# The Cenepa Conflict at 25: Lessons Learned

## An Analysis of the Employment of the Principles of Peruvian Aerospace Military Power

#### LT COL OSWAL SIGÜEÑAS ALVARADO, PERUVIAN AIR FORCE

An air force, made up of airmen and normally used by other armed institutions, requires for its conservation and maximum performance, an extremely user-friendly command, comprehensive, aware of its possibilities and limitations, and safe to use it only in missions that are strictly essential to avoid premature wear and tear, but at the same time, commanding it in a very prudent and energetic way.

Lt Col José L. Ragúz, 1934

### Introduction

26 January 2020, marked the twenty-fifth anniversary of the confrontation between the armed forces of Ecuador and Peru on the eastern side of the Condor Mountain range over the Cenepa River basin, in the province of Condorcanqui in the department of Amazonas, for control of a disputed area on the border of both countries.

The conflict, which lasted from 26 January to 27 February 1995, confronted the armed forces of two countries with limited military capabilities, little air materiel, and below the current technological level of other countries of the region.<sup>1</sup>

Scholars have described the conflict as low intensity due to the number of lives it claimed (around 500 combatants from both countries), while others find characteristics typical of the "old wars" because they consider the confrontation was specifically of a military character. Whereas for the Peruvian Air Force (FAP), the Cenepa Conflict was a focused conflict,<sup>2</sup> a view that I share, given that it was restricted to a specific geographical area in which operations were carried out with the sole military objective of dislodging the enemy from Peruvian territory, without crossing their border.

What was the strategic vision of this conflict? For Peru it was to demonstrate they could evict Ecuador from the disputed territory (offensive strategy), and to go to the negotiating table to achieve its political objective of "closing the border of the seventy-eight (78) kilometers to be delineated."<sup>3</sup> Ecuador's strategy was for the international community to view Peru as the aggressor and thus ignore the existing Protocol of Peace, Friendship, and Limits of Rio de Janeiro (PRJ), signed in 1942. They could then force Peru to sign a new boundary treaty, which would

allow Ecuador to stay in the disputed area and make its dream of becoming an Amazonian country come true.



**Figure. Border dispute Zone between Ecuador and Peru** Source: Central Intelligence Agency (CIA)<sup>4</sup>

Both countries agreed to maintain the situation at the level of a focused armed conflict, but the social reality was not the same in both countries. In Lima, the capital of Peru, the population spent the summer peacefully on the beaches even though the front pages of the newspapers indicated that Peruvian armed forces were giving up their lives on the border with Ecuador; in other words, the social reality was very far from the political-military reality that Peru was going through at that time. On the other hand, in Ecuador, people held massive rallies in squares

and parks nationwide, expressing their total and unconditional support to the Ecuadorian armed forces.

The Joint Doctrine of the United States of America points out that the difference between a conflict and a war is that the conflict basically involves a military sphere, and war necessarily implies the very active participation of all domains: political or diplomatic, informational, economic, and social. Thus, Cenepa was a focused conflict.<sup>5</sup>

After 25 years, from the perspective of the eight principles of aerospace military power indicated in the Basic Doctrine of the Peruvian Air Force (DBFA), its use in the Cenepa Conflict is analyzed through the air campaign employed, with the hope that this analysis contributes to the defense of the Peruvian territory.

## Were Aerospace Military Power Principles applied in the Cenepa Conflict?

According to the DBFA there are eight principles of aerospace military power: centralized control and decentralized execution, synergy, flexibility, versatility, priority, balance, concentration, and persistence, which complement the principles of war and military actions.<sup>6</sup>

For Prussian General Clausewitz, the "principles, rules, norms, and methods are essential concepts for the theory of war, insofar as it leads to positive doctrines."<sup>7</sup> This general and other war scholars refer to the principles of war according to their experience and have drawn up their own lists of principles applicable not only to war but also to aerospace military power, as in this case.<sup>8</sup>

The DBFA defines *centralized control and decentralized execution* as the first principle of aerospace military power. This principle resides in planning, directing, setting priorities and the consequent delegation of authority to subordinates.

According to Joint Publication 5-0, Joint Operation Planning, "Joint planning is end-state oriented."<sup>9</sup> This publication also shows a figure that graphs operational planning through two questions: "where are we?" and "where do we want to go?" If there is no answer to those two questions, the failure of any force will be its fate.<sup>10</sup>

As it pertains to regarding the principle of centralized control and decentralized execution, the Joint Command of the Armed Forces of Peru did not appoint an Air Component Commander dependent on a single Operational Commander for this conflict. Instead, the planning and execution of air operations were under various commands: Operations Command located in Lima, the First Air Wing Commander of Piura and the Ciro Alegría Detachment Commander. These commands had five Air Wings that had one or more Air Groups, and were organized based on one or more Squadrons, as follows below.<sup>11</sup> First Air Wing: Stationed at the Captain FAP José Abelardo Quiñones Gonzáles Air Base in the city of Chiclayo in the department of Lambayeque, commanded the Sixth Air Group made up of CCBB 611 and 612 Squadrons equipped with 13 French Mirage VP/DP fighter planes, the 606 Maintenance Squadron, the 607 Support Squadron, and the 6th Intelligence Squadron.

