

IMPLICATIONS OF THE FORCES EQUIPMENT WITH NEW WEAPON SYSTEMS ON THE COMBAT POWER MORALE COMPONENT

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Today's modern battlefield requirements impose more than a simply convenient force concentration in order to accomplish the mission and obtain a military success. Definitely, the factor of morale remains a force multiplier and an essential element of combat power. In this regard, we highlight that by equipping military forces with modern and performing weapon systems we can obtain a significant combat power increase. The superiority with respect to this military action's dimension ensures the premises not only for a physical destruction of the opponent, but also for shattering its cohesion and will to fight. Tactical forces' proper equipment in terms of quantity and quality generates results not only for the combat power's physical component, but also for its morale component. Therefore, my opinion is that the maintenance of morale is strictly related to the quality and reliability of providing forces with new weapon systems and other military equipment.

Keywords: military weapon systems; combat power morale component; will to fight;

Motto: “To win battles, you do not beat weapons-you beat the soul of the enemy”.

General George S. Patton,
A letter to his son, 6 June 1944

INTRODUCTION

Throughout history, one of the state's constant options adopted with the purpose to counter their security risks and threats has been the development of the military instrument of power. Therefore, this instrument has become leverage and also a means for imposing the political will.

In time, this instrument has been constantly refined and consequently a series of fundamentals, principles and accepted procedures regarding conducting military operations and using forces have been established. Different military thinking schools and academia have produced “*recommendations*” regarding *how to fight*. The recommendations are generated by the gained experience during the past armed conflicts and wars. They are constantly adapted and adjusted in relation to the nature of threat and technological development. Today, this kind of guidance about the conduct of military operations becomes what is called military doctrines. Military doctrines are developed with the purpose to direct military activities by offering appropriate solutions in order to achieve success in future operations.

Even if the nature of war remains the same during time, its character continuously evolves. Therefore, the military instrument has to adapt to the changes entailed by the war's character variables. Intrinsically, combat typology as well as tactics, techniques and procedures ought to be adapted to the battlespace's requirements. It is also true that technological development has a significant influence.

The modern weapon systems and other military equipment have a decisive contribution to obtaining military combat power in terms of all its components and aspects. The qualitative enhancement of the military equipment produces changes and effects to the spatial and temporal dimensions of the military actions. Therefore, a constant adaptation of the command-and-control process, where timely decision-making is paramount, is needed.

However, the human resource emerges above all of these considerations. Regardless of the technological level, man power remains the essential vector that will enhance the energy needed to achieve the objectives at each level of operations. The fighter, in a broad sense of the concept, will remain the main subject with respect to the military conflicts' evolution. The human resource as an element of the physical combat power's component gives the necessary synergy to all components, finally generating the premises for obtaining a superior combat power in order to fulfil the mission. In other words, man is the element that connects the conceptual, physical and morale components of combat power.

The main objective of the present paper is to analyse and outline the manner in which forces' equipment with new weapon systems could generate a series of influences to the morale component of combat power. The complexity of this subject and its dimensions and implications' amplitude to the military operations are difficult to be measured. The present analysis is intended to draw attention to the importance of the military personnel morale for the success of operations, with emphasis on the forces' equipment status. The approach tries to highlight both the positive aspects on the combat power level as a direct result of the forces' proper equipment and the diminishing effect as a consequence of existing dysfunctions in the equipment domain.

In order to obtain a coherent approach and also to focus the research efforts I have considered helpful to establish a few questions. Intrinsically, these questions generate the research directions of this approach. The questions are:

- *What is the role of the morale component in the combat power's generation process and what are the determining factors of this component?*
- *What are the requirements of the modern battlefield and which are their implications for the combat power's morale component?*
- *What are the implications for the combat power's morale component generated by the military forces' equipment with modern weapons?*

It should be noted that proper existing research methods for this analysis are quite limited. During my research I have used a few methods and techniques suitable for military sciences domain in line with the recommendations made by some experts in military scientific research: the historical method, the referential research method, the deductive and analysis methods (Scipanov, Nistor, 2020,

p. 954). Therefore, considering the lessons learned from the past military conflicts, I have tried to obtain a true image regarding the weapon systems effects on the fighters' morale and their will to fight. Moreover, by using a deductive reasoning I have tried to outline the existing connection between technological development, forces equipment and will to fight.

