



Chairman of the European Union Military Committee

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CEUMC Speech at the 6th Air Power Conference

"Joint Air Power: The ultimate vehicle to enhance synergy within the Armed Forces"

Athens, 19 April 2018

Generals, Admirals,

Distinguished guests,

Ladies and Gentlemen,

Before I begin my presentation I want to thank Hellenic Air Forces' Chief, Lieutenant General Christos Christodoulou, for providing me with the opportunity to share my thoughts with this distinguished audience. And, to offer my condolences to the Hellenic Air Force family for the loss of Flight Lieutenant Georgios Baltadoros who lost his life in the line of duty last week.

I do not think that there is any need to engage in a geostrategic analysis or an overview of the challenges, the nations represented in this auditorium face today. I will only highlight the fact that we witness **a peak in their number and their intensity**. This is especially true **in this particular region** of the world. I argue, and I do not expect that there are different opinions among the participants, that the democratic nations represented here today, they do **not** consider the option to succumb or to not address these challenges. On the contrary, they will gather a set of capabilities which, together with the right posture, will tackle these challenges, presenting deterrence and projecting stability around their periphery.

Deterrence is a relatively simple idea: it is about persuading a would-be aggressor that an aggression would incur a cost, possibly in the form of unacceptable damage, which would far outweigh any potential gain, material or political. To put it in plain, deterrence is the sum of the capabilities that a nation has to have accompanied by the right posture in order to send the message that the other side should not dare to challenge its sovereign rights or its territorial integrity. Although the balanced development of all three

elements of a nation's **Hard power**, the Army, the Navy and the Air Force, is fundamental, and without any intention to downplay the importance of the Army and the Navy, the strategic value of a credible, capable and sustainable Air Power cannot be underestimated. The inherent characteristics of the Air Power, such as **far reach**, **speed** and **flexibility** of the platforms, make it the principal deterrent actor.

So, the role of Air Power in deterrence is clear and can be described with one word, **dominant**. Having said that I want to remind you some very simple tactical rules about Air Power, related to the principles of war. The application of Air Power –independently or within the framework of a joint campaign–has to be done taking into account and adhering to the accepted principles of war related to the use of military force. This is something that has to be ensured and enforced in the planning and execution of an air campaign. I am not going to deliver here a lecture on the principles of war. I will only remind us of the first one, which the United States Air Force calls “Objective” and the rest of us call “Selection and maintenance of the aim”.

There is no doubt that all military operations, including air campaigns, are launched in order to achieve a higher political objective. Keeping this in mind, we understand that, and I quote *“The single path to success in aerial warfare is unwavering adherence to the principle of Objective. The adaptability of air forces to many missions and the ease with which they may be diverted, encourage vacillation and defeat”*, unquote. This comes from a lecture on general Air Force principles at the US Air Corps Tactical School in 1934. I will not speak about concentration of forces, for which Sir Basil Liddell Hart argued that *“The principles of war could for brevity be condensed into a single word: concentration”*, as you are all familiar with it. I will make only a brief remark on the offensive action and how I see it as an Army Officer. According to my 44 years’ long military experience, there can be no offensive actions, offensive or counter-offensive operations without Air Power. Air superiority, even limited in time and space is necessary for any offensive or counter-offensive operations. This is beyond discussion.

Results coming from every war-gaming exercise demonstrate that it is impossible to succeed in an attack or counter-attack in the absence of Air Power. Defeat and destruction of the forces engaged in these operations is a matter of few hours. Depending on the level of the enemy’s Air Superiority, these “few hours” may be a very optimistic calculation. The German counteroffensive in Ardennes in winter 1944-45 and the US response to the

surprise attack against their forces near the city of Deir ez-Zor, Syria last February are the perfect examples.

