

REVISTA ESPAÑOLA DE DEFENSA



PACIFIC SKIES
Air raid across four
continents

OPERATION VALENCIA FLOODS 2024



MINISTERIO DE DEFENSA



REVISTA ESPAÑOLA DE DEFENSA

HABLAMOS de Defensa

36 años de información de calidad

Solidarity with those who suffer

THE Spanish Armed Forces are working closely together to respond to Spain's deadliest and most destructive floods this century. The ensuing tragedy has been devastating, not only in terms of human lives, but also in terms of damage to property and the psychological impact on those affected, which will last for years to come.

The Military Emergency Unit (UME) and various units of the Army, Navy and Air and Space Force, are involved in evacuating casualties; bailing out water; opening roads; cleaning and clearing streets; removing household goods and debris; and distributing bottled water, food rations, essential goods, etc. They are also working to restore essential services and damaged infrastructures, and building temporary bridges.

The mere presence of military members has offered nighttime reassurance to the inhabitants of the towns affected. In the initial hours following the catastrophe, UME members rescued and safely evacuated a large number of people, and, later on, began assisting in the search for the missing. In turn, the unit's psychologists offer assistance to the individuals affected and to the military personnel themselves, who also experience psychological trauma. This support is crucial in such difficult times.

Currently, 8,500 soldiers have been mobilised and made available to the authorities of the Autonomous Community of Valencia. Additionally, over 2,000 assets —mostly high-tech— have been deployed, including vehicles, helicopters, drones, and heavy and light machinery.

These figures reflect Spain's largest military deployment in peacetime. Moreover, Defence Minister Margarita Robles has stated her willingness to provide "all the resources necessary for as long as it takes". This is a massive undertaking that can only be completed by bringing together the efforts of all the authorities and citizens.

Thus, the Armed Forces are responding to a problem that affects the integrity and well-being of our people. They have already done so on numerous occasions, including after the unprecedented snowfall of Storm *Filomena*, the volcanic eruption in La Palma, COVID-19, or the fight against forest fires every summer. Once again, during these especially trying and challenging times, our military personnel are working alongside those who suffer with complete dedication and spirit of service.

RED



Managing Editor:

María José Muñoz Estévez.

Editor in Chief: Víctor Hernández Martínez.

Heads of section. International: Rosa Ruiz

Fernández. **Art Director:** Rafael Navarro.

Opinion: Santiago Fernández del Vado.

Culture: Esther P. Martínez. **Photography:**

Pepe Díaz. **Sections. National:** Elena

Tarilonte. **Armed Forces:** José Luis Expósito

Montero. **Photography and Archive:**

Hélène Gicquel Pasquier. **Layout:** Eduardo

Fernández Salvador. **Featured in this**

edition: Diego Alcolea Navarro, Francisco

Braco Carbó, Pablo Guillén García,

Margarita Robles Fernández y Ricardo

Valdés Fernández. **Translators:** Fuensanta

Zaballa Gómez (chief) and Gráinne Mary

Gahan.



Published by: Ministerio de Defensa.

Editing: C/ San Nicolás, 11. 28013 MADRID.

Phone Numbers: 91 516 04 31/19 (management),

91 516 04 17/91 516 04 21 (editing).

Fax: 91 516 04 18.

Email: respdefe@mde.es

Website: www.defensa.gob.es

Administration, distribution and subscriptions:

Subdirección General de Publicaciones y Patrimonio

Cultural: C/ Camino de Ingenieros, 6. 28047-Madrid.

Phone: 91 364 74 21. Fax: 91 364 74 07.

Email: suscripciones@mde.es

Website: https://publicaciones.defensa.gob.es

Catalogue of Publications, General State

Administration:

https://cpage.mpr.gob.es

Photomechanics and printing:

Ministry of Defence.

NIPO 083-21-179-8 (Print edition)

ISSN 2695-6284 (Print edition)

NIPO 083-21-180-0 (Online pdf edition)

ISSN 2695-6292 (Online pdf edition)

Legal Deposit M 40176-2019

Editorial Board: María José Muñoz Estévez (chairperson), Mercedes Gómez Mena, Antonino Cordero Aparicio, Miguel Ivorra Ruiz, Ignacio Miguel Warleta Alcina, Carlos Martín Martín-Peralta, Manuel de la Chica Camuñez, José Luis Chaves Bermejo, Eduardo Guitián Crespo and Enrique Cuenca-Romero Jiménez.

The views expressed in the articles are those of the authors and do not necessarily reflect the positions of the REVISTA ESPAÑOLA DE DEFENSA. The editors of the magazine are not obliged to correspond with the authors of the contributions or to reply to any unsolicited letters.

Cover photo: UME.

GIVING THEIR ALL TO HELP OTHERS



Spanish Armed Forces help those affected by torrential rains with the largest peacetime deployment ever.



PERSPECTIVE

14 Ready for the present and the future

20th anniversary of the Operations Command.

PACIFIC SKIES

16 Air raid across four continents

Spanish task force successfully conducts Europe's largest-ever joint air force challenge.



22 Interview

Lieutenant General Francisco González-Espresati, Former Commanding Officer of the Combat Air Command (MACOM).

ANALYSIS



26 NATO Summit in Washington

Allies show their unwavering willingness to continue supporting Ukraine and strengthen deterrence and defence.



48 The current context of nuclear rhetoric

Moscow's threats to use nuclear weapons and its repeated withdrawals from disarmament agreements provide a renewed focus on deterrence.

HISTORY

52 530th Anniversary of the Sergeant Rank

Captains of the Old Guards of Castile asked to create this rank for "the good governance of the squadrons".



CONTENTS

INTERNATIONAL MISSIONS

30 In command of the force in Slovakia

Spain leads a multinational defence and deterrence brigade on NATO's eastern flank.



GUEST WRITER

38 ESFAS is the past, present and future

Major General Pablo Guillén García, Director of Spain's Armed Forces College (ESFAS).

ARMED FORCES

42 The first to arrive, the last to leave

The Air Deployment Support Squadron (EADA) is a fundamental pillar to deploy the assets of the Spanish Air and Space Force abroad.



SPACE



54 Sixty years of space exploration

Spain and the United States strengthen their scientific cooperation at NASA Space Tracking Station, Robledo de Chavela, Madrid.

FEINDEF 2025

56 A reference for international industry

The International Defence and Security Exhibition will be hosting 25% more foreign companies than in previous editions.





OPERATION VALENCIA FLOODS 2024

Spanish Armed Forces help those affected by torrential rains with the largest peacetime deployment ever



Soldiers from the 21st
Signal Regiment in Marines
working on the removal
of accumulated sludge in
Masía del Oliveral, Valencia.



While visiting the UME headquarters at Torrejón Air Base, the Prime Minister and the Minister of Defence are briefed on the flood relief operations.

Borja Puig de la Bellacasa/Pool Moncloa



Marco Romero/MDE



Iñaki Gómez/MDE



Iñaki Gómez/MDE

GIVING THEIR ALL TO HELP OTHERS

COVERED in mud, dozens of members of the emergency teams run to and fro to respond to the many requests submitted to the forward command post set up in a gas station on the outskirts of Paiporta. This is ground zero of this tragedy and it looks like a total war scenario. This command centre manages the efforts being made to assist those affected by Valencia's most devastating flash floods in the last decades. Phones and transmitters are ringing nonstop requesting assistance in specific locations where people have been found and need to be rescued, as well as the dispatch of machinery to clear the roads and the provision of food and water to the municipalities that remain isolated. The work is distributed among the different units of the Armed Forces, Civil Guard, National Police, local police forces, Civil Defence, firefighters, health workers and hundreds of volunteers.

This is a particularly difficult task. The torrential rains on 29 October 2024 caused

**Margarita Robles:
“We will deploy
all the necessary
troops for as
long as it takes”**

severe floods in a matter of hours, destroying bridges, roads, vehicles and everything else in their path. Entire neighbourhoods were destroyed, hundreds of people were trapped on ground floors or in parking garages, and many others were distressed and unsure of what had happened to their loved ones. “We’re totally committed to helping them as if they were our own families”, stated Captain María de los Reyes Martínez of the Military Emergency Unit (UME) from the very heart of the tragedy.

All access roads were blocked. The sludge had swept away trees and countless objects, while cars were piled up obstructing the streets. However, that same evening, the first members of the UME made their way to the Utiel-Requena area, which was among the worst hit by the floods. “As soon as we managed to get in, we concentrated on meeting the needs of the people, particularly evacuating victims, bailing out water and, above all, opening roads”, said the UME officer. Many locals had been compelled to seek refuge on rooftops and



GIVING THEIR ALL TO HELP OTHERS



upper floors while they awaited rescue. The UME used helicopters for their first rescues, and several people were also evacuated with the help of tractors belonging to the locals. “We have rescued individuals who had been trapped for 36 hours, spending all night on top of cupboards until the water receded”, another soldier remarked.

The heartbreaking images of the areas hit by the heavy rainfalls and the overwhelming testimonies of those impacted were an account of our country's greatest natural disaster in recent history. “This is already the second flood this century that has claimed the most victims in Europe”, stated Prime Minister Pedro Sánchez from the Moncloa Palace during his appearance on 2 November to give an official statement. The number of people that have already lost their lives as a result of the flash floods has risen to 230 (at the time of going to press). Sánchez offered the government of Valencia “all the necessary state resources for as long as it takes”. Military personnel hailing from many bases across the nation joined the relief effort in

the days that followed. One month after the catastrophe, more than 8,500 soldiers and sailors, belonging to the UME, the Spanish Army, Navy and Air Force, continue to work tirelessly in the affected areas and to help the people. According to the Prime Minister, “this is the largest military deployment ever made in our country in peacetime”. Similarly, King Felipe VI instructed 100 members of the Royal Guard and 42 more of his own

“We’ve been totally committed to helping them as if they were our own families”, points out a UME officer

security agents to go to the area so that they could be at the disposal of the government and assist in any way they could. Along with the force, over 2,000 assets —mostly high-tech— have been deployed, including vehicles, helicopters, drones, and heavy and light machinery. Additionally, the troops on the ground are supported by more than 700 people working on coordination tasks from their respective bases and headquarters.

The Spanish Armed Forces have also sent their teams of psychologists to help the individuals affected and the military personnel themselves, who also experience psychological trauma. “Although it is extremely difficult, the public is aware that it can always rely on the unwavering assistance provided by the Armed Forces, which will always stand alongside those who suffer”, underlined Robles during her speech in the Senate to report on the activities being carried out. The zone of action covers 4,608 km², 43% of the surface area of the province of Valencia. There are 72 municipalities affected and the military is present in all of them, as well as on the



UME



UME



Marco Romero/MDE

The Armed Forces are working with specialised personnel and equipment in impacted areas, such as Utiel, Requena, Ribarroja, Torrent, Paiporta, Algemesí, Chiva, Alfajar, Loriguilla, Masanasa, Alcadia and Catarroja, and are aided by drones, helicopters, and dogs.



UME



UME



Residents of Paiporta receiving water provided by members of the Armed Forces, who are working tirelessly to help in every possible way.

UNE



Marco Romero/MDE



UNE



roads that connect them. Military personnel also participated from the beginning in rescue tasks in two locations in Castilla-La Mancha that were also severely impacted by the heavy rains.

The military deployment is led by UME commander Lieutenant General Javier Marcos. During the press conference held on 8 November to report on the situation, he outlined the main tasks being carried out: searching for missing persons, rescuing people and evacuating them to health centres, bailing out water and removing sludge, cleaning and clearing roads and streets, unclogging blocked drains, removing vehicles and debris, and providing people with water, food and essential goods. The Armed Forces are also assisting in the restoration of essential services and have built four temporary bridges.

In order to recover economic activity, efforts are also being made to restore mobility and infrastructure in industrial and agricultural areas. In this regard, Margarita Robles reiterated the great work being carried out by the Armed Forces in the affected areas: "they are totally and utterly committed to Valencia and its citizens".

Victor Hernández

Everyone's Armed Forces



Margarita Robles
Minister of Defence

WORDS cannot adequately describe the sadness we feel as a result of the flash floods that have affected several parts of our nation, particularly the Community of Valencia. The tragedy we are witnessing these days affects all of us.

No one can remain oblivious to a situation that has been forever engraved in our hearts. The men and women in uniform, who have been on the ground since the beginning, helping those affected and witnessing extremely harsh testimonies and images that will live indelibly in their memories, are well aware of this.

Despite this, and despite the hardship and the emotional and psychological burden that comes with this type of operation, the professionalism and empathy of our service members is always outstanding. It is a source of pride to see how they put their all into helping others and do so with meticulous organisation but, more importantly, with a level of sensitivity worthy of praise.

As Minister of Defence, it is a source of satisfaction to witness this outstanding work and the trust that the people place in the Armed Forces because, with every action, every mission, and every intervention, it is clear that, wherever there is a Spanish soldier, there is hope and peace of mind.

My sincere thanks to all of them, to all those on the ground and those who, in the shadows, are working on logistics and planning to guarantee that everything runs smoothly. I am sure that my appreciation is shared by all the locals affected by these flash floods, who have seen how the Military Emergency Unit, the Army, the Navy, and the Air and Space Force are always there when they are needed.

As I stated at the beginning, there are no words to describe the pain we feel, but Spain is a great country, and there is no doubt that we will come back from this. Likewise, all the Spaniards can count on the Armed Forces, their Armed Forces, which are always ready to give their all, no matter where.

