training, logistic and military actions to new realities. It starts from the idea that no one country can defend itself anymore, but only thru a close cooperation on an international level.

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CONCEPT OF THE DEFENSIVE OPERATION OF THE IRAQI SUPREME COMMAND

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Abstract: *Counting on the experience experience based on their latest battles, the Irakians sustained that their army was increasing the victory chances in a direct conflict by fighting near the roads, transit information and also around the zones of high strategic importance. After the ending of the first Golf War, Saddam Hussein had reorganized the army because a lot of his troops were killed in action and also most of his army vehicles and equipment was destroyed. After these battles, the army was reorganized from 67 divisions down to only 30 divisions. In 1992 these divisions were reinforced by another 3 new Irakian armed structures: Special Republican Guard (SRG), Security Military Service and Fedayeen (Martyrs).*

Keywords: Special Republican Guard, Golf War, task, invasion, Irak.

Admitting the fact that thez don't have the capability to strategically move their troops, the Irakians could focused only on the local war. Based on the NATO military OPS that took place in 1999, in Kosovo, and also on their own experiences during the first Golf war from 1991, it was self understood that, the moving units will be detected with an incredible speed and unfortunately destroyed. By putting the combat units, near the roads, transit information and also around the zones of high strategic importance before the beginning of the battles, Irakian forces could increase the odds to engage the coalition's forces based on the next conditions: choosing the battlefield by the Irakian troops, with minimal explosions and battle rehearseals.

After the ending of the first Golf War, Saddam Hussein had reorganized the army because a lot of his troops were killed in action and also most of his army vehicles and equipment was destroyed during the „Desert Storm'' OPP. Most of the Irakian troops were destroyed and an increased number of infantry soldiers were disabled like: minister of defence, the chief of personnel and every leading commandment officer from the Irakian army. Starting with 1994 the conventional army was reorganized from 67 divisions down to only 30 divisions. The new fresh army was reshaped around the republican guard that exceeded to remain after „Desert Storm'' OPP. Remarkable, this units have the best equipment, and they have proved, most of the time, loyalty by protecting Saddam against the biggest threat from his own rule, the March rebellions, year 1991. First of all, the republican guard was rebuild around 8 divisions: 3 armored divisions, 1 mechanized division and 4 infantry divisions. Its troops have been decreased from 150 000, in 1990, down to 80 000 in 1992. Three new agencies had been formed in 1992:

(1) Special Republican Guard (SRG), compared to a 15 000 troop unit, devised in 13 battalions. First recruits belonged from the areas and cleans that were loyal for Saddam. The most important task for SRG was to protect Saddam and also being able to provide military

response against any rebellion or the coup, but also this is looking like a bridge between the army and security services.

(2) Military Security Service (MSS) was formed to detect and to be able to do disagreements between the army.

(3) Fedayeen (Martyrs), formed by Saddam's son, his real name Uday, for close protection of Saddam from internal enemies.

Time passing by, security system begun to be more centralized, heads of this system were directly connected with Saddam or his tribe. Especially, his son, Qusay, who took over a big part of security system, became the commander of SRG. Under the command of Qusay, MSS personnel was increased to 5 000 until 1995, its authority expended, here being involved the other security agencies. The outstanding growing of the security troops seemed to have proved its utility, because a lot of coups were defeated in 1990. Irakian defensive strategy involved also the battle in many places in as many places as possible, using all the army elements that have capability to fight against the coalitions ground forces. These elements could involve entities like: SRG in Baghdad, MP divisions in the biggest cities and near those. The Irakians were also expecting that the intensity of the coalitions OPS against the regime to leave the growing of their own forces. These had a model experience regarding the attacks against their command centre and they could have taken more measures for decreasing the effects. The emergencies plans could have been better established in case of bonding with Baghdad if decentralization of the military and civilians authority could have been possible.

The Irakians have searched in the same time the accomplishment of some victories, even the smallest one, and coalitions SPEC OPS could have given them a chance to realize this fact. Based on it's own experience from 1991, regarding recent SPEC OPS from Afghanistan, also the mass-media analyze from the planning way and the coalitions capabilities, the Irakians could probably have a complex idea regarding against what they could have expect from the coalitions SPEC OPS forces. Although, the destruction or capturing some of the SPEC OPS forces could have been an obstacle from their OPS. The urban environment was a potentially problem for the coalition, but also some of physical elements were considered important. As example, Irak has a lot of villages, these could represent possible resistance points. Although, most of the villages can or could be avoided, coalitions troops could fight for a most part of them. Irakian authorities didn't let the civilian population to stand in their places, to the extent that there constraints will represent a success, they will present a few military difficulties.

A few irakins have been motivated to view the invasion of Irak, not only as a attack against Saddam's regime, and they have reacted against the logic. Civilians resistance was extremely upsetting for the coalition logistic support units, whom have operated over hundreds of miles and that are extremely vulnerable against the combat units.

Irakian army was organized on 5 army corps. The total of soldiers were near 375 000, 2 000-2 300 tanks and other armed vehicles were being part of them. Most of the irakian army equipment wasn't upgraded. Irakian regime also had in suborder the RSG, (aprox. 60 000 soldiers). The army was formed from infantry divisions, mechanized and armored infantry being known as the most efficient battles strike of Irakian army.

The infantry was the most worthy for the Irakian forces, neither the marines forces didn't have any strategic role in the time of war. Irakian troops have been deployed in 4 main areas:

(1) in North, near Mosul and Kirkut, were also normal troops of the army and SRG troops could be found;

(2) along the Mosul-Baghdad and Kirkut-Baghdad highways, blocking positions could be found;

(3) near Baghdad, SRG troops have been mobilized;

(4) in South region 2 SRG division and 1 infantry division have been disposed.

The outgoing of the troops was near the main area of the oil fields, excepting the blocking troops situated on the 2 highways and around Baghdad.

For leading the troops, Irakian commandment formed 4 district centers: North, South, central, central Eufrat.

Irakian military ground forces capabilities regarding the main technical categories:

(1) 2.200-2.300 tanks: T-72/72M, T-62, T-54/55 (Russian production), T-59/69II (China), Chieftain Mk 3/5 (Great Britain);

(2) 2.000 - 2.500 armored/IFV: BTR 152/50/60, OT-62/OT-64, MTLB, M113A1/A2, YW-531, FR PanhardM-3 and BMP1/2;

(3) 1.500 RFV: BRDM-2 and AML-60/AML-90 ;

(4) 5.500 anti-rocket artillery: ZSU-57-2 SP, 57-mm and ZSU-23-4, 23- mm, S-60, 57-mm, M1939, 37-mm and AAA-100 mm;

(5) 100-200 SCUD rockets;

(6) ground forces aviation had 300 helicopters/72 choppers;

(7) 1750 pieces of artillery, 230 auto cannons and 250 launching rockets: M109A1/A2 SP, 155-mm, 2S3 SP, 152-mm, 2S1SP, 122-mm, ASTROS II, 127-mm, BM-21, 122-mm, D-30, 122-mm, D-20,152-mm, G-5,155-mm and 46/59-1, 130-mm ;

(8) Milan system, AT3/4 and HOT ;

(9) cannons B-11, M40A1, 106-mm and SPG-9, 73 mm.

(10) Irakian air forces were the main piece for air combat and ground base defense:

(11) personnel: 30.000 soldiers;

(12) military equipment: 300 operational air-planes, from a total of 800 counted before the beginning of the war. From those, only 150 could have been considered modernized as MIG-29, MIRAGE F-1, MIG-23, SU-20.

(13) transport air-craft: 10An-2 COLT; 6 An-12 CUB; 5 An-24 COKE; 2 An-26 CURL; 2 Il-76M/MD CANDID.

It was expected that the Irakians to try everything possible for defeating the coalitions forces. Some of those measures used during the first steeps of the conflict, including over floods, shouting down the airports, bridge destruction and using very toxic chemical agents. The Irankian army moved on the field, roads and bridges, even though, the coalition had an incredible air strike mobility, together with the logistic support elements.

Finally, the Irakians could use the transactional space, not necessary for time resources, but for enclosing the coalition efforts. The coalition used up to 14 divisions against Irakian military resistance and for the big safety areas, its forces had, under surveillance Irakian units, even those that could be found garrisoned and the also had to control the urban environment.

Even though the military campaign could have been less slower and more painful than some could anticipate, Saddam Hussein and his regime were, in the end, defeated.

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INSURANCE OF ACTIONS AND PROTECTION OF FORCES IN THE CURRENT OPERATIONAL FRAMEWORK

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Abstract: *The present paper intends to identify the main forms of insurance for actions and protection of forces, which from my point of view must be analyzed from the perspective of risks and threats to both the civilian population and the armed forces participating in missions in the Operations Theater in Afghanistan. At the same time, the need of knowing the characteristics of the current operational framework and how the proper application of the determinants influences the dynamics of a military operation, are motivating factors in countering the risks and threats. Thanks to the advanced technology, the armed forces are easier to identify the main obstacles to ensuring peace. The civilian population will be less exposed to the dangers of armed confrontation and the survival rate of humanity will increase considerably.*

Keywords: risks and threats, civilian population, current operational framework.

1. Introduction

The current field of military action is different from that of the last century and is constantly changing. Peacekeeping operations are current and dominate future actions. Also, the attention is directed to this type of military operations, and the physical and material resources allocated are gradually increasing. Although there are peacekeeping operations, troops continue to face opponents with different purposes and ways of thinking. So comes the need to use force to restore the security climate.

The spectacular evolutions in the field of science and technology have a special effect on the military field, especially in the current extremely fluid geopolitical and geostrategic context, imposing reorientations, rethinkings and reorganizations in the system of modern military actions.

At the tactical level, the ensuring of combat actions and the protection of forces is carried out in order to maintain the combat power and to successfully carry out the actions in any conditions. [1]

The military units, depending on their structure and value, the situations in which they act, the forces and means available, must be protected, and the actions they carry out, insured. The commander is responsible for ensuring the actions and protection of the forces. [2]

The provision of combat actions appeared with the first armed conflict and is an intrinsic part of all the measures that are taken for the protection of one's own troops, the

population and of course, in order to achieve success. It has an anticipatory function, creating, at the same time, the conditions necessary to elaborate an appropriate decision to maintain the high fighting capacity, to prevent the surprise and unnecessary losses.

Forms of insurance for fighting actions are the following: research, security, masking, information and public relations activities, topogeodetic insurance, hydrometeorological insurance, human resources insurance, legal assistance and religious assistance. These forms are intended to ensure all information about the enemy's previous and future actions. It also stops the adversary from obtaining information about his own forces and creates conditions necessary to protect and hide the grouping of his own forces, so as to mislead the hostile actions of the opposing forces. [3]

Force protection consists of actions taken to prevent or mitigate hostile actions against personnel, resources, facilities and critical information. These actions preserve the combat potential of the forces, so that they can be applied in a decisive time and place and incorporate coordinated and synchronized offensive and defensive measures to enable the effective deployment of their own forces while degrading the opportunities for the enemy. In the category of forms of protection of forces are included: avoiding fratricide; counteracting the effects of the enemy's psychological actions; electronic protection; information protection; anti-aircraft protection; gene protection; NBC protection; protection against incendiary means; environmental protection and medical and veterinary protection. [4]

2. Risks and threats within the operational framework of the Afghanistan Operations Theater

Contemporary military conflicts have revealed new orientations and concepts regarding the development of military actions, characterized by complexity, mobility, dynamism, the use of high technologies and professionalized forces, integrated actions of all categories of forces and types of weapons.

The current operational environment is represented by a combination of situations, conditions and factors that affect the structure, capabilities, dislocation, combat device and mode of action of forces, which has a decisive influence on the decision-making process. From the point of view of having territorial and administrative control, of the military capabilities employed, the operational environment can be characterized as permissive, uncertain or hostile. [5]

The theater of operations comprises one or more geographically delimited areas of operations, as well as the interior area (when the operations take place on the national territory), including the airspace above them and represents the area necessary for conducting, conducting or supporting military operations. [6]

The fundamental changes that have taken place in the continental and global geopolitical structure in recent years have meant new challenges and concerns for different European and Euro-Atlantic military states and alliances. The classic threats have been replaced, in large part, by new risks, conflicts that may affect regional and global security, but also individual states. [7]

The security environments in the theaters of operations in which the Romanian Armed Forces carry out missions are described by instability and by certain risks and threats.

The main risks and threats to the security of the space for the execution of missions by the military members in the theater of operations are the following:

• attacks with improvised explosive devices (FDI);

• intersection with motor vehicles (VBIED) and motor vehicles for suicide bombing (S-VBIED);

• attacks with light armament of infantry and artillery, on the military bases on which the Romanian military is located or on the columns of vehicles on the move;

• execution of ambushes;
• abduction of persons.

The necessary conditionsfor the preparation of the combat missions, as well as for the removal or reduction of the dangers existing in the theater of operations are based both on the more detailed knowledge of the land, the climate, the level of economic expansion, and the way of life, education and of work of the population of the respective state. Also, the areas with rough terrain, penetrated by crevices and deep ditches, present one of the dangers that the armed forces can face, ensuring advantageous conditions for approaching by surprise the insurgents. The weather, through unforeseen changes in temperature, has an adverse influence on personnel and technology and offers advantages to the enemy to attack the supply and connection areas of ISAF forces. [8]

In line with the risks and threats to the civilian population in Afghanistan, there are an annual number of injuries and deaths resulting from conflicts and attacks with FDI.