The description of the combat power's morale component and the identification of those mandatory actions needed to manage it are also starting points for this analysis. The short case studies focused on this topic support and give consistency to this research.

THE ROLE OF MORALE COMPONENT IN COMBAT POWER'S GENERATION PROCESS

The requirements of the modern battlefields stress the need for seizing and maintaining the initiative. This fact is corroborated with a global tendency of NATO's potential enemies to find their source of power by using hybrid approaches to military operations. Moreover, the hostile attitudes of China and Russia as well as their constant actions to strengthen their military capabilities generate the necessity to reconsider the possibility to conduct major combat operations (AJP-3, Allied Joint Doctrine for the Conduct of Operations, 2019, pp. 1-27). The possibility to conduct this kind of operations arose due to the emergence and identification of a potential enemy for NATO states. This threat is evaluated as a *near peer enemy* with respect to military capabilities compared to the Alliance capabilities.

Therefore, taking in consideration these facts, NATO's approaches to operations emphasise the importance of initiative. Manoeuvrist approach to operation offers the arguments and foundations in order to achieve this goal. The milestone of this approach is exploiting enemy's vulnerabilities simultaneously with avoiding its strengths (ATP-3.2.1., Allied Land Tactics, 2018, pp. 1-16). Exploiting tactical fleeting opportunities has the same importance. Thus, an efficient command-and-control system is needed in order to ensure commanders with freedom of action and the right authority to act. Mission command is NATO's philosophy of command that empowers the commanders with this authority. It is also true that mission command facilitates the manoeuvrist approach, being a necessary instrument that complements its tenets (ADP-6.0, Army Doctrine

Publication, Mission Command, 2019, p. 1). This kind of command, assumed by all NATO states, is supported by the principle of mutual trust and it is an essential element of combat power. Consequently, it has a significant influence on the combat power's morale component.

When referring to the combat power and its morale component, it should be emphasised that most of the modern armies' doctrines make a difference between *fighting power* and *combat power*¹. In other words, fighting power refers to military units' physical, conceptual and morale components in an initial phase (at a given time), prior to operation. On the other hand, combat power is the result of combat functions' application to the components in a particular situation generated by the operational environment and the enemy's activities. Experts in military arts have defined combat power as *"the realized capability of a force at any instant of time to achieve results in furtherance of a particular mission against a specific enemy force in a specific combat environment"* (Du Bois, 1997, p. 6).

Taking into consideration the previously mentioned aspects, it should be highlighted that the military unit's combat power is represented by the energy emanated by that unit in a combat situation. Combat power's primary source comes from the fighting power's components and their level of accomplishment. Therefore, combat power could have a superior level compared to fighting power's one, or, on the contrary, if combat functions are not well-integrated, a decreased level of combat power could be obtained. In conclusion, combat power is the unit's ability to produce destructive effects on the enemy in order to defeat it. These aspects belong to both physical and morale domains.

¹ *Allied Joint Doctrine for Land Operations* identifies three components of combat power: *the conceptual component, the physical component and the moral one* (North Atlantic Treaty Organization, Allied Joint Publication (AJP 3.2), Allied Joint Doctrine for Land Operations, 2016). The Romanian equivalent of NATO's doctrine for land operations makes a clear distinction between fighting power and combat power, highlighting the fact that the latter is the result of combat functions integration to the fighting power components with respect to the operational environment requirements, including enemy's activities. The combat functions integration could have a force multiplier effect as well as a reducing effect to the unit's overall combat power. The same Romanian publication identifies the same combat power's components like NATO' equivalent publication (FT-1, *Doctrina operațiilor forțelor terestre*, București, 2017).

