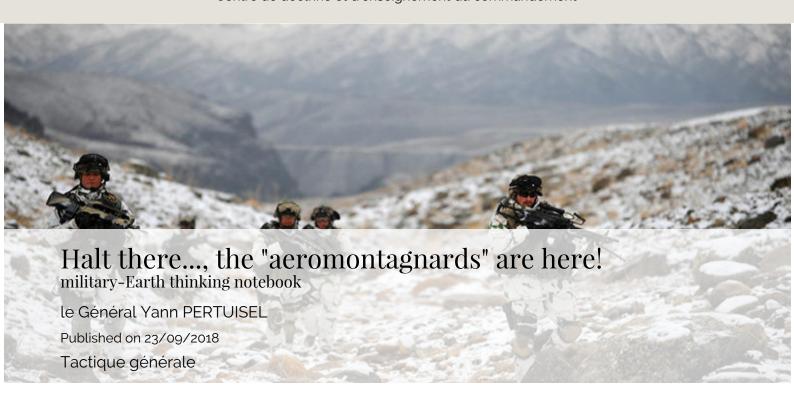
Pensées mili-terre Centre de doctrine et d'enseignement du commandement



This article is a response to the article "Rethinking the influence of the environment on joint manoeuvres: the case of air-land combat in the mountains" published in Cahiers n°22.

Nearly 1,300 combat missions [1], 7.000 30 mm shells, 300 68 mm rockets, 12 HOT missiles[2], this is the balance sheet of the "aeromontagnards" of the PAMIR [3] helicopter battalion (called GTIA [4] Mousquetaires) in Afghanistan for the year 2010. It is also very important to note that this assessment was not marred by any collateral damage or fratricidal fire. These figures would suffice in themselves and would even go without comment, as they perfectly illustrate the capacity of the army's air combat assets to engage in mountainous areas.

It is the article read in issue 22 of the "Cahiers du CESAT" on air-land combat in the mountains that prompted me to take up the pen for, all of a sudden, a new article on this subject. First of all, I wanted to remind you that the problem of combat in mountainous areas is perfectly mastered by the Army in all its air-land spectrum.

Then, I would like to take this opportunity to share some thoughts on three-dimensional tactical manoeuvres, in fact on air combat and on the qualities and capabilities of helicopters to intervene in such an environment, demonstrated once again by the figures recalled at the beginning of this article.

First of all, therefore, the problem of combat in mountainous areas is not new to the Army. Obviously, the operations conducted today in Afghanistan have put this subject back on the agenda. Without wishing to take the place of my mountain comrades of the 27th Mountain Infantry Brigade, who are undisputed experts in this area, I do not think I am wrong

Centre de doctrine et d'enseignement du commandement

in saying that the don't think I'm wrong when I say that expertise in fighting in difficult areas has been cultivated and developed for many years and that, in this field, France has a real European, or even world centre of excellence. But even today, all the units of the French Army are gradually acquiring a little more experience every day[5].

5] The same is true for army helicopters, which now have nearly 60 years of solid experience in mountainous areas. Need we remind you that our good old SIKORSKY S 55 and VERTOL H 21 (the famous "Banana") were already flying at high altitude in the Algerian Jebel?

The ALAT masters perfectly the combat in mountainous area, has adapted means, and develops a whole coherent set of training and education.

Combat in mountainous areas is first of all the subject of a specific doctrine document which has just recently been updated and which truly serves as a reference; it is the ALAT 30.311 (manual of use of the ALAT in mountainous areas). I also invite all those who are particularly interested in the problem of mountain combat to consult it, as it is the result of ALAT's decades of experience in this area, including its most recent experience in Afghanistan.

ALAT then has training and training capabilities with, in particular, its mountain flight centre (CVM) in Sainte-Léocadie in the Pyrenees, which is dependent on the ALAT school. All the pilots learn the "fundamentals" of flying in such conditions and the units regularly stay there to maintain or enrich their know-how.

Moreover, even if the Gap high mountain squadron (EHM) has been disbanded for resource reasons, the fact remains that the working areas of this very interesting region of the Alps are also used very regularly. It is from the Cannet des Maures platform that helicopters can go there and units can take advantage of the 4th RCh [6] facilities to conduct exercises.

These exercises are carried out systematically in joint forces, the level at which all Army operations are conducted today. On this subject, it is very important to underline the indispensable "complicity" and the perfect mutual knowledge that must be shown by the actors of any air-land combat in general, and more specifically in mountainous areas. This is a genuine culture that the people of the Earth acquire from the cradle', from their initial training, and which they develop throughout their careers.

Air combat is "the integration of airborne tactics, missions and modes of action into airland manoeuvres in combination with the other components of the contact function. It gives the Joint Chiefs mobility, reactivity, reversibility and gradation of effects, participating fully in tactical surprise close to the ground, in taking and retaking the initiative. In order to guarantee the optimisation of scarce resources, air combat must be taken into account right from the design phase of the joint manoeuvre, and airmobile units must be integrated at the most appropriate level of command" [7].