3. Conclusions

In conclusion, the organization, planning and carrying out of the multinational operations highlighted the fact that, the degree of violence is constantly changing, the conflicts with the opposing troops are usually carried out in unfriendly environments, the principles of armed struggle are used in accordance with the theater of operations, in whereas the modalities of combat, both at tactical and operational level vary constantly, with a very fast pace.

Regarding Afghanistan, the security environment in this state is characterized by instability, being exposed to the influence of political, institutional, cultural, religious, military and social conditions, which requires a high degree of involvement from ISAF forces, in - a moment of successive withdrawal of the own forces and of the renunciation of the local, regional and national authority, to the legally established authorities.

Afghanistan needs a security environment based on democratic principles and norms, but also on a rule of law capable of guaranteeing and respecting human rights and freedom.

Therefore, a comprehensive awareness of the current operational environment and its evolution in the future is essential. The success of the military operations carried out in the future operational environment requires a complete understanding of its present and, in particular, its probable characteristics. Early identification of trends regarding the factors that define the operational environment will help decision makers to better plan future military actions. The fact that the operational environment is the framework for the deployment of military action makes it a fundamental element to be taken into account in the operational planning process.

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CURRENT REFERENCES REGARDING ITALY'S MILITARY CAPABILITIES IN AN INTERNATIONAL CONTEXT

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Abstract: *This paper deals with aspects of Italy's military capabilities. In order to create a relevant context, the paper deals with elements of a geographical, historical and economic nature. Also, the organizations of which Italy is a member are presented. The history of Italy is significant from the perspective of the cultural and social development of the Mediterranean world. Italy is one of the states that have contributed to the formation of what is now called the European Union, the amounts that Italy contributes to the EU budget being directed to the financing of programs and projects in all EU countries. Italy is considered to be a medium power country that intends to increase its power and assume greater responsibilities in the geographical areas where it has immediate security interests.The last part of the paper presents aspects regarding Italy's military capabilities in terms of human resources, endowment and defense expenses.*

Keywords: **capabilities, capacity, infrastructure, human resources, endowment.**

Introduction

The “ Military capability” is a new concept used in Romanian military language, frequently being differently understood also because of the old terminology that it has been used by the term “ Military capacity”. Therefor there are essential difference between those two terms, the Military capacity is in general defined by the quantity of the forces, means and resources that the army is able to provide at a specified moment. The “Defense capacity of a country” consist in the totality of the forces, means and resources that can be provided to defense the country. The “Defense capability” of a country is the total ability and competence of making the defense of the country possible using the knowhow to prospect and execute combined with the providing of the means, methodology, expertise and procedures needed to apply a certain plan, an idea or a concept.

In conclusion, the Military capability can be defined as the ability to execute a course of an specified action to obtain a planned operational effect.

2. Current Aspects on Italy's Military Capabilities

The geographical position of the state and significant historical landmarks.

The Republic of Italy is a parliamentary republic located in the Southern Europe. It has an important history related to the cultural and social development of the Mediterranean world. Figure 1 shows the location of Italy on Earth and the countries with which it adjacent.

Figure no. 1: The geographical position of Italy[1]

After the Etruscan civilization, Magna Greece and Roman Imperium dominated this part of the world, it was followed by the Middle Ages, with the period of Communes and Regions, period dominated by the confrontation of the great empires on the Italian territory. Successive the period of Humanism and Renaissance have been influencing the creation of European spirituality.

Italy has become a state-nation in the year 1861, in the period when most of the Peninsula's states were united by the king Victor Emanuel the second, from Savoia dynasty. An important contribution to Italy's unification was made by count Camillo Benso di Cavour, the prime minister of the kingdom and the general Giuseppe Garibaldi.

Roma was another decade the capital of the Papal Estate, becoming a part of the Italian Kingdom at 20th September 1870, the date of the unification of Italy. Italy was participating along the Antanta at the First World War.

The fascist dictatorship of Benito Mussolini was established in 1922, conducted Italy into a disastrous alliance with Nazi Germany and Japan (the Berlin-Rome-Tokyo axe) and to the defeat of Italy in the Second World War. At 2 of June 1946 was established by referendum the abolition of the monarchy and the proclamation of the republic. At 1 of January 1948 was adopted the new Constitution of the republic. Italy is a NATO's and European Union's member, Shengen state and EUR zone.

Aspects regarding the belonging to regional or global organization

Italy, along the other states like Belgium, France Germany, Luxemburg and the Low Countries has established the European Coal and Steel Community and the European Economic Community, these states being united to prevent the wars that have been devastating the European territories and making an alliance to share the control of the natural resources needed during the wars(coal and steel). The scope of the union was that the countries implicated in commercials exchanges to become interdepended from the economical point of view, so the conflicts would be avoided. What has started as an pure economical union has been developed gradually to an organization that takes action to different domains of activity like climate

policies, environment, health and international relations, security, justice and migration. This change has been reflected in the exchanging, in 1993, of the name of European Economic Union to the European Union.

So, Italy is one of the estates that has been contributing to the established that is today the European Union, the amounts that Italy contributes with to the budget of UE are being distributed to the financing of the projects and programs to all the countries in the UE (construction of roads, subventions for research and environment protection**.**

Italy is one of the NATO's members, a political-military alliance established in 1949 by the Northern Atlantic treaty signed in Washington at 4th April of the same year.

The alliance is made by the independent states, interested in peace protection and the defense of their own independence by the politic solidarity and by having a defensing military force capable of discouraging and if it is necessary to respond to all the probable form of aggression against it or against one of the members.

Italy was one of the estates that was a part of NATO's creation along with Belgium, Canada, Denmark, France, Island, Luxemburg, Great Britain, Norway, Portugal, Holland and United States of America. NATO is involved in finding solutions to resolve peacefully the conflicts. In the situation when the diplomatic efforts fails, the Alliance has the military power to make interventions using the management of crises. The actions take places under the collective defend clauses of the NATO treaty - article 5 of the Washington treaty or under the mandate of United Nations, independent or in collaboration with other states and international organizations. So, NATO, alliance from which Italy is a part, represents an unique connection between Europe and North America, giving the states the possibility to consult themselves and cooperate in the defense and security domain and to realize together multinationals operations of crises management.

Italy is considered as a country with a medium power, that participates to the great security alliance of NATO and to the European process of integration. In the same time, Italy has the intention to increase the power and assume bigger responsibility in the geographical areas with security interests. The region that includes Mediterranean sea to the Persian Gulf, Eastern and Central Europe, Balkans and Turkey, Caspic Sea and Central Asia, is consider to be the center of the future European stability and of the interests of Italy.

Italians don't intent to take action by themselves in the regional confrontations, but as a member of the European Union, collaborating with the other states to resolve the problems and the differences that will challenge the political and economic stability of Europe.

In the present there is no direct fretting to the national security of Italy and at this moment this has an powerful geostrategic interest in reducing Russia in international community by making a more stronger bilateral partnership. Also, Italy is engaged in peace stability in Balkans to prevent a possible split. The Strategy of Italy in Persian Gulf sustains in constant surveillance of the Irak's programs, in maintaining the military Italian capacity in permanent state of preparing for a possible intervention. Italy has made a strategy of nominalization of the collaboration with the neighbors of Irak and Turkey. Italy considers the Middle East a zone full with danger and incertitude. Italy is an important economic and political partner to the United States. The neighborhood of Italy with the tension zones from Balkans, Eastern Mediterranean Sea and North Africa suggest the strategic signification of it. Foundation member of NATO, Italy has been collaborated with United States during the effort to promote the reconstruction, democracy and the stability of Irak, Afghanistan, Central and Eastern Europe, implementing the accord of Dayton in Bosnia and the success of peace process in Middle East.[2] Italy has played an important role in NATO's actions in Kosovo and in handling the refugees crises, in the efforts of making the economic and political stability in Albania. Italy has played a central role in developing the United Union, supporting the economic and political European integration and pleading for a more powerful European identity in security and defense in NATO.

General elements regarding military doctrine and strategy

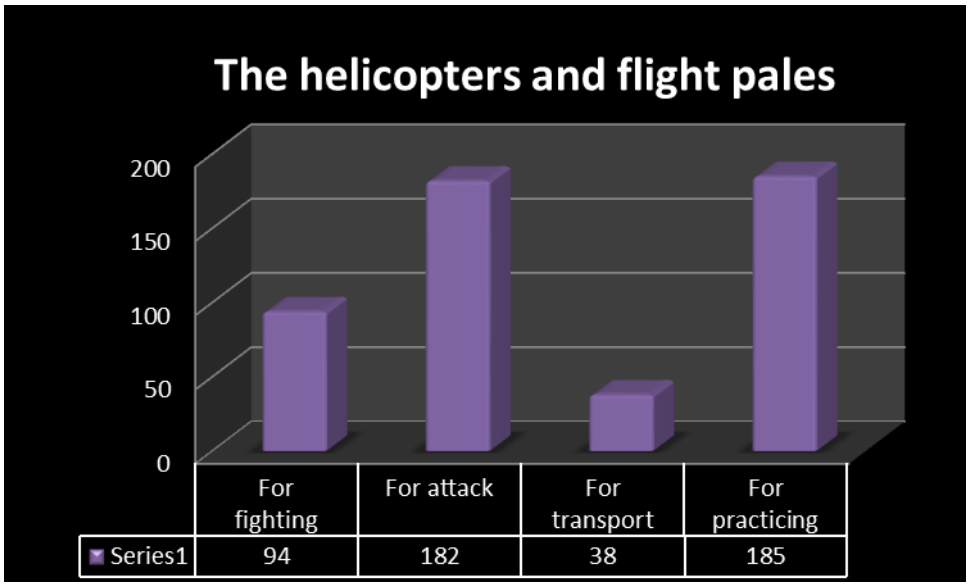
The Armed Forces of Italy (Forze armate Italiane) are formed by four categories: Esercito Italo (the Army), Military Navy (Marina), Italian Air Force, Gendarmerie (Carabinieri).

The Armed Forces of Italy are controlled by the Defense Ministry. The control of Carabinieri, a military security force has been transferred in March from the Intern Ministry to the Defense Ministry, although the Intern Ministry has the authority of this force in the matter of internal security. Four separated police forces report to the different ministry authorities or local authorities. In exceptional circumstances the Government can ask the army to offer security under the police form in sort of local zones, permitting to the Carabinieri anl Local Police to concentrate to sort of other attributions. For some years, the army supported Sicily in Naples's region, zones with a high degree of criminality rates. The army has left Naples at the end of the year 1997 and Sicily in 1998, but has been redistributed to some locations for a short period in 1999, when there were a lot of actions against the organized crime. In September 2000, the Government has sent to Napoli army forces of 500 policemen and Carabinieri, some of them wearing uniform dresses for fighting camouflaged in military style, to stop the criminal violence in the city. Amnesty International (AI) has reported a lot of depositions that sustains that the police has been using excessive force against some population, often against the gypsy population refugees and against the women, in the moment of arresting and initial detention.
Statistically Italy is characterized by the next values:

- Total population – 62.246.674 people;
- Number of men – 28.011.003 (45%);
- Number of people suitable to the army services: 22.688.913 (36.5%);
- Total of military persons: 357.000 (0.6%);
- Active military persons: 175.000 (0.3%);
- Personal of military in reserve: 182.000 (0.3%);

Italy has as a main plan the general updating of fight terrestrial and navy systems, but this has to ensure a greater durability and protection to the forces situated outside the borders. The Navy's strategists sustain that after the Cold War it is necessary that the state of Italy should concentrate over the navy protection in Mediterranean Sea.[3]Because the army forces in Italy are becoming old, it is necessary a major program of updating. This program should include the second easy conveyer, with amphibian capacity, two anti-war aerial frigate, a new generation of frigate with many applications, eight new coast ships and the updating of the helicopter fleet.

At the moment, the Flight Fleet has helicopters and fight pales in total of 831 flying machines:



(Table 1) [4]

The terrestrial forces has main fighting equipment, small tanks and destroyers (there is no difference between the ones tracked or without). The terrestrial army of Italy has armored fighting vehicles, also:

- Fighting tanks – 200;
- Armored fighting vehicles – 4000;
- Self-propelled artillery – 164;
- Tracking artillery – 90;
- Rackets projectors – 21;

Beside the flight and terrestrial forces, Italy has navy forces like traditional transporters, aircraft carriers on the sea. The Italian army has diesel-electrical submarines and nuclear submarines, also. So Italy has the next navy equipment[4]:

- Ships in total of – 143;
- Aircraft carriers – 5;
- Frigate – 12;
- Corvettes – 1;
- Submarines – 8;
- Mining ships – 10.

Military capabilities regarding human resources, endowment and defense expenses.

The expenses with human resources, expenses with the military equipment and the investments in infrastructure are the most important chapters included in a defense budget. The distribution of the amounts from the budget is very important. The expenses with human resources doesn't change from one year to another because there is a constant number of employees, and the quantification of salaries doesn't change too much , also. For these expenses, Italy has a defense budget of 29.200.000.000 USD.