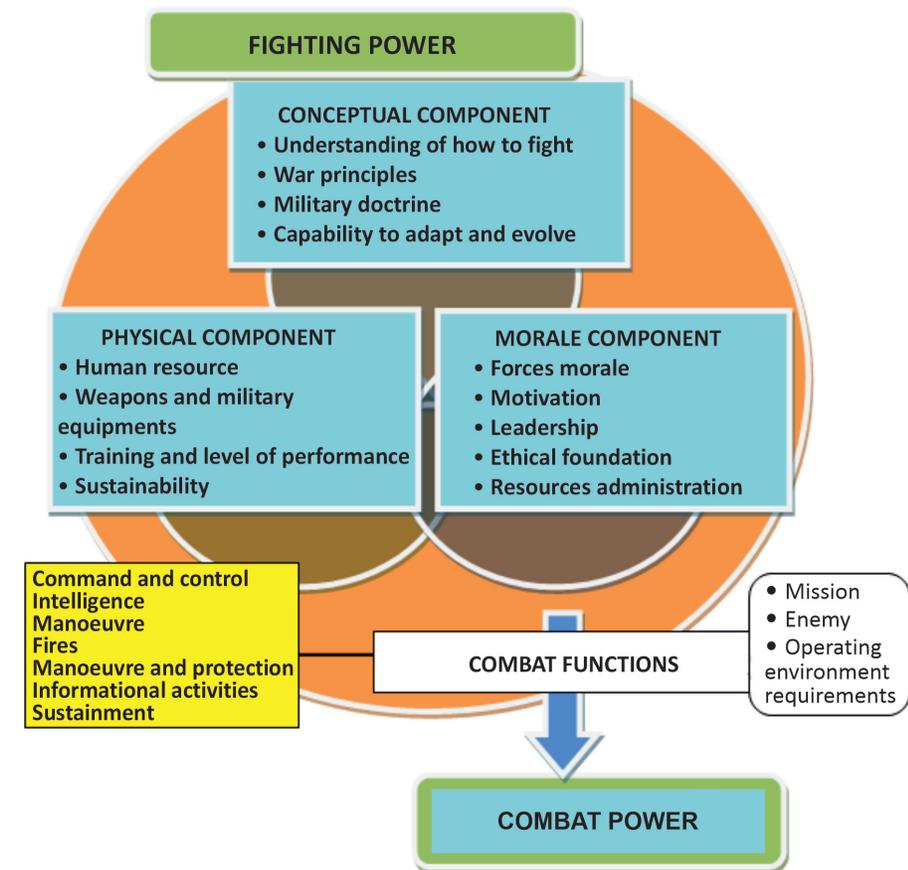


Figure no. 1: Fighting power-combat power relation
(British Ministry of Defence. Army Doctrine Publication, Land Operations, p. 3.1)

Taking into consideration the theoretical aspects analysed until now, it could be concluded that no matter if we talk about fighting power or combat power, the role of their morale dimension is paramount. Therefore, an efficient management of this component of combat power is essential. As a consequence, a short description of this concept might be useful.

Combat power's morale component is used to measure *"the military willingness to fight"* (Buța, Alexandrescu, Dumitru, p. 8), a reality that has always been one of the major concerns of military experts. Their opinion includes the idea that the morale factor *"represents a mandatory lever between combat potential and fighting power to all levels including soldier, tactical units and the whole army"* (Duțu, 2001, p. 22).

The morale component of the combat power is broadly defined as the dimension that integrates all the aspects related with forces' morale and motivation, professional ethics, leadership, including the ability to conduct an efficient resources' management process. Although forces' sustainment is an essential element of the physical component of combat power, the available resources' efficient management (including human resources) as well as the proof of its efficiency are important inputs to morale component. The same is true when we refer to the forces equipment with new weapon systems and other military equipment, even if these are elements of the physical component, too. Therefore, the forces equipment with new weapon systems in a sufficient quantity having a superior quality could be decisively in combat. Moreover, the timely equipment and proper training will generate positive effects on the fighters' morale.

Usually, the combat power's morale component materialises in a critical requirement, which is a source of power for those critical capabilities of own forces' centre of gravity. The same is true for the enemy's forces. In my opinion the morale component of combat power has the same importance as the conceptual and physical ones. By neglecting this component, a lot of vulnerabilities are disclosed and the enemy gains the opportunity to exploit them. There is a close connection between combat power's components. Furthermore, the manner in which physical and conceptual components are handled directly influences and affects soldiers' morale and personal motivation.