In addition, in Piura, the 7th Air Group, housed at the Captain FAP Guillermo Concha Ibérico Air Base, contained the 711CB Squadron with 16 North American Cessna A-37B Dragonfly light attack aircraft, the 705 and 706 Training Squadrons, the 706 Maintenance and 7th Intelligence Squadrons. At the Capitán FAP Montes Air Base in the city of Talara in the department of Piura, belonging to the same wing, there was also the 11th Air Group, whose 111 CB Squadron had Soviet Sukhoi SU-22 Fitter aircraft. The 116 Maintenance Squadron and the 11th Intelligence Squadron were also housed there.

Second Air Wing: whose headquarters was the Jorge Chávez de Lima-Callao Air Base, where the 3rd Air Group resided, was home to the 324th, 325th, and 326th Helicopter Squadrons, equipped with Mi-8T, Mi-17, Bell AB 212/214 and 412. These units were supported by the 306th Maintenance Squadron and the Third Intelligence Squadron. Likewise, the 8th Air Group was stationed at this base, made up of the 841st, 842nd, and 843rd Transportation Squadrons, the Presidential Squadron, the 806th and 807th Maintenance Squadrons, and the 8th Intelligence Squadron.

The Third Air Wing: represented by the 4th Air Group, residing at the Mariano Melgar Air Base in the city of La Joya in the department of Arequipa, which housed 411th CB Aguila Squadron, the 412th Halcones Squadron, the 406th Maintenance Squadron and the 4th Intelligence Squadron. This unit had 12 French Mirage 2000P / DP fighters and the Soviet Su-22 fighter-bomber. The 9th Air Group was based at the Renán Díaz Olivera Air Base in the city of Pisco in the department of Ica, where the 921st and 922nd Bombardment Squadrons flew supported by the 906th and 907th Maintenance Squadrons and the 9th Intelligence Squadron. The operational squadrons were staffed with 20 Mk-68, Mk-12, Mk-52, and TMk-54 Canberra aircraft. The 2nd Air Group and the Command School located at the Vítor Air Base in the department of Arequipa, where the 211th Combat Squadron flew, supported by the 206th Maintenance Squadron. The operational Squadron was equipped with MI-25 aircraft and Special Forces Units.

Fourth Air Wing: Located in the imperial city of Cuzco in the department of the same name, was rather a nominal unit since it lacked stable units under its dependence. Years later, this wing would be in the city of Pucallpa in the department of Ucayali.

Fifth Air Wing: Based at the Coronel FAP Francisco Secada Vignetta Air Base in the city of Iquitos in the department of Loreto, managed the 42nd Air Transportation Group, which had the 421st Jungle Transportation Squadron, the 426th Maintenance Squadron, the 427th Support Squadron, and the 42nd Intelligence Squadron. Pilot training and other training were carried out by the 51st Air Group, which included the Air Academy. This independent Group located at the Las Palmas Air Base in Lima had the 511th Primary Instruction, the 512th Basic Training, th 513th Advanced Training, and the 514th Technical Squadrons. Finally, in that same Air Base, the 331st Aerial Photography Squadron was the operational unit of the National Aerial Photography Service.

This lack of centralized Command and Control (C2) impeded the joint force's success in Cenepa. There was no coordinated work among components and, therefore, no centralized control under a single air component commander to conduct air operations, since each command imposed their own course of action in the theater of operations. Competing commander intents prevented an integrated effort to achieve the objectives assigned to the joint force. Although the Air Operations Doctrine in existence at that time established a Joint Air Operations Center (CAOC) to allow for the interoperability of joint forces and precise and timely communications, there was lack of understanding of operational issues between North and Northeast Operational Commands. This contributed to the disorganization and dysfunctionality of the joint forces in the theater of operations and the combat zone in Cenepa.<sup>12</sup> As the Scottish Royal Air Force commander, Arthur Tedder, pointed out in a speech: "War by air cannot be divided into small segments; it doesn't know borders on the ground or in the sea, except those imposed by the radius of autonomy of the aircraft; it is a unit and demands unity of command."<sup>13</sup>

The command unit means ensuring the unity of effort under a commander responsible for each objective. In Peru, we did not have a command unit, while Ecuador had a solid command unit that ensured the air-tactical and air defense operations. This taught us the importance of a unified combatant command, with the ability to demand maneuver, flexibility, and versatility; which, as in the case of the United States, would serve to provide effective military C2 both in peace and in war, and act according to a unified command plan—whose authority goes from the president, through the secretary of defense, to the combatant commanders. This applies to our reality because the Political Constitution of Peru itself states in Article 167 that the president of the republic is the supreme chief of the armed forces and the national police.<sup>14</sup>

Regarding the second principle, synergy, it is conceptualized as the precise and coordinated application of the various elements of force to exert pressure on the enemy. The Dictionary of the Royal Spanish Academy defines it as "an action of two or more causes whose effect is greater than the sum of the individual effects"<sup>15</sup> so that aerospace military power produces synergistic effects by dictating the pace, tempo, and conduct of the war effort in a conflict and demonstrates that the proper application of a coordinated and synchronized force can outperform forces employed individually, producing the desired effects.