Features of italy's military equipment

The F-35 Lightning II is a fight airplane with one passenger place and one engine, designed to be able to do many missions, with advanced sensors. F-35 B has USMC weapons: 2x air to air AIM-120C missiles; 2x GBD-32 guided bombs GBU-32 JDAM propulsion: F135-PW-600 speed: Mach 1.6 (1200 mph) Interval: 900nm. F-35B Lightning II has a ventilator for vertical propulsion and an engine nozzle swivel to offer a vertical landing and a short capacity of taking-

off to expeditioner air fields. F-35B can take-off and land on the conventional long air field tracks.

Figure no. 2: The F-35 Lightning II airplane [5]

In the air fights, airplanes from the 4th generation have a bigger section for radar, that means that can be easier seen by the enemy fighters. An airplane from the 5th generation has a transversal radar section inferior that permits to the pilot of F35 to see the enemy airplane and take action.

Eurofighter Typhoon is an airplane that has a multiple-role for hunting engine[6]. The airplane is designed and built by a group of three companies: Alenia Aeronautica, BAE Systems and EADS that works together through a company that sustains them Eurofighter GmbH, created in 1986.

Typhoon makes the light construction (82% = 70% components of carbon fiber + 12% components of reinforced glass). It has a great agility to both speeds and a relaxed design. The flight control is main realized by the unification of the wings flaps.

Figure no. 3: The Eurofighter Typhoon airplane [7]

The control surfaces in the airplane are moved and controlled by to hydraulic independent systems that are incorporated in the airplane. This also gives different elements like baldachin, brakes and carrier. The navigation is made by GPS and an inertial navigation system. Typhoon can utilize the System of Instrumentation for Landing (ILS) for debarking on the bed weather. The airplanes have a very sophisticated integrated Defensive Sub-system SIDA 9 DASS). The threatening of detection is shown by a Warner radar receiver (RWR), a missile approaching Warner (MAW) and a laser reception Warning (LWR) (just RAF). The protection is made by Chaff and Flares, electronic Counter measures (ECM), a tracked radar Decoy (TRD) (just RAF).

The main fight tank of the Italian terrestrial force is C1 Ariete, designed and created by a consortium made by the companies Iveco-Fiat and Oto Melara. The chassis and the engine are made by Iveco, the turret and the conducting system for the fire were developed by Oto Melara. The tank has the newest optic technologies and conducting the fire, being capable to drive in every kind of weather and fire during the driving.
The tank has the caliber of 1200 with the pipe made by Oto Melara. The pipe of the cannon is reinforced and steeled to have a longer period of exploitation.[8] The cannon has a thermic mansion with a gas ejector. The munition is utilized by the NATO standards and can be used to all the types of cannon's shot existing, including cumulative projectiles or drilling sub caliber, stabilized with small wings and detached sleeve. The secondary arms is a coaxial machinegun of 7.62 mm caliber and an anti-aircraft machine gun of 7.62 caliber used by the commander. The reinforcement of the tank C1 Ariete is made by steel. In the frontal part of the housing and in the frontal and side part of the turret is a composite reinforcement to increase the protection of the tank in the frontal side. The tank tracked are protected by exterior defense shields.. The tank has a protection system NBC, of warning in lightning laser cases and smoking grenades[9].
C1 Ariete has an engine with 25.8 liters Fiat-Iveco, turbo-diesel, with 12 cylinders, capable to generate 1250 horses power at 2300 rotations/minute. Maximum torque is of 4.615 Nm at 1600 rotations/minute The transmission is fabricated in Germany, ZF LSG3000, automatic with four gears ahead and two in reverse. The maximum speed on the road is 65 km/h.

Conclusion

According to the present paper, it has been shown according to studies that Italy is a country with a medium power but with impressive military capabilities and a large number of soldiers in the military system. The country emphasizes on the military side, and the GDP allocated to the Italy army. These military capabilities include military resources, the diversity of weapons systems, military fighting and defense techniques, natural and energy resources, geographical features, financial resources and the available labor force.

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ROLE OF HUMINT IN MILITARY OPERATIONS

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Abstract: *In a general sense, human intelligence uses intelligence value information generated by a human source for use in the analysis of an intelligence issue or as support for an operational activity.Human intelligence, also known as HUMINT in intelligence jargon, is not only the intelligence extracted from human sources but also represents a particular type of collection operation by which information is transmitted either directly or indirectly from one person to another.Human resources also provide situational intelligence to support ongoing business efforts such as identifying and evaluating the new targets for recruitment. Interrogations are used to addressing tactical and strategic military requirements as civil intelligence requirements such as terrorist organization information.*

Keywords: Intelligence, military, HUMINT, collection, process.

Introduction

In a general sense, human intelligence refers to the value of intelligence provided by a human source to support an operational activity or to be used in an intelligence analysis. Human intelligence, is well known as HUMINT in intelligence specific language, isn't an intelligence collected from human sources, it also reflects a different type of collection activity where information is transmitted from one individual to another even if it's directly or indirectly. The different forms of this process reach is being produced by the human source, who is collecting the intelligence, in which circumstances and for what will be used.

Human sources also provide operational intelligence which helps operational activities, as identifying and assessing new targets to recruit as sources. HUMINT also serves as an important element in counterintelligence programs within which an illicit human source, called a penetration, installed inside a hostile administrative unit provides a gentle stream of intelligence about the organization, activities, intelligence practices and personnel.

Military operations

The operational environment is a set of factors, circumstances and pressures which that affect the use of their own forces and that require decisions of the commanders. The contemporary operational environmentapplies to air, ground, sea and space and involvesstructures from hostile, friendly or neutral positions associated with them (political,

military, economic, social, information, infrastructure, legal nature, etc.), which are important for unique multinational joint operations.[1]

Contemporary operating environment is characterized by a combination of circumstances, environments and influences affecting the structure, capabilities, dislocation, fighting systemand mode of force action, which has a decisive effect on the decision-making process. The operating climate can be described as "permissive, vulnerable or aggressive" from the point of view of territorial and administrative power, the military capabilities employed.

The military forces are facing a dynamic, multidimensional and increasingly interconnected global operational environment. The situation in the world is complicated and divided into numerous factions, with several potential conflicts. Additionally, as the essence of conflict changes, the features of war tend to change.

Specific risks need intelligence to respond to a constantly evolving operating environment. This ensures that all military intelligence personnel very quickly retain or develop a cultural understanding (at a high level of detail) that is unique to the national and local operating climate.[2]

These criteria have a significant effect on the MI as they increase the degree of difficulty and complexity in deciding not only the opponent's identity but also the enemy's various action possibilities that he can execute.When military forces can overpower an adversary by their technical, operational, and strategic aspects or capacities, the adversary must turn to unorthodox and adaptable means and means to achieve his objectives, which may often change.

Role of HUMINT

For military operations today, the commander constantly wants intelligence about the enemy and the battlefield before leading missions and fighting the enemy. Intelligence lets the commander envision the combat area, coordinate his own troops, and monitor the operations conducted by them to accomplish or get them to the final state of their desired tactical objectives.

With the intelligence received, it helps force defense, advises the commander of emerging threats and assists in security operations.

It is likely that he will need to face more challenges from his own forces. The commander must consider how its forces are organized, trained, engaged and managed by current and potential enemies. The knowledge provides the enemy's understanding which helps in planning, preparing and carrying out military operations.

Also, one of the most valuable achievements that could be made by HUMINT personnel is that they can anticipate the enemy's potential actions with precision. Although it's an incredibly difficult challenge, predictive intelligence helps the commander and his staff foresee important potential acts or reactions and manipulate them to build a strategy that could combat hostile intent.

The Intelligence main objective is to help the commanders make the right decisions. Commanders need to appreciate the information they are getting as it's tailored to their needs, trusting it and behaving. Intelligence guides the military operations from the doctrinal framework.

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[1]Neag Mihai-Marcel, Udeanu Gheorghe, *Elemente de artă militară,* Sibiu, Editura Academiei Forțelor Terestre „Nicolae Bălcescu", 2013, p. 8.

[2]John Keegan,*Intelligence in War*, New York, Knopf, 2003, p. 44.

HUMINT operational cycle

Intelligence operations typically involve the five roles that comprise the process of gathering information: planning, scheduling, storing, processing, and generating.

In addition, there are three specific tasks that occur in the information gathering process five functions: analysis, distribution, and evaluation. After the last feature, output, the three common tasks are debated.The intelligence process functions are not inherently sequential; thus, the distinction is made between the intelligence process in the army and the normal knowledge cycle.

The intelligence cycle offers a standard model for a military to change the way they think, prepare and analyze environmental risks in the area of interest. The intelligence cycle produces information about the threat, the area of interest and the situation that helps the commander and staff to formulate a strategy, take advantage and sustain the initiative, create, keep pace and maximize progress.

Processing requires translating the data and information obtained into a form appropriate for the analysis and knowledge development. Processing examples include creating a video, enhancing photographs, translating a document from a foreign language, transforming electronic data into a structured report that can be interpreted by a device operator, and correlating information, respectively.The processed data and knowledge are realized independently and cooperatively by both people and by automated systems.[3]

The processing stage includes evaluating, analyzing, interpreting, synthesizing and integrating information from single or multiple sources into information products or intelligence to meet known or anticipated requirements.[4]

The General Staff analyzes details about the enemy's strengths and weaknesses, the tactical climate and the problems that occur in the knowledge process itself to determine their existence, origin and interdependence.This review enables commanders, personnel and leaders to decide what action or reaction is necessary and to concentrate or redirect assets and resources to fill knowledge gaps or mitigate traps.[5]

Dissemination communicates relevant knowledge of some kind, from one person or location to another, in a manner that can be used to enhance the comprehension, execution or conduct of the action by any means necessary. Dissemination of information requires using information processing methods and procedures to provide timely, appropriate, correct and accessible information to the Commander.

Determining the product type and selecting the distribution methods are essential aspects of the dissemination. Information can be displayed in verbal, written, interactive, or graphical format. However, the quality of information, the amount of time available and the commander's individual choice affect the information format.

HUMINT planning and management

HUMINT preparation determines the goals of the project, when they are collected and what resources they will obtain. Commanders with HUMINT collection assets receive collection tasks from their units based on the criteria that were established during ISR planning.The commander and staff determine the requirements and responsibilities of the

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[3]Randolph H. Pherson, Richards J. Heuer Jr., *Structured Analytic Techniques For Intelligence Analysis*, CQ Press, 2010, p. 78.

[4]*Ibidem*, pp. 78-79.

[5]Alfred Rolington, *Strategic Intelligence*, Oxford University Press, 2013, p. 45.

team or teams best prepared to fulfill the needs based on the placement interaction and access to it, in coordination with the management committee for support operations.[6]

Another problem that needs to be addressed attentively in the process of the operating cycle plan is technical control. Technical control is to ensure adherence to established policies and regulations, provide technical information and instructions and detailed supervision of the specialist military occupation needed to conduct the collection missions.

Planning must take into account the fact that a technical control does not interfere with or substitute the command and control a commander has over a unit, nor does it interfere with the commander's set of requirements.

Technical control includes the management of sources and other sensitive data and databases, intelligence emergency management and information assessment, relation with other HUMINT sub-units and operational risk mitigation. He also provides HUMINT collection teams with the requests and data they need to carry out operations and clear guidance on how to carry out missions in some circumstances.[7]

The planning, management and execution of these operations are essential tasks for collecting information and generating definitive intelligence.

Mission planning

Planning is continuing to include the framework of the Project.

When a unit receives a assignment, training begins. It also overlaps with training, and continues for certain subordinate units into execution. Implementation brings a strategy into action.The evaluation is continuous and influences the other three activities.

Units of the same order can be subordinate at various stages of the operating cycle.

Commanders may substitute their decisions at any point during the operational phase, based on another vision or major changes in the operating environment. It can lead to a different outlook on problem solving and to a completely new approach. Though simple in principle (planning, preparation, execution, and evaluation), the operating process is complex in execution. The commanders and staff use the operations process to incorporate several processes and activities within headquarters and subordinate units that consist of hundreds of tasks performed.[8]

The commanders must simultaneously coordinate and train their staff for the planning, training and execution of the operations, while continuously reviewing them. Commanders are responsible for preparing their personnel to do so as integrated teams.[9]

The fighting command-the art and science of knowing, visualizing, defining, controlling, guiding and assessing forces for mission accomplishment is at the heart of the operations phase.Commanders are the most important actors in the chain of operations. At all activities of this phase the subordinate staff and commanders support the commanders in the exercise of the battle order.[10]

Conclusion

HUMINT plays a key role in contributing to a wide variety of intelligence assessments that military decision-makers use to direct the decision-making process. It is also the only source of intelligence on matters where it is not possible to collect information through other

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[6]V. G. Băleanu, *The Enemy Within: The Romanian Intelligence Service in Transition*, Royal Military College Sandhurst, 1995, p. 65.

[7]*Ibidem*, pp. 68-69.

[8]*Ibidem*, p.261.

[9]*Ibidem*, p.261.

[10]*Ibidem*, p.263.

means.To retain this crucial collection capability, HUMINT teams require highly skilled information officers to hire and manage the human resources they work with in a secure and productive manner, often at personal risk to themselves and their families.

HUMINT will continue to play an invaluable role in this effort, offering unparalleled access to knowledge that gives analysts the ground-reality to generate reliable and timely critical intelligence assessments to make a coherent commanders decision.

In addition, HUMINT must aim to respond to the demands of civilian populations, primarily because the results of their operations are focused on civilian contributions, and so reduce the need for military action and mobilization.