Expansion and decompartmentalisation of space, contraction of time, three expected effects of air combat which undoubtedly provide a perfectly appropriate response to the physical constraints of the mountain. And who better than the helicopter can also respond to the constraints of this environment and the needs of the troops on the ground?[8]

Far be it from me to sweep away the limits of rotating sails, which, by the way, also exist for fixed sails. I am of course referring to the meteorological constraints that sometimes prohibit manoeuvring in the 3rd dimension [9] given the conditions of reduced visibility. I

Centre de doctrine et d'enseignement du commandement

also want to talk about the power limits of the aircraft with regard to altitude and temperature, but which are constantly being pushed back with technological advances.

Above all, however, the intrinsic qualities of the helicopter must be appreciated. In particular, I would like to point out that the helicopter has the unique ability to adapt its speed to the terrain and to the situation at hand, even going as far as hovering. It is also worth recalling its extreme manoeuvrability and more particularly its performance in tight manoeuvres enabling it to operate in very steep and closed valleys. Thus, thanks to these capabilities, and having always more efficient observation [10] and firing systems [11], it can, better than any other "effector", apply precise fire while manoeuvring in the field, day and night, and in contact with friendly troops.

His ability to move by adapting his speed and height to the terrain[12], according to the position of friends, enemy and threat, taking advantage of the masks and é13], and, of course, the crew's knowledge of the ground troops' modes of action, allows a perfect adaptation of the maneuver to the tactical situation of the moment. Here again, it is worth pointing out the fundamental difference between CAS[14] and CCA[15], which is the preferred procedure for helicopters. The former leaves almost no initiative to the aircraft pilot, the latter being guided on the objective at the orders of a CAF[16] for the choice of weaponry and the opening of fire. The second leaves the entire initiative to the crew in the choice of trajectories, ammunition and the opening of fire[17]. In the first case, it is indeed, both literally and in use, a support (support), whereas the CCA, as its name indicates, is a true contact attack.

Finally, and again contrary to certain generally accepted ideas, the helicopter has this ability to last over the area of engagement or to be positioned as close as possible [18], able to intervene in almost immediate time. Its increased autonomy[19] or the simple principle of taking over in the area after a rapid replenishment[20] gives it this advantage.

In conclusion, the mountain has never been absent from the doctrinal work of the army and, in particular, from that of its aeromobility. Studies have always been carried out in perfect symbiosis according to the principle of total integration of helicopters into land manoeuvres. The mountainous environment, perhaps even more exacerbated than others, is a perfect illustration of this. Helicopters are not, however, a panacea in particular, as I have pointed out, because of the limitations of weather conditions, and other means are also perfectly suited to supporting [21] troops on the ground. I am referring here to the LRU[22], with which the Artillery will very soon be equipped, which, with its metric precision and range, will be capable of handling an objective whatever the weather conditions.

As I very often have the opportunity to say, there is often no need to fundamentally rethink things, but rather to adapt them. Above all, however, we need to develop much more interoperability of our means, both technically and in terms of use. The integration of an Air Force Caracal into the GTIA Mousquetaires is a perfect example of this, and we must continue along these lines. As I said at the beginning of my remarks, perfect mutual knowledge between ground troops and air combatants is essential to the success of the mission. This condition begins during operational readiness[23] and must be absolutely fulfilled.

As the maritime environment is par excellence that of the Navy, the land environment, and in particular the mountainous one[24], is the one of predilection of the Army. In a joint approach, and in order not to "reinvent the gunpowder", ALAT 30.311 could perfectly well become an AIP tomorrow[25].

Centre de doctrine et d'enseignement du commandement

1] CCA, ISR, escort, MEDEVAC, OHP, ... 2] Only ammunition fired in combat situations is counted here. 3] 3 Tiger, 3 Gazelle VIVIANE, 3 Cougar and 3 Caracal (including 1 from the Air Force). [4] Joint Battle Group 5] All the regiments of the army will have fought in such a terrain. 6] Fighter Regiment (armored unit of the 27th BIM) based at Gap. 7] "Only a combined manoeuvre between ground forces and helicopters can win the decision. The ALAT is more than ever the weapon of tactical surprise at ground level. Air and ground combat are therefore today necessarily confused. The third tactical dimension is not only consubstantial to the effectiveness of the land forces, but it is consubstantial to the Army" (General IRASTORZA, Chief of Staff of the Army, Le Luc en Provence, 10 July 2008). 8] Intelligence, fire, movement, command, medical evacuation, logistics 9] Whatever the vector [10] Thermal Camera, Night Vision Binoculars, ... [11] 30 mm gun, air-to-ground missile (HOT today and HELLFIRE from 2013) 12] Principle of the VOLTAC, or combat flight, practiced in the army [13] Areas of shade, vegetation,... [14] Close Air Support [15] Close Combat Attack 16] Forward Air Controler 17] This procedure may be initiated by any leader in the field and is intended to give the nature, volume and positioning of friends and enemy. 18] "on station" or "on call". 19] Almost 2 hours on the action zone for helicopters such as the Tiger or the Cayman (NH 90). 20] Like the Gazelle, which has a less important autonomy. 21] In the sense of the term "support" mission... 22] Unitary rocket launcher (range of 70 km). 23] In particular during MCPs (pre-projection conditioning) carried out with all the means deployed. 24] See document EMP 23.431 on the doctrine for the use of land forces in mountainous areas. 25 | Joint publication

Centre de doctrine et d'enseignement du commandement

Title: le Général Yann PERTUISEL

Author (s): le Général Yann PERTUISEL

Release date 12/02/2021