Thus, objective functional specialization and synchronized direction constitute the principles of organizational synergy according to Max Weber,<sup>16</sup> in which the sum will be more than its parts. However, without synergy the sum becomes a negative, with results much lower than expected and great added frustration, at both the personal or group level—which is what happened to Peru during the Cenepa Conflict.

The Peruvian armed forces did not specify the principle of synergy in the Cenepa Conflict because the three Weberian principles mentioned above were not fulfilled, for the following reasons: 1) The lack of a holistic vision, in this case due to different operational commanders, which prevented them from forming a strategic vision to transmit to others. 2) The air groups that participated in the Cenepa Conflict were not differentiated in order to develop specific, necessary, and efficient tasks. On the contrary, they were all charged with the task of flying to dislodge the enemy. Finally, 3) synergistic direction is a question of leadership and synchronization that should be in charge of the commander of the Peruvian Air Component to properly adapt to change. However, this did not happen due to the lack of a definition of responsibilities and delegation of authority to different operational commanders.

The Air Component Commander, who received orders from three commands, was more concerned with solving small, localized incidents than developing a plan with a consistent objective for the various air wings. The great difference from Ecuador was that from the beginning, they made the correct selection of objectives to occupy Peruvian territory and at the same time make it seem as they were the attacked country.

C2 is essential, and the backbone of other capabilities; thus, its absence caused a lack of coordination not only in the planning of operations but also in the preparation of the air assets with those of air defense. In turn, Peru's poor vision inhibited its ability to obtain even the minimum superiority over its foe, since the FAP was unaware of Ecuador's military capabilities due to the scarcity of the intelligence information processed. It was a different situation for the Ecuadorian Air Force (FAE), which had had taken note of our capabilities during the Peru-Ecuador Armed Conflict in 1941 and in the False Paquisha Conflict in 1981, and tailored their equipment accordingly.<sup>17</sup> Meanwhile, the intelligence information processed in Peru was almost nil, and represented a huge limitation for the FAP.

For example, Ecuador used its fighter planes from positions not known to Peruvian intelligence and achieved quick reaction times thanks to the availability of electronic warfare coverage, an advantage that Peru did not have.

The third principle of aerospace military power is versatility. According to the Basic Doctrine of the FAP, this principle is characterized by using aerospace military power effective and efficiently at the strategic, operational, and tactical levels in different operational missions. This principle was not applied during the Cenepa Conflict by Peru. Since the rules of engagement did not allow for the crossing of the border, planning could not be carried out against tactical, operational, and strategic objectives within enemy territory. Thus, missions were limited to targets within Peruvian territory, with a single-entry pattern, exposed to Ecuadorian air defense and antiaircraft weapons. Additionally, parallel operations could not be carried out and direct operations against centers of gravity, deception operations, indirect operations on C2 objectives, lines of communication and defensive capabilities, and planning were limited to specific fire support operations for surface forces, not to a wide spectrum of targets.

Towards north of the Cenepa River, the Ecuadorian territory has an average elevation of more than 1,900m and forms a plateau that allows the tracing of land routes. That advantage was denied to the southern Peruvian sector and forced the Peruvian military command to depend on air supplies. However, the relative distances from the theater of operations to the rear bases in both countries varied between 75 and 260 km. These general conditions provided advantages for Ecuador and problems for Peru.

Unlike Ecuador, during the conflict, Peru always maintained a defensive strategy. This action agreed with the provisions of Peru's White Paper on National Defense, chapter 3, "State Policy for Security and National Defense," which specifies Peru's security strategy is defensive-dissuasive and that military action is the last resort that the Peruvian state will use to act in its defense.<sup>18</sup> When the Cenepa Conflict broke out, the white book did not exist, it dates from April 2005. However, the "defensive-dissuasive" strategy was the one used by the Peruvian armed forces in the Cenepa Conflict, the same one that guided all the actions of the FAP. In this sense, it could be affirmed that Clausewitz's maxim was fulfilled: "War is simply the continuation of politics by other means,"<sup>19</sup> which translates into the subordination of war to politics.

The fourth principle, flexibility, is about moving from one campaign objective to another, quickly and decisively. According to the Operational Glossary of the Peruvian Air Force, flexibility is the ability to adapt, conceptually and materially, to changes in the security environment to prevent surprise by an adversary, acting effectively and more quickly than the adversary, even in the absence of a previous alarm.<sup>20</sup>

In the Cenepa Conflict, although there was a military directive for the FAP to evict the invader without crossing the border, that order was coupled with foreign policy discourse seeking to keep peace, friendship, and limited conflict protocols between Peru and Ecuador in force. Known as the Protocol of Rio de Janeiro, signed in 1942, both countries committed to developing a plan to place milestones to set the limits of each country. Although this limited the freedom of aerial action to a rectangle of 12 by 24 km, which was insignificant from the point of view of military aerial maneuver, it made it easier for the FAP, which had fewer resources compared to Ecuador, to better enhance its aircraft to reach its military objectives.

In an interview with the current commander general of the Peruvian Air Force, Rodolfo García Esquerre, who participated as a pilot in the Cenepa Conflict, he was asked what tactics pilots used in the Cenepa missions. He replied that they were air raids, in which a small group of aircraft flew low, at the highest possible speed, to reach their targets. In his words, bombing at medium altitude with GPS was all the pilots could do, in order to be out of range of Ecuador's antiaircraft artillery. In many cases, they used precision night attacks, with scopes, in A-37 and T-27 "Tucano" aircraft; and bombing at low altitude, without ground radar, with little or no variation in their entry and attack axes.<sup>21</sup>

In the Cenepa Conflict, there was a tactical offensive in support of the surface forces that guaranteed speed and mobility in the fulfillment of the mission on a focused scenario, although at a high cost for the FAP. However, this allowed the FAP to apply the principle of flexibility in the Cenepa Conflict: It adjusted its actions to defend only against the disputed territory; and its response was agile in the face of the restricted terrain, the enemy, and Ecuador's timing.

The fifth principle of aerospace military power is priority, defined as the result of the analysis made by the commanders to establish a certain order in the use of air and space power—it relies on versatility.

During the conflict, the FAP was required to perform various operational functions that had an effective use in air operations in support of the surface forces, guaranteed the speed and maneuver of the ground forces to the extent that they were able to evade the air defense capacity and Ecuadorian antiaircraft artillery. However, this prioritization was not complete given that the complex and close Condor Mountain range, which prevented FAP from having freedom of action, and restricted all possible courses of action.

Adequate prioritization results from planning. For this, the air component commander must evaluate the use of force and guide the use of air resources in those priorities that can contribute to the requirements of the joint force and the success of the mission.

The assignment of priorities has the following characteristics:

- The primary objective of the Air Commander must be to achieve an adequate degree of airspace control, which allows executing the given priorities—that is, achieve air superiority.
- Political restrictions may prevent the above priorities from being assigned.
- The results of a battle or campaign help to assess whether the targeting priority was correct.

In Cenepa, the FAP did not establish priorities aligned to the desired effects and consequently did not establish an order or a selection of objectives based on the desired effect. What was the desired effect? Its only desired effect was to "dislodge the Ecuadorian troops"; there were no other objectives to select: it was necessary to evict these troops, no matter what, to close the 78-kilometer border. This was achieved but at the cost of many deaths, the question is "should it cost us what it did?" in the words of the Ecuadorians themselves, it cost many Peruvian soldiers' lives.<sup>22</sup>

Likewise, as mentioned above, the performance at Cenepa was characterized by political restrictions that decisively influenced the planning of air operations. In the Peruvian case, the military strategic directive to carry out air operations without crossing the border limited and interfered in all planning that had the achievement of air superiority as an objective. The FAP knew that it could not carry out planning against tactical, operational, and strategic objectives where the offensive units of the Ecuadorian airpower were. This military strategic restriction expressly excluded any action aimed at penetrating the adversary's air centers of gravity, and, in this sense, it inhibited the possibility of obtaining air superiority, however limited.

In different interviews conducted with FAP pilots who participated in the Cenepa Conflict, they affirmed that the FAP played a decisive support role in the ground forces' victory in the inhospitable mountain of the Cordillera del Condor. There is no doubt they accomplished combat air patrols (PAC), combat transport, and operational deception missions, at low altitude so as not to alert the enemy even though they did not have electronic warfare radars or precision weapons or planning processes. The pilots fought far from their bases and without freedom of action but with an unshakable morale and sights set on the political objective of closing the border with the neighboring country. They performed 776 departures, and logged 2,400 flight hours, 103 combat missions, and 800 hours in transport aircraft (passengers and cargo).<sup>23</sup>

The FAP's tactical offensive mission was always at the front lines, but did not have the discretion to carry out air interdiction operations or obtain air superiority. Thus, FAP did not have freedom of action in Cenepa, and that is where its main problem was rooted, because Ecuador created the scenario and located it far from Peruvian air bases, and out of the reach of its radars. The Ecuadorian adversary had everything—radars, airfields, communication routes, intelligence, all the logistical support at its service—and they intelligently prepared the theater of operations. The scenario for Peru entailed long distances from the FAP's interior Talara and Chiclayo air bases, and from Lima and Pisco, which forced the FAP to fly to the areawith its planes at medium altitude and return the same way, with little time to orbit in the theater of operations. Thus, Ecuador had the initiative providing Peru with the little opportunity to cause damage without suffering large losses. John Warden III would say in this regard that the FAP could not go further in each attack on the Ecuadorian military forces because it lost all opportunity to become the determining factor in the Cenepa Conflict.<sup>24</sup>

The sixth principle of aerospace military power, balance, consists of the evaluation of the expected results against the projected risks, which implies having appropriate and timely information to produce an effective decision. Air resources have limited and finite availability, therefore this principle has a high value for an air commander.