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DEVELOPING THE CAPABILITIES OF ENGINEERING FORCES FOR CREATIVE ENGAGEMENT IN MILITARY OPERATIONS AND PERFORMANCE INCREASE IN SPECIFIC MISSIONS

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Abstract: *In the pages which will follow i will be presenting in the beginning, few information about the place, the lead role and main specific misions of engineering forces in the context of the current operational environment. Going further, there will be presented few military technologies that engineering forces of NATO are using nowadays in the operational theatre. Basicaly, by that i will try to show and prove you that engineering forces have become a basic pylon of NATO military structures across the entire range of actual military operations. Concluding, we should ask ourselves if developing the capabilities of engineering forces is trully neccessary considering the fact that without them support, mostly, we are not able to win.*
Keywords: engineers, capability,developing, creativity, performance, NATO.

1. General aspects regarding the place, role and specific missions of the engineering forces in the context of the current operational environment

We live in a dynamic society, which is in a continuous transformation, adaptation and movement. At present, the era of information civilization is dominant and has decisive influences on the preparation and conduct of military actions. The new revolution in the military field that is taking place within the NATO member states, represented by modern means of combat with hitting accuracy and great destruction power, by efficient and reliable information systems, by means of pilotless combat and robots and last but not the least by intelligent armament and ammunition, will radically change the character of the future war, by emphasizing psychological and media-like behaviors.

Under these conditions, the role of military engineering structures has increased substantially in terms of direct support missions and protection of the fighting forces. Therefore, the capabilities of the military engineering structures will need to know how to develop effectively, so that they can respond efficiently to all the challenges and threats of the modern battlefield.

Capability represents the ability to carry out actions in order to achieve some objectives and includes a complex system of measures and procedures with elements of doctrine, organization, preparation, equipment, control, infrastructure, personnel and interoperability.

From the perspective of the Allied Command for Transformation, a capability has four main components: processes (policies, strategies, doctrines), organizational forms (organizational structures and schemes), people (personnel, leadership, education, training) and technology (weapons and materials).

The restructuring and development of the capabilities of the engineering forces has represented and continues to represent a complex process for designing and constructing modern, viable and dynamic structures, with a high capacity for carrying out specific missions, capable of participating in complex operations, carried out under any environment and space conditions.

The place and role of the military engineering structures depend on the group of forces to which they belong or to which are subordinated and the missions received. We find their place in the composition of combat support structures of the Land Forces, Air Forces and Naval Forces. The role of engineering forces is exercised in the field of engineering support, integrating the interarms character of military actions.

Engineering support represent all the missions carried out by the military engineering structures, in support of the combat forces actions, of their planning, organizing and conducting activities, of operations specific to the armed struggle, of operations of stability and support, as well as in intermediate operations. Essentially the engineering support have four specific areas: mobility, countermobility, maintaining the operational capacity, general engineering support.[1]

Mobility refers to the set of actions and measures of ground exploitation in order to ensure the freedom of maneuver and the possibilities of movement in the space of battle for own forces, without producing delays due to the obstacles in the field.

The countermobility refers to the set of actions and measures of ground exploitation that slow down the maneuver or displacements of the enemy and which prevents to use the land advantages by him.

Maintaining operational capacity is the set of specific ground exploitation measures that ensure the protection of own forces in the battlefield, including all aspects of personnel, weaponry and reserves protection, as well as actions to mislead the enemy.

The general engineering support includes all the measures and actions that ensure and provide resources and specialized workforce for their own forces or for the population in the operations area, mainly manifesting in the pre-conflict and post-conflict periods, as well as during operations, in particular peace support operations, or humanitarian operations.

It is no longer a novelty that the military technology revolutions and the informational aspects of the military actions have altered both the combat space and the requirements of the current operational environment. Consequently, this change gives the commanders of the engineering forces a more coherent and broader view on the multidimensional and fully integrated battlefield, allowing for the simultaneous use of the forces and the means to carry out the missions of the engineering support throughout the depth of the operation or fight, with understanding of the laws and principles of armed struggle.

2. Organizational forms and technologies - important components of force capabilities. The main capabilities of NATO military engineering structures

In contemporaneity, engineering forces have long ceased to be an insurance weapon. In the modern armies the place and role of military engineering structures not only remained, but increased considerably, becoming fighting forces in the German, French, English, Austrian, Swedish armies and insurance and support forces in the Italian and Finnish armies. The new valences that are given to the engineering weapon, fully justified, are also those of combat and combative weapon, not only indispensable, but also very important in the successful conduct of military actions.

To cope with a wide range of indefinite risks and threats, and increasingly effective and devastating weapons throughout the depths of the battlefield, engineering forces will need substantial development of capabilities to enable them to obtain performance in meeting the objectives of the current operational environment.

The miltitary engineering structures within the Land Forces are able to provide support in the full range of military operations. Thus, they can fulfill specific missions such as: engineering research of the enemy, mining verification, land and objectives clearance, execution of explosive and non-explosive dams, accomplishing corridors through them, campaign fortifications, masking works, as well as the planning and maintenance of roads and access routes.

In the current context of the requirements of the operational environment and of the emerging technologies developments, the central objective of the engineering forces, as well as the other structures of the land, air and naval forces, is to capitalize on the capabilities for their development and modernization, so that they be able to respond promptly to the complexity and diversity of the modern battlefield and to achieve a high performance in carrying out specific missions.

In this context, in the theaters of operations, the main categories of technique, means and materials used by the engineering forces in the armies of the NATO member states, in order to fulfill the tasks and missions specific to each component of the engineering support, are [2]:

- technique, means and materials intended for engineering research of the enemy and the terrain;
- technique, means and materials for mining verification;
- technique, means and materials for land and objectives clearance;
- technique, means and materials for executing explosive dams;
- technique, means and materials for performing the destruction works;
- technique, means and materials for the execution of the corridors through the dams;
- technique, means and materials to ensure crossings over water courses and other obstacles;
- technique, means and materials for road layout and maintenance;
- technique, means and materials for mechanized execution of campaign fortifications;
- technique, means and materials for performing masking works;
- technique, means and materials for the engineering arrangement of command points;
- technique, means and materials for the exploitation and processing of wood material;
- technique, means and materials for arranging and servicing water supply points.

For the engineering research of the land and the enemy, were created automatic armored, self-propelled, equipped with video cameras, which offers protection to their own forces, having the ability to mine the land. Some examples of such powerful means of equipping the structures of NATO armies, used in the theaters of operations are: SALADIN - armored means of engineering research of the terrain and the enemy; SCORPIONUL or FV101 - represents the improved version of the SALADIN armored vehicle; FERRET - armored vehicle used by engineering structures for research missions.[3]

In the missions of mining verification, land and objectives clearance, specific technologies are used largely by remote control or robotically. The most recent technical means used in the missions in the theaters of operations are: the robotic engineering tank (Robot created by specialists from the American army); self-propelled remote control robot and equipped with video cameras and defense devices (Hunter); portable mine detector with high sensitivity in metal detection, based on electromagnetic pulse technology (MD-8); the Dragon Runner 20 (DR-20) robot used especially for bomb neutralization, being able to detect a wide variety of explosive devices.[4]

Figure 1: Unmanned Ground Vehicles / Dragon Runner 20 (DR-20) [5]

Within the actions of execution of the dams, the military engineering structures within the Alliance, use for the successful execution of the missions, preforming technical systems such as: the portable demining system capable of demining a corridor with a length of about 55 meters (the TAMGEC system) and the system mine that uses explosive cargo and is capable to make a corridor with a length of 100 yards for tanks, vehicles and personnel (MICLIC system).[6]

In order to accomplish the missions of executing explosive dams, NATO's engineering forces use powerful means such as: mine planter (F2); mines in remote mining systems (MI AC DISP F1 mine, AT II mine, SATM mine, HB 876 mine, type 111 and 121 anti-shield mine, L10A1 anti-personnel mine); antipersonnel and anti-shield mines dispersed with remote mining systems; directed action mining systems (horizontal action mines with projectile propulsion and horizontal action mining systems, placed on anti-shield rocket launchers).[7]

In the missions of executing the destruction works, the military engineering structures of the NATO's member armies, use explosives with great destructive power, to make explosive charges of different shapes and sizes. The most used explosive load in theaters of operations is DM 12 or DM 12 B1 because it has the advantage of being easily cut and molded, even at very low temperatures of -40 degrees Celsius.[8]

The mission of the engineering support to which the engineering forces of the modern NATO armies pay special attention, is the passage of the forces over the water courses and other natural or artificial obstacles. For the accomplishment of this mission, the military engineering structures use high-performance technical means, made by military specialists, such as: the auto-amphibious floating bridge (M3), which is the most modern, efficient and fast equipment used, with a carrying capacity of 70-100 tons force; floating bridge (P.F.M., FFB 2000 made by MAN company); the bridgehead (F.S.B.); the accompanying mobile bridge (PAR-70); LEGUAN mobile assault bridge.[9]

Figure 2: The auto-amphibious floating bridge (M3) [10]

For the arrangement and maintenance of road viability and for the mechanized execution of the campaign fortifications, the Alliance's engineering structures use modern techniques such as: the engineering tank (Alacran CZ-10 / 30E; French EBC); armored amphibious bulldozer (M9 ACE); universal vehicle (Grizzly); hydraulic excavator (LIEBHERR 914 Litronic, LIEBHERR 904 Litronic).[11]

As far as the masking works are concerned, the engineering forces in the NATO member armies use: the products of Mandra company that specialized in masking coatings for individual firing places, individual weapon and small technique; the products of the Hunter company that specialized in the manufacture of masking suits for armored vehicles, as well as for small boats.[12]

The military engineering structures of the modern armies of the Alliance, use for the accomplishment of the missions of exploitation and processing of the wood material, the complete of electrical tools for the fighting forces in the endowment of the engineering forces of the army of the United Kingdom.

Last but not least, the most commonly used technical means by the engineering forces of the NATO member states to carry out the missions of arranging and servicing the water supply points, are: the reverse osmosis water purification station (ROWPU); the GLOBAL WATER'S LS3 WATER PURIFICATION SYSTEM and water drilling rigs (600-Foot WDS and CF-15-S).[13]

The forms of organization and the advanced technology offer to military engineering structures of the armies of the states of the world, the possibility of carrying out any military operation that comes to them, thus managing to obtain, through the creative engagement of the forces and by the clever use of the laws and principles of the armed struggle, a high performance.

3. Conclusions

In contemporaneity, the battle space has changed considerably compared to the one from the previous era. The new technological conquests and operational concepts make the military actions have, today, but probably also in the future, a great breadth in: time and space, specialized forces and means, a combined character, increased intensity and complexity, as well as sudden changes in the situations of all levels.

Advanced, high-performance, state-of-the-art technology offers to all categories of forces the opportunity to successfully complete specific missions. In this context, the engineering forces also have a modern technique that allows them to obtain the performance in carrying out their tasks and missions.

In the current operational environment, the genius structures have gained a great importance in the theaters of operations, both by carrying out the specific missions of stability and support, as well as the tasks assigned to them within the other structures of forces. Therefore, as their level of responsibility increases, the role of creativity in the performance of the characteristic missions becomes exponential, as a creative mind will always be able to produce new ideas and make the best decisions under any conditions, anywhere with areduced cost of resources.

Also, the increase of creativity correlated with the continuous social and technological development, leading to a high degree of performance. This has a special role in the training of engineering forces, as it makes it possible to acquire competences, skills and abilities both in operating with the new technique and acting wisely in the specific missions.

The performance involves well-trained military personnel and state-of-the-art technique. In this context, the performance forces the military engineering structures, to go through a process of endowment with modern technique, that will be able to carry out the mission

successfully until the end and to offer protection to the force in the current and future conditions of the operational environment.

In conclusion, with the increase of the role and place of the engineering forces in the other structures of forces, but also of their responsibilities for carrying out the missions, the need for capacity development increases.

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THE ROLE OF MILITARY INTELLIGENCE IN THEATER OF OPERATIONS

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Abstract: *In this paper I will explain and analyze the role of intelligence military in the fight against terrorism in theaters of operations. I will make a brief presentation of the generaly military intelligence activity and the role, place and missions carried out in support of combat activities in the theaters of operations, in particular. I will continue to point out a series of data on the sources of interest for military intelligence services, in the theaters of operations, and I will detail aspects regarding the obtaining of information through HUMINT means in the theaters of operations. From a military point of view, it becomes obvious that modern armies face serious limitations when it comes to an asymmetrical war. Such a war is an informational war, in which armed attacks are useless in the absence of intelligence. The military intelligence activity plays a fundamental role in ensuring the security of a state, contributing to reducing international risks to the country by participating in the effort to achieve information superiority in certain areas of interes. So, the military intelligence activity is necessary, both in detecting and defining the aggressive intentions of an adversary, as well as in preventing the asymmetrical threats directed against the state and its armed forces.*

Keywords: military intelligence, role, terrorism, theater of operations, information.

Chapter 1: Military intelligence activity. Role and missions in support of combat actions (activity in theaters of operations)

Motto: "It is necessary to defend ourselves against the unknown, the uncertainties, the unseen and the unexpected. To accomplish this we must get rid of the conventional way of thinking and find new ways of approaching the defense. "

The military intelligence activity plays a fundamental role in ensuring the security of a state, contributing to reducing international risks and threats to the country by participating in the effort to achieve information superiority in certain areas of interest.