20th anniversary of the Operations Command

Ready for the present and the future



Lieutenant General Francisco Braco Carbó
Former Commanding Officer of the Operations Command
(Currently a five-star General and Chief of Staff of the Spanish Air and Space Force)

THE Operations Command (MOPS in Spanish) was created twenty years ago on 25 June 2004, in accordance with Royal Decree 1551, to take charge of the operational planning, conducting, and monitoring of military operations. At that time, the Spanish Armed Forces were participating in only four overseas operations: Bosnia, Kosovo, Afghanistan and *Active Endeavour* in the Mediterranean Sea.

First, I would like to emphasise that in these twenty years the Operations Command has expanded the Spanish forces' area of deployment all over the world, including in such unstable territories as Iraq, Lebanon, Mali, the North Sea, Colombia, operation *Solidarity Response* in Pakistan and the humanitarian aid operation in Haiti.

Now, following the recent withdrawal of operation EUTM Mali, Spanish contingents are serving in 16 operations abroad. Against this backdrop, our most demanding operation is currently the deployment for the reinforcement of the European eastern flank under NATO's shield, which includes various locations in Latvia, Lithuania, Estonia, Romania, Bulgaria, Slovakia, Türkiye, the Mediterranean Sea and the Atlantic Ocean.

In all of them, the Operations Command undertakes operational planning, which facilitates the deployment of our forces. It is also in charge of monitoring and conducting operations so that our soldiers can perform the tasks assigned to them by the international organisations under which they are deployed.

However, our tasks are not limited to overseas. The Operations Command is also responsible for the planning and conducting of presence, surveillance and deterrence operations, all of which are carried out on our soil as a contribution to national security.

Due to their permanence over time and their importance, these operations entail a very demanding activity of great responsibility. Although this may not be a high-profile task, media discretion is the key to its success: if we do not have to intervene, it is because we are safe. That is why I want to underline that we have approximately 3,000 men and women working around the clock every day to make sure that all Spaniards can live in peace. Knowing our surroundings undoubtedly helps us to be ready to intervene in any crisis, and these missions allow us to guarantee our efficiency, whenever necessary.

Proof of this commitment to Spain is the effort made by the Armed Forces in recent years. Thus, the Operations Command has conducted operations in direct support of Spanish society, always in coordination with other ministries, including operations *Balmis* and *Baluarte*, in the fight against the COVID-19 pandemic, or non-combatant evacuation operations (NEO) conducted to evacuate civilians in Afghanistan, Sudan and Niger. Throughout these 20 years of deployments in operations, some of our comrades have made the ultimate sacrifice for their country, giving their lives to defend Spain and its interests.

They will always remain in our hearts. All of them are an example to us, and we remember them in prayer, every day and at every military base. Their willingness to serve, for which they suffered the

«MOPS military members do their best to ensure that the personnel deployed on operations feel supported»



harshes of consequences, deserves respect and admiration, while their dedication is a source of permanent motivation for the personnel of the Operations Command.

It is that motivation that leads us to provide ongoing support to the more than 3,000 military personnel deployed on missions, which is a critical part of our job. Every member of the Operations Command knows that the well-being and protection of our deployed force must come first in order for the mission to succeed. Hence, one of the pillars of this command is the ongoing monitoring of missions. To achieve this we maintain a direct and open line around the clock with all the contingents deployed.

A lot has changed since our creation in 2004. We were born with a small initial core under the command of the first Chief of Staff, Air Force Major General Andrés Navas Ráez. Since then the Operations Command has evolved and overcome various milestones, of which I would like to highlight the following:

The monitoring of operations started in 2007 and we moved from the Defence Staff Headquarters to the current Retamares base in 2016 without the slightest interruption in the fulfilment of our tasks. Finally in 2018, with the execution of exercise JFX MOPEX 18 this Command reached its full operational capability (FOC).

These and other developments have shaped the nature of this Command, which is characterised by its readiness and spirit of service. The military members of the MOPS also display exceptional professionalism and do their best to ensure that the personnel deployed on operations feel supported. On the other hand, I would like to emphasise that we are a joint command, with personnel hailing

from the Army, Navy, Air and Space Force, Common Corps and Civil Guard, and that this joint spirit is an integral part of our very essence and *raison d'être*.

In fact, this is reflected in our coat of arms, on which the Army, the Navy and the Air and Space Force are represented by three tall silver swords against an azure background, united by a chain that leads us to act in unison in order to honour the renowned motto: "Unity is strength". As we look back, our Operations Command is celebrating its first 20 years of history. It has only been two decades, but we have lived through them intensely.

We are aware that the Command is in its infancy, but we also acknowledge that we devote all our energy and commitment to facing the new challenges arising in an increasingly unstable world. In the current international geopolitical scenario, conflicts are evolving exponentially in all of the domains and in each one of them Spain is taking on a greater role in Security and Defence by deploying numerous forces abroad. This is required from us due to our commitment to global peace, of which Spain and its people have always set the best example.

There is still a long way to go and we will keep moving forward. We are convinced that these 20 years of progress and adaptation of the Operations Command have given us the chance to demonstrate our readiness and efficiency in the present, and will also be the best guarantee for the future of military operations.

To sum up, I only wish to add a final consideration. The activities carried out by this Command and the speed at which it works are directly and immediately reflected in the operations: this is "real life".



Formation flight of two MRTTs, one German and one French, two Eurofighters (German and Spanish) and a French Rafale en route from Canada to Alaska. Below, the Minister of Defence visits Los Llanos air base to congratulate the 14th Wing contingent; and tuning of a fighter jet during Arctic Defender.



Irakli Gómez/MDE





AIR RAID ACROSS FOUR CONTINENTS

Spanish task force successfully conducts Europe's largest-ever joint air force challenge



OVER the Indian Ocean, after taking off from Sullur air base in southern India, Major Fernando Rojas Sevilla, a fighter pilot from the 11th Wing, maintains a speed of Mach 0.74, some 300 km per hour, and an altitude ranging from 26,500 to 30,000 feet (up to 9,000 metres) at the controls of his *Eurofighter*. A German *Eurofighter* is to his left, three more of the same nationality are in front of him, a French *Rafale* is to his right, and two Spanish *Eurofighters* are behind him. These fighter jets are flying at a significantly slower speed and below the optimum height that these fourth-generation supersonic platforms are capable of achieving, in order to match the navigation parameters of the A330 Multi-role Transport Tanker (MRTT) that

leads the European multinational package of thirteen aircraft. Above “Mama Duck” — as the pilots call it—, there are two other MRTTs flying in formation, which, escorted by the fighter jets, travel together to Abu Dhabi, the capital of the United Arab Emirates.

During the transit of almost 3,000 km and nearly five hours flying, the fighters refuel in the air up to three times to reach the Persian Gulf. Despite the challenging weather conditions, their baskets (drogues) are easily connected to the hoses launched by each MRTT on both sides to fill their fuel tanks in airspace-restricted areas, away from commercial airways.

The flight between India and the United Arab Emirates was the last of the

ten flights that marked the development of the raid that has already been described by those responsible for its planning and execution as “the most demanding and ambitious exercise” in the history of military aeronautics: *Pacific Skies 2024*. It was a 58,400-km round-the-world trip, featuring 1,800 service members, 28 fighter jets and 16 transport aircraft. They were grouped in large packages from the German Luftwaffe (Germany being the operation's lead nation), the French Armée de l’Air et de l’Espace and the Spanish Ejército del Aire y del Espacio. Germany, France and Spain are also partner nations in the Future Combat Air System (FCAS) programme. Such a feat required an unprecedented logistical effort, supported to a large extent by the



numerous refuelling operations conducted by the multirole tanker transport (MRTT) aircraft from NATO's Multinational Multirole Tanker Unit (MMU). For 51 days, from 26 June to 15 August 2024, the German-French-Spanish contingent flew over the Atlantic, Pacific and Indian Oceans and over 24 countries in Europe, America, Oceania and Asia, deploying in ten of them: Canada, Germany, the United States, Japan, the Philippines, Australia, New Zealand, Malaysia, India and the United Arab Emirates.

Spain contributed to exercise *Pacific Skies* with an expeditionary task force called *Plus Ultra*, in honour and memory of the four aviators who, aboard the mythical seaplane with that same name, conducted the first Spanish transatlantic flight in 1926, when the Air Force had not yet been created. As in that feat, *Pacific Skies* faced unprecedented aeronautical challenges. The 100-year-old *Plus Ultra* crossed the Atlantic Ocean in 61 hours and 44 minutes, flying 10,270 kilometres

between Spain and Argentina. Almost a century later, the four *Eurofighters* —two from the 11th Wing from Morón (Seville) and two others from the 14th Wing from Los Llanos (Albacete)— and the two *A400M* transport aircraft from the 31st Wing flew nearly 60,000 km, reaching 400 and 200 flying hours, respectively.

The 240 Spanish military personnel who participated in the event deployed in two rotations. The first major challenge was to fly from Europe to the United States via Canada to operate in Alaska, “the last frontier”, as part of exercise *Artic Defender*, which took place from 8 to 18 July 2024. Then came another achievement: flying and deploying for the first time in the history of Spanish military aviation in Japan and the Antipodes, where the members of the contingent were relieved.

Thus, pilots and maintenance crew from the 11th Wing replaced those from the 14th Wing to take part in exercise *Pitch Black*, held from 22 July to 1 August 2024 in northern Australia, and in exercise

Tarang Shakti in southern India, where the Spanish Air and Space Force also deployed its assets and personnel for the first time.

TRAINING

“In Alaska, all the Allied air forces spoke the same technical language and worked together on operations planning in order to attain the highest level of integration in packages of up to 70 aircraft”, underscores Captain Jaime Molina Cegarra, one of the twelve pilots of the 14th Wing that participated in *Artic Defender*. The most significant thing for them was that, during this exercise, they were able to lead fifth-generation aircraft, like the American *F35s* or *F22s*, which have capabilities that we do not have here in Spain. Meanwhile, another German pilot commanded a formation of fighter jets that was responsible for ground attacks, one of our primary tasks in Alaska, which led to dropping 24 *GBU-16* 500-kilometer laser-guided bombs.



Luftwaffe and Spanish service members carrying out joint maintenance work in Sullur. The Mission Support Section preparing the information used by the pilot during the flight. Below, refuelling operation between Darwin and Kuala Lumpur; and Captain Herrero, mission commander in *Artic Defender*.

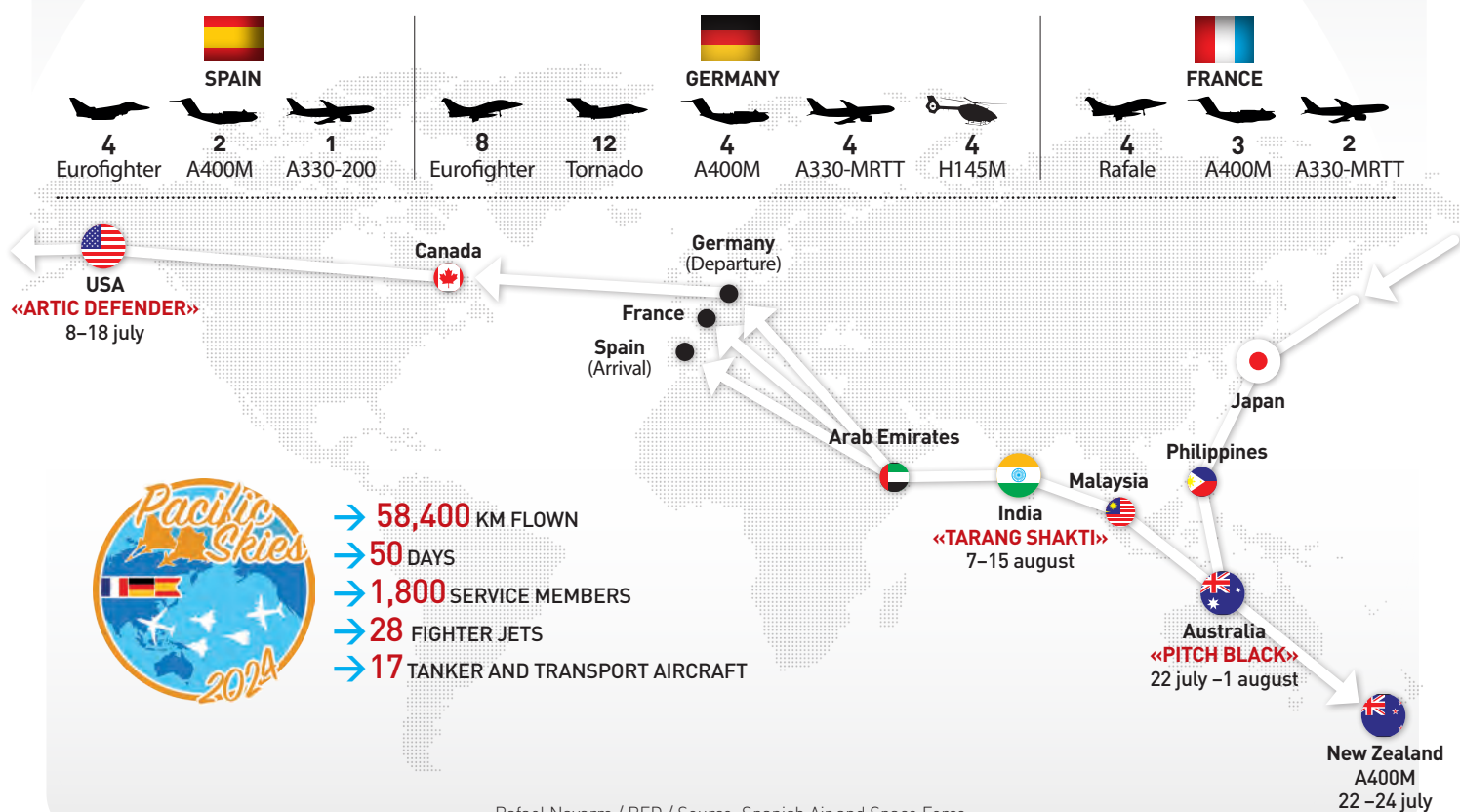


PACIFIC SKIES 2024

26 June – 20 August 2024

THIS event demonstrated the joint projection capability of three aerospace forces and their ability to operate anywhere in the world. During this operation, the three forces participated in exercises Artic

Defender (Alaska), Pitch Black (Australia) and Tarang Shakti (India). They also made logistic stops in some of the countries in the region, such as Japan, the Philippines, Malaysia and the United Arab Emirates.