I will not elaborate any further on the adjustment of the Air Power to the principles of war and I will move to another important area, the cost of Air Power. Because these capabilities always come with a cost, a high one. The financial crisis that hit to a greater or lesser degree every nation, combined with the post-cold war euphoria that prevailed in the West, led to dramatic defence budget restraints. They in turn translated into the diminishing or even loss of hard gained defence capabilities, despite the warnings voiced by those who understood that this period of unprecedented peace, security and prosperity had an expiry date. To complicate things even more, we witnessed the acquisition and operating costs of modern main defence equipment skyrocketing. Focusing on the Air Force, the technological advances and the exotic technologies incorporated in 4.5 and 5th generation fighter aircrafts are clearly reflected on their cost. Although their value is unquestionable, **questions do arise regarding the numbers in which they can be acquired and the density of their operational use**, especially in Operations Other Than War or in Stability Support Operations (SSO). It is almost impossible for any given nation to acquire such modern aircrafts in sufficient numbers or to attain the required availability. The same holds true to any sophisticated, specialised air platform, be it a Maritime Patrol Aircraft or an attack helicopter.

But there is no way to avoid spending this huge amount of money. The consequence of failing to do so is a serious undermining of the credibility of deterrence. Furthermore, this particular nation will **fall behind the rest of the allies**, unable to contribute to the collective effort, falling victim to an ever-growing technological gap. The same applies to strategic enablers, namely aerial refuelling aircrafts, airborne radars or ISR assets without which, any modern air force would be incomplete.

It is therefore beyond any doubt that Air Power needs to be constantly developed. It is also beyond any doubt that the long standing barriers that prevented cooperation among the respective Branches have long disappeared, as **Joint** operations became the new norm. The principle of cooperation that I referred to a while ago. Successful Air/Land or Air/Sea battles are prime examples of cooperation. Here I quote Dr. Sanu Kainikara who argued in a Royal Australian Air Force Working Paper on the Principles of War and Air Power that, quote *“However these complex operations can also be indicative of the damage and confusion that can be created when cooperation between*

services is not at the desired level. In contemporary conflict the failure to cooperate is almost immediately visible at the tactical and operational levels, whereas the impact of less than optimum cooperation at the strategic level – both within the military and at the governmental level- may manifest only gradually. However, strategic level cooperation failure will have a greater and longer lasting effect on the national security equation than failure at the operational level” unquote.

But cooperation can and should be extended **beyond the airspace**, to cover **ground activities** as well. From training to maintenance, huge possibilities for synergies lay ahead. Synergies that will produce economies of scale and enhance operational capabilities, through the gradual build of a **shared mentality**, a **common background** and a **thorough understanding** of each other’s capabilities and limitations. These synergies will reduce the high costs associated with air operations, making them more affordable and sustainable.

This has been clearly understood in Brussels. To address the documented low operational output that undermines the high defence spending of the Member-States, about €200 billion annually, the **European Union** has launched last December the **Permanent Structured Cooperation**. Its aim is to strengthen defence cooperation within the European Union Member-States, 22 of which are also NATO-members. A total of 17 projects have been selected to form the first batch of cooperative defence-related projects, with more to follow suit. These projects, it has to be underlined, are **in addition** to those that the European Defence Agency runs for some time now. Among them and particularly related to the Air Force capabilities, the **Air-to-Air Refuelling** and the **Remotely Piloted Aircraft Systems** projects are of particular interest to the European Union. These two projects are part of four key defence capability programmes identified by EU Heads of State and Government back in 2013.¹ Especially on Air-to-Air Refuelling, I have to say that this is a capability that we underestimate sometimes. This is a mistake. The force of nine French fighter aircrafts that participated in the attack against Syrian installations related to chemical warfare last Friday were supported by six air-refuelling tankers. Without them, the mission would be compromised, maybe even impossible. This is a tribute to those who denied the Hellenic Air Force such a capability in the past.

¹ Air-to-Air Refuelling (AAR); - Remotely Piloted Aircraft Systems (RPAS); - Governmental Satellite Communications (GovSatcom); - Cyber Defence.