Thus, the military intelligence activity is necessary, both in detecting and defining the aggressive intentions of an adversary, as well as in preventing the asymmetrical threats directed against the state and its armed forces. At the same time, the monitoring of crisis areas is another basic objective of the military intelligence activity. [1]

It is appreciated that military intelligence is needed to prevent threats before they escalate. It is necessary for decision makers to assess risks, potential risks and threats, to decide and to make decisions to counteract their influence.

The decision makers must judge the level of risk and decide the moment of action, taking into account all the costs and consequences.

The military information structures must carry out a continuous activity of collecting information and informing the beneficiaries about the evolution of the international military and military-political phenomenon that could affect the external interests, the sovereignty and the integrity of the state. [2]

At the same time, it is necessary to provide a lot of information that will allow the prevention of the surprise in case of an armed aggression or external terrorists.

Terrorism is a complex phenomenon, and one of the main components of the fight against it and its elimination is represented by an efficient information activity directed at the terrorist organizations and their leaders, the states that support, tolerate or cannot control the phenomenon or over any entity / means of financing terrorism.

The intelligence component of the fight against international terrorism is delimited on several levels: that of the activities of prevention of terrorist actions carried out on the national territory and the one of obtaining information from outside the country, from the theaters of operations. On this level, the role of military intelligence services is very important.

In combat missions outside the national territory, the military intelligence services have the task of identifying, in a timely manner, those threats, real or possible, which could change the nature of the operations.

Consequently, the main missions of the military intelligence services in support of the operations carried out are the following: issuing the warning, informing the battlefield, estimating the enemy's fighting capacity, identifying the main targets to be destroyed, protecting their own forces and assessing the damage caused to the enemy.

Military intelligence services must provide data and information on the possibility of the use of weapons of mass destruction by the enemy, violation of international treaties and agreements, unexpected deployment of forces in the probable area of combat actions, unexpected change in the intentions of the adversary or degree of support granted. population in relation to certain operations.

Military intelligence services also provide commanders, both strategically and operationally, with all the information needed to understand the battlefield and the options they offer to their own, allied and opposing forces.

So, there is a process of analyzing the threats and the environment in the respective geographical area, carried out continuously and systematically by defining the environment of the combat space, describing the effects of the combat space, assessing the threat and determining the probable ways of materializing the threat. [3]

The identification of the main targets to be destroyed provides the information necessary for the combat units to engage and destroy the strategic objectives of the enemy. Generally, this activity is carried out on the basis of information held since time of peace.

Forces protection consists in identifying, locating and tracking the enemy's capabilities to strike and affect their own or allied forces, facilities and operations, for which the following missions are carried out:

- identifying and counteracting the opponent's intelligence gathering capabilities;
- assessing one's own and allied vulnerabilities and the adversary's ability to know and exploit them
- dentifying the enemy's perceptions of the main allied capabilities and the way he will attack them or influencing and identifying the essential countermeasures that would prevent the enemy's access to the critical resources of their own and allied forces.

In this way, at the operational and strategic level, the military intelligence structures contribute to supporting and carrying out combat actions. In the case of our country, these

activities are undertaken permanently and continuously in the theaters of operations where Romania contributes with force.

Chapter 2: Sources and means of collecting information of military interest in theaters of operations

Gathering information in the military is a very complex process, which is almost always done in order to assess the risks, threats and possible dangers.

The military information must compete, both in the preparation of the battlefield and in explaining what happens, why it happens, which are the strategic, operational and tactical implications of the actions carried out by the adversary and which are the best courses of action. to be adopted.

The informational component in the theaters of operations is made up of information cells comprising elements of intelligence and counterintelligence that aim to provide information that responds to the information requirements specific to each phase of the operation. [4]

For this, the personnel participating in the informative activity in the theaters of operations will obtain information from the military, political, social, cultural and economic field.

The means of collecting information are determined by the predominant characteristic of the sources used for obtaining data and information. In the specialized literature, these environments are assimilated with main types or categories of intelligence.

In theaters of operations, the collection is performed differently, and the media and sources of information are used in parameters other than the usual ones. Thus, I will continue to list the means of collecting military interest in the theaters of operations and will present, in turn, the particularities of each. [5]

The means of collecting information of military interest in the theaters of operations are the following:

- Human Intelligence (HUMINT);
- Signal Intelligence (SIGINT);
- Open Source Intelligence (OSINT);
- Measurement and Signatures Intelligence (MASINT);
- Geospatial Intelligence (GEOINT) şi Imaginary Intelligence (IMINT). 6]

HUMINT are those types of information obtained by specially trained and trained personnel by exploiting human sources, officially, semi-officially or unofficially (clandestine), through informants, collaborators or agents (spies) . [7]

HUMINT activity is a complex process, planned and conducted, with the potential to contribute to the entire range of information requirements, within the information collection plan.

In the theaters of operations, HUMINT provides the necessary information at the tactical and operational level, the collection of information being oriented on the priority and permanent need of information of the leader or the commander, as well as on activities of collecting information of counter-informative type.

HUMINT is an information activity that is focused on penetrating the enemy decision-making architecture to obtain information regarding the adversary's capabilities, vulnerabilities, disposition, plans and intentions.

It also implies the activity within a complex system of personnel, specific structures and equipment which, when properly coordinated and synchronized, can provide a clear picture of the adversary and his intentions, as well as of the area of operations. [8]

In order to support the activities carried out by its own forces in the theaters of operations, a very important role is played by the manipulation of human sources at the tactical level (TAC HUMINT).

The term HUMINT TAC refers to those operations planned and executed by the military intelligence formations at the tactical level, in order to satisfy the information needs of the commanders of the maneuver units.

Within the missions carried out so far by the information structures in the theaters of operations, the SIGINT components have made an important contribution, both directly, by continuously providing useful data and information, and by confirming, on request, the data obtained. from other sources (especially HUMINT).

SIGINT is a basic component of the information structures in a theater of operations, proven in the asymmetric conflicts in Afghanistan and Iraq, when all command and control operations were fundamentally influenced by intercepting and analyzing a considerable flow of information carried on all communication channels (military and non-military, but also through the media, Internet, etc.). [9]

SIGINT provides valuable information on identifying risk factors and military and nonmilitary threats, military, political and economic knowledge of the theater theater area, assessing the evolution of the conflict, making available to commanders information on terrorist groups and their activity in the theater of operations, their intentions, the possibility of terrorist attacks within the theater or in any other state, the activity of insurgent groups and their intentions. [10]

OSINT represents the finite information products of information that can be obtained by legal methods (not covered) from open sources (public documents, media, books and magazines, "gray" literature and the Internet), and are freely available, but not free of charge, to anyone who wants to access them. The information obtained from open sources implies, in addition to print media, audio-video and Internet, a wide range of accessible and unsecured knowledge from private sources. [11]

In the theaters of operations, the monitoring of open sources specific to the electromagnetic environment is an important source of information, used mainly as a support element for the information gathered from the communications and HUMINT, to supplement and confirm them.

The complementarity of the two elements COMINT-OSINT is fully justified in operations such as those in Iraq or Afghanistan, because the lack of a category of communications (radio or radio relay) or their poor development is supplemented by the media through which they transmit valuable information regarding the attitude of the population towards the stabilization forces.

At the same time, the threats of terrorist groups are known to be promoted mainly through the media (websites, letters and audio-video recordings of terrorist organizations). [12]

MASINT represents the information based on a qualitative and quantitative analysis of the data obtained with the help of specific sensors.

This category refers to acoustic information, radar information, nuclear radiation detection, infrared information, electro-optical information, radio frequency, random radiation, sampling of various materials, wastewater and spectral-radiometric and electro-optical. The information obtained through the MASINT techniques complement the information field of the battlefield, continuing the actions of the other forms of Intelligence, in a territory not covered by them. [13]

MASINT offers commanders the opportunity to have a complex picture of the battlefield and the entire theater of operations. MASINT systems offer the possibility to obtain information about the dangerous areas in which the human factor cannot penetrate, at

the same time realizing an early warning of the commanders regarding the activities of the enemy.

The GEOINT concept represents the exploitation and analysis of geospatial images and information for the description, evaluation and visualization of physical details and activities on the geographical surface. GEOINT achieves a natural convergence between IMINT (Image Intelligence) and geospatial analysis technologies. [14]

GEOINT is a valuable source of information because it provides information by directly detecting the spatial properties of objects and surfaces, being able to visualize facilities and equipment. Spatial analysis techniques allow the identification of patterns in the activities of the enemies.

It is possible to determine precise geographical coordinates, various measurements/ dimensions and other characteristics of the objectives in inaccessible areas, more precisely, faster and more efficiently than any other military instrument.

CONCLUSIONS

The activity of combating terrorism in the theaters of operations can be carried out under successful conditions only if the due importance is given to the information structures and the activity they carry out.

The information activity in the theaters of operations is conditioned by several factors, and the efficiency of the information work depends on the way these factors are handled.

It is very important for the information structures to know the history of the country, to understand the culture and customs of its population, to integrate into the local environment and to try to change the attitude of the civilian population not actually involved in conflict with their own forces and to try to obtain its support.

One fact is true: societies practicing a fundamentalist Islam religion are very difficult to penetrate by any foreign entity. That is why the war in Afghanistan has been a challenge for both military and civilian intelligence structures. This conflict has led intelligence services to seek and find new and diverse ways of obtaining and collecting information, which has led to an advance of intelligence on all levels of action.

The fight against international terrorism held in Afghanistan's theater of operations has involved an impressive number of individuals in the intelligence services, as well as a large amount of technical and material resources. What was very clear, however, during this confrontation, was the need to obtain more information from HUMINT sources to duplicate and verify the information obtained through sources of another nature.

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CURRENT ISSUES REGARDING VIETNAM'S MILITARY CAPABILITIES

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Abstracts: *This paper deals with aspects of Vietnam's military capabilities. In order to create a relevant context, the paper deals with elements of a geographical, historical and economic nature. Also, the organizations of which Vietnam is a member of different partnerships are presented. The history of Vietnam is significant from the perspective of the cultural and social development. Vietnam's foreign policy is aimed at developing good relations with a diversified mix of nations, after it established or reestablished diplomatic and economic relations with most of Western Europe, China, and other East Asian countries by joining the Association of Southeast Asian Nations (ASEAN) and the Asia-Pacific Economic Cooperation forum (APEC). Vietnam is considered to be a medium power country that intends to increase its power and assume greater responsibilities in the geographical areas where it has immediate security interests. The last part of the paper presents aspects regarding Vietnam's military capabilities in terms of human resources, endowment and defense expenses.*

Keywords: capabilities, services, doctrine and military strategy, budget.

Introduction

Vietnam is the fifteenth most populous country in the world, being ruled by a communist regime with only one political party. Following the disintegration of the Soviet Union in 1991, on the world map remained five socialist states, including Vietnam. It still remains a country controlled by a communist regime, which is trying to become an industrial and economically powerful country. Because of the collapse of the Soviet Union (Russia being a strong and important ally), it's investments in Vietnam were reduced, which let to Vietnam's trade suffer and creating of debts of about 15%, the payments being extended over a period of 2 decades, a part of the value being refundable through rice and coffee goods.

Vietnam is considered the second largest military power in Southeast Asia, after Indonesia, due to the military capabilities of this country. These military capabilities include military resources, the diversity of weapon systems, military fighting strength, natural and energy resources, geographical characteristics, financial resources and available labor force.

According to Global Firepower estimates, Vietnam has 318 aircraft and 140 helicopters, 2575 tanks, 65 ships and 5.4 military personnel. Vietnam is remarked for its land, naval and air forces along with the coastguard.

Vietnam's annual budget is 3.3 billion $, with the highest defense spending in the world being made by the US and Saudi Arabia, with a budget of 716 billion $ and 70 billion $, respectively.

Geographically speaking, it is the most eastern country of Southeast Asia, with a length of about 1650 kilometers and a width of 56-550 kilometers, with a forested area covering 2/3 of the country's total area, with the largest plain area being the Red River Plain, along homonymous river. One of the most important things is that this country has an exit to the South China Sea, the sea being a natural resource used as an energy source.

Its population is about 95.5 million inhabitants, occupying the 15th place globally. About 90% of the population is Vietnamese, the rest of which represents minorities such as: Chinese, Hmong, Thai, Khmer, with a birth rate of 16.26 and a mortality of 6.22%

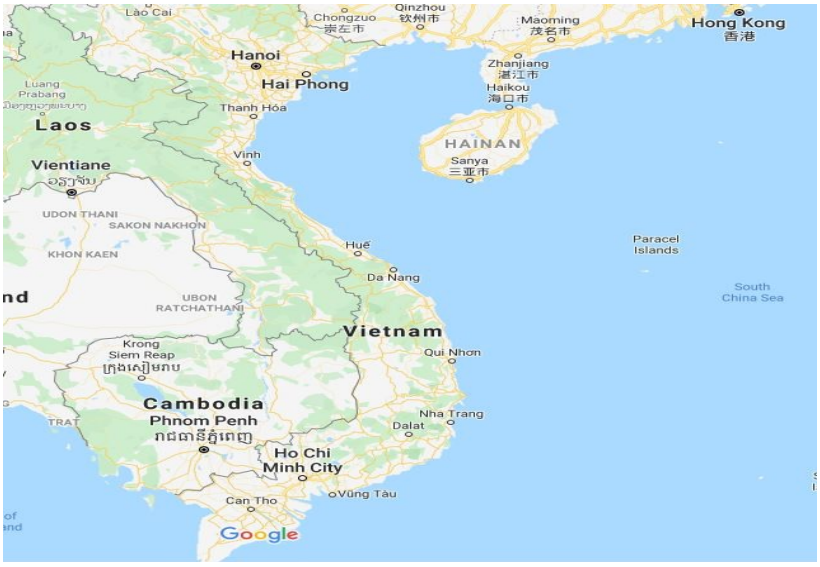
From an economic standpoint, it is a developing country, because over the last 30 years it has been trying to stabilize after the war with the US and without aid from the Soviet Union. The economic domain is highlighted by agriculture (about 20%), industry (41%) and services (38%). The country is rich in mineral and oil resources, crops of rice, bananas, coffee, etc.