Getting and maintaining an appropriate level of the military personnel morale in order to generate sufficient combat energy to defeat the enemy is a result of a continuous and constant process. This process starts even from the enlisting phase. The future evolution of the military personnel, regardless of the rank, depends a lot on the initial motivation with respect to military vocation and career. Therefore, demonstrating the military capabilities effectiveness and the destructive effect of their unit's weapon systems could have a decisively effect on the recruits' morale and becomes a natural step in their evolution. By organising demonstrative tactical and shooting exercises a solid opportunity to increase fighters' trust and confidence is seized. At the same time, there are other aspects that influence the military personnel's morale: the justice of the cause and the effectiveness of the command-and-control system augmented by the evidence that the human resource is not wasted. People want to know that their sacrifice is not in vain and contributes

to the mission's accomplishment. In addition, the personnel's physical and mental health, proper training, professional recognition and domestic reliability shape what we call today *the will to fight*. Even if a proper equipment could enhance the fighter's morale, it could not compensate effectively the aspects mentioned above. It should be emphasised that those aspects ensure morale legitimacy and psychological comfort for the military personnel. In conclusion, it should be outlined, once again, that in a complex operational environment, morale and will to fight remain a priority.

Today's complex battlefield, where military operations must ensure an appropriate solution to both conventional and unconventional threats in a multi-domain spectrum, generates the need for an efficient management of the military personnel will to fight. Therefore, this will always be one of the major priorities for NATO's forces, all the more armies' doctrines identify human beings as the main resources in the military action.

HISTORICAL LANDMARKS REGARDING THE ROLE OF MILITARY EQUIPMENT IN THE MANAGEMENT OF THE MORALE COMPONENT OF COMBAT POWER

The appropriate equipment, at least equal to that of the adversary, from not only a qualitative but also a quantitative point of view, can potentiate the morale component, this fact being translated into an increased combat power. Highlighting this fact is the subject of our approach, and to achieve the main objective I consider the analysis of particular cases to be relevant, noting that their list is far from being complete. The case studies refer to the inappropriate equipment of the Romanian Armed Forces during the First and the Second World Wars as well as to the impact and consequences generated by the introduction of new weapon systems during an ongoing armed conflict.

Reorganisation and Equipment with Weapon Systems of the Romanian Armed Forces in the 1917 Campaign of the First World War

Unfortunately, for Romania and its armed forces, the campaign of 1916, the year of our country's entry into the war, was a major military failure, which generated both significant territorial losses and the neutralisation or even the physical destruction of many Romanian divisions. *"Apart from the mountain divisions,*

there was nothing left from the Romanian Army”, General Henri Berthelot, head of the French Military Mission (FMM), informed Paris on 13 December 1916 (Torrey, 2018, p. 187).

The number of casualties among the Romanians was huge: 163,515 dead, seriously wounded or missing/146,600 prisoners (ib.), given that, at the beginning of the war, our country had approximately 658,000 soldiers employed in the *operative branch* and 134,000 were part of the *services branch* (Otu, 2017, p. 7).

The armed forces had to be reorganised, including reforms, training, combat procedures, to meet the requirements of the battlefield at that time. Last but not least, the forces had to be provided with the appropriate, in terms of both quantity and quality, weapon systems.

Thus, Romania, under the FMM guidance, reduced the number of infantry divisions from 23 to 15 and managed the almost complete operationalisation of 10 divisions. An operationalised infantry division consisted of 2 infantry brigades, each brigade being composed of 2 infantry regiments and 2 cavalry battalions. The regiment consisted of 3 infantry battalions, each of which had 3 infantry companies and 1 machine gun company, the 4th company being disbanded, thus allowing the establishment, at the division level, of a reserve of 4 infantry battalions. In total, each division had 19,000 posts and 12,000 rifles (ib., p. 78).

The equipment with weapon systems was another important objective, given that in the battles of 1916 about 80% of the own rifles existing at the beginning of the campaign, 50% of the artillery and 85% of the machine guns were lost. The official figures registered in the evidence documents, both of the Romanian Armed Forces and of the FMM, specify a huge quantity received: 199 planes, 300 vehicles, 220,000 rifles, 4,500 automatic rifles, 2,700 machine guns, 80 pcs. of 75 mm cannons, 85 pcs. of 120 mm cannons and related ammunition (Torrey, p. 200).

Thus, unlike 1916, when the Romanian regiments had a maximum of 6 machine guns and rarely an automatic rifle, in 1917, a regiment had 24 machine guns and 96 automatic rifles. At the level of the 10 divisions in the first line, each had on average 112 machine guns compared to 81, and going up to 108 machine guns, as the German divisions had. The artillery, which practically did not exist in the previous year, numbered 49 batteries at the end of the reorganisation. The American historian, Glenn E. Torrey, emphasises in his work dedicated to Romania's participation in the First World War that *“instead of the assaults carried*

out by infantrymen with bare hands, machine guns and submachine guns would play a decisive role in the attacks of Romanians” (ib., p. 187) They had a decisive role, in my opinion, on the morale of the military.

In order to highlight the decisive role that the appropriate technical equipment played on the morale of the Romanian military in the 1917 campaign, I start by recalling the words of the same General Berthelot who considered that well-armed Romanians were *“eager to attack”*. For the German and Austro-Hungarian armed forces, the battles of 1917 on the Romanian front, although they did not end in defeat and Romania was finally forced to sign a peace treaty separately, were still a failure. Undoubtedly, the appropriate equipment with competitive weapons and in sufficient quantities contributed decisively to the Romanians' morale and their will to fight. To them, adequate training and a more flexible leadership than in the summer of the previous year were added.

Deficiencies regarding the Romanian Armed Forces Equipment with Anti-tank Weapons in the Battles in the Stalingrad Area, in the Second World War

The second example that we consider relevant for my analysis also brings to attention the Romanian Armed Forces. This time I focus on one episode of the Second World War, on the Eastern front, in the battles in the Stalingrad area. Romania's decision to continue military operations with the Axis' powers in the 1942 campaign also led to a disaster of the 3rd and 4th Romanian Armies, which were irreparably defeated on the Don and in the steppes of Kalmykia. The initial phase of the Soviet operation, called *Uranus*, began on 19 November 1942, and it was aimed at penetrating the defence system of the two Romanian armies, which was done successfully and eventually led to the siege of the 6th German Army as well as of a number of approximately 12,000 Romanian troops (Otu, Historia, 2020).

The reasons for the defence failure of the Romanian divisions are many and their analysis is not one of my objectives. Certainly, one of the most important causes was the lack of anti-tank weapons, insufficient in number and inadequate in terms of quality. The Soviets knew that. The English historian, Antony Beevor, mentions in his work, *Stalingrad*, about the Romanians *“fear of tanks”*, a fear which, in my opinion, decisively affected the morale component of the combat power of the two Romanian armies. It is obvious now, as then, that the low morale had as a source the weak equipment with anti-tank weapons too. In the same book,

Antony Beevor emphasises, on the other hand, the determination of the Romanians to fight even though they were profoundly disadvantaged from a technical point of view: *“the Romanians strongly resisted a few new Soviet infantry attacks, but for not having enough anti-tank weapons, they were condemned”* (Beevor, 2020, p. 386). It highlights that inadequate equipment is the main reason that contributes to declining morale and the failure of military operations. The awareness that the chances of stopping the penetration of Soviet tanks were very low constantly and decisively affected the morale of the Romanian military.

At the beginning of *Operation Uranus*, the equipment of the Romanian troops concentrated in the Stalingrad area included Flak 88 mm anti-tank guns, an efficient armament system, developed and remodelled after German anti-aircraft guns of the same calibre, but in insufficient numbers (1/for each infantry regiment). The Romanian forces also had the 37 mm and 47 mm Skoda anti-tank guns, totally ineffective against the armour of the Russian T-34 tank. Edifying in this sense were the preparations made by the commanders of Soviet tanks, on the eve of *Operation Uranus*, in order to increase their morale, by executing demonstrative shots with Skoda anti-tank guns captured from the Romanians. The demonstrations against the Soviet T-34 tanks proved the inefficiency of those weapon systems, the shots bouncing off the armour even from a short distance (Beevor, p. 283). It should be remembered here that the anti-tank cannon *“Resita”*, 75 mm calibre, a weapon that would prove its efficiency and superiority over the models mentioned above, entered into the inventory of the Romanian Armed Forces only in 1943. The development of the mentioned weapon system came in response to cover the deficiencies in this field, given the conditions in which the German Armed Forces refused to deliver the anti-tank systems promised at the beginning of the 1942 campaign on the Eastern Front.

Equipment of the Soviet Armed Forces with MLRS BM-13 Multiple Rocket Launcher (“Katyusha”) in the Eastern Campaign of the Second World War

Another weapon used in the Second World War that had a considerable demoralising effect was the multiple rocket launcher system/MLRS BM-13, known as *“Katyusha”* or *“Stalin’s organs”*. They were widely used in various forms, both on vehicles and statically, using stands, during the Second World War. The service life of those weapon systems in various configurations has been long, some armies around the world maintaining such systems to this day.

On 14 July 1941, at 15.15, the multiple rocket launcher battery under the command of Russian Captain Flerov fired the first rounds on the concentration of German troops in the vicinity of the railway junction at Orsa in Belarus (Timofeychev, 2018). The German soldiers then heard, for the first time, the frightful hiss of *Katyusha*. The devastating effect on the target permanently affected the morale of the German military during the period in which the Soviets used that type of weapon, although the accuracy still left much to be desired. But used in sufficient numbers, later mounted on trucks thus gaining mobility and with a launch capacity of 16 missiles/round, it became a weapon that maybe, together with the T-34 tank, contributed the most to victory by the Soviets.

The Chief of the OKH – the General Staff of the Land Forces of the German military at that time, General Franz Halder noted in his diary: *“... the Russians have used a weapon unknown until now. The weapon destroyed the Orsa railway station, troops and military equipment. The metal was melting and the ground was burning. The psychological impact on the soldiers is serious, they lose their will to fight”* (Ib.).

By the end of the war, the Russians had set up more than 500 *Katyusha* batteries, and produced more than 10,000 launching systems and more than 12 million rockets. Aware of the destructive effect on the target, which, coupled with the ability to demoralise enemy troops through the infernal and frightening noise produced when rockets were fired, the Soviets brought launching systems to the gates of Berlin in 1945, *Katyusha* being one of the Red Army’s flagship weapons of the Second World War.

Low Reliability of American M-16 Assault Rifles during the Vietnam War

Another example I want to discuss refers to the low reliability of the American M-16 assault rifles, which entered into the inventory of US forces in 1966, during the Vietnam conflict. The M-16 assault rifle, produced by the Colt Company, was supposed to be, at that time, a modern and more efficient replacement for the M-14 predecessor. The problems in the operation of that weapon and especially the magnitude of the implications on the morale of the military engaged in combat actions are very well represented by the following testimony of an American veteran of the conflict: *“the strangest thing in an exchange of fire is the noise of the misfire that your weapon makes. In a second you realise that the only thing that can protect you from the enemy is not working and a race against time begins”* (James O’Connell, 2020).

It seems that such incidents in the operation of the weapon systems were quite frequent, which led to controversies at the high political-military level regarding the opportunity to equip American contingents deployed in Vietnam with such rifles. The soldiers complained about problems with the automatic loading, extraction of the cartridge tube and repeated failures, in which case the Commander of the American contingent, General William Westmoreland, requested a technical commission from the United States to investigate the problem. The reasons for the malfunctions were various and kept the weapons poorly maintained, largely because of the lack of interest of the fighters as well as because of the technical reasons that involved the use of a different powder in order to increase the initial velocity of the bullet. The rapid rusting of the cartridge tube, in the extremely humid climate, was another identified cause that resulted in the weapon malfunctioning.

Regardless of the reasons that generated the malfunction of the M-16 assault rifles, at least in the initial phase of the conflict, it is certain that the idea of the possibility of experiencing a failure in the execution of fire was always in the fighter's mind. It constantly affected the morale of the military, given the difficult operating environment that often involved patrolling and carrying out operations independently by small units and subunits.

As I have already mentioned, there are many examples that highlight the role that the new weapon and combat systems have on the morale of the military. In this regard, we only mention the effects produced by the German dive-bombing aircraft (Junkers Ju 87 "STUKA") on the morale of the Allies at the beginning of the Second World War. Also, the morale of the Egyptian military was certainly high in the initial phase of the operations of the Yom Kippur War (1973), when anticipating an Israeli armoured counter-attack, the Egyptian infantry subunits were equipped with a considerable number of anti-tank weapons. Mujahideen guerrillas received real support, with effects on the will to resist and fight for the combatants, by obtaining *MANPAD-type AD* weapon systems capable of shooting down Soviet attack helicopters.

Following these brief analyses, I would like to emphasise once again the implications that armament can have on the morale of both own and enemy forces, having positive or negative effects.

IMPERATIVES REGARDING THE MANAGEMENT OF THE COMBAT POWER'S MORALE COMPONENT IN RESPECT OF THE MODERN BATTLEFIELD'S REQUIREMENTS

Doctrinal and Operational Considerations

Doctrines substantiate the use of armed forces in military operations and, at the same time, place man as the main resource, emphasising that this resource is the main enhancer of the combat power of force structures. The success of military operations largely depends on how human resources are exploited. In an analysis of future military operations, NATO identifies a number of principles that will guide these operations to respond effectively to the challenges of the future. These principles refer not only to the need to know the enemy but also to the need to understand human aspects in relation to military actions as well as the will to fight in order to win, which involves permanent adaptation to the operational environment. The last principle, which in my opinion is imperative and complementary to the others, refers to the permanent maintenance of high morale, this ensuring a solid premise for continuing efforts to achieve victory (Framework for Future Alliance Operations, 2018, p. E-1). NATO Doctrine identifies the achievement and preservation of high morale as one of the principles of operations (AJP-1, Allied Joint Doctrine, 2017, pp. 1-14), whereas NATO Doctrine for Operations Planning emphasises that this is often much more critical for the execution of military operations than physical aspects (AJP-5, Allied Joint Doctrine for the Planning of Operations, 2019, pp. 2-13).

One of the manoeuvrist approach to operations element is represented by the ability to induce shock on the enemy, in order to affect the psychological and implicitly morale component of its combat power. Inducing shock is intended to affect the cohesion, understanding and willingness of the enemy to fight. (FT-1, Doctrina operațiilor forțelor terestre, 2017, p. III-8).

Referring to the objectives of the present approach I consider it relevant to demonstrate how the equipment with new weapon systems induces shock on enemy's actions. The effects of shock generate inadequate and inefficient ways of responding on the part of the enemy, and this is based on overtaking the enemy in the decision-making process, exploiting fleeting opportunities, surprise etc. (ATP-3.2.1., Allied Land Tactics, 2018, pp. 1-18). To achieve these goals, weapon systems, combat vehicles and other modern and high-performance military equipment are essential, creating effects on the morale of both the enemy and own forces.

Consequently, in my opinion, in order to hit the enemy in depth, armoured capabilities are needed, materialised by robust tactical structures. These structures must be equipped with modern platforms with high mobility and speed, active and passive protection, as well as high firepower to achieve the specific effects of shock induction. They must also be adequately supported by air strikes carrying out close air support/CAS and air interdiction/AI missions, which will enhance the will and determination of the military personnel.

Long-range, lethal and high-precision weapon systems provide the ability to strike the enemy's centres of gravity or critical requirements by surprise. Equipment with modern anti-tank systems of the *"pull and forget"* type gives psychological comfort to the military both from the perspective of having an effective ability to hit enemy armour and due to the fact that the anti-tank team can leave the location immediately after launch, thus avoiding enemy engagement.

Monitoring the actions of dismounted forces operating in specific restricted environments, especially in dense urban environments, with the help of drones also generates a moralising effect for the military personnel. Their awareness of the fact that they have a significant technological advantage over an enemy that usually acts unconventionally, more often than not, offers psychological advantages.

Also, an efficient communications system brings advantages not only from an operational point of view, but also from a morale point of view. The permanent connection with the higher echelon or with the tactical command centres of operations confirms to the military the possibility of providing the necessary fire support or medical evacuation, if necessary, the provision of the latter service having a major impact on morale on the battlefield.

Military Training and Education

The individual and collective training and education of the military, in relation to the equipment with new weapon systems, has an essential role in shaping the morale component of the combat capability and implicitly of the combat power. The establishment of new military capabilities materialised in armament systems is considered fulfilled when the integration of all aspects related to DOTMLPFI² is achieved, training being a mandatory element.

² DOTMLPFI (doctrine, organisation, training, material, leadership, personnel, facilities, interoperability/doctrine, organisation, training, actual material, leadership, personnel, facilities and logistical support, interoperability) is a concept established by the Department of Defense (DOD) of the USA in 2009 to designate the essential requirements for the establishment of a military capability.

Thus, permanent training for the creation of cohesion at Brigade/Division level as well as for the acquisition of skills necessary for the efficient use of weapons and military equipment is achieved through: armament knowledge sessions and regular techniques training, using virtual ranges too, demonstrative and experimental shootings sessions, live fire exercise/exploitation of combat vehicles in special conditions and specific environments.

Psychosocial Determinants of the Military Morale

The efficient management of the factors and parameters that influence the morale of the troops and also the achievement of the combat power necessary for the prevalence on the current battlefield must consider a multidimensional approach of the military action, considering a series of aspects related to:

- ensuring decent living conditions including providing basic services or facilities for military families, as well as providing support/counselling to members of military families deployed in theatres of operations/conflict zones;
- demonstration and persuasion of the families of the fighters engaged in military actions in international operation theatres, regarding the fairness of the case and the legitimacy of the actions; mediating the legitimacy of these actions, thus helping to reduce the tendency of civil society to *"demonise"* the armed forces members involved in conflicts (British Ministry of Defence, *Developing Leaders*, p. 90);
- providing psychological counselling and, if necessary, post-traumatic treatments to counteract the effects of post-conflict and/or post-traumatic stress disorders;
- achieving and exercising effective leadership, both at the level of units and large units and at the central level, doubled by the rational allocation and management of resources, the latter being both a mobilising factor for the military and a duty to society regarding spending public funds; this fact will emphasise that *"military personnel life is an invaluable asset for commanders"* (FT 1, p. I-21).
- creating a climate that allows the military to promote on the basis of competence, the merits being recognised as such;

- constant state's investment in military equipment, combat equipment and new weapon systems that maximise the chances of success on the battlefield, while increasing *survival capabilities*.

Considering the current requirements for the management of combat power's morale component, it should be revealed the connection between the existing organisational climate during peace time and the military morale in combat situations. Research studies emphasise the connection from the motivational perspective, including implications for the morale of the military personnel. There have been identified processes including *duty motivation* in connection with *training motivation*, both of them being the foundation for *combat motivation*. (Arădăvoaice, Niță, 1996, p. 51). Therefore, a healthy organisational climate will generate the premises for a high morale and in, my opinion, the political factor has a significant input in this respect. Taking in consideration that "*the total and unconditioned national support*" for the military combat operations is paramount (FT 1, p. I-21), I truly believe that political decision factors have the duty to constantly invest in the forces' equipment.

CONCLUSIONS

A broad analysis of the implications the equipment of the military (especially with weapon systems) has on the morale component of the combat power of a military structure requires much more laborious investigations and approaches.

In my opinion, the performance of comparative case studies, in the situation where the equipment with weapons was different, in various phases of the same conflict, can generate relevant results. Measuring the level of morale can be a great challenge and, in support of achieving this goal, the objective analysis of the testimonies and combat diaries of the military actions of the units are real sources for obtaining results of conclusive research. Combat efficiency, in terms of resources allocations, can also be an indicator of the level of military morale. The truth is that not always the results in combat were those expected by the commanders, with respect to the forces and means involved in operation. Edifying is the Russian-Finnish conflict (30 November 1939 – 12 March 1940), known as the *Winter War*, where the Soviets, despite significant resources employed, suffered disproportionate losses, in relation to the Finnish Armed Forces involved resources.

Currently, through state-of-the-art technologies as well as through the experience gained in the psychological and motivational field, simulations can be performed in which the morale level and the will to fight of the military personnel can be measured objectively with relevant results for possible future situations. The interest for managing this component of combat power is constantly growing, the military organisations realising that the morale of the military personnel will be the main source in the general tendency to reduce the general strength but also the costs for defence (Strategic Foresight Analysis, 2017, p. 57). The decrease in the military personnel involves the enhancement of the new weapon systems in terms of precision, lethality and range. Their superiority and especially the highlight of superiority corroborated with its awareness (by both own and enemy forces) can be a guarantee for maintaining a high morale of the military.

Going back to the role and implications that the equipment with new weapon systems has on the morale component of combat power, I want to emphasise once again that "*confidence in military equipment and effective logistical support is a source of military morale*" (Army Doctrine Publication, Land Operations, pp. 3-9). Considering this reality, states, in general, and military organisations, through decision-makers, must constantly pursue to provide military structures with military equipment, combat equipment and high-performance weapon systems that effectively meet the requirements of operations. Proper equipment and maintenance of a force with a high combat capability, in all respects, involves high costs. Engaging this force in military operations, especially in combat operations, substantially increases these costs, which are usually not limited to material and financial costs. But, at the same time, the neglect of the way of accomplishing and preparing the force from a conceptual, physical and morale point of view creates premises for failure in the execution of the respective military operation, which generates implications of a substantially greater magnitude.

To conclude, military operations generated by the diversified challenges of the future will involve a multidimensional calibration, certainly including the proper modelling of the morale component of combat power. Proper equipment will progressively enhance this human aspect of the combat power of military structures, so necessary for success in operations. The energy thus obtained will generate the premises for the preservation and perpetuation of a high morale.

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