The air commander must establish a balance between the efficient, effective, necessary, and timely use of force, with respect to the risks inherent in its use, hence it contributes to the adequate balance between offensive and defensive operations in the theater of operations and among the strategic, operational, and tactical application of aerospace military power.

The principle of balance is closely related to the principles of centralized C2 and with that of priority, since centralized C2 ensures the balance and proper prioritization of the air environment, which, due to its response characteristics, is highly desirable and, at the same time, limited. For this reason, having no centralized C2 by the FAP in Cenepa meant that the opportunity to integrate the capabilities of the FAP with ground forces was lost, and the opportunity to obtain the minimum superiority was missed, since the FAP did not have adequate priorities or objectives to achieve. Instead, it could only limit its actions to attacks on military leadership from the narrow area in which the conflict was positioned.

However, FAP developed missions and tactics such as transport, patrolling, support to surface forces, combat air patrols, aeromedical evacuations, liaison missions, reconnaissance missions, escort and search. Nonetheless, airspace control was not achieved—not even for a moment. This was reflected in the high losses of Peruvian aircraft in air combat, which were due more to human error than to the capability of the Ecuadorian forces.

Every time a FAP aircraft headed to the northern area near Tumbes, it orbited in anticipation of a possible attack, its pilots did not have clear information and were always in a situation of "alert in flight." There was not even a three-dimensional radar to allow air patrols to point out the target, so without the necessary equipment and without accurate information it was almost impossible to guarantee the safety of the Peruvian pilots themselves in the air. The further they tried to get, the higher the possible cost increased. The air strategy was always subordinate to the military strategy and in turn to the political objective, for this reason the principle of balance was not applied in the Cenepa Conflict.

The seventh principle, concentration, is defined as the location of the efforts necessary to obtain a purpose; it also assumes that air and space power is not very effective when it is foolishly dispersed. This principle is based on the economy of force to distribute and make a judicious use of the forces it has, so that these forces deploy at the appropriate time and place to achieve air superiority.

In Cenepa, the Peruvian pilots fought far from their bases, as has been stated previously. The air groups were dispersed in the north and south of Peru; added to this was the longer transfer time to the tactical objectives, the unfavorable climate and jungle-type terrain, and lack of air-land communications. However, FAP aircraft were concentrated with a single military purpose: to dislodge the enemy, an effort made to concentrate power in a time and place considered decisive was directed only to remove the enemy from the Peruvian area that had been invaded. Yet, maneuver was sacrificed in favor of mass, as a result, many lives were lost.

Concentrating the effects, in the case of the air component on the material objectives according to the desired effect and the rational use of force, guarantees the continuation of the force. Although Peru did not fully use the diversity of its air assets at their full capacity and did not use its air assets efficiently, it was able to carry out deception operations. However, unlike Ecuador, it did not have the element of surprise, the offensive, nor the freedom of action it desired.

The characteristics of air assets allow their concentration at the place and time and, with the appropriate capabilities, to produce the desired effects. In the fight for control of airspace, concentration is an extremely important principle that should not be forgotten. Warden points out that each conflict, each war, each confrontation presents its own problems, but it is obvious that in all there is a clear mandate to concentrate forces. For Warden there is no simpler or more ignored principle than concentration because the commander who concentrates his forces either wins or avoids defeat; therefore, the speed and mobility of aviation facilitates concentration and thus the use of the air weapon.<sup>25</sup>

In the focused scenario of the Cenepa Conflict, fire support operations for surface forces that at first did not seem to work, paid off in the end. The flexibility that

the FAP applied to meet the multiple demands during air operations in Cenepa made it possible for them to respond with integrity to the threat posed by Ecuador.

It should also be recognized that, considering the operational situation, the little freedom of action, and the use of inadequate weapons in the theater of operations, for Peru the risk of not reaching the objective at the operational level (military objective) increased. Although there was, at all times, a high risk of being defeated by the adversary, the FAP had a timely and precise reaction when the air resources were required, concentrating its attacks, although improvised for lack of a centralized leadership, and that allowed it to achieve the desired end-state to dislodge the enemy.

Persistence is the eighth principle of aerospace military power; it consists of the application of airpower with the continuity (in time) and intensity (volume) necessary to achieve the desired degree of neutralization. This means that aerospace military power must be applied constantly, to prevent the achieved objectives from being recovered by the adversary.

In the Cenepa Conflict, the Peruvian armed forces had only one objective: to dislodge the Ecuadorian armed forces. In the case of the air component, they had the essential task of preparing, planning, and executing air raids in the northern area of operations, fulfilling the explicit tasks of bombing at medium altitude with GPS, night attacks with scopes, and bombing at low altitude, and the implicit tasks of attacking through few or no variation of entry and attack axes, with accompanying bomber aircraft with ground control of interception (GCI) radar-free combat air patrols—that is, without a ground radar that would indicate the objectives with greater precision and guide the fighter planes.<sup>26</sup>

Unlike the FAP, the FAE benefited from the proximity of its air bases and established a comprehensive air defense system with early warning radars with GCI capability and firing radars associated with automatic antiaircraft artillery. This allowed it to maintain the initiative in Cenepa and prevent the Peruvian air component from achieving air superiority.

Persistence makes it possible to maintain surveillance permanently in the air and react quickly to attacks, as well as to extend the command, control, communications, and computing capacity beyond what is allowed by simple electromagnetic systems used in the air environment. It gives us awareness of the spatial situation, which is strengthened through the exercise of spatial control. This allows air units, regardless of their level, to achieve the objectives set under the intention of the upper echelon, achieving unity of effort. However, this is far from what was achieved in Cenepa because, as has already been mentioned, there was no centralized command to draw up the objectives because the offensive strategy of the FAP and the other forces was subsumed to a single military strategic objective.

The FAP persevered on the offensive in support of the land campaign in Cenepa to achieve the desired effect, fulfilling the strategic military objective until the shooting down of our aircraft in combat, but the close air support missions, normally conducted close to the fire safe control line demanded greater risk and were also very expensive for Ecuador's air defense.

The objective of persistence is to maintain pressure on the enemy and not allow it to recover. In the case of Cenepa, the Peruvian air component fought away from its bases, supporting the advance of our land forces, towards the positions falsely called Cueva de los Tayos, South Base, and Tiwinza; each assault being preceded by rocket attacks from MI-25, MI-17, and MI-8T aircraft; with the decisive terrain of Ecuador was invaded from the air continuously with attacks from SU-22, A37B, and Canberra FAP. The Mirage 2000/P protected northern cities and air bases in the event of a surprise attack by the FAE, through operational offensive and defensive air surveillance functions in their own territory.<sup>27</sup> Therefore, the principle of persistence was applied in offensive air operations in support of fire to the surface forces, because they had a single objective, which was to dislodge the armed forces of Ecuador, an objective that limited the FAP, because it could have carried out other more remunerative tasks such as air interdiction and air superiority.

#### **Final thoughts**

Following Sun Tzu's logic, when a president monopolizes the generals' decisions, war turns into chaos.<sup>28</sup> The context of the Cenepa Conflict in 1995 was dominated by the desire for reelection and power of the engineer Alberto Fujimori, then president of Peru, who did not allow the air force to use its power effectively. The Joint Command encouraged this lack of action, despite that there was combat experience with Ecuador on two previous occasions (1941 Conflict of Peru-Ecuador and 1981 Conflict of the False Paquisha) and the skills acquired in Huallaga, Ucayali, and Ayacucho.<sup>29</sup> The subordinate armed forces achieved the political objective by evicting the enemy and occupying the area that had been invaded without exceeding the border limit, but at a very high cost, and the FAP played a decisive role despite the restrictions on the force within its area of responsibility.

Thus, the political context and the strategic military objective placed the FAP in a dilemma of fighting or dying, going for the homeland to the point of sacrifice if necessary, and that is what it did to achieve the Pyrrhic victory in the upper Cenepa Conflict. In Clausewitz's formula, the one who achieves the political objective wins, in the Cenepa Conflict, although air superiority was not achieved, the military objective was achieved and therefore the political one to which it was subject, which sought to close the border with Ecuador. The FAP was shy in employing its military instruments at the operational level, locked into a tactical offensive strategy.

The principles of aerospace military power are fundamental ideas that should not be put into practice independently, nor should they be left to chance—rather, their application should be done jointly. Peru did not have precision weapons, electronic warfare equipment, joint doctrine, nor established planning processes, and its selection and preparation of the theater of operations was one of the most important determining factors which affected everything else—hence it was obvious Peru did not apply all the principles of aerospace military power.

As explained, of the eight principles of aerospace military power, in the Cenepa Conflict the FAP applied only three of them, namely: flexibility, concentration, and persistence. There was no versatility, since our air force had a very limited area of operations, played a diminished role in the conflict, and the expected synergy with the rest of the armed forces did not occur. Battle rhythm was slow and the air engagements were not effective due to the lack of centralized control and decentralized execution. There were improvised air operations in the theater of operations but with little freedom of action, which led to a daily loss of human lives while awaiting the signing of a peace agreement. There was no priority to envision desired effects because airpower capabilities were not exploited, and the efficient, effective, necessary, and timely use of the air force was not properly balanced. Without a doubt, the most valid lesson for the FAP will be to recognize that the principles of aerospace military power constitute fundamental truths, which have not been institutes overnight, but instead are the product of decades of experience in the use of airpower—its application would have allowed a better role against the FAE than the one played.

In summary, in the Cenepa Conflict not all of the principles of aerospace military power were applied due to external factors that conditioned the participation of our armed forces, and especially our air force, to adopt an operational and strategic defensive position and an offensive tactical attitude in support of surface forces.

Winston Churchill said that of all forms of military force, airpower is the most difficult to measure or even to express in concrete terms.<sup>30</sup> However, its optimal use translates into saving human lives and economic costs, and if Peru wants an air force capable of acting in any future conflict scenario, it must trust that the principles of aerospace military power and all the others that the doctrine imposes are fundamental beliefs to fight a war to achieve victory.

#### Notes

1. "Desde el Dog Fight hasta los UCAV s: Evolución del Poder Aéreo." (From Dog Fights to UCAV s: Evolution of Air Power), Revista de la Escuela Superior de Guerra Aérea (RESGA). Buenos Aires: Editorial Gráfica Independencia Argentina S. R. L. Capítulo M: Perú – Ecuador. 2001. P. 5.

2. La FAP en el conflicto del Cenepa 1995 (The FAP in the CENEPA conflict). Revista Oficial de la Fuerza Aérea del Perú. Jan-Apr 2017 / Edition Nº 517. P. 37. Retrieved May 6, 2021, from https://issuu.com/fap.mil.pe/docs/revista517.

3. Cenepa 20 años después. Cronología de la participación de la FAP, en el teatro de operaciones, durante el conflicto que permitió cerrar nuestra frontera norte (Cenepa 20 years later. Chronology of the FAP's participation in the theater of operations, during the conflict that allowed closure of the northern border) Revista Oficial de la Fuerza Aérea del Perú Aviación Nº 514. 1er semester 2015. P. 33. Retrieved 5 January 2021 from https://issuu.com/fap.mil.pe/docs/revista\_final\_514.

4. Mapa de la Zona de Conflicto Fronterizo, Peru - Ecuador 1981 (Map of the Peru-Ecuador Border Conflict 1981). Retrieved 11 January 2020 https://www.gifex.com/ecuador\_maps/Peru -Ecuador\_Area\_Boundary\_ Dispute\_Map\_2.htm.

5. Chairman of the Joint Chiefs of Staff of the United States of America. Joint Operations Manual, JP-03. 2006.

6. "Desde el Dog Fight hasta los UCAV's: Evolución del Poder Aéreo." Revista de la Escuela Superior de Guerra Aérea (RESGA). Buenos Aires: Editorial Gráfica Independencia Argentina S. R. L. Capítulo M: Perú – Ecuador. 2001. P. 5.

7. Clausewitz, Carl Von. De La Guerra (On War). Madrid: La Esfera de los Libros. 2005. P. 109.

8. The following can be mentioned: Sun Tzu (350 a.C.), Vegetius (390 a.C.), Saxe (1757), Napoleón (1822), Jomini (1836), Mc Dougall (1858), Forrest (1864), and Mahan (1890).

9. Publicación Conjunta 5-0, Planificación de la Operación Conjunta, 11 de agosto de 2011, II-1. (Joint Publication 5-0, Joint Operation Planning). Retrieved 11 March 2013, from http://www.dtic.mil/doctrine/new\_pubs/jp5\_0.pdf.

Krause, Merrick E. El poderío aéreo en la guerra moderna (Airpower in Modern War). P.
2-15. Retrieved 5 Mach 2020, from https://www.airuniversity.af.edu/Portals/10/ASPJ\_Spanish
/Journals/Volume-27\_Issue 4/2015\_4\_05\_krause\_s. pdf

11. "Desde el Dog Fight hasta los UCAV´s: Evolución del Poder Aéreo." Revista de la Escuela Superior de Guerra Aérea (RESGA). Buenos Aires: Editorial Gráfica Independencia Argentina S. R. L. Capítulo M: Perú – Ecuador. 2001. P. 5.

12. The theater of operations is a geographic area of significant size in which what is sought is to achieve a common strategic goal; in the case of the Cenepa conflict, the theater of operations included an area on the eastern side of the Cordillera del Cóndor, on the Cenepa River basin in Peruvian territory.

13. Mentioned by Juan Ramírez in: "Efectividad del Poder aéreo en Colombia" (Effectiveness of Air Power in Colombia), in *Revista Taktika* edición 4.0. Fuerza Aérea Colombiana. P. 46. Retrieved 10 January 2020 from https://d2r89ls1uje5rg.cloudfront.net/sites/default/files/revista\_taktika\_edicion\_4\_0.pdf.

14. "Doctrina de las Fuerzas Armadas de los Estados Unidos" (Doctrine of US Armed Forces). Retrieved 6 January 2021, from https://web.archive.org/web/20111027024636/http://www.dtic .mil/doctrine/new\_pubs/jp1.pdf.

15. Diccionario de la Real Academia Española (Dictionary of Royal Spanish Academy). Consulted 5 May 2021 from https://dle.rae.es/sinergia.

16. Mentioned by Agustín Arias in: "La Sinergia. Factor de éxito para las Fuerzas Armadas" (Synergy: Success Factor for the Armed Forces). P. 1. Retrieved 12 May 2021 from https://dialnet .unirioja.es/descarga/articulo/4579921.pdf.

17. "Desde el Dog Fight hasta los UCAV´s: Evolución del Poder Aéreo." Revista de la Escuela Superior de Guerra Aérea (RESGA). Buenos Aires: Editorial Gráfica Independencia Argentina S. R. L. Capítulo M: Perú – Ecuador. 2001. P. 11.

18. Libro Blanco de la Defensa Nacional. Ministerio de Defensa del Perú. (White Paper from Peruvian Ministry of National Defense) 2005. P. 62. Retrieved 19 February 2020, from https://cdn.www.gob.pe/uploads/document/file/397073/Libro\_blanco.pdf

19. Clausewitz, Carl von (1999), *De la guerra* (Volúmenes I) (On War Volume I), Madrid: Ministerio de Defensa. P. 54.

20. DOFA 1-0 Doctrina Glosario Operacional de la Fuerza Aérea del Perú (Operational Glossary of the Peruvian Air Force). 2016. Approved by Directorate Resolution N° 0009-EMGRA. P. 84. Retrieved May10, 2021, from http://www.intranet.fap.mil.pe/cendo/index.php/publicaciones/doctrinas.

21. El Cenepa: 20 años después. Revista Oficial de la Fuerza Aérea del Perú Aviación Nº 514. 1er semestre 2015. P. 33. Retrieved 20 January 2019 from https://issuu.com/fap.mil.pe/docs /revista\_final\_514.

22. Memorias del Conflicto Bélico de 1995. Tomo II Ecuador-Perú. Academia de Guerra del Ejército (Memoirs of the 1995 Conflict. Volume II Ecuador-Peru). Army War College. Pág. 73. Retrieved December 12, 2018, from https://issuu.com/ceheesmil/docs/8\_memorias\_delcenepa\_2.

23. Revista Oficial de la Fuerza Aérea del Perú Aviación Nº 514. 1st Semester 2015. P. 35 . Retrieved January 5, 20212, from https://issuu.com/fap.mil.pe/docs/revista\_final\_514

24. Colonel John Warden III developed a theory about Air Power in his book "The Air Campaign" in which he states, among other concepts, the strategic application of the air weapon and points out that to affect the leadership of the enemy we must understand what the enemy looks like conceptually because when we have identified where the Centers of gravity really fall, we will be able to choose how to attack them in the best way, this identification did not occur in Cenepa.

25. Warden III, John A. The Air Campaign: Planning for Combat. National Defense University Press. 1989, Pág. 29.

26. GCI: Ground Control of Interception is a tactical air defense by which one or more radar stations or other observation stations are connected to a communications command center that guides interception aircraft to a target in the air.

27. DOFA 1-1: Doctrina Operacional de Operaciones Aéreas (Air Operations Doctrine). 2016. P. 4. Retrieved May 10, 2021, from http://www.intranet.fap.mil.pe/cendo/index.php/publicaciones/doctrinas.

28. Sun Tzu. El Arte de la Guerra. Séptima edición (The Art of War. Seventh Edition). Bogotá: Panamericana. 2005.

29. Corrales, Franz. La Prospectiva del VRAEM (VRAEM's Perspective. VRAEM Combatant). Revista del Comando Especial VRAEM. Edición Nº 06 2012. P. 26-27.

Quoted by Juan Carrasco in "Aerospace Doctrine, Needs and Challenges for the Air Forc." P.
Recuperado el 14 de mayo de 2021 de http://dialnet.unirioja.es/descarga/articulo/4602479.pdf.



## Lt Colonel Oswal Sigüeñas Alvarado, Peruvian Air Force

Special operator graduated from the Special Operations Course of the Peruvian Air Force, Jump Master and Operational Paratrooper. Master's in Doctrine and Aerospace Administration from the Peruvian Air War College, graduated from the Command and Joint Staff Course in the Republic of South Korea, and from the Tactics and Special Operations Division of the Western Hemisphere Institute for Security Cooperation (WHINSEC). He has been a teacher at the Officer School and at the FAP's Air Warfare School. He is currently Chief of the General Staff Section for Special Operations and Psychological Operations at the 3rd Air Wing. He has received decorations such as the War Cross for Valor, the Peruvian Cross for Aeronautical Merit, and the United Nations Medal.