Rafael Navarro / RED / Source: Spanish Air and Space Force

Like Captain Cegarra, Major Rojas — chief operations officer of the squadron of twelve *Eurofighter* pilots from the 11th Wing deployed in Australia and India—considered that their participation in the exercises held in both countries was very positive.

Regarding *Pitch Black*, the most important exercise of the Australian Air Force, he said: “Training was very valuable and enriching. We flew with our Allies, but also with Southeast Asian countries that we had never encountered before, such as Indonesia, Singapore, Thailand, Vietnam, among others, or South Korea and Japan”.

“We were able to integrate with them utilising non-NATO procedures, which gave us the chance to learn and practise other ways of operating and to see that, despite their differences, they are just as effective as ours” Major Rojas explains that in

India, the Indian air force, drawing on the presence of the multinational contingent, created an ad hoc phase of exercise *Tarang Shakti*. The goal was to provide German, Spanish, and French fighters with training opportunities fighting in a visual environment against Russian-made *Su-30s* and COMAO (combined air operations) type missions in packages of 20 or 30 aircraft.



Pilots of the 11th Wing heading to their respective aircraft to participate in a *Pitch Black* mission.

LOGISTICS

In June, weeks before the arrival of the expeditionary task force in Alaska and Australia, different teams started operating as advanced echelons made up of members of the Air Deployment Support Squadron (EADA) and the Second Air Deployment Support Squadron (SEADA), as well as of operations and maintenance crews of the 11th and 14th Wings. They comprised military personnel from, among other units, the Air Combat Command (MACOM) and, only in Alaska, from the Armament and Experimentation Logistics Centre (CLAEX), who were in charge of supervising the assembly, arming and fitting of the *Eurofighters*’ bombs and electronic warfare systems.

“These multidisciplinary teams took charge of preparing and coordinating the arrival of the fighter jets and transport aircraft far in advance, providing



Australian Defence Force

In Australia, the Spanish fighters had the opportunity to carry out joint flights with the Allies and operate for the first time ever with fighter jets from Southeast Asia, South Korea and Japan, among others, under exercise *Pitch Black*.



Master Sergeant Marco of the 11th Wing conducting a real-time monitored inspection with the Albacete Air Logistic Centre.

During *Artic Defender*, Spanish fighters dropped real armament that had been assembled and fitted by both personnel from the CLAEX and air weapons specialists from the 14th Wing.



Santos Cabrerías de Diego



sustainment, and handling a variety of other tasks, such as the accommodation of the crews and support personnel”, explains Captain Víctor Martínez Borrás, from the EADA. This unit, like the SEADA, was responsible for force protection and security and airlift support at the bases from which the fighter jets and transport aircraft operated. It also oversaw the multimodal deployment in exercise *Pacific Skies*, which took place in Alaska and Australia for the first time ever, and marked another milestone for the Spanish Air and Space Force thanks to the assistance of its Air Mobility Command.

In this regard, 14 containers arrived at the Port of Anchorage, in Alaska, and another 13 at Port Darwin, in Australia, with around 140 tonnes and more than 60 tonnes, respectively, “of secondary materiel for the *Eurofighters*”, says Captain Borrás. “For example, the guidance systems for the bombs dropped in exercise *Artic Defender*, the trailers to move them and the platforms (baps) to place them under the fighter jets”, he explains.

However, “sensitive material, its pieces and spare parts travelled on the aircraft”. Sergeant Pablo Martín is the cargo supervisor of the 31st Wing’s first transport aircraft that departed Germany for Alaska at the end of June and which, along with the German Airbuses, formed the vanguard of the logistical transport fleet at the beginning of *Pacific Skies*. He recalls that two containers, “one with maintenance material for the fighter jets and the other from our aircraft, were stowed inside the two A400Ms of the 31st Wing, each weighing a maximum of 4,500 kg and also carrying personnel and their luggage”. Lieutenant Victor Llorente was one of its two pilots. “We flew with a peak load of between twelve and thirteen tonnes, which limited the amount of fuel we could use to conduct our longest flight, from Canada to Alaska, a distance of 5,500 km and nearly eight hours flying. This forced us to meticulously plan the operation, especially with regard to alternative airports in case of an emergency, even though we completed it in just one go”.

Captain Juan José García Bellot also flew from Australia to the Emirates, conditioned by the cargo and the amount of fuel, and



German, French, and Spanish A400M aircraft heading to RNZAF Base Ohakea. This was the first time a Spanish military aircraft had flown that far.

paying particular attention to the weather conditions: “we had to fly lower than usual, at an altitude of between 6,500 and 7,000 metres, to prevent the high temperatures from degrading the engines’ capacity”. There was also the risk of the monsoon. “We were surprised at how quickly the storms grew. The clouds were huge and towering. It was impossible to avoid them from up there”.

The operational logistic efforts of *Pacific Skies* consisted of the projection of two reaction and contingency teams formed by EADA and SEADA personnel and a maintenance crew from the 11th and 14th Wings, all on board of each A400M cargo aircraft. “The reaction team (advanced party) preceded the arrival of the jets at

foreign airfields and the contingency team (last flight out) was responsible for solving any incident that occurred during planned flight legs”, says Captain Borrás.

“In the first one, we strengthened the teams with the presence of apron controllers, who are those in charge of receiving and releasing the aircraft”, explains Lieutenant Juan José Espinosa, posted in the 14th Wing’s Maintenance Squadron. “In the A400M last flight out, we decided to give a more prominent role to maintenance by establishing recovery teams”, adds Captain Triana, commander of the 11th Wing’s maintenance team that deployed in Australia and India. “We needed to be ready to deal with a breakdown that could prevent a *Eurofighter* from taking off

either at the deployment bases or at the alternative airfields and airports to which they had to be deflected if any incident occurred during the flights”, he explains.

“We have demonstrated that Spain, Germany and France can work together and move to any territory in the world thanks to European development and design technology”, stresses Sergeant Pablo Martín. “We often don’t believe it until we see it. However, we have been able to see it for ourselves in *Pacific Skies*”.

J.L. Expósito

Photos: Spanish Air and Space Force



Personnel of the Second Air Deployment Support Squadron conduct the offloading in Darwin.

INTERVIEW

LIEUTENANT GENERAL FRANCISCO GONZÁLEZ-ESPRESATI,,
FORMER COMMANDING OFFICER OF THE COMBAT AIR COMMAND (MACOM)

“WE ARE AT THE SAME LEVEL AS OTHER AIR FORCES”

This deployment has provided “the best training for our crews”, says former MACOM commander

“WHEN our nations work together, we are stronger and better prepared to meet global challenges”. The former commanding officer of the Combat Air Command claims that exercise *Pacific Skies 2024* has proved this. Lieutenant General Francisco González-Espresati (Córdoba, 1959) considers this deployment to be “a key milestone” for the strengthening of relations between the German, French, and Spanish air forces, as well as “an unparalleled opportunity” to reinforce joint operational capabilities.

—What has been put to the test in *Pacific Skies*?

—There are several aspects to highlight. First, the MACOM General Staff's capacity to lead the planning of a deployment of these characteristics and its participation in three significant international exercises. This planning also involved several Air and Space Force commands and headquarters, all in coordination with the German and French air forces. Second, the logistical

sustainment capability of a task force for over six weeks in various locations around the world. Third, this task force's projection and operational capability in places where it had never been deployed before and with countries with which it had never had the opportunity to operate.

Last but not least, we managed to update the major social media platforms on the operation while it was being carried out.

—What is the importance of this experience for our Air and Space Force?

“Logistical planning was very complex due to the prolonged duration of the deployment”

—This experience is so crucial because we have demonstrated that we are at the same level as other air forces that have better capabilities than we do, and that in coalition with them we are a multiplying factor of those capabilities.

Moreover, our participation in these exercises allowed our pilots to operate fifth-generation aircraft, gaining valuable experience that can be very useful in our domestic operations. From a historical point of view, it is an unprecedented milestone that builds upon the accomplishments of our airmen in the past. Furthermore, the friendly relations that have been reinforced with the nations visited throughout the deployment, particularly with those in the Indo-Pacific region, are also pivotal.

—What are the difficulties in planning such a demanding deployment?

—The complexity is due to two factors: having to plan with personnel from three different nations, each with their own processes and mindsets, which calls for a pooling of ideas; and the prolonged duration of the deployment in



geographically dispersed areas. On the one hand, having to plan the fighter transits together with those of the tanker aircraft, routes with in-flight refuelling areas, backup plans in case of emergency, and securing the necessary overflight authorisations from multiple nations. The latter were particularly complicated due to the great number of countries to be flown over, and because even though the aircraft of the three air forces flew in mixed formations, each had to request those authorisations individually as each country had different permanent overflight agreements. In some cases, one nation already had the authorisations ready, while another did not receive them until the very last minute, leading to confusion over the start of the transits.

On the other hand, the logistical planning to sustain the air assets in different locations. Locations where it was necessary to place the right supplies for that sustainment as effectively as possible, considering the variety of breakdowns that may occur, but with the exacerbating circumstance that spare parts are limited and must be shared with the operations that continue to be carried out on national territory.

Finally, each exercise in each of the countries required three different planning conferences: an initial one (IPC), a main one (MPC), and a final one (FPC). As a result, there were nine planning conferences plus the corresponding site surveys of all the bases —a total of twelve different bases— from which we were going to operate, or where our aircraft were going to transit. It was also necessary to find accommodation for the personnel in each of those bases.

—How was the challenge of moving and maintaining resources and personnel around the world approached?

—The logistic transport plan involved movements not only by air, but also by land and sea. Long before the official start of this exercise, the Danish vessel ARK Germania had already placed logistic containers at the ports near the air bases where our aircraft would be deployed, namely Australia's Port Darwin and Alaska's Port of Anchorage. At these ports, EADA/SEADA personnel were positioned sufficiently ahead of schedule to oversee the unloading of our containers and resolve any issues in situ, in coordination with the Air Mobility Command. Another difficulty

INTERVIEW

worth mentioning was the strict biosecurity controls that all the materiel deployed in Australia had to go through beforehand in order to comply with Australian regulations.

In addition to the fighter jets, two A400Ms with personnel and materiel were also deployed to deal with possible contingencies during transits. Agreements for technical maintenance collaboration were signed with the French and Germans, with whom both personnel and materiel were shared. This was one of the most important objectives of this deployment.

—Which flight was the most difficult?

—The truth is that all the flights had the same planning and, a priori, the same complications. However, those in the Pacific received more attention because they were the longest. This meant more in-flight refuelling and greater fatigue for the pilots, besides running the risk of more adverse weather conditions at that time of year, which thankfully did not occur.

Each flight consisted of three groups, each made up of two MRTTs and six fighter jets separated by one minute, and each group separated by 30 minutes, so that if an MRTT failed in one group, the other MRTT would take over the refuelling of the entire group.

The transit from Japan to Australia, which lasted eight hours and 40 minutes, set a new record for the longest non-stop flight by a Spanish *Eurofighter*.

—What experience did our fighter pilots gain in these exercises?

—The training could not have been better. The pilots were trained in three different environments with three different objectives. In Arctic Defender (Alaska), in a polar environment, they had the opportunity to fly with and against fifth-generation F35 and F22 aircraft, in a highly demanding scenario with simulation of real ground threats, and the possibility of using real weaponry. In *Pitch Black* (Australia), we flew in a desert environment, where, in addition to operating with fifth-generation aircraft (F35), we were able to exchange tactics with air forces from the Indo-Pacific area that we had never worked with before. The exchange of views on the use of air assets was very useful. In exercise Tarang Shakti in India, we flew in a more tropical environment with simpler scenarios,

but with the possibility of fighting directly against a Russian-built high-performance aircraft (SU-30) in one-versus-one and one-versus-two missions, which greatly enriched the experience of the pilots, especially the younger lieutenants.

—What about transport crews?

—While our aircraft did not participate directly in the exercises, the deployment itself, and the fact that they operated in remote areas and at previously unknown bases, was beneficial to the experience of the crews for future transport missions in these areas. It is worth mentioning the deployment of an A400 from the 31st Wing in New Zealand, together with a German

deployment for the development of this future air system?

—The most important lesson is that we need to be interoperable. The FCAS must be based on the idea that it ought to be capable of interoperating with any air, but also naval and/or land platform in the environment of our Allied and friendly nations. Wherever the FCAS operates, it must be able to exchange data with any weapon systems in those countries. This may represent a technological challenge that is difficult to achieve 100%, but it should not cease to be an aspiration in its development.

On the other hand, what I have seen in this deployment is that when three



Lieutenant General González-Espresati visits the Spanish contingent in Darwin during its participation in exercise *Pitch Black*.

A400 and a French A400, which conducted a mission at low altitude accompanied by a New Zealand C-130. In short, during this deployment, our personnel —not just the air crew, but the entire detachment— received the best training ever provided in the Air and Space Force, as well as the best experience in logistics, health, financial support and force projection in all its areas.

—Germany, France and Spain are partner nations in the FCAS programme. What lessons can be learned from this

air forces, such as the German, French and Spanish ones, come together, they successfully meet any major challenge that we may face. We must learn that the will of a group to achieve a milestone should prevail over individual obstacles or standpoints that may prevent it from being attained.

The FCAS is a milestone for the European industry, especially for these three nations, and the will to reach that milestone must take precedence over any other interests that might jeopardise it.

J.L. Expósito



MUSEO DEL EJÉRCITO



El Museo del Ejército está instalado en dos edificios, el histórico Alcázar y el de nueva planta, unidos por los restos hallados en las excavaciones arqueológicas realizadas para la ampliación.

El Alcázar está destinado a la Exposición Permanente, albergando en el nuevo edificio las dependencias administrativas, las salas de Exposiciones Temporales, el auditorio, el archivo, la biblioteca, los talleres de restauración y almacenes, entre otras.

En más de 8.000 m² se distribuye la Exposición Permanente, con 8 salas de discurso histórico y 13 salas temáticas.

2.100 m² de restos arqueológicos que representan las épocas romana, árabe, medieval (Trastámara) y Carlos V.

HORARIO DE VISITAS

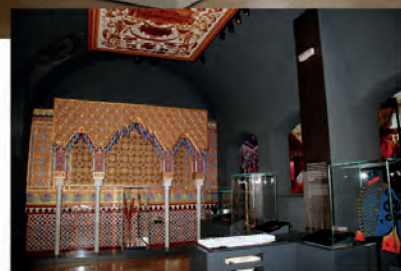
Abierto todos los días de 10.00 a 17.00 horas. Permanecerá cerrado todos los lunes (festivos incluidos), y los días 1 y 6 de enero, 1 de mayo, 24, 25 y 31 de diciembre

VISITAS DE GRUPOS

Obligatorio realizar reserva previa a través del Departamento de Reserva de grupos.

museje.grupos@et.mde.es

Tel. 925 238 816
925 238 909



Allies show their unwavering willingness to continue supporting Ukraine; decide to appoint a Special Representative for the Middle East, North Africa and the Sahel; and strengthen deterrence and defence

NATO Summit in Washington: 75 years defending our future

Colonel Diego Alcolea Navarro (Army)

Head of the NATO Branch in the Plans and International Relations Sub-Directorate

THE thirty-two NATO Heads of State and Government met last July in Washington —the city where the founding Treaty was signed seventy-five years ago—. They commemorated the anniversary and, as they have done at other difficult times in history, adopted the necessary steps to preserve peace and stability in the Euro-Atlantic area, ensuring its collective defence against any threat, wherever it may come from. In addition, the Allies, during their welcome message to Sweden, a first-time Summit participant, reaffirmed their commitment to an open door policy, in line with the provisions of Article 10 of the North Atlantic Treaty.

The route that led to this summit bears testimony that the consensus decision-making mechanism is, despite the intricate trade-offs that underpin it, NATO's primary guarantee of success in a world that, as Josep Borrell recently reminded us, is increasingly multipolar and yet less multilateral. The commitment of each and every Ally to democracy, individual freedom and the rule of law has always been and remains the basis for ensuring NATO's cohesion in critical situations, even when the geopolitical standpoints of its members do not always coincide. Thus, in Washington we have found a more united, stronger and more global Alliance that has been able to implement, to a greater or lesser extent, many of the initiatives put forward in Madrid and Vilnius, despite the differing views of its member states.

In order to fully understand the Alliance's messages in Washington, it is necessary to take into account Allied concerns about the evolution of the transatlantic link just months before a crucial US election. Therefore, it is not trivial that Jens Stoltenberg insisted, shortly before the Washington sessions began, that: "NATO is good for US security, good for the US industry, and good for US jobs". After ten complicated years at the helm of the General Secretariat, this was the last summit of the former Norwegian Prime Minister. Mark Rutte, the current Prime Minister of the Netherlands, replaced him on 1 October 2024 and will meet with NATO Heads of State and Government in The Hague for the first time in June next year.

A MORE UNITED NATO

The so-called "Ukraine support package" was undoubtedly the main topic of discussion at the summit. After a very difficult year on the battlefield, the Alliance wanted to move from words to deeds by showing, in a much more tangible way, its political commitment to Ukraine's future. The road has not been easy, but the message sent

NATO will remain steadfast in its defence of a strong, independent, and democratic Ukraine



to Russia in Washington is clear: NATO remains and will continue to remain steadfast and united in its defence of a strong, independent, and democratic Ukraine. The Secretary General has repeatedly declared that the Alliance's legitimacy is unaffected by Hungary's decision not to participate in this package as its prime minister has not vetoed it, even though he could have.

Thus, the 32 voted in favour of an "initiative" that, although not designated as a mission, means that the Alliance will take over the coordination of military training and equipment provided to Ukraine by Allies and partners —activities that were previously overseen by the United States through the Security Assistant Group—, as well as the logistical support and transformation of its military and security forces within Allied territory. The main challenge of this initiative, with its HQ in Wiesbaden, Germany, will be to avoid duplicities with the activities being carried out in these areas by the European Union and other international organisations, thereby creating both political and operational added value. The Allies also approved in Washington the establishment of the Joint Analysis, Training and Education Centre, in which NATO and Ukraine will work together to identify lessons learned from Russia's war against Ukraine.

Another decision adopted during the Summit was to collectively and proportionally assume the necessary funding to provide the materiel, assistance and military training to Ukraine for a minimum

amount of €40 billion this year —a figure that should be a minimum baseline for future years. This new commitment, which takes into account all the contributions made by Allies both bilaterally and multilaterally, aims to ensure an enhanced and predictable support for Ukraine for as long as it takes. This attempts to prevent a recurrence of uncertain situations similar to the one that occurred when the US Senate blocked the assistance package to Ukraine. This measure is essentially a declaration of intent, considering the political and legislative obstacles that many Allies have to overcome in order to commit funds from future budget years.

In any case, as proof of their unwavering determination to further strengthen Ukraine's military capabilities, several Allies announced during the Summit the delivery of new air and missile defence batteries, thereby meeting President Zelenskyy's key demand in recent months. Furthermore, the transfer of *F-16s* donated by the Netherlands and Denmark was confirmed to be underway. Despite not having formally invited Ukraine to join the organisation, the Alliance thinks that these initiatives, along with ongoing bilateral security agreements, provide a strong foundation for Ukraine's irreversible journey towards full NATO membership. Thus, NATO, without abandoning its open-door policy, defers a decision that is currently a red line for certain Allies. This ambiguity allows Ukraine to consider new strategies to end the conflict if it so chooses, while maintaining the strategic pulse with Russia.

A MORE POWERFUL NATO

Washington also reviewed progress in implementing the measures agreed in Madrid and Vilnius in terms of strengthening NATO's deterrence and defence posture. Thus, the Allies are providing the necessary forces to implement the defence plans approved last year, currently with up to 500,000 high readiness forces; they are conducting large-scale reinforcement exercises, such as Steadfast Defender 2024, which involved some 90,000 military personnel from both sides of the Atlantic; and they are strengthening their ability to move, supply and sustain deployed units. In addition, significant progress has been made in the Integrated Air and Missile Defence (IAMD) mission by implementing the new IAMD Rotational Model, and in the Ballistic Missile Defence (BMD), where Enhanced Operational Capability has been declared after the US transferred the Aegis launching system located in Poland.

Another important news in Washington is that two-thirds of the Allies already spend at least 2% of their Gross Domestic Product on defence. This baseline, which former US President Donald Trump repeatedly demanded, remains valid today, even though NATO recognises that higher percentages will be required to address the security challenges presented by the current situation. At the Summit, the Allies also highlighted the fact that defence spending by European countries and Canada had had an overall increase of 18% over the past year, i.e. nearly \$90 billion. This rise, in addition to strengthening the transatlantic link, will make it possible to accelerate the production of the most critical capabilities, especially in Europe. In fact, and as agreed in Wales, 29 of the 32 Allies are already devoting more than 20% of their investment to funding new developments.

In this vein, it is also worth noting that Washington approved the NATO Industrial Capacity Expansion Pledge, a public document that aims to go beyond the results obtained with the Defence Production Action Plan agreed in Vilnius. This new initiative that aims to promote industrial cooperation among Allies, notably among transatlantic Allies, includes, among other aspects, the obligation to report annually on the evolution of national industrial plans and the requirement to monitor compliance with NATO-approved standardisation measures to facilitate interoperability among Allies. It is evident that the defence industry plays and will continue to play a decisive role in NATO's future. Indeed, the main event held on the margins of the Summit was the one sponsored by the US Chamber of Commerce, which brought together national defence investment decision-makers and the most influential defence industry corporations.

A MORE GLOBAL NATO

Another of the Allies' key goals for this summit was to strengthen cooperation and dialogue with their strategic partners, especially the Indo-Pacific partners, the so-called IP4: Australia, Japan, New Zealand and the Republic of Korea. This was the third consecutive year that the Heads of State and Government of these countries, along with the presidents of the Council and of the European



Commission, attended a Summit. It is evident that the support that North Korea, Iran and China are giving Russia in its war against Ukraine has further convinced Allies that the threats they face are global and interconnected. In fact, while it was accepted in Vilnius that developments in the Indo-Pacific could impact Euro-Atlantic security, Washington is already openly claiming that these developments affect it directly.

At the summit, four flagship projects were agreed, which aim to enhance NATO-IP4 cooperation in the areas of supporting Ukraine, cyber defence, countering disinformation, and technology. In view of China's concerns, the Alliance insists that this relationship is not about expanding its influence in the Indo-Pacific, but working together to address global challenges. However, the 32 were also keen to show their growing concern about the role that China is playing in the reconstitution of Russian industry, and used a more forceful language than they did in Vilnius last year. It would seem reasonable to assume that NATO will keep strengthening its relationship with the IP4 in the



SHAPE

coming years, but limiting its projects, at least in the short term, to non-geographically defined domains, such as those approved in Washington, since there is no consensus on the geopolitical implications of any other kind of rapprochement in the region.

NATO's Southern Neighbourhood was also present in Washington in the form of an action plan that contains some of the proposals of the report submitted by a group of independent experts following the mandate given in this respect at the Vilnius Summit. These include the designation of a Special Representative to coordinate all NATO's efforts in the Middle East, North Africa and the Sahel and, on a more practical level, giving the Strategic Direction South Hub (NSD-S HUB) a higher political-military profile. Beyond the recurrent

Spanish diplomat Javier Colomina has been appointed the first Special Representative for Neighbourhood

demographic, economic and security challenges in the South, Russia's increasingly active presence, coupled with the progressive decline of Western influence in the region, seems to have helped raise awareness of the importance of the Neighbourhood among non-coastal states. It is now necessary to develop an individualised and well-funded strategy that builds on the leadership of organisations and countries that, like Spain, the main promoter of this dossier, already have well-established synergies in the countries in the area. The appointment of Spanish diplomat Javier Colomina as the first Special Representative for the Southern Neighbourhood will undoubtedly help to consolidate this approach.

THE ROAD TO THE HAGUE

The Washington Summit has once again demonstrated NATO's ability to adapt its decisions to complex scenarios, such as the current one in which Russia's aggression against Ukraine has shattered peace and stability in the Euro-Atlantic area. As evidence of its public recognition, 73% of the population of the 32 Allied countries consider that NATO plays an important role in their security. NATO's Ukraine support package sanctioned by the Heads of State and Government is very robust and clearly demonstrates the Alliance's political will to support Ukraine for as long as it takes without becoming a party to the conflict.

Of course, it is now necessary to implement the measures approved. As for the initiatives related to the Indo-Pacific and the South, they reflect, in a balanced manner, different sensitivities within NATO, in line with NATO's 360-degree strategic approach and its conviction that threats are global and interconnected.

The most dynamic dossier in the coming year will continue to be deterrence and defence. The evolution of defence investment and the commitment to expand industrial capacity should speed up the entry into service of new military capabilities, particularly on the European continent, even though we have yet to address the debate on how to recruit and retain the military personnel required to meet new deterrence and defence objectives. Sweden and Finland's full membership can help strengthen integration between NATO and the European Union and thus revitalise the transatlantic link.

The need for a reinforced European defence no longer seems to be in doubt. The 32 committed in Washington to strengthening their national resilience, by aligning civilian and military planning, as well as to developing more tools to counter malicious hybrid actions undertaken by state and non-state actors. The road ahead is not easy, but it is certain that the Alliance is and will continue to be the cornerstone of the collective defence of its member states despite today's complex circumstances.

INTERNATIONAL MISSIONS

Spain leads a multinational defence and deterrence brigade on
NATO's eastern flank

IN COMMAND OF THE FORCE IN SLOVAKIA





The Spanish Armed Forces are leading a contingent of some 1,100 troops at Leš military training area.

INTERNATIONAL MISSIONS

AT 11 p.m. on 15 October 2024, fifty Army High Mobility Tactical Vehicles (HMTVs) located in Lešť, a small town in an agricultural area of Slovakia, depart from the Riecky compound, south of the military training area, to travel north. There, the opposing force—played by the Czech troops—with their BVP-2 infantry fighting vehicles—has crossed the border and is advancing rapidly. The attack surprises the head units, the *Centauro* cavalry reconnaissance

vehicles, which retreat to safe positions. That morning, the response is ready. A minefield stops the attack of the hostile force, and now the lost ground must be regained.

After noon, Portuguese *Leopard 2A6* tanks launch a counterattack on open ground, supported by Spanish troops armed with *Spike* anti-tank missiles. After that, sappers clear the way for the battle group, in charge of the main combat in their HMTVs, armed with 12.7 mm heavy machine guns and LAG-40 grenade launchers. Throughout the day, the opposing force loses the initiative, withdrawing to isolated urban areas. It is time to leave the plains and fight house to house to drive back the enemy force, and restore the pre-attack border. Night falls again, temperatures drop to below zero, and they use night vision devices to secure their positions before the end of the exercise on 17 October.

This spectacular live-fire exercise is one of those conducted by the Multinational Brigade Task Force Slovakia (MN BDE TF SVK). Since 1 July 2024, Spain has been leading this task force while the host nation along with Slovenia, Portugal and the Czech Republic provide capabilities. Likewise, Romania will join them in January. This is the first time Spain has served as framework nation for a forward land force on NATO's eastern flank, the one in Slovakia, which is part of the Atlantic Alliance's effort to strengthen deterrence and defence in this area. Our country's commitment goes



Spanish soldiers working at Kuchyna air base, Slovakia, where NATO's High Readiness Land Headquarters Bétera has sent a coordination and liaison element.

further, as since the 2022 Madrid Summit the forces deployed by NATO to deter Russia have been designed to escalate and rapidly turn into brigades. The Task Force, which is the part of the brigade that is permanently stationed at Lešť military training area, has 1,100 troops, of which over 800 are Spanish. However, the remaining units, known as "capabilities on call", are at the military bases of their respective nations on alert and ready to deploy immediately upon call.

Together, all these units make up the Multinational Brigade Slovakia (MN BDE SVK), which amounts to a total of 2,800 troops (about 2,100 of which are Spanish). Its Commanding Officer is General Luis Fernández Herrero, commander of the Spanish Paratrooper Brigade (BRIPAC), located in Paracuellos del Jarama (Madrid). Within only 10 days of receiving the order, the entire brigade must be on the ground.

The battle group was granted NATO certification in November 2024, meaning

that the complete brigade has achieved its initial operational capability. Its full operational capability is expected to be achieved in June 2025, when practically the entire brigade will conduct an exercise in Slovakia. Prior to that, in December, the BRIPAC will hand over the command of the multinational brigade for the whole year to the BRILAT (Spanish Armed Forces Light Airborne Infantry Brigade), which was already in the Central European country from January to July 2024.

LINK WITH BÉTERA

Spain is also the framework nation for an army corps, of which NATO's Rapid Deployment Headquarters (HQ NRDC-ESP) in Bétera, Spain, serves as the command and control element in the Slovakia-Hungary region. Lieutenant General Luis Sáez Rocandio, commander of HQ NRDC-ESP, leads this army corps, which has a Corps Forward Element (CFE) at Kuchyna air base in Slovakia, close to Bratislava.

"We try to be the eyes and ears of our commander", explains Colonel Gustavo Paredes Lobo, who is in charge of the 33 Spanish soldiers at Kuchyna. From Valencia, it is challenging to get a clear picture of what is going on in the assigned area of operations: the Czech Republic, Slovakia and Hungary.

That is why it was agreed to leave a part of the headquarters there in order to maintain a military presence that would enable communication and information gathering with the nations in their respective areas of deployment. This makes command and control, and information gathering much easier. In the event of a crisis, some 400 troops, both Spanish and from the twelve other nationalities represented at the HQ, would be deployed from Bétera to Kuchyna. They would be ready to lead up to five divisions—some 60,000 troops—in a conventional high-intensity operation. The initial command and control elements could be in the area within ten days, and it should be possible to deploy the entire

**HQ Bétera is
the command
and control
element of the
Army Corps**



The 8th Cavalry Regiment *Lusitania*, part of the Paratrooper Brigade, operates five *Centauro* wheeled combat and reconnaissance vehicles, as part of the Cavalry Squadron in Slovakia. This is the first time the *Centauros* participate in a mission outside our national territory.



Several soldiers receiving and processing requests for fire support from forward observers.



A sapper platoon carrying out an explosive ordnance disposal drill.



**COLONEL FRANCISCO CALVO RODRÍGUEZ,
COMMANDER OF MULTINATIONAL BRIGADE
TASK FORCE SLOVAKIA**

“We have reached a brigade structure”

COLONEL Calvo (Narón, A Coruña, 1970) has participated in missions in Bosnia and Herzegovina, Afghanistan and Iraq, and is now in Slovakia, where he has been leading this Task Force since 1 July 2024. “Personally, it is both a major challenge and a great opportunity”, he points out. He is posted to the 4th Parachute Infantry Regiment Nápoles of the BRIPAC, and assures that “solid foundations” are being laid so that Multinational Brigade Slovakia reaches its full operational capability in 2025.

—What have these first months been like?

—We have come a long way since our arrival in Slovakia. The Spanish contingent has already settled at Lešť; the essential brigade procedures and structure have been defined; we have enhanced our interoperability with units from other nations; and we have an appropriate organisation to carry out our tasks as framework nation for the multinational brigade. We are the first Spanish brigade-size contingent, with all its capabilities and responsibilities, on the eastern flank; and although there is still much to be done, we have laid good foundations for future contingents to continue to improve what has been done so far.

—What does it mean to you to take command of the force in Slovakia?

“Our activities are ultimately intended to reduce tensions and prevent conflicts”, says Colonel Francisco Calvo.

—It represents a challenge because it involves many responsibilities in terms of interoperability with units from other nations; integration of combat, combat support, and logistic units of the multinational brigade; cooperation with the Slovak Armed Forces; and coordination of the needs of each of the contingents deployed with the Slovak authorities. However, it is also a great chance to demonstrate that the Spanish Army, and in particular its human capital, is capable of leading multinational organisations effectively, which

“The daily work and activities facilitate the integration of all forces”

contributes to the prestige of our Armed Forces and to our national security.

—What is the current situation in the evolution from battle group to brigade?

—One of my priorities since day one has been to define and implement an effective brigade structure that enables the integration of the combat, combat support and logistic capabilities of all the nations comprising Multinational Brigade Slovakia. We do not have all the capabilities permanently deployed; however, there is already a brigade structure in place, and this allows units “on call” in their nations to integrate more easily and form the full brigade within the established timeframe.

—What have been the challenges to the deployment?

—The size of the Spanish contingent is commensurate with the tasks we must carry out as framework nation. This commitment requires a major effort on



the part of the Spanish Army in terms of generation, projection and sustainment of forces, armament, materiel and equipment.

The projection of the necessary assets was carried out mainly between February and June, together with the deployment of the first BRILAT contingent and its reinforcement with BRIPAC capabilities.

This made it possible to assume command of the operation and leadership of the multinational brigade on 1 July 2024, with all the necessary personnel and assets. With the initial projection completed, the priority now is force sustainment. Ongoing improvements in our facilities, services, and capabilities demonstrate the huge effort being made to guarantee that we have everything we need to live and operate efficiently.

—What possibilities does Lešť military training area offer?

—It features excellent facilities for the troops' well-being and training activities in multiple aspects of military operations. We are grateful that the Slovak authorities have allowed us to use their best training area. Deploying in such a training area allows units from different contingents to live and work together on a daily basis. This has significant advantages in terms of operability, interoperability and mutual understanding.

—What is the integration with other allied forces like?

—The daily work and training activities facilitate the integration of all the forces. We have developed a training programme, which we started with company-size exercises and ended with a certification exercise of the multinational battle group.

We have also gradually increased the exercises' complexity. At first, the companies ran their exercises independently. Later, we started integrating the brigade's combat support and logistic capabilities, and combining units from different nations, including Slovakia.

Finally, we have focused our efforts on the battalion-size to ensure integration and interoperability. This progress in training has allowed us to continuously analyse and improve our

tactics and procedures, culminating in the certification exercise for the multinational battlegroup.

—How does the coordination with the Spanish CFE work at Kuchyna?

—The deployment of the CFE is part of Spain's effort in Slovakia. This, in addition to improving the relations between the two nations, raises the Spanish Armed Forces' reputation among our Allies. The responsibilities of the CFE at Kuchyna are well defined and very different from those of the Task Force.

Our efforts are complementary, and the relationship is fluent and collaborative. Additionally, from a national perspective, forces at Lešť provide logistic support to Spanish forces at Kuchyna, demonstrating a rational use of resources and ensuring that Spanish personnel, wherever they may be in Slovakia, have access to all the capabilities deployed by Spain.

—What would be the role of the Task Force in the event of an escalation of international tension?

—The forces deployed in this operation are tasked with contributing to the deterrence and security of NATO's eastern flank.

Therefore, our daily training activities help to demonstrate that the forces are effective and decisive, contribute to collective security of the Alliance, and reflect our commitment to the security of all Allies. In short, given the complex and volatile international situation, our activities are ultimately intended to reduce tensions, promote dialogue and prevent conflict.

—What remains to be done in the months left before your deployment?

—The certification exercise in November was our contingent's primary milestone. This has demonstrated that everything we have done so far is on the right track to fulfil a successful mission.

Until we are relieved, we will keep working to improve the contingent's living conditions and logistic capabilities, prepare a smooth handover, and draft a significant number of brigade standard operation procedures incorporating what we have learnt throughout our deployment.

headquarters within a maximum of two months to have complete command and control capabilities.

LARGE PRESENCE

With 800 soldiers and 250 vehicles, the operation in Slovakia is the largest of those conducted by our Armed Forces abroad, including the United Nations operation in Lebanon, with 670 Spaniards, and NATO's operation in Latvia, with 600. The BRIPAC accounts for 85% of the contingent, followed by the Army's Logistics Brigade (10%) and the rest from other Army and Civil Guard units.

"Part of every capability of the brigade is deployed at Lešť", says Colonel Francisco Calvo Rodríguez, who leads the Task Force. He believes that this favours the integration and interoperability of contingents because the units joining from now on do not start

Spain has deployed 800 troops, mostly from the BRIPAC, and 250 vehicles

from scratch, they will integrate into an existing structure. Thus, Lešť already has the brigade's headquarters; a Spanish battle group as the main combat unit including a Slovenian motorised company and a Portuguese tank platoon; a Czech mechanised infantry company; a Spanish cavalry squadron; an artillery unit; a sappers company; and air defence units —equipped, among other assets, with unmanned aerial vehicles (UAVs)— as well as signal, logistic and military police units. The battle group, commanded by Lieutenant Colonel Juan José Pereda, is led by the 1st Paratrooper Battalion *Roger de Flor* of the 4th Parachute Infantry Regiment *Nápoles*. A Romanian anti-tank platoon and a Slovakian reconnaissance platoon are due to join them in January, while the Portuguese tank platoon is expected to grow into a mechanised infantry company by mid-2025. The remaining

INTERNATIONAL MISSIONS



Lieutenant Colonel Juan José Pereda directing the combat operation from his command post.



A Spanish soldier working in the vehicle repair shop.



A member of the Paratrooper Brigade throwing a drone during an anti-drone training exercise at Lešt' military training area.

units are located in their respective national territories: the other two battle groups, one from the Spanish BRIPAC and one from the Czech Republic; and various cavalry, artillery, engineer and logistic elements. At Kuchyna air base, 16 of the 33 service members hail from the HQ in Bétera; 15 from both the 21st Signal Regiment in Marines (Valencia) and the 1st Signal Regiment in Huesca; one from the Logistic Brigade in Zaragoza and one from the 81st Logistic Support Group in the Canary Islands.

The Task Force's vehicles at Lešt' military training area include six Portuguese *Leopard 2AE* battle tanks and six Spanish *Centauros*, the latter of which are on their first mission outside our country. It also has URO VAMTACs (High Mobility Tactical Vehicles); Czech armoured vehicles of Soviet BVP-2 and Slovenian *Valuk Pandur* origin, similar to the Spanish BMRs (medium wheeled armoured vehicles); European *Mistral* air defence missiles and *Spike* anti-tank missiles; British

105 *Light Guns*; Israeli 81-millimetre mortars; and *Cervus* anti-drone systems recently acquired by Spain, among other materiel. It also has advanced 3D printing equipment, Prometeo II, which can be used to manufacture spare parts without compromising the security of the vehicles.

Once the necessary works are completed, a helicopter unit will be deployed to the Corps Forward Element at Kuchyna, to which two Spanish *Tiger*

attack helicopters and one NH-90 transport helicopter will be added.

MANY POSSIBILITIES

With an area of 145 km², Lešt' military training area is one of the largest in Europe. It has extensive open spaces for troop movements, living and working facilities for units, and built-up areas like Oremland, where NATO forces conduct combat training in urban areas in buildings with peeling walls and shattered windows that once housed Russian barracks. "It has many facilities we can use", underlines Captain José Antonio Mochón, in command of the field artillery battery. "One of the most complicated aspects, especially when it rains, is the difficulty to advance in this terrain, but it also offers us the chance to practise vehicle recovery. Moreover, since the battery provides fire support to all the manoeuvre units, we can train with forces from other Allied countries on a daily basis".

Santiago F. del Vado
Photos: Pepe Díaz

**The 145 km²
training area in
Lešt' is one of
the largest in
Europe**

SPANISH TROOPS ON THE EASTERN FLANK

The Spanish Armed Forces contribute to NATO's deterrence and defence missions in Eastern Europe with more than 2,500 troops in the land, sea, and air domains.



OPERATION PERSISTENT EFFORT

Integrated Air and Missile Defence Missions



- Paznic' air tactical detachment, consisting of eight F-18 aircraft and **150 service members** from the 12th and 15th Wing at Mihail Kogalniceanu military base (Romania).



- Tigru' detachment with an air surveillance radar and **80 service members** at Schitu barracks in Romania.



- NASAMS battery in Lielvarde (Latvia). **87 troops**.
- NASAMS battery in Amari (Estonia). **102 troops**.
- Patriot unit in Adana (Türkiye). **140 troops**.



FORWARD DEPLOYMENT OF GROUND FORCES



Eight multinational battle groups in Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia. All of them capable of scaling up to brigades.

- Spain leads the brigade in Slovakia and contributes **841 troops** and 250 vehicles at Lešt' and a Corps Forward Element at Kuchyna.

- It contributes to the Latvian brigade with **541 troops** from a mechanised task group, a field artillery unit, a sapper unit, an engineer unit and a logistic unit.

- A company-size task group with more than **206 marines** and 40 vehicles joined the Romanian brigade in November 2024.



OPERATION NOBLE SHIELD

Maritime rapid reaction forces



- Frigate Cristobal Colon (F-105). Integrated in Standing NATO Maritime Group 2 (SNMG2) in the Mediterranean. **Crew: 232**.

- Combat Supply Ship (CSS) Cantabria. Integrated in the Standing NATO Maritime Group 2 in the Mediterranean. **Crew: 170**.

- Minehunter M-36 Tajo. Integrated in the Standing NATO Mine Countermeasures Group in the Mediterranean and Black Sea. **Crew: 46**.

ESFAS is the past, present and future



Major General Pablo Guillén García
Director of Spain's Armed Forces College (ESFAS)

I would like to share a recent experience of mine with you. I have no documentary evidence so I doubt that anyone reading this article will believe me, but I will write about it anyway.

I have travelled to the future. Allow me to explain what I mean. I have a friend who built a time machine and needed a volunteer to test how it worked because he could not do so himself (someone has to press the button from the outside...). Since I consider myself a good soldier and volunteering is one of our virtues, I decided to accept the challenge, but not without first making him promise that it would not hurt. "Well", he said, "I must confess that decomposing your body for teleportation up to atomic level is not harmless, so you may feel some discomfort". After completing the journey, I have to admit that teleportation is not painful but it is quite uncomfortable, in particular when it affects certain organs and especially the teeth.

I asked him if in that future he could send me to a very advanced country in conflict with the hope of meeting with the most senior military officer leading its armed forces. The purpose was to gain first-hand insight into the progress made in conflict management thanks to the use of the technologies and procedures that are yet to come.

That is exactly what he did. He sent me to a country whose top military commander was kind enough to receive me (most likely because he knew beforehand that I was coming from the past and was hoping to astonish me with the progress made in the future in the military field). The first thing that struck me was that this general received me in his own home, in jeans, drinking a beer. Noticing my look of surprise, he informed me that he was able to work remotely to

a highly convenient schedule thanks to the new command and control systems, seldom requiring him to show up at his headquarters.

In fact, he admitted that he hardly knew anyone there, saying that the high commands did not often run into each other because the few management-related activities were coordinated in the metaverse using new technologies. When I asked him about their personnel resources, he confessed that he did not know the figure, since besides being scarce in numbers they also worked remotely. He even told me that they conducted operations from home connected to a quantum supercomputer, which has a computing power beyond comprehension for a limited 21st century mind and uses artificial intelligence to carry out all the tasks automatically.

"What about planning?" I asked. He was clearly taken aback by the question because he tried to buy time by pretending to drink some beer before answering. "Planning", he finally said, "I think this is done entirely by artificial intelligence and we as commanding officers don't have access to that process".

Very surprised by the evolution of technologies, I decided to get down to more specific aspects of crisis management. To start with something easy, I asked him about the targeting process. He said

**Military values humanise something
as undesirable but as inevitable today
as armed conflicts**



that it was done by a pre-installed application that managed the most suitable weapons —all of which were autonomous— and selected which targets to strike. When I questioned him about collateral damage management, he acknowledged that he was unfamiliar with that concept, although it did ring a bell from old books of previous eras. As for the treatment of enemy casualties, he actually said that, by default, the software did not consider this option because it did not account for the possibility of enemies remaining alive, thereby avoiding that inconvenience.

At that point, I became interested in the survival of those values that we now consider fundamental to our institution, such as loyalty, honour, self-sacrifice, etc. He appeared a little annoyed at this, arguing that these values had been the primary obstacle to the development of new technologies as they unnecessarily slowed down operations and thus had to be eliminated from the programme.

I decided to come back to the present, somewhat dismayed by what I had seen. I have to admit that the trip back was a good bit more comfortable given how much more advanced the technology of the future is. However, in the process of going back and forth I lost two teeth and one of my kidneys no longer works as it used to, but it was worth it.

I would be lying if I said I was not dazzled by all those breakthroughs, but I believe that is because I am getting older and am therefore more easily impressed by anything related to technology.

However, I also found what I saw to be tremendously disturbing. I have always thought that conflicts are the compulsory scenario

for applying the most rigorous principles of humanity and damage control, precisely because of the enormous destructive potential they unleash. Imposing oneself on an adversary is not the same as unnecessarily destroying him.

For this reason, I have always believed that human beings should invariably be involved in the planning and conduct of operations, mitigating the impact of military power in the most humane way possible.

I wanted to find out what had led humanity to such a radical change in the way it dealt with conflicts lest I myself, albeit unwittingly, were to contribute through my present actions to the evolution of this folly.

Feeling a little anxious and wanting to investigate whether we were on the right track or not, I did my best to go over the principles guiding the training of our future staff officers, as top advisers, and the refresher courses for our future generals, as ultimate decision-makers.

After a detailed analysis, I was able to confirm for my peace of mind that the principles that have long guided military education are still in force. Values that dignify the profession and humanise something as undesirable but as inevitable today as armed conflicts. Underlying these many values is that of respect for human life. I say this because I have always believed that life should be guided by two basic principles: freedom and respect. Any other principle must be linked, or rather subordinate to these two.

Respect is the basis of coexistence on which all other values are developed. As stated in the Preamble of the Royal Ordinances for the Armed Forces, respect for the dignity of human beings and their rights is inviolable. And that respect, even for those who have learned it from an early age, must continue to be fostered as an inherent reference in the training of our personnel at the Armed Forces College, which is and must continue to be just that: a college. And I underline the concept of "college" because I argue that this term applies to a place where they teach specific subjects and train in very specialised fields (art, music, languages, etc.), while at the same time promoting ethical references.

Such training must therefore include an essential foundation in the military domain made up of the values that should guide all our actions. One must be highly trained in order not to cross the red line between a virtue and its associated risk. We say YES to being brave, NO to being unmindful. YES to being loyal, NO to being servile. YES to being flexible, NO to being chaotic, etc.

No one doubts that ESFAS is a benchmark in the quality and design of its different courses in the academic sphere. The international recognition that this centre has achieved in the field of higher military education is indisputable. Moreover, the national recognition of universities and other training and research centres is supported by the fact that all of them compete to forge partnerships with the CESEDEN (Spain's Centre for Higher National Defence Studies) for educational or research projects. In the twenty-five years that this centre has been teaching its courses, it has earned an impeccable reputation.

However, there is another aspect that is harder to quantify in terms of results but is nonetheless as important as the previous one: training in values. It is the most cross-cutting of the educational aspects but also, in my opinion,



**Artificial
intelligence
should not
replace intuition,
initiative or
creativity**

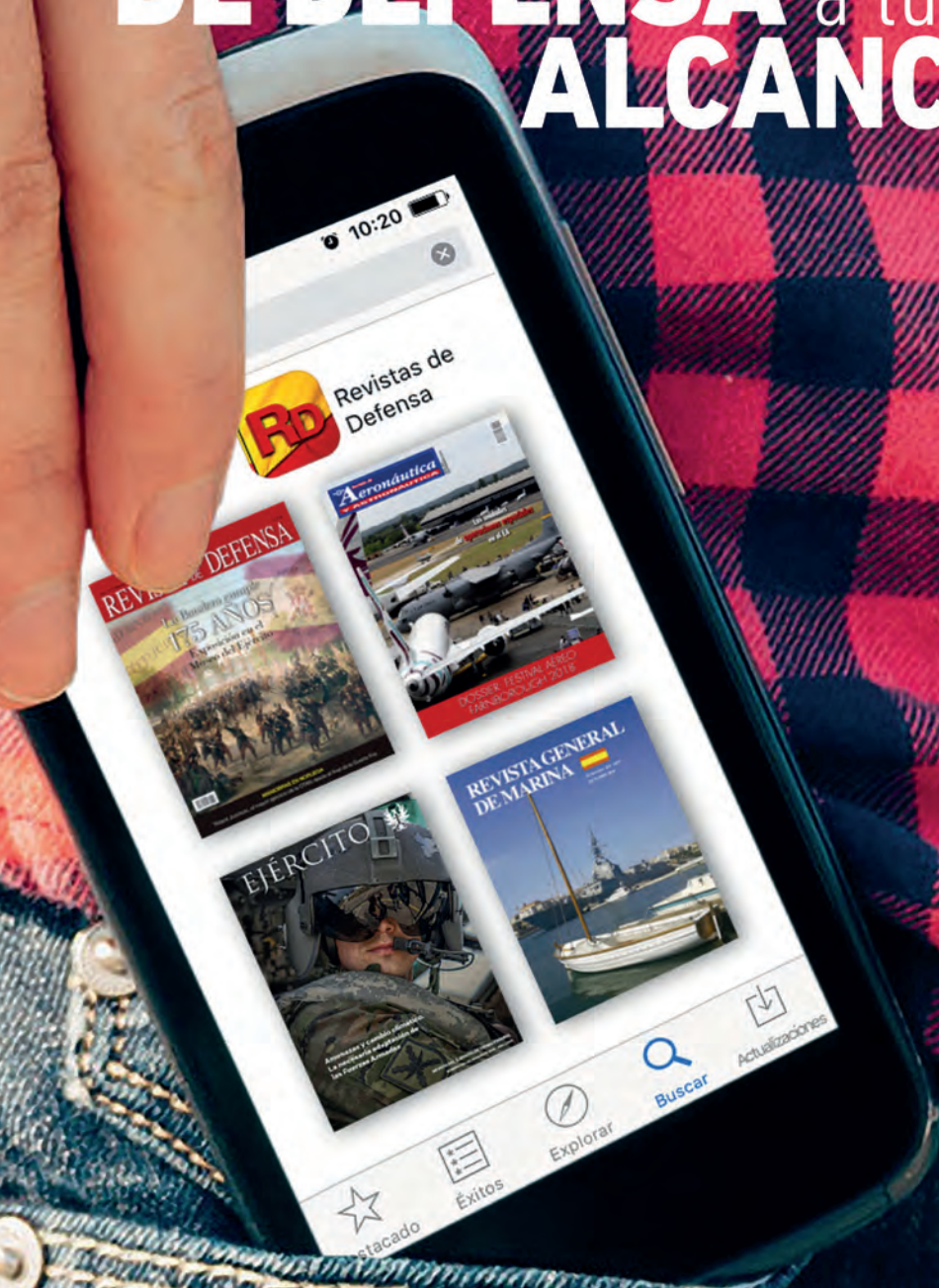
the most necessary. To this end, the exemplary conduct of the teachers, all of whose lives are fully dedicated to the military, must be indisputable. Also unquestionable are the discipline with which the different subjects are taught and which are the result of rigorous planning; the self-sacrifice of those who do not mind extending their teaching hours if required for their students; the initiative of the different departments, always seeking the very latest methodologies and content; and, of course, the constant struggle to stimulate leadership, a critical spirit and one's own reasoning, which are all indispensable qualities of our officers.

Face-to-face training, as a teaching reference, is absolutely essential for all these virtues to permeate the students participating in the different courses. Online training is an excellent resource which, if used in good measure, complements teaching. As is the use of artificial intelligence, a tool that, when utilised wisely, offers a vast array of possibilities. However, let us not try to replace something as human and inherent to the profession as intuition, initiative or creativity. At a recent meeting of European universities, someone defined artificial intelligence as a resource that produces fast results which are good but not very brilliant and still far from the standards of human creativity.

This year, we have concluded the 25th General Staff Course (CEMFAS) as well as the 25th Refresher Course for General Officers (CADCOG). I have had the opportunity to deal with the students of both courses, and I believe that we will have virtuous officers and general officers for a while yet. God forbid anyone try to change that by dehumanising this profession.

I think I am going to invite a CHOD from the future to pay a visit to ESFAS. He might then realise that they are not as advanced as they claim to be in some aspects. I will let you know how it goes.

Las **REVISTAS** **DE DEFENSA** a tu **ALCANCE**



Descárgate
App
GRATIS

<https://publicaciones.defensa.gob.es>

 @DefensaLibros

THE FIRST TO ARRIVE, THE LAST TO LEAVE

The Air Deployment Support Squadron (EADA) is a fundamental pillar to deploy the assets of the Spanish Air and Space Force abroad

“WE jump with oxygen, in free fall, and open the canopy at high altitude to navigate between 40 and 50 km for more than 30 minutes until we reach the theatre of operations. Once on the ground, we prepare and mark the runway, and study the meteorological conditions at different altitudes of the area of operations (layers). Within 20 minutes, we can start coordinating with the transport aircraft pilots the airdrops of personnel and cargo or the maximum-effort landings on unprepared or semi-prepared airstrips”.

Staff Sergeant David Gutiérrez Escacena leads one of the Combat Control Teams (CCT) of the Air Deployment Support Squadron (EADA). Small in size —between two and eight soldiers— the members of this team are the first to arrive at the theatre of operations to support military airlifts.

This is one of the capabilities that the EADA provides to Air and Space Force deployments worldwide and that ensures the projection, sustainment and defence of its bases and detachments. Based in Zaragoza since its creation in 1994 —first as a company-size unit, and since 2000 as a battalion-size squadron—, the unit celebrates its 30th

anniversary this year. Its main features have been consolidated over the past three decades: “versatility, very high readiness and multipurpose rapid deployment”, says its commanding officer, Lieutenant Colonel Humberto Briones.

The nations where the Squadron has deployed its expeditionary character include missions in the Balkans, the Baltic States, Bulgaria, Poland and Romania in Europe; Cape Verde, Congo, Chad, Gabon, Egypt, Libya, Mali, Mauritania, Niger, the Central African Republic, Senegal, Sudan, Tunisia and Zaire in Africa; Afghanistan, Kyrgyzstan, Indonesia, Jordan, Iraq, Israel, and Palestine in Asia. These operations include humanitarian relief, peacekeeping, evacuation of personnel, support for medical air evacuations and victims of

natural disasters, and, currently, providing logistical and security assistance to aircraft taking part in the Pacific Skies initiative around the world.

This unit is part of the NATO Response Force and the European Air Group. Furthermore, some of its elements are a benchmark for the Allied Air Forces that attend the advanced training courses in tactical airlift led by Spain (ETAC).

AIRLIFT

“We are the first to arrive”, says Technical Sergeant Escacena, referring with pride to the EADA’s motto —*Obviam Primus*— when he explains his duties as a combat controller. “Once on the ground, the CCTs coordinate with pilots the massive drops of personnel and cargo, which are carried out in paratrooper static line method, at low altitude, in rapid descents that only take a few minutes”. The first to jump are the members of the Force Protection, whose mission is to extend the circle of security initially established by the CCTs. They are followed by members of the Air Transport Support Section (SATRA), who are responsible for managing the unloading of materiel: vehicles, tents, modules, containers, etc.

“If the operation so requires, the deployment is completed with the other assets and capabilities offered by the



EADA paratroopers jumping in free fall from an A400M tactical transport aircraft above the area of operations.



A CCT team member controls air traffic at Qala i Naw airport, Afghanistan, in 2009. Below, members of the CBRN section collect a sample of a suspected biological agent; an EOD drone approaches an IED; and a massive parachute drop.



ARMED FORCES



Inside the control centre of the C-UAS *Crow* counter drone system, which operates close to the Squadron's command post to ensure its security and the protection of bases and detachments.

EADA”, says Captain Víctor Martínez Borrás, commander of the Mobility Support Coy, before he starts to list those capabilities: SBAD (Surface-based Air Defence) systems, MWD (Military Working Dogs), EOD (Explosive Ordnance Disposal), Counter Unmanned Aerial Systems (C-UAS) and CBRN (Chemical, Biological, Radiological and Nuclear) capability.

“In fact, we act as a small service branch within another branch, the Air and Space Force”, says SATRA commander Lieutenant José Alberto Gallego.

This section provides support to military airlift “wherever we are needed and in any kind of environment, whether permissive or not”. Its members work divided into two very specific areas: airdrop, where they pack the parachutes; and airlift, for the preparation of droppable cargos and their distribution and restraint in the aircraft. “This capability”,

adds Lieutenant Gallego, “also allows us to set up an air terminal where no aeronautical services are available, in order to manage the embarkation and disembarkation of equipment and personnel, handle the thousands of documents that this generates, establish a customs service, and provide the required airport security”.

EADA participates in most of the deployments of the Spanish Air and Space Force

SBAD AND FORCE PROTECTION

Mistral firing posts ensure low-altitude air defence of installations and aircraft. For protection against drones, they use what Master Sergeant Fernando Marcos Domingo, an operator in the SHORAD (Short Range Air Defence) Coy, defines as the unit's “jewel in the crown”: the C-UAS *Crow* system, which “prevents any armed or unarmed drone from entering its area of influence within a 1.5 km radius. However, we detect the threat earlier, up to 20 km away from our position, and that's when we disrupt it with the jammer module”. This system entered service four years ago and was later joined by the *Enforce Air2* and the SENDESCOPE suitcases, making the SHORAD Coy the Air and Space Force's premier drone defence unit. All these assets have been deployed in Mali, Lithuania and Romania, and during the EU summit in Granada in 2023 and Madrid's

NATO summit in 2022. “The defence of a TAOR (Tactical Area Of Responsibility), as well as its internal security, is monitored from an FP-C2 command and control post”, explains Sergeant Jorge Salaber inside the 20-foot deployable shelter that houses this operations centre managed by the Force Protection Coy. This NCO is a member of the Security and Surveillance Systems section, where the RQ-11 *Raven* UAVs are integrated. These drones deliver a 10-km range and a 75-minute flight time. However, this defence capability against drones will increase with the arrival of the RQ-20 *Puma*, “which will allow us to cover the command post’s entire area of influence”.

The *Ravens* also participate in tactical mobility tasks, “for example, to orbit around a base or a hostile area”, says Sergeant José Larriba, assigned to the Security and Defence Section.

Also taking part in these tasks are the canine teams, which use dogs specialised in detecting improvised explosive devices (IEDs), and the Explosive Ordnance Disposal (EOD) reconnaissance section, which uses the Avenger robot and operates in mined areas.

For the past few months, the EOD section has been using an ST5 high mobility tactical vehicle (HMTV) with these features. “Before that, when we sent our reconnaissance teams and dogs on missions to identify potential explosives, we did so with limited information and we had to be extremely cautious”, says EOD operator, Sergeant Jorge Torrente. “Now we work with greater security. We have replaced our binoculars with the in-vehicle camera, which can be raised up to four metres, offering a 360-degree view up to 5 km”.

EOD teams and dogs from the canine section escort Force Protection members on military police missions within air detachments, such as those in Lithuania and Senegal.

This Coy has a CBRN section. “We have decontamination stations for personnel, materiel, vehicles and aircraft, and positive pressure COLPRO tents that allow us to work and live inside them without having to wear personal protective gear”, explains Staff Sergeant Carlos Nadal.

This section is also responsible for the environmental (air quality) monitoring of all the detachments and, in Lithuania



Folding a parachute into a backpack to be used for light airdrops. Below, training in military police riot control techniques.



“We provide immediate deployment, protection and flexibility”

“**A**MONG the Spanish Armed Forces, the EADA is unique, and is well-known throughout the world due to its variety of missions and way of life”. Lieutenant Colonel Briones, like the rest of the men and women under his command, always keeps his phone close at hand, “because whenever an aircraft is activated to conduct an air operation, we provide security and airlift support to ensure the mission is accomplished, regardless of the time or place in the world”. He assures that belonging to this unit involves “spending long periods of time on operations, courses and exercises, and sometimes being away from home for over 200 days a year”.

—How has the EADA evolved in the three decades since its creation?

—As new capabilities and tasks have been assigned to it to cope with evolving conflicts, it has grown in terms of infrastructure, personnel, and materiel. The Air Force needed an air unit to perform a number of pioneering and innovative tasks to guarantee the security, defence and support of air expeditionary units in new and more demanding theatres of operations. The cornerstone on which this unit was built comprises two concepts: Survive to Operate and, subsequently, Force Protection. Thus, first as a company-size unit, it began to provide protection to aircraft and bases abroad. Later, it became a battalion-size squadron, which meant a notable increase, not only in personnel and infrastructure, but also in weapons systems such as RPAS, C-UAS, deployable Command and Control centres, EOD teams, etcetera.

—However, it has never lost its parachutist spirit...

—That's right. Since the EADA was established in 1994 on the foundations of the former Military Airlift Support Coy (EATAM), we have inherited its parachute missions, which include airlift support via parachute drops and combat control by CCT teams.



We do not forget that parachutist capability. It is one of our most precious inheritances because, in addition to its importance in combat, it bonds all the members of the unit in risk and enables us to face the most dangerous missions.

—What do you currently provide to the Air and Space Force?

—I would say that the EADA mainly provides confidence and security in all air

missions, however distant, complex or risky they may be. Our goal is to ensure that Spanish aircraft and their installations have the security, defence and support they need wherever we are required, so that they can accomplish their missions and focus solely on winning the air battle. In short: we enter, secure, protect and cover the exit of our most precious asset, namely, air power.

—You also say that this unit is subject to high standards. Why?

—Not only because of the readiness and commitment I mentioned earlier—for example, the unit has recently participated in numerous international operations, as well as in the security deployment for the Paris Olympics or in exercise *Pacific Skies*, which involves deploying personnel to Alaska, Japan and Australia—but also because of the current and forthcoming weapons systems, such as the NASAMS missile battery, the modernisation of the *Mistral* system, the embarked 81mm mortars, the prowl munitions, and the new and more capable RPAS and C-UAS, all of which require constant training and a highly specialised and varied preparation. In any case, the more that is required of us, the better we respond.

—Are there similar units in the world?

—Up to now, as far as we know, we have never been in the same area of operations or multinational exercise with a similar unit. In Afghanistan, for example, the Germans, British, and Americans were very interested in our model. These countries simply deployed different units for each capability. As a result, the unit that performed force protection didn't know about airlift support or SBAD (Surface-Based Air Defense)...

When we got to Herat, the EADA simultaneously provided a number of these capabilities, thereby economising on assets and personnel. In addition, we erected the first infrastructures and fortified the base by building defensive positions, observation posts, and barricaded areas (berms) along the entire perimeter, as well as shelters and anti-shrapnel protection in the aircraft movement areas.

As far as we know, nobody is currently doing what we do and we haven't come across a unit that is comparable to ours.

J.L.E.

ARMED FORCES



EADA members get ready in the embarkation area. On the right, a *Mistral* firing post on a HMTV; and soldiers of the Mobility Support Coy preparing cargo to be dropped.

in particular, it is in charge of radiological measurements. “The CBRN capability of the Air and Space Force lies with the EADA”, outlines this Staff Sergeant.

The Force Protection Coy includes the Air Mobility Protection Teams —“the teams that escort passengers and aircrew both in flight and on the ground”, explains Sergeant Larriba—, which have taken part in numerous missions, especially in Africa.

These include support for NEO operations to evacuate nationals. Last year, this sergeant took part in the operation to extract Spanish nationals caught up in the armed conflict in Sudan.

One of the most memorable and celebrated events in this field was the

evacuation from Afghanistan of personnel who had cooperated with the Spanish Armed Forces.

The NATO unit that was deployed the longest in Afghanistan was the EADA, as it was stationed there continuously for 13

years, from January 2002 to March 2015. It is at this point that Technical Sergeant Escacena recalls the 2005 arrival of EADA members in Qala i Naw, in the north of Baghdis province, to arrange the deployment of the military contingent, by preparing the airstrip, all its visual aids, the aircraft parking area and to establish an air control space area. “There was an impressive amount of movement of transport aircraft and helicopters on medical air evacuation and weapons and ammunition resupply missions. It was our responsibility to control all that heavy air traffic”. They were the first to arrive —*Obviam Primus*—, and the last to leave —*Ultimae Excedere*—.

J.L. Expósito
Photos: Pepe Díaz



Tactical combat controllers jumping at high altitude with additional oxygen equipment.

Moscow's threats to use nuclear weapons and its repeated withdrawals from disarmament agreements provide a renewed focus on deterrence

The current context of nuclear rhetoric

Captain Ricardo Valdés Fernández (Spanish Navy)

Head of the Geopolitical Analysis Branch

Coordination Division for Security and Defence Studies (SEGENPOL)

WITHOUT ignoring other pillars such as intelligence or international cooperation, deterrence is likely to be the pillar with the greatest weight in a security architecture model. In Spain we also believe that—at least in the field of defence—dialogue, empathy and confidence-building measures effectively complement the backbone of deterrence.

Throughout history, humans have believed that in order to defend their own existence they need to keep their environment safe from threats, which leads us to consider, in terms of security, that deterrence is as old as humanity itself. According to the Dictionary of the Royal Spanish Academy, to deter means “to induce someone with reasons to change his/her mind or to desist from a purpose”. Within the current security framework, these “reasons” are sought in the development of those military capabilities that are required to confront our risks and threats, and to make them credible to any potential adversary, as a prior step to encourage dialogue, which is a vital and priority tool in the face of any disagreement.

If Ukraine's adversary had sensed—or at least suspected—that credible deterrence was being used west of the Ukrainian border, it most likely would not have crossed the border. If credibility is in question, as so often happens in history, it is probably due to overconfidence: we, the Europeans, did not imagine that a new war would take place in the heart of Europe and perhaps we neglected our capacity to deter by not making it evident enough. Although it

is also true that neither did President Putin imagine that there would still be a Ukrainian government outside his sphere of influence. Credibility is therefore a basic principle in human relations and the realm of perceptions, and it can also be applied to deterrence.

The war in Ukraine, among many other things, has taken us back to a nuclear narrative that is particularly reminiscent of the Cold War period. The rationale most likely stems from President Putin's efforts to discourage the West from supporting Kyiv even before the full-scale invasion of Ukraine. The term “deterrence theory” was created at the political level during the Cold War, when there were two very compact blocs. It mainly refers to nuclear weapons as the differentiating element in a state's capacity to deter. The situation today requires that the consequences of any decision taken on the international stage needs to be carefully considered. There is no doubt that the Kremlin's narrative, together with the fact of neglecting certain confidence-building measures contained in treaties or agreements that were meant to restrict the use, development and stockpiling of nuclear capabilities, but which have become irrelevant today, have increased the need for credible deterrence.

The war in Ukraine has taken us back to a nuclear narrative that is reminiscent of the Cold War



Rick Bajonas/ONU

In early October 2024, NATO's new Secretary General Mark Rutte stated that he did not perceive "any imminent threat of Russia using nuclear weapons, despite the Kremlin's reckless and irresponsible rhetoric". This statement came a week after President Putin said Russia was considering changing its military doctrine to regard an attack from a non-nuclear state —such as Ukraine— that was backed by a nuclear-armed one to be a "joint attack". Another of the Kremlin's allies, North Korean leader Kim Jong Un, said during a South Korean military exercise that "his forces would use nuclear weapons without hesitation if their territory was attacked by South Korea".

Neither this narrative nor the nuclear tests themselves are new. The geopolitical tensions in certain regions also have a lot to do with the capability to support actions under the umbrella of nuclear deterrence, as we can see in the Middle East or, in retrospect, in the cyclical tensions between India and Pakistan. Estimates of Chinese nuclear warheads are rising every year. In the West, NATO's Strategic Concept reflects NATO's nuclear capability as a deterrent tool to preserve peace. The European Union's Strategic Compass considers the proliferation of weapons of mass destruction and their means of delivery as a persistent threat. In addition to considering the proliferation of weapons of mass destruction (WMD) as a risk or threat to national security, Spain's 2021 National Security Strategy mentions that the nuclear order inherited from the Cold War has been undermined by the dismantling of several arms control agreements that limited the US-Russian arms race.

BILATERAL TREATIES

It is true that dialogue has also been a human tendency since ancient times, just like the previously described deterrence, and, in some historical periods, that dialogue has been effective in promoting confidence-building measures. However, the current cycle of history concludes that these are rough times for multilateral agreements on arms control, nuclear proliferation and confidence-building measures, as virtually the entire nuclear arms control regime inherited from the Cold War has disappeared. In particular, Russia and the United States built a large nuclear arsenal after World War II that peaked during the Cold War. Since then, they have sought to contain the escalation of nuclear warheads through bilateral treaties to restrict their number.

The US views these agreements as a relic of the past, a legacy of a bipolar world in which there was only one other superpower that is now defunct. In the revisionist powers' so-called multipolar world, in which Washington's main concern is the emergence of China, US pragmatism sees no need to maintain bilateral agreements with Russia, which the US probably already views as a declining regional power.

The dismantling of these arms control agreements, which are heavily oriented towards Cold War bilateralism, had its peak over the past year. Russia withdrew its ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT) and the Treaty on Conventional Armed Forces in Europe (CFE). It also suspended its participation



(as did China and the US) in the New START Treaty (Strategic Arms Reduction Treaty). This treaty, also called START III, was signed by the US and Russia in 2010 at a time of détente between the two powers, and limited the number of deployed nuclear warheads to one-third of those authorised by the original 1991 START.

Washington has been abandoning all the agreements in force since the Cold War, starting with the 1972 ABM treaty (from which it withdrew in 2001) and continuing with the 1986 INF treaty (from which it withdrew in 2019).

The first one, the Anti-Ballistic Missile (ABM) treaty, limited the number of deployed anti-ballistic missile batteries per superpower to two, as these weapons systems limit deterrence capability and could incite a pre-emptive nuclear strike. President Bush withdrew the US from the Treaty in order to deploy a new missile shield against a future Iranian threat. However, Moscow considers it to be against Russia. The second treaty, the INF (Intermediate-Range Nuclear Forces), eliminated cruise and ballistic missiles with a range of 500-5,500 km that were deployed in Europe. The US withdrew

from this treaty implying Russia non-compliance, which was denied by Moscow at the time.

These withdrawals have the immediate effect of virtually paralysing the international agenda of meetings aiming to advance in arms control given that the results are inefficient due to the inability to reach consensus documents. Some examples of this are the Fifth Review Conference of the Chemical Weapons Convention or the First Preparatory Committee for the 2026 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

The EU has maintained its sanctions against Iran and has taken the UN's sanctions as its own in response to the violations of the Joint Comprehensive Plan of Action (JCPOA). These have been confirmed in various reports by the International Atomic Energy Agency (IAEA) over the past year, despite the lack of clarity surrounding Iran's own nuclear program. Thus, under these circumstances, agreements with Iran limiting the amounts and levels of uranium enrichment are unlikely to be reached.

Despite international sanctions, North Korea has so far spared no effort in testing missiles of various ranges and payloads, and has often attempted —with little success— to put a military reconnaissance satellite into orbit.

MULTILATERAL NUCLEAR TREATIES

The Treaty on the Prohibition of Nuclear Weapons (TPNW), a multilateral agreement that entered into force on 22 January 2021 after its 50th ratification by Honduras, has currently been signed by 94 states and ratified by 73. In the European Union, it has been ratified by Austria, Ireland and Malta. No NATO member has signed it, and those states with nuclear weapons have repeatedly made it clear that not only are they not bound by it, but also that it is not a legal text that can be incorporated into customary international law.

The TPNW “prohibits States Parties from developing, producing, transferring, receiving, using or threatening to use nuclear weapons. Signatories are barred from testing, seeking or receiving assistance by any State for any activity contrary to the TPNW and States Parties cannot allow the stationing, installation, or deployment of nuclear weapons in their territory”.

The Nuclear Non-Proliferation Treaty (NPT) is a key international treaty that is also multilateral. Its objective is to prevent the spread of nuclear weapons and weapons technology; to promote cooperation in the peaceful uses of nuclear energy; and to further the goal of achieving nuclear disarmament, and general and complete disarmament. The NPT is probably to this day the only multilateral treaty that represents a binding commitment for nuclear-weapon states to the goal of disarmament.

Nuclear disarmament has been discussed since 1968 precisely under the NPT. Its Article VI stipulates that States Parties undertake “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament”. The NPT also specifies which states can possess nuclear weapons: the US, the USSR (now the Russian Federation), China, the UK and France, and prohibits the rest of the adhering countries from possessing them.

The NPT has three pillars: nuclear non-proliferation for those states that did not have nuclear weapons in 1968; disarmament by the five countries that were already nuclear powers; and the right of all states to the peaceful uses of nuclear energy. The first pillar has been overtaken by the proliferation in non-NPT states, such as India, Pakistan and Israel or North Korea. The latter was a party to the NPT; however, in January 2003, it announced its withdrawal from the treaty to develop its own nuclear programme. Very little

has been accomplished in the second pillar. The nuclear-weapon states that signed the NPT have interpreted the treaty as permissive rather than prohibitive (as the NPT is) for those countries that have nuclear weapons. The First Preparatory Committee for the new NPT review cycle has already been held, but the current review cycle is expected to be complicated. This is due to Iran's opposition, even to the minimum objectives, despite the work of some states, including Spain, to build bridges between the different views on disarmament and nuclear non-proliferation through proposals such as the Stockholm Initiative.

The objective of the NPT and the TPNW is the same: to put an end to nuclear weapons. However, while the former opts for nuclear powers to move towards disarmament (a permissive standpoint), the latter opts for prohibition (a prohibitionist option). The non-nuclear-weapon states criticise the TPNW for not having a verification mechanism that would provide “States Parties with reliable assurances of compliance with their obligations and for not defining a mechanism for the removal of nuclear arsenals from a nuclear-weapon state”.

**The NPT is to
this day the only
multilateral treaty
that represents
a binding
commitment**

SPAIN AND THE TPNW

Spain supports the objective of the TPNW and the complete elimination of nuclear weapons, but considers that efforts should focus on strengthening and advancing in the fulfilment of the obligations assumed under the NPT, as a universally accepted instrument of non-proliferation and disarmament.

Spain considers that the TPNW contributes to the erosion of the current system, and that it also has some weaknesses (its disarmament verification protocol is not clearly defined, it does not include any nuclear-weapon possessor states, and it is incompatible with the gradual approach to disarmament). In its attempt to try to reach a consensus that would allow progress on nuclear disarmament within the NPT, Spain joined the 14-nation Stockholm Initiative to try to build bridges between the different perspectives.

Even though most studies consider that there is no legal incompatibility between the NATO Treaty and the TPNW, they do conclude that there is a political incompatibility and that it is impossible to be a member of NATO (which includes nuclear deterrence) and the TPNW. Although Spain has not yet attended TPNW meetings as an observer, the Foreign Affairs Committee of the Spanish Parliament passed a resolution in 2020 welcoming the negotiation and adoption of the TPNW “as an effort to advance towards peace, security and disarmament”. Therefore, Spain's statements emphasise our shared objective of a world free of nuclear weapons and demonstrate our awareness of the repercussions of using them.

530TH ANNIVERSARY OF THE SERGEANT RANK

Captains of the Old Guards of Castile asked to create this rank for “the good governance of the squadrons”



Arquebusier sergeant. Detail of the painting “The recovery of the island of San Cristóbal” by Félix Castelo (1634), now in the Prado Museum.

THE 50th anniversary of the Spanish NCO Scale (rank group) coincides with the 530th anniversary of the creation of the rank of sergeant. In 1494, Isabella of Castile and Ferdinand of Aragon signed and sealed an Ordinance introducing a position and rank in the military organisation that would be critical to the history of the Armed Forces.

While some authors claim that this rank descends from the medieval cuadrilleros, its true origin can be traced back to a royal decree of 2 May 1493, which established the squadrons of the Old Guards of Castile. According to the chronicles, a year later, the captains of the newly formed squadrons asked the Catholic Monarchs to create the rank of sergeant, because “their service was essential to the squadrons and to their rest”.

“Chosen because they were fit, skilled, level-headed, courageous and experienced in the art of warfare”, these first non-commissioned officers were the only link between the officers (captains and second lieutenants) and the rank and file. Among other duties, they were in charge of supervising the training and education of the soldiers, maintaining discipline and the squadrons’ administrative and logistical management. They were also responsible for the tactical organisation of the units, “requiring a great deal of skill to quickly put a squadron into combat formation, as they had to be familiar with the manoeuvres of different types of troops”.

These sergeants were linked to the Cavalry because the Old Guards were mainly made up of mounted troops.

FIRST REFERENCES

Shortly afterwards, the General Ordinances of 1496 led to the creation of the Ordinance Infantry. The first references of sergeants forming part of a typical infantry unit are found in that regulation.

Their duties as an intermediate echelon between the officers and the rank and file were set out in the 1534 Ordinance by which Charles I created the Tercios (Spanish pike and shot infantry unit) of Sicily, Lombardy, Naples and Milan.

Each squadron of arquebusiers and pikemen had a sergeant who was in charge of assigning quarters to the enlisted ranks, teaching them how to handle weapons and training them in tactics. Many sergeants distinguished themselves in this



Eighteenth century uniform of a sergeant and plate armour used by the Tercios (Spanish pike and shot infantry unit). Images from the “50 years of the NCO Scale and its academy (1974-2024)” exhibition hosted by the Institute of Military History and Culture.



role as immediate leaders of the troops during combat. This is the case of the Cordovan sergeant Cristóbal Marco, also known as Marco “Bomb”, who in January 1588, during the siege of Wachtendonk, Flanders, stood alone in front of the enemy walls throwing bombs until he managed to open a breach, allowing the troops to advance until they conquered the city. After the battle, he was congratulated by Alexander Farnese and was promoted to second lieutenant, but he refused the rank because “he had seen himself in such danger during the fight that he had vowed to God that, if he saved his life, he would die a sergeant”.

Throughout the years, the importance of sergeants in the units increased, as did their numbers and missions, the rank being extended to all branches of the armed forces. Their training, however, was based on daily practice in the squadrons, and the attempts to create Academies for them in 1845 and 1885 were unsuccessful. This was achieved in 1898 with the creation of several preparatory Academies, although they only lasted a few years due to “the shortage of students and the surplus of teachers”.

NON-COMMISSIONED OFFICER CORPS

The sergeants’ role went through a significant development in the 20th century, with other ranks being incorporated into the NCO category and the creation, in 1931, of the NCO Corps and, 43 years later, the NCO Scale.

Also during the last century, the equivalent ranks in the Navy were standardised and, with the creation of the Air Force, they were integrated in that service branch in the same way as the rest of the military ranks. The sergeants’ role has been dealt with in

**“Chosen
because they
were fit, skilled,
level-headed,
courageous and
experienced in the
art of warfare”**

a variety of ways throughout the different regulations governing this specific rank. The number of NCO ranks and their duties have changed in accordance with the historical circumstances and the particular needs of the service branches. Many of the reasons that led to the creation of NCOs and which have made them, as often pointed out, “the backbone of the armed forces”, still remain more than five centuries later.

Over the years, their missions have varied, and their training and technical preparation has improved substantially. But above all, non-commissioned officers have become an essential part of the management of the material, economic and human resources of the Armed Forces, and their significance is growing in those militaries equipped with resources and weapons systems that demand high levels of specialisation.

What has remained unchanged is their *raison d’être* and the enormous importance they have had, still have and will continue to have in what 15th century captains described as “the good governance of the squadrons”, when they asked the King and Queen to create this rank.

Victor Hernández
Photos: Hélène Gicquel

NASA will be able to use the Robledo de Chavela facilities for another fifteen years.



60 YEARS OF SPACE EXPLORATION

Spain and the United States strengthen their scientific cooperation at NASA Space Tracking Station, Robledo de Chavela, Madrid

ON 10 June 2024, Spain and the United States signed the renewal of the Scientific Cooperation Agreement, allowing NASA to use the Robledo de Chavela Tracking Station for another 15 years. This new version improves areas concerning the station's practical operation and incorporates the Spanish Space Agency.

The document, which represents decades of collaboration between the two countries, was signed by the State Secretary for Foreign and Global Affairs, Diego Martínez Belío, and US Ambassador to Spain Julissa Reynoso. The ceremony, held at the Deep Space Communications Complex (DSCC) Visitors' Centre in Robledo de Chavela, was attended by

Defence Minister Margarita Robles, who gave the opening speech, as well as by the Minister of Science, Innovation and Universities, Diana Morant, and NASA's senior representative, Kenneth D. Bowersox.

Robles stressed that this agreement is yet another manifestation of the "magnificent relationship" between Spain and the United States, as well as proof of the importance "that our government attaches to space". "Spain will be firmly committed to this agreement. You can count on us and on the Ministry of Defence", Robles said. She also highlighted the great work carried out by the National Institute for Aerospace Technology (INTA), which is fundamental in the close collaboration with NASA for the operation and maintenance of the station's facilities.

ANNIVERSARY

October will mark the 60th anniversary of the first Scientific Cooperation Agreement between Spain and the United States to provide NASA with certain land and rights of way in the municipalities of Robledