



Notions on collaborative combat and recent observations of experiments

Land Forces Doctrine Review

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In the light of the first deliveries of GRIFFON emblematic material of the SCORPION program planned for this summer, the question of what the SCORPION fight changes is fundamental.

In this context, the doctrinal aspect through the work of LCS2 sheds light on this trace, the aim of which is, more than these deliveries, to provide our land forces with a high-performance combat tool whose main characteristics must be understood by everyone today. While the set of The French Army has naturally taken possession of the SCORPION "totem" and is seeking in its field of expertise to apply its specific features. Today, it is important to have a common and shared vision of the key notions of this system of systems.

It thus appears, in the light of the drafting of the first exploratory doctrine documents and the LCS's recent experiments, that these key concepts must be precisely defined, with the essential elements of these definitions being of the content is presented through this article. Within this framework, the LCS is currently working on the drafting of the land forces baseline level 5 and 6 info-enhanced units to be released this year. This article therefore proposes to revisit these concepts and share them. It will show to complete this panorama through the lessons learned from the latest exercises conducted (whose importance is fundamental in terms of understanding the characteristics of SCORPION combat) how things are changing our way of conducting the tactical maneuver.

1. The fundamental notions of collaborative combat

It would be presumptuous to claim in a few lines to summarize all the notions characterizing the collaborative combat that the program proposes to us. Indeed, this fight remains above all an integrator of effects and presents multiple facets. If we were to be simple, the collaborative combat could be summarized in the following equation:

Collaborative combat = collaborative observation + collaborative protection + collaborative

aggression...

However, in order to understand the latter, it is first necessary to see how this modernised fight brings real added value.

COLLABORATIVE OBSERVATION, PROTECTION, AGGRESSION

Information remains the heart of SCORPION. It can be defined as a decision-making aid for the tactical commander, enabling him to acquire and disseminate a reliable flow of tactical and technical data in near-real time. More than the GRIFFON, other JAGUAR and SERVAL, the heart of info-enhanced combat is based on an essential part of the program: SICS3. First of all, it is SICS that will enable tomorrow's machines to communicate and exchange information, giving crews and leaders an "augmented vision" of the system. and the possibilities of using weapons.

In the future, collaborative combat will rely heavily on these three concepts (observation, protection and collaborative aggression), allowing on the one hand a better sharing and understanding of the vision of the battlefield and on the other hand an accelerated response capacity to threats. If the crews will be able to exchange through this collaborative observation consolidated information on the ground via a vision Through the shared mapping of the environment and the adversary and through augmented reality, it will above all enable a common tactical synthesis (SYNTAC) that is more reliable and faster. The combination of these shared observations and this increased reaction capacity will undoubtedly make it possible to obtain shortened decision-making loops, which will guarantee that the adversary will have the upper hand.

It should be noted that, while collaborative observation and collaborative protection have been known to date, the LCS has added this notion of collaborative aggression to its work. The latter is an equally fundamental notion of info-combat in 2 ways: SCORPION is indeed a combat tool and as such it allows the combination of effects with an offensive vocation and not only defensive. Moreover, this notion also reflects the "warrior spirit" that is sought after today. An example of this capacity for collaborative aggression is the anti-tank weave. The sharing of sectors and the ability to designate via the info-value will be such as to obtain a more lightning action on the opponent.

INCREASED LEADERS

The role and place of the leader will also evolve in the centre of the friendly system. Based on the above-mentioned capabilities and on robust command interfaces, each level will benefit from a vision of the leader's role and position. regularly updated overall view of the friendly system and the enemy elements detected (still important role of a SYNTAC in near real time). These interfaces will have the particularity of limiting radio exchanges, limiting the cognitive load and reducing the situation points, thus giving the commander extra time to better anticipate his manoeuvre. Similarly, it will be easier for him to coordinate with neighbouring units.

THE AGILE MASS

A major characteristic of SCORPION combat is that units will have more than the ability to "go fast, far and strong", they will have a real capacity in a given space to disperse and regroup their effectors quickly, thus allowing them to concentrate their efforts if necessary. The idea of fulgurating better sums up this rethought style of combat. The rhythm of combat in the literal sense, while it will improve on the margins (the rate of progress of a brigade will remain more or less the same and it will not be made to do 100 kilometers more per day) will be marked above all by acceleration. important favoured by

a better anticipation giving to the fighting mass this agility allowing it for its safeguard and the efforts wanted to multiply or combine quickly the effects on the ground and the adversary. The concepts described in the SCORPION exploratory assault echelon (EA) and discovery echelon (ED) doctrine reinforce this concept of agile mass. The IATF preceded in its manoeuvre by its ED will have the ability to define the contours of the adversary but also to identify the points of vulnerability before engaging its EA leading the main action in a more targeted and precise manner. The notions discussed above, which make up SCORPION's DNA, are essential to understand. They must prevail in the reflections conducted in each field to avoid having a fragmented SCORPION tool. It should be noted that more than a "terro-Terrestrial" SCORPION inherently carries a joint dimension. The issue of Cl3D with the Air Force illustrates this, as does the support SCORPION's logistics, calling upon contributions from the services and joint directions such as SSA4or SEA5 to ensure that no one is quote them.

2. The recent teachings of the doctrinal development around SCORPION

The lessons observed through the recent LCS experiments are likely to complete the common vision of the possibilities of this system of systems. The points discussed below illustrate the tactical contribution of the implementation of SCORPION units.

ARTICULATION AND COORDINATION OF UNITS

One of the essential assets of SCORPION is that it will give the joint commander the ability to carry out re-articulations in the course of action according to the chosen manoeuvre, facilitated by the info-enhancement and to inform neighbouring units of these re-articulations. Without calling into question the concept of lines of coordination, it also appears, for example, that an adverse element located in a neighbouring zone could, for the purposes of information sharing, be processed according to the opportunities and capabilities of the effectors. This has two major advantages: it makes the manoeuvre more fluid and reduces the need for regular adjustments in the conduct of operations. This is an important source of task simplification in the operating mode of the GTIA and SGTIA level PCs.

MODELING

Described in exploratory doctrine, this "new" mission is not only for the Discovery Element (DE) a simple enhanced offensive reconnaissance. It is about creating the conditions for engagement. In this spirit, the idea is to create a feeling of insecurity in the adversary's rear by touching, for example, CPs, logistic zones or even important and unique assets of its apparatus. Modelling, more than simple reconnaissance, will favour the action of the attacking echelon (EA).

TRANSITION EA/ED

This transition or handover between ED and AE, studied in a recent tabletop exercise, is a point of attention. It is a matter of finding the best phase in the manoeuvre for the ED to perform this transition. transmission. If one often imagines this level of discovery very far ahead, it turns out in reality that there is a need to keep reasonable elongations according to the terrain between the two levels. In addition, one of the limitations in terms of distance between the two levels is that the DE must remain within range of its artillery and other supports, but also under the SIC6 bubble, which allows it to benefit from all the functionalities of the info-value.

COMMITMENT STANDARDS

The subsequent question, particularly with regard to transition issues, is that of standards of engagement that remain to be refined at this time. Nothing is set in stone at this hour. However, we note that the dispersion of SCORPION units means that the current standards will probably evolve in certain phases upwards. Missions, in particular those conducted by the ED on evoked missions such as modeling will see a spread of the devices to facilitate infiltration and discretion of this element. Conversely, in phases of concentration of efforts on offensive missions by the EA for example, it is easy to imagine that the dimensions areas of engagement will not vary greatly. From the point of view of doctrinal, work in the field of defining these standards must and will be the subject of particular attention as it also conditions the manoeuvring of support and will have consequences on the logistic support of SCORPION units.

NOTIONS OF HARD KILL/SOFT KILL⁷

Another recent simulation exercise highlighted the value to the programme's major equipment of having HARD KILL devices capable of neutralizing the missile and rocket threat. These devices, which combine sensors and effectors, have the advantage of effectively improving platform protection. This protection must be completed by SOFT KILL systems including masking, decoy and jamming. On the other hand, despite the appearance of these new means of protection, we note that compliance with known elementary acts remains the best way of safeguarding our armoured vehicles.

IN CONCLUSION

The conclusions of recent experiments now make it possible, as we have seen, to highlight the significant improvements in a new mode of combat. On the other hand, we can see that it will be to keep the principles of warfare in mind as a "tactical lifeline". The conclusions reached on the SCORPION subject are shared as follows today one of the keys to the successful implementation of the programme and its ownership. It is indeed for all the actors working on The aim of this subject is to be able to understand the characteristics of this new way of looking at the battlefield and conducting operations there. It is also not a question of "making new out of old" but of broadening the vision of things in terms of innovative and adapted solutions. From a vision of command to the problems of information and communications systems to those of logistical support, in order to To quote them, the challenge is ultimately to build a model in which each brick serves and supports a coherent whole that does not restrict the displayed ambitions of the program. The joint aspect of the programme should also be emphasised and it should be approached in the best possible way in conjunction with the other armed forces and joint services and directorates. The excellent dialogue initiated by the army and the services in the logistics field is the best illustration of this.

² LCS: SCORPION Combat Laboratory.

³ SICS: SCORPION Combat Information System.

⁴ SSA: Army Health Service.

⁵ SEA: Service des Essences des Armées.

6 SIC: Information and Communication System.

7 HARD KILL: Active protection system against rocket and missile. SOFT KILL: protection passive.

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