This paperwork presents aspects regarding Vietnam's military capabilities, its relationship with other states, the elements regarding the military doctrine and strategy it conducts, the budget for defense and the new military technologies with which the Vietnam Army is endowed.

1. Current Aspects On Vietnam's Military Capabilities

1.1. The geographical position of the state and significant historical landmarks.

Vietnam is a country in the southeastern Indochina Peninsula of South Asia, with a large population, ranked 15th in the world. The country is bordered by the People's Republic of China to the north, Cambodia and Laos to the west[1].The location of Vietnam (Figure 1) on Earth and the countries with which it adjacent.



(Figure 1)The geographical position of Vietnam[2]

The year 1975 represents a significant victory in political field during the Second Indochina War. North Vietnam eventually captured the South and had simultaneous victories in Laos and Cambodia. The collapse of the non-communist governments of Indochina led to a communist control over this region for a period of 4 decades.

At the same time, the year 1975 contributed significantly to the official reunification of the North and South Vietnam in 1976, about 3 decades after Ho Chi Minh's first proclaiming of Vietnam's independence under a single government in 1945 and more than 100 years after France divided the country in order to govern separate regimes.

The 1945-1975 period was marked both by the war of independence from France and by the war for the control of the South against the US-backed non-communist regime.

Reunification and independence were the goals of the communists, long-awaited targets of North Vietnam, who resisted Chinese rule for 1000 years and French rule for 100 years[3].The division of Vietnam (Figure 2) into North and South Vietnam.

After uniting North and South Vietnam under a socialist government in 1947, Vietnam suffered an economic and political blow, being isolated in these two areas for 10 years, when the communist regime formed economic and political reforms that had success and led to the growth of gross domestic product, facilitating Vietnamese integrity in political and economic terms.

Vietnam has tried to resist foreign intervention, with all Communist leaders claiming that every resident of Vietnam was a soldier in this struggle for Vietnam's independence[1].

(Figure 2)The division of Vietnam[3]

1.2. Aspects regarding the belonging to regional or global organizations

Vietnam is part of the Association of Southeast Asian Nations, which represents an integrative economic-political form in Asia and globally, this country being the 7th member of this association (ASEAN-Association of South-East Nations).By 2010, this Asian country has established diplomatic ties with 178 other countries, is a member of the UN, ASEAN and the Asia-Pacific Economic Cooperation Forum and the World Trade Organization[1].

AFTA	**ASEAN Free Trade Area**	Brunei Darussalam Cambodia Indonesia Laos Malaysia Myanmar Philippines Singapore Thailand Vietnam
ASEAN	**Association of South East Asian**	Brunei Darussalam Cambodia Indonesia Laos Malaysia Myanmar Philippines Singapore Thailand Vietnam

(Figure 3)Main regional integration agreements [4]

The countries (Figure 3) that are part of the two organizations where the main regional integration agreements were made, Vietnam being one of the countries that are part of ASEAN and AFTA.

US and ASEAN representatives cooperated to sign a document against terrorism and focused on potential threats in the region. Both sides want to combat terrorism and block the operations of terrorist organizations. The US wants to strengthen military relations in the field of international terrorism prevention and combat, and wants to make ASEAN look more like

a NATO of Southeast Asia, where Singapore, the Philippines and Vietnam become important US allies[4].

During the Vietnam incursion into Cambodia between 1978 and 1989, the country was internationally isolated. After the conflict was resolved by the Paris Agreement on Cambodia, Vietnam restored economic and political relations with most of Western Europe, China and other East Asian countries.

Vietnam improves relations with China, and trade increases to $ 7.2 billion, but Vietnam is uncertain about China. In 2000 they sign a treaty that defines a common border, but both claim sovereignty over the Spratly and Paracel Islands of the South China Sea, thus a possible renewed tension between them may occur.

Vietnam enjoys a good political-economic relationship with Japan, the two countries are partnering to exploit the oil fields in the South China Sea. Following the partnership, Japan has provided support to Vietnam for WTO accession[5].

1.3. General elements regarding military doctrine and strategy

The war between Vietnam and the US, Westmoreland's war, had a pretty big impact on the Vietnamese territory. It went to the area of parallel 17, the political border line between North and South Vietnam. The key elements used on the ground by South Vietnam forces included search and destroy missions. US troops used local information to identify pro-communist camps, then removed them with firepower.

„In the view of the North Vietnamese thinkers, the revolutionary popular war was to represent in essence the violent form that gave finality to the political plan, an integral part of the general strategy that was based on three major elements:

a) Use of people's power to gain political power;

b) Recognizing the importance of rural areas in building the insurgency bases and expanding the general control.

c) Permanently maintaining the strategic offensive to protect the bases and controlled areas.These three features of the strategy have made their mark on the revolutionary people's war"[6].

In 1969, at a meeting with members of the Parliament of the Republic of Vietnam, General Cao Van Vien (Chief of the General Staff) reported: "We Vietnamese do not have a military doctrine because the command of all operations is in the hands and responsibility of the American side. We follow the American military doctrine"[7].

The military doctrine does not aim at the prohibition of war, but rather tries to prevent possible war or armed conflict in order to reduce or dissolve violence. It must be adapted to the new security environment and the balance of forces taking into account local wars.

Military strategy provides the improvement of the forces and the means, the resources and the military actions to impose their own will on the adversary and to achieve the goals and objectives of security and defense.

The doctrine and military strategy of war are outlined by the following principles:

- The principle of strategic mobility;
- the principle of the appropriate strategic action;
- the principle of strategic threat;
- the principle of strategic maneuvers.

Using the concept of network-based warfare is a necessity that materializes through a doctrine, which is based on high technology and effective action, protecting one's own equipment as well as destroying the opponents' equipment. Network-based warfare is a new military doctrine[8].

The doctrine is also based on high technology and effective action, which consists in the proper treatment of each objective. The essence of this doctrine does not lie in the number of

servicemen, but in that of the specialists, information, communications and methods and ways of acting as quickly as possible to counter the espionage, hijacking or destruction of communications and computer systems [9].

1.4. Military capabilities regarding human resources, endowment and defense expenses

1.4.1. Defense expenses

Vietnam's defense budget is still kept secret. Vietnam only rarely provides information on weapons purchased or acquired, or of service and cooperation contracts in the defense industry. For example, they submitted weapons import and export reports for inclusion in the 1994 US Register of Conventional Weapons in 1994. After this period, Vietnam reported arms imports for only 4 years (1995, 1997, 2004 and 2005). Vietnam does not provide a report for all other years.

In recent years, Vietnamese military leaders and politicians have given priority to preventing their stockpiles of weapons and military equipment from deterioration. Vietnam requested spare parts and foreign assistance for maintenance, reconditioning and updating of defense equipment inventory. Vietnam's second priority was to grant access to modern military technology and the transfer of its own national military defense industry by joining associations and co-productions. In the attempts of achieving both goals, maintenance and modernization, Vietnam has been constrained by their cost, compatibility and the trade restriction of US.

Other priority areas for the Vietnamese army are the protection of the coastline that spans the entire length of the country about 3444 kilometers and search and rescue operations. In recent years, the Vietnamese army has played an important role in the prevention and rescue efforts of natural disasters (hurricanes, floods, landslides, etc.) and humanitarian response.

SPIRI military spending data is derived from NATO definitions, which include all current and capital expenditures of the armed forces, including the peacekeeping force, ministry of defense and other government agencies engaged in defense projects or paramilitary forces, if any.

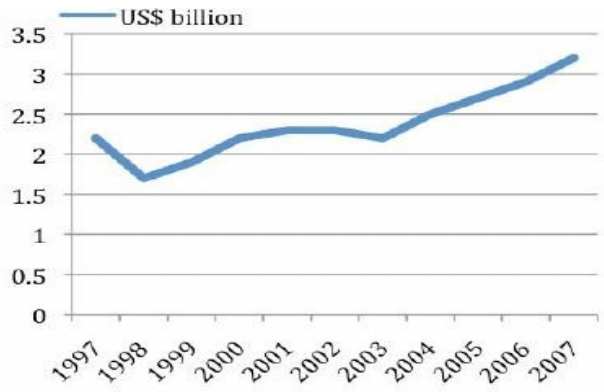
Expenses include civilian and military personnel, retired veterans of the Vietnamese army and personnel from social services; operation and maintenance; procurement; military discoveries and developments. The military budget covers civil defense, reserves and auxiliary forces, police and paramilitary forces and pensions of military personnel.

In 2010, Vietnam had a gross domestic product of $260 billion or $90 billion at current exchange rates. Major industries include car construction, mining, coal, steel, chemical fertilizers and cement. Vietnam exported $56 billion a year, with large segments of oil and maritime products. In 2003, Vietnam's defense budget was estimated at $2.3 billion, in 2008 it was estimated at $4.7 billion, about 5.7% of GDP (gross domestic product). Total spending was estimated at about $4 billion a year for the military or 2% of Vietnam's GDP.

Vietnam's defense spending rose sharply from year to year, from $2.6 billion in 2001 to $3.3 billion in 2007, with significant funding allocated to the Vietnamese Army's modernization program. But these expenditures dropped significantly between 2008 and 2009, when the global financial crisis hit Vietnam, the White Paper said the defense budget was $1.46 billion or 1.8% of GDP. In 2011, the defense budget increased to $2.6 billion, an increase of 70% compared to 2010[10].

According to the diagram (Figure 4), it can be seen that the expenditures and funds allocated for the defense of Vietnam have increased significantly, with small decreases in 1998, 2003 and those presented above between 2008-2009. Between 2000 and 2004 it is

noted that defense funds have been allocated around $2.4 billion, this amount will rise after 2004.



(Figure 4) Funds for the defense of Vietnam[10]

1.4.2. Human resource

The Vietnamese Armed Forces are organized into 3 basic categories or types of forces. The first category, also known as the "Regular Force", consists of land, air and naval forces. The second category "Regional Force" is organized geographically and is made up mainly of infantry units with limited mobility, with around 500,000 members. The third category called "Self-Defense Force Militia" or local troops, is a semi-mobilized element organized by community or economic affairs, in 1989 their number was 1.2 million members.

The Vietnam Army consists of 412,000 members in the ground forces, 42,000 members in the naval forces, 30,000 in the air and air defense forces, and 40,000 paramilitary members of the border guard. Also, Vietnam has 4 to 5 million paramilitary members who are reservists. In 1983, Vietnam had between 1 and 1.2 million active military personnel, excluding reservists and paramilitaries who were probably 1.5 million. It was the fourth largest military force in the world and shows an increase of approximately 35% over the number of 650,000 soldiers in North Vietnam in 1975 after the fall of Saigon.

The Army estimated in 1987 a total of over 4 million: 1.2 million members in the ground forces, 15,000 members in the naval forces, 20,000 members in the air forces, 50,000 members in the regional forces, 1.2 members in the military of self-defense, 1.5 million members in armed assault force and 50,000 members in tactical force.

Military service is mandatory for 2 years. At the end of 2001, Vietnam reinstated female recruitment into military service. The compulsory military service for women had been abandoned in 1975 at the end of the civil war. Although nearly 1 million citizens were eligible for military service each year, many young people did not enter military service because they attended higher education and were planning to enter into business to support Vietnam's economy.

The status of the army as a dominant force is manifested during the period of the communist revolutionary mandate that ruled Vietnam and therefore there were no changes in the services of the air and naval forces. However, as Vietnam's strategic environment becomes increasingly complicated due to pressure from China to become the dominant country in Asia, with the continued development of military capabilities, the country's capability of conducting military operations offshore was more emphasized. In order to protect itself, Vietnam will make the necessary improvements to naval and air forces. Vietnam has made modernization and improvement movements, but these have sometimes been symbolic due to financial constraints, but also to other priorities[11].

1.4.3. Endowments

Main endowments of Vietnam refer to the categories of forces and their equipment and personnel (Table 1).

Vietnam's Air Force	**Aircraft**	**293**
	Transport Aircraft	**38**
	Helicopters	**138**
	Attack Helicopters	**25**
	Total (494)	
	Pilots	**77**
	Instructors	**36**
Vietnam's ground forces	**Tanks**	**2615**
	Armored Fighting Vehicles	**2530**
	Self-propelled artillery	**40**
	Canons	**1000**
	Projectors / Rocket Launchers	**85**
	Total (5270)	
Vietnam's naval forces	**Total goods**	**65**
	Frigates	**9**
	Corvettes	**14**
	Submarines	**6**
	Patrol ships	**26**
	Mine planting ships	**8**
	Total (128)	

(Table1) Main endowments of Vietnam [12]

1.5. Features of Vietnam's newest military equipment

IWI ACE

(Figure 5) IWI-ACE-N-22-5_56mm-NATO [13]

IWI ACE (Figure 5) is a family of rifles originally developed and manufactured by the Israeli manufacturer of firearms. It is now produced by Israel Weapon Industries (IWI), which was created when IMI privatized the small arms division. Afterwards, it was produced under license by FAMAE, RPC Fort and Z111. It is produced in 3 different calibers; 5,56 × 45 mm NATO, 7,62 × 39 mm and 7,62 × 51 mm NATO. All other features of this weapon can be observed in the table below (Table 2).

Model	Calibre	Barrel length	Length (extended)	Length (retracted)	Weight (unloaded)	Feed system	Muzzle velocity	Range	Rate of Fire (rounds per minute)
ACE 21	5.56×45mm NATO	216 mm (8.5 in)	730 mm (29 in)	650 mm (26 in)	3.00 kg (6.61 lb)	35-round Galil magazine	710 m/s (2,300 ft/s)	300 m (330 yd)	680–880 RPM
ACE-N 21	5.56×45mm NATO	216 mm (8.5 in)	730 mm (29 in)	650 mm (26 in)	3.05 kg (6.7 lb)	30-round NATO magazine	710 m/s (2,300 ft/s)	300 m (330 yd)	680–880 RPM
ACE 22	5.56×45mm NATO	335 mm (13.2 in)	847 mm (33.3 in)	767 mm (30.2 in)	3.40 kg (7.5 lb)	35-round Galil magazine	850 m/s (2,800 ft/s)	—	680–880 RPM
ACE-N 22	5.56×45mm NATO	335 mm (13.2 in)	847 mm (33.3 in)	767 mm (30.2 in)	3.45 kg (7.6 lb)	30-round NATO magazine	850 m/s (2,800 ft/s)	—	680–880 RPM
ACE 23	5.56×45mm NATO	463 mm (18.2 in)	976 mm (38.4 in)	896 mm (35.3 in)	3.60 kg (7.9 lb)	35-round Galil magazine	915 m/s (3,000 ft/s)	500 m (550 yd)	680–880 RPM
ACE 31	7.62×39mm	216 mm (8.5 in)	730 mm (29 in)	650 mm (26 in)	3.00 kg (6.61 lb)	30-round AK magazine	600 m/s (2,000 ft/s)	—	680-880 RPM
ACE 32	7.62×39mm	409 mm (16.1 in)	927 mm (36.5 in)	847 mm (33.3 in)	3.50 kg (7.7 lb)	30-round AK magazine	680 m/s (2,200 ft/s)	—	680–880 RPM
ACE 52	7.62×51mm NATO	409 mm (16.1 in)	954 mm (37.6 in)	874 mm (34.4 in)	3.60 kg (7.9 lb)	25-round 7.62mm Galil magazine	800 m/s (2,600 ft/s)	—	620–680 RPM

(Table 2) Main model's characteristics of IWI ACE[13]

RAM MK3

(Figure 6) RAM MK3[14]

RAM MK3 (Figure 6) or RAM 2000is a lightly armored fighting vehicle produced by IAI RAMTA. It is based on a 4×4 wheeled chassis. The vehicle is 5.6m in length, 2.08m width and 2.12m height. It has an unloaded weight of 5.300 kg and a combat weight of 6.500 kg. Its most important characteristics of RAM Mk3 can be seen below (Table 3).

RAM Mk3 AT is equipped with 4-8 LAHAT anti-tank laser guided missiles. Unlike other armored vehicles, which have the engine in front or under the protected cabin, RAM places the entire power pack-engine, automatic transmission and transfer boxes in the rear[14].

The most recent RAM operators include security forces in Vietnam and the Republic of Gabon. The Vietnamese army and the security forces of Vietnam operate 150 RAM 2000 vehicles purchased from Israel in recent years.

The RAM 3 vehicle maintains all these attributes, with additional features added and has been adapted to new missions. As a modern combat vehicle, the RAM Mk3 offers ballistic armor, explosion and mine protection techniques and a double wall, which separates

the engine compartment and the fuel tank from the crew compartment, protecting the crew, weapon system and vehicle power battery.

The vehicle maintains a low silhouette and light weight, providing superior battlefield surveillance along with ground mobility required for special missions in the Indochina region.

The geometric profile of the cockpit also improves the vehicle's resistance to such an explosion. Once the vehicle wheel activates a mine, the explosion damage cuts off the respective axes, and glass fiber protection devices disintegrate, allowing the blast force to be directed outward and away from the crew cabin[15].

Specifications	
Weight	6.5 tons on the stock version
	7.2 tonson the extra armor version
Tank capacity	160 liters
Engine	6.472 liters on engine start
	189 HP
	2500 rpm
Transmission	Automatic
Direction	Electric assistance
Brakes	Hydraulic assistance
Total length	5950 mm
Total Height	2120 mm
Total width	2080 mm
Performances	
Speed	100 km/h
Distance (cruise)	800 km
Seats	7+1
Uphill (degrees)	60
Side slope (degrees)	30
Vertical obstacle	0.6 m
Ground clearance	0.53 m

(Table3) Main specifications and performances of RAM Mk3[15]

Mil Mi-24

Mil Mi-24 (Figure 7) is a military helicopter, used for attacking and transporting troops with reduced capacity, with room for eight passengers. It is produced by Milic Helicopter Plant in Moscow and has been operated since 1972 by the Soviet Air Force and its successors, along with 48 other nations. The main specifications and performance of Mil Mi-24 can be observed below (Table 4)[16].

(Figure7) Mil Mi-24[16]

Specifications	
Crew	2-3 pilots
Capacity	8 passengers
Weight	2400 kg
Length with only fuselage	17.5 m

Length with rotors	**19.79 m**
Blade length	**6.5 m**
Height	**6.5 m**
Maximum take-off weight	**12000 kg**
Performance	
Maximum Speed	**335 km/h**
Distance	**450 km**
Service ceiling	**4900 m**

(Table 4) Main specifications and performances of Mil Mi-24[16]

2. Conclusions

According to the present paper, it has been shown according to studies that Vietnam is a strong military country, namely the second military power in Southeast Asia, with impressive military capabilities, with a large number of soldiers in the military system. The country emphasizes on the military side, and the GDP allocated to the Vietnamese army. These military capabilities include military resources, the diversity of weapons systems, military fighting and defense techniques, natural and energy resources, geographical features, financial resources and the available labor force. As shown in the figure below (Figure 8) Vietnam occupies a middle position in the list of the most powerful armies in the world.

THE 25 MOST POWERFUL MILITARIES IN THE WORLD

COUNTRY	OVERALL RANKING	ACTIVE PERSONNEL	BUDGET (BILLIONS)	TANKS	AIRCRAFT	AIRCRAFT CARRIERS	SUBMARINES
United States	1	2,500,000	$581.0	8,848	13,444	19	75
Russia	2	4,017,110	$46.6	15,398	3,547	1	60
China	3	4,635,000	$155.6	9,150	2,942	1	68
India	4	3,468,000	$40.0	6,464	2,086	2	14
France	5	400,770	$35.0	423	1,282	4	10
United Kingdom	6	332,000	$55.0	407	879	1	10
Japan	7	307,900	$40.3	678	1,590	3	17
Turkey	8	596,130	$18.2	3,778	1,007	0	13
Germany	9	325,000	$36.3	408	676	0	5
Italy	10	362,000	$34.0	586	785	2	6
South Korea	11	3,525,000	$33.2	2,381	1,451	1	15
Egypt	12	1,270,000	$4.4	4,624	1,133	0	8
Pakistan	13	1,135,000	$7.0	2,924	923	0	5
Indonesia	14	876,000	$6.9	468	420	0	2
Brazil	15	2,130,000	$31.9	486	735	1	5
Israel	16	790,000	$15.6	4,170	681	0	6
Vietnam	17	5,455,000	$3.36	1,470	289	0	5
Poland	18	635,000	$9.36	1,009	461	0	5
Taiwan	19	1,975,000	$10.7	2,005	815	0	4
Thailand	20	55,000	$5.4	722	551	1	0
Iran	21	2,345,000	$6.3	1,658	479	0	33
Canada	22	146,000	$14.7	181	426	0	4
Australia	23	104,240	$26.1	59	417	2	6
Saudi Arabia	24	260,000	$56.7	1,210	722	0	0

(Figure 8)The most powerful militaries in the world[17]

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THEORETICAL ASPECTS REGARDING THE PROTECTION OF CIVIL POPULATION IN MILITARY CONFLICTS

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Abstract: *The need to establish protection standards for the civilian population came as a logical consequence of the rapid change of the armed conflicts and their extension in terms of territory and evolution of weapons. The civilian population could not be considered sheltered from the effects of the military operations unless there is a clear distinction between combatants and civilians. In modern operations it is even harder to make a difference between combatants and civilians because of the area that military operations are taking place and also because of the unconventional actors such as insurgents.*

Keywords: protection standards, civilian population, military operations, combatants

1. Introduction

An essential element of international humanitarian law is represented by all the regulations concerning the security of the civilian population as a whole, civilian, goods and places that are not military objectives.

The need to establish protection standards for the civilian population came as a logical consequence of the rapid change of the armed conflicts and their extension in terms of territory as a consequence of the fact that they were affected by an increasing percentage of the population which did not take part directly in hostilities, but especially as a result of the evolution of weapons, techniques and tactics of fighting. The civilian population is, by definition, composed of people who are not directly involved in the conflict, against no hostile act.

Until the second world conflagration, due to the way the wars were waged, international humanitarian law did not provided, in practice, adequate security for the civilians, and this is not directly affected by military operations. There were only some general rules in international agreements that also referred to the civilian population. There is, for example, Reason 2 of the Sankt Petersburg Declaration of 11 December 1868, according to which "the only legitimate aim which states must propose during the war is the weakening of the enemy's military forces."[1] The prohibition "to attack or bomb, by any means, cities, villages, dwellings or buildings that are not defended"[2] can also be mentioned.

At the stage of the start of the Seċond World War, as well as during the course of the war, all these rules proved to be futile. Compared to World War I, when about 10 million people died, of which about 500,000 civilians, at the point the Second World War finished, the balance sheet was at least tragic: about 50 million deaths, of which 24 million were civilians.

2. Civilian regulations

The issue of protecting the population that does not directly participate in hostilities, against their devastating effects, has become an imperative desperation as a result of the balance sheet of the Seċond World War.

The worldwide society, in pursuit of punishing the acts committed by the Nazis in the World War II, laid down in 1946 the Statute of the International Military Tribunal in Nuremberg, a plethora of cruelties to which "the civilian population had fallen victim such as assassinations, mass extermination, slavery, deportations, persecutions for political, racial and religious reasons."[3]

Still beneath the effect of World War II tragedies, the State of States signed, on 12 August 1949, at the Geneva Diplomatic Conference four conventions of which the Fourth refers exclusively to the safety of the population and civilians inside the event of battle, the alternative 3 conventions regarding the development of the variety of wounded and unwell in armed forces in the campaign (Convention I)[4],the development of the amount of wounded, ill and stranded folks in the actions at sea (Convention II)[5] prisoners of war (Convention III).[6] Encouraged by the success of the signing of the four Geneva Conventions, the International Committee of the Red Cross has offered to the Geneva Diplomatic Conference the text of two additional protocols, adopted on June 8 1977, texts referring to the protection of victims of international armed conflicts (Protocol I)and non-international ones(Protocol II).

The civilian population could not be considered sheltered from the effects of military operations in an armed conflict unless there was a clear distinction between combatants and those who did not directly engage in hostilities. In order to achieve this, the doctrinal codification had to answer the following questions: what civilian population mean and what military missions should be pursued? The struggle was amplified by the fact that in the armed conflicts of recent decades a strict delimitation between combatants, whose circle has widened greatly, and the civilian population is very difficult to do. Due to this fact, the debates at the Geneva Diplomatic Conference focused on the idea of formulating a negative definition: it was intended to eliminate from the category of civilian population those who participate directly in hostilities, those who directly hit the military capability of the enemy. Excluded are those who participate in the war effort, but it can be considered as the whole of the activities that, in the vicinity or at a distance, contribute to the continuation of the hostilities. The civilian population can participate in the conflict effort, without being stripped of the right to security.

Following extensive deliberations on the definitions of civilian and civilian populations, a consensus has been reached on the following codification:

"1. Any person not belonging to one of the categories referred to in Articles 4A,1,2,3 and 6 of the Third Convention and Article 43 of this Protocol shall be deemed to be civilian. In case of doubt, that person will be considered civilian.

2. The civilian population includes all civilians.

3. The presence in civilian population of isolated persons who do not meet the definition of civilian person does not deprive this population of its quality. "[7]

The signatories to Protocol I have defined the civilian population by excluding it from those directly participating in the armed conflict, namely:

"1. members of the armed forces of a Party to the conflict

2. members of militias and volunteer bodies that are part of the armed forces;

3. members of organized resistance movements belonging to a Party to the conflict and acting outside or within its own territory, even if that territory is occupied, provided that these militias or organized resistance movements meet the following conditions:

• to have as a leader person who is responsible for his subordinates;

• have a distinctive and recognizable sign;

• to wear arms openly;

• to comply, in their operations, with the laws and customs of the war.

4. members of the regular armed services claimed by a government or authority not recognized by the Detaining Power.

5. the population of an unoccupied territory that, when approaching the enemy, spontaneously takes arms to combat invasion troops without having had time to form themselves into regular armed forces, if it is wearing arms openly and complying with laws and the habits of war. "[8]

3. Civilians and direct participation in conflicts

In accordance with art. 51, par. 3 of the Additional Protocol I to the Geneva Conventions, civilians lose the right to be protected if they participate directly in hostilities and only during that participation, a statement that implies that the civilians in question may be the object of the attacks during that period. It may also be obvious that the requirement of directly taking part in hostilities excludes indirect participation, and hostilities are a more restrictive concept than war effort. However, the interpretation of these terms in the many situations that may arise in practice proved to be difficult, and an agreement or convention was not always available. In this situation, the International Committee of the Red Cross launched a study on this issue in 2003 and published the outcome of the study in 2009 in a document titled "Guide to Interpreting the Notion of Direct Participation in Hostility in International Humanitarian Law."[9]

In addition to many other aspects addressed in the guide, it is enough to summarize here the following argument regarding direct participation in hostilities: for an action to be direct participation in hostilities, it is most likely necessary to hurt or harm " military operations or military capability "[10]of its enemy or, in the absence of military damage, to kill, injure or destroy property or persons protected against attacks. It is not necessary for the damage to occur. The probability of such an incident is enough. The damage may be the effect of the action itself or may be part of a military operation, the potentially harmful action being part of it. The action must also be intentionally directed against a party to the conflict and the other's support.

It is clear that the practical implementation of this approach of directly participating in conflicts is not always simple. As a result, the main issue in determining whether an action is directly involved in hostilities is a matter of perspective, distance and time. A soldier involved in ongoing military action may consider only a fraction of the elements that can outline a clear picture of the status of the one in front of his weapon. On the other hand, a commander of a military operation may have access to more information than the soldier in direct contact with the enemy, but he can not always check whether the information is reliable or not. Essentially, both during military action and afterwards, verification of direct participation in hostilities must be rational.

4. Conclusion

Armed conflicts have, over time, brought waves of suffering to those in conflict zones. Due to the development of technology and technology, in modern conflicts we can no longer speak of

a strictly determined contact area between belligerents. The wars of the end of the past millennium and the beginning of the new millennium, true laboratories for the testing of various weapons and ammunition, have been and are being widespread and increasingly affect that part of the population that has nothing to do with the armed conflict , the civilian population. In this situation, there is a pressing need to humanize the conflict by respecting the rules of international humanitarian law by all belligerent parties.

Outside the armed forces, all persons on the territory of the parties to the conflict are civilians. Also, wishing to limit the discretionary actions of one of the Parties to a civilian conflict, as well as to emphasize the importance of civilian-combatant distinction, the definition requires the granting of the presumption of civilian to any person over whom there is a doubt as to the status thus indicating the necessity of certainty before the inclusion of a person in the category of combatants.

The notion of direct participation in hostilities is more restrictive than that of contributing to the war effort. In World War II, in particular but not only then, the idea, often repeated, was that any contribution to the war effort was sufficient for the civilian population to lose the right to protection against the effects of military operations. Contribution to the war effort was interpreted as covering activities such as the transport of weapons and ammunition to a warehouse away from the military operations area, work in the armament industry, the construction of military fortifications for the defense of its own territory. It is also certain that these activities are no longer assimilated to direct participation in hostilities.

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THE FEATURES OF THE FRONTAL BLOW IN THE FIRST AND SECOND WORLD WARS

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Abstract: *The first and second world wars have decisively influenced the content and physiognomy of military thinking, offering numerous developmental perspectives of the frontal blow, on which the success of battles depended to a great extent. Extended papers contains relevant examples for the use of front blow in more operations and battles that have been taken over the time. The frontal blow and its characteristics will be materialized both in the battles on the territory of Romania and in the battles that took place in Europe. An important aspect of the First World War regarding the evolution of maneuver forms is provided by the design of force, on transoceanic distances, respectively, from the North American continent, on the theatres of operations in Europe.*

Keywords: frontal blow, First World War, battles, Second World War, features.

First and second world war influenced in a decisive way the content and the physiognomy of military thoughts, offering a lot of perspective developments of frontal blow, from which the battle success was depending. First example of manoeuvre, and also, frontal blow it's represented by the offensive battles that were executed near Oltenița, more exactly The manoeuvre of Flămânda, front and flank manoeuvre, that had the purpose of crossing the Danube.

Because of the last that happened on Turtucaia, war council of Great Romanian Headquarters decided that the offensive actions from Transylvania, that also in the South part of Danube to continue, against the fact that the Romanian forces number capable to fight was very small. For those actions to be done was absolutely necessary forming the South Group Armies. This had in suborder 16 divisions likely: 11 Romanian infantry divisions, 2 Russian infantry divisions, one Serbian infantry division, one Romanian cavalry division, one Russian cavalry division, 5th Călăraşi Brigade and 2 MP detachements. We can notice that the Romanian army had 186 Battalions, 145 field artillery, 13 heavy artillery, one anti-rockets artillery and 55 escadrilles.

On the other way, the enemy force was represented by 3rd Bulgarian army and Defence Group River, was composed by 105 battalions, 51 field artillery, 19 heavy artillery and 35 escadrilles. By doing a comparison it's well known that Romanian forces had an considerable numerical advance.

,,General Alexandru Averescu's action initiative, commander of the 3rd Romanian army, although strong contested, it is finally accepted by the Romanian HQ. Between 18th September – 1st October 1916 starts troops a boarding on ships, the OPP during the whole morning, without recording any attacks from the enemy forces". [1]

The OPP consisted in the execution of a frontal blow by the Dobrogea's army and in the same time the execution of enclosure manoeuvre over the Danube, in Flămânda. Forcing the cross of Danube had been chosen and well planified, for being safe crossed by the 3rd with 5 infantry divisions and one cavalry division. Cooperation between the 2 armies was necessary, because each of them had different missions. Dobrogea's army had to execute offensive OPS for reaching in the main sector of the enemy, and 3rd army had to push Danube for reaching behind the enemy troops.

In the same time, engineers troops installed the pontoon bridge for making possible the artillery's move. Unfortunately, the weather didn't let this happen, reducing the time for pontoons construction. In this hole time, Romanian forces had been bombed by the enemy air forces.

Even in this bad conditions, the bridge had been built, making possible 2 divisions of the 3rd army's move on the Bulgarian land. After an unsuccessed try for destroying the bridge by the Austrian soldiers, finally they managed to succeed, preventing the moving of Romanian forces.

This situation demanded the reassessment of curse of action, obliging Romanian HQ to stop the action.

„Concept of operation, admitted by the most of the specialist, was very ingenious. According this is saying that the Ash campaign from the autumn 1916. The manoeuvre of Flămânda was a genius sparkle that generated big hopes and from which it has been trying to remark the moral and to cover the strategic initiative after the humiliating loss from Turtucaia in the beginning of the war".[2]

Relevant example in which the frontal blow has lead to the success of the OPP is represented by The battle from Mărăşti (11-19 July 1917), one of the greatest battle of Romania in the first world war. This OPP was conducted by the Russian and Romanian forces.

Curse of action elected consisted in execution of a blow by a massive importance by The 1st Romanian army, The 4th Russian army, who was supporting this, having the mission to destroy 9th German army and doing the necessary OPS for an offensive battle near Mărăşti, by the 2nd army having the mission to support the main blow on the right flank from the attack direction. Once the OPORD was received, 2nd army, under the command of General Averescu, with a total of 5-6 battalions, 14 escadriles, 258 cannons, 50 000 soldiers, being supported by 1st Cavalry division, 2nd Cavalry brigade and 17th pioneers battalion, leaded to an attack on a front of 37 km.

A violent artillery preparing marked the beginning of the offensive action, action that had done massive loss for the enemy, offering the alliance troops an opening for the blow. After a long series of awful battle, Mărăşti pass under the command of Romanian forces, following in the next days by the freedom of the next villages: Câmpuri, Vizantea Mănăstirească, Roşculeşti and Răcoasa.After this victory 2nd army gets the mission for stopping the enemy, this fact is happening because of the Russian troops (8th Russian army), which has withdraw, making possible, the possibility of an flank attack and behind the Romanian line, what represented a huge disappointment for General Averescu. However, by a mysteriously approval of a request from General Averescu to continue the offensive for reaching the success, he had continued the initial preparing OPORD, leading the mission success.

„Mărăşti offensive was a real military art master piece that has marked the commander qualities of General Alexandru Averescu. This victory showed the outstanding qualities of Romanian soldiers, their commanders and it has been a big moral meaning, representing, in a way, a rematch against the losses from the 1916 autumn".[3]

Hungarian campaign (1918) had shown the well prepared commanders from Romanian forces, making possible to organize and to execute complex battles with decisive achievements. Such battles as this we can see the battles 1919's summer. Refusing to admit the Transylvania and Romania unify, Hungarian forces had planned an complex offensive having the purpose to recover the territory between Apuseni mountains and Tisa river, a territory gained by the Romanian forces by a well planned contra-offensive. For succeeding that, Romanian forces moved on different defence positions located near Tisa river, preparing for the offensive leaded by the Hungarian forces, that were composed from 4 army corps, 10 infantry divisions, 7 independent mix brigade and a variable number of Red Guard battalions. There total was represented by 2/3 from all their forces, more likely 60 000 from 90 000 soldiers.

After intense battles Romanian forces succeeded to prevent the Hungarian offensive, offensive that was supposed to be on 3 sector: North, South and West and, in the same time ménages to destroy the bridges owned by the Hungarian. However, central part of the Romanian line was vulnerable against the main Hungarian blow, after which, Hungarian forces installed a bridge on a line of over 80 km and a deep of 60 km. According to this, Romanian forces organise a contra-offensive. The plan is represented by a frontal blow, realised by the South group and enclosure of the left flank of the enemy, realised by the manoeuvre group, commanding 2nd cavalry division, 1st infantry division and 6th infantry division. South group mission was to attack the centre and the right flank of the bridge group forces. Course of action was a success, withdrawing the Hungarian troops, and after that Romanian forces were crossing to follow them, by attacking the river line. Hungarian troops had been destroyed during the movement, Hungarian territory being conquered, the South-West part being an exception. Although first world war it is known under the form of a Position war, we have to admit the fact that during the war some elements will be remarked.

Second world war (1939-1945) showed all the manoeuvring types that are also utilised today by the modern armed forces.

Poland's exist war was the result for executing a heavy direction manoeuvre, executed by the German troops, in September 1939.

The action of the armoured being supported by the aviation, over the sectors from the occident centre, had big consequence for the enclosure of the alliance force from the North-West of France and South of Belgium and France's capitulation.

Doing combined manoeuvre on the ground, frontal successive blows, German troops have entered and conquered Holland and Denmark, and by naval, ground and air OPS, Norway and Creta island (1941).

The army of German nazi had executed line manoeuvre, flank, double and simple enclosure (more precisely in 1941, by Werhmacht*). „Viewing the combined OPS, sea and ground, by the way of corp action West Europeans in Crimea's war"*[4], this representing an important objective, for the nazi forces as well for the soviet ones. *„Having an opening at the Black Sea, Azov Sea, control over the South part of the East Europeans line and being rich in huge oil quantities, Crimea represented an excellent base for dislocating soviet aviation for executing air attacks over harbours and Romanian oil zone"*. [5] For conquering Caucaz and for ensuring the right flank, Hitler moved to an offensive action against Crimeea launched on the 24th September.

Represented a weakness for the soviet forces in the right flank and behind Werhmacht troops, they prevented the marching of German and Romania troops whom executed an offensive action with 54th divisions corp. With a force composed from 45 and 75 infantry divisions, German army reached Perekop Istm, producing over 2 000 casualties in less than 6 days of battle. Although they have superior number, the soviet had been dramatically defeated. On 22nd and 23rd October, soviet air-forces had been destroyed by 3 fighting planes

escadrilles, and 87 Junkers destroyed ground air-forces. This action represent the first German offensive. The next target was Sevastopol, the action represented was the surrounding of the city, by moving 45th and 73rd infantry divisions to the East part, on the Sevastopol-Yalta railway and 72nd infantry division towards Balaklava. Thanking to the field zone that offered favourable key points to the defence and to the other 3 fortified roads, wining Sevastopol turned down into a real siege, that expanded between 6 months (21st November 1941-4th July 1942).

For one year between 1944-1945 offensive battles executed with the support of the air, armoured, sea units and paratroopers, whom have been moved on a larger line, Russian forces destroying nazi troops from oriental Prussia, Poland, Romania, Hungary, East Germany and Czechoslovakia.

A new unexpected aspect of manoeuvre was offered by battle from 1944, in Atlantic, where German sea forces fought against the allies, having in support Supersonic aviation, rockets, artillery and armoured carriers and helicopters.

In conclusion a important aspect regarding first world war in the form of manoeuvre evolution offering *„Force projection, on transoceanic distance, respectively, on the North American continent on operation theatres from Europe".*[6]

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