Ladies and Gentlemen,

PESCO and all the other defence related European initiatives come to a **certain extent** as a response to calls from NATO for a fairer burden sharing regarding European security, as expressed in 2014 in Wales. While it is important that EU Member-States invest more in defence, increasing their national defence spending to 2% of their GDP, it is also paramount that they invest **wisely and efficiently**, selecting the **right** capabilities. In this context, a greater role for a well-coordinated European Air Power may be required. Synergies will need to be identified in order to address potential shortfalls.

A good example of such an approach can be found in the form of the **European Air Transport Command**, established in 2010. The seven member-nations operate their military air transport assets under one single command with one common set of rules and regulations.² They **pool and share** air transport capabilities, exchange experiences and train together in multinational environments. This way they enhance their combined operational capabilities and improve the effectiveness and efficiency in conducting **air transport, air-to-air refuelling** and **aeromedical evacuation** missions. Tomorrow is the closing day of European Air Refuelling Training, EART 2018, which takes place at Eindhoven Air Base and is conducted by EATC. France Germany, Italy, the Netherlands and for the first time, a non-EATC member nation, the United States, will be training together under EATC's lead. EART 2018 will run **concurrently** with the multinational "Frisian Flag" fighter training exercise, organized by the Netherlands. I think that the benefits resulting from this kind of synergies are evident.

These are just examples that showcase the potential that is out there. Prioritisation, cooperation and effectiveness need to become key throughout the entire equipment lifecycle. **From acquisition, to maintenance, to upgrade and to disposal**, the possibilities of finding synergies are vast. These possibilities also extend to other supportive areas, such as the purchase of specialised equipment for the maintenance of the fleets and weapons.

Additional synergies can be identified in the domain of **growing the human capital** of the Air Forces. It has been documented that the cost of the basic training of a pilot amounts to \$1 million, while the cost to fully train a pilot with the requisite operational experience can be more than \$9 million. It is obvious that economies of scale can easily be achieved in this domain. A

² Belgium, France, Germany, Italy, Luxembourg, Spain and the Netherlands.

multinational training entity that would prepare pilots certified for a specific type of aircraft and deliver them to the respective Air Force for fine tuning and further training in nation-specific tactics and doctrines could be worth examining. As I remember, Greece and Italy had initiated a common training program for their pilots. As a bonus, a common military as well as a common Air Force identity will be gradually developed, leading to better cooperation in the future in bilateral and multinational environments.

Ladies and Gentlemen,

In my view, there is another threat that we are facing, one that we cannot tackle with our physical Air Power. I refer to **cyber**, the 5th domain of warfare. Usually, when we talk about cyber-attacks, we have in mind attacks in banking systems, energy grids, critical infrastructure, hacking of databases, Denial of Service (DOS) attacks. But, how about the digital security of the Air Force bases, the infrastructure and the assets? How about Joint Air Power operations that will be increasingly Net Centric? The United States Air Force understands this threat and it will launch this year (maybe it has already launch it) a cyber initiative, aimed at protecting the Air Force's core missions by establishing and assigning personnel and cyber teams to wings and missions.³ Their task is to protect aircraft and key cyber terrain on bases to make missions go. I see an opportunity here for cooperation in a domain which is definitely prone to synergies.

Then, we also have **hybrid threats**. In this particular context, up to now Air Power has been deployed mainly in order to ensure adequate **support** to land forces to counter hybrid threats on the ground. However, hybrid threats also come from the air, taking advantage of modern technologies for purposes of espionage, sabotage, data collection, attacks on people or infrastructure or the achievement of media effects. In particular, one of the main challenges of hybrid warfare is the potential malicious use of technologies such as the remotely piloted platforms, in both military operations and in peace time, in the opening moves of extremely complex scenarios.

The air domain is being increasingly exploited to perpetrate illicit and terrorist attacks, posing a significant threat to Homeland Security and national defence. A broad range of flying devices are emerging as potential means to cause damage to human life and critical infrastructure or to produce significant

³ The F-35, ALIS logistics and planning system remains vulnerable to cyber-attacks according to a 2018 report.

cognitive effects, thus increasing the public's sense of vulnerability. The lessons identified from the battlefields of Syria and Iraq are valuable. Commercial off the shelf (COTS) technologies have greatly improved non-state actor's aerial warfare capabilities, broadening the threat spectrum with so called Low, Slow, Small (LSS) vehicles. The use of unmanned and manned LSS (balloons, ultralight aircraft and gliders) could expand the definition of and employment against what we already know as renegades. Combined with the proliferation of Weapons of Mass Destruction and the increasingly available and inexpensive delivery methods provided by these new low-cost technologies, the risk of malicious attacks to territory, population and critical infrastructure for the air will be increased.

This may justify the evolution of a new approach that considers Air Power a guarantor of support against hybrid threats coming from the air. Acknowledging how complex this challenge is, it is essential to synergise all inter-governmental capabilities and skills available. A successful response will come from the adoption of a new approach that will come as a result of **civil-military** deliberations and cooperation. A **closer interaction between EU and NATO** would enable both organisations to better prepare and respond effectively in a **complementary and mutually supporting manner**. This proposed interaction would be based on the principle of inclusiveness, while respecting each organisation's decision making autonomy.

But, which are the basic operational Air Power needs for the European Union? For an international actor that has **crisis management** and **capacity building** as its **strategic priorities**, there is hardly any need for fighter or bomber aircrafts. Furthermore, one has to keep in mind the newest European Union's strategic priority, **protecting Europe** and Europe's dependence on the **maritime domain**. The combination of these facts place **information gathering, situational awareness** and **rapid response** in the core of its capability development efforts. We fight terrorism, piracy and human smuggling and provide a Safe and Secure Environment to different and far away areas. In order to do this effectively, we need to have situational awareness and intelligence gathering capabilities.

In this context, European Union focuses on projects like **Air-to-Air Refuelling, strategic airlift, Maritime Patrol Aircrafts and Remotely Piloted Aircraft Systems** that will serve the priorities set by the European Union Global Strategy. It goes without saying that all these and other projects launched are **complementary** to those deriving from NATO Defence Planning Programme. In

order to be more specific, in the present situation Maritime Patrol Aircrafts and Remotely Piloted Aircraft Systems are of paramount importance to the European Union. In addition to them and in case we receive the order to deploy our Battlegroups in a troubled area, we will also need strategic airlift and, certainly, Air-to-Air Refuelling capabilities to provide air support if needed.

Ladies and Gentlemen,

Deterrence, and defence in general, is an expensive sport, its air element being the most funds-demanding one. But if one thinks that the cost of deterrence is too high to bear, he should try to calculate the cost of a war. Nevertheless, there are tools available to make this cost affordable to any nation. Cooperation and coordination within and among Armed Forces should be sought in every imaginable area. The framework is already out there.

Concluding, I will summarise the points I have made as follows:

- Future challenges require vigilance, reforms and flexibility;
- Their nature demands the exploitation of synergies within the Armed Forces, between Armed Forces and between them and the civilian sector. The principles of war adjusted to the Air Power characteristics should be always followed in planning and execution;
- Joint Air Power is probably the best vehicle to credible, flexible, and fast deterrence and defence affordable to every nation;
- Cooperation and coordination are the tools to tackle rising costs while preserving credible deterrence. This is the only way to make deterrent Air Power affordable to every nation;
- The European Union already offers a successful example of such cooperation, through its recent initiatives like PESCO but also through other projects, such as EATC;
- The EU CSDP missions and operations, like the ones we currently conduct, mainly require increased situational awareness. To this end, Maritime Patrol Aircrafts and Remotely Piloted Aircraft Systems are of paramount importance. However the importance

of strategic airlift and Air-to-Air Refuelling should not be underestimated;

- The projects launched in the framework of European Union, serve its own strategic priorities, while at the same time they complement NATO capabilities. Again, Air-to-Air Refuelling and strategic airlift together with Remotely Piloted Aircraft Systems, are the most important common capabilities requirements.

I will stop here and I am open for any questions.

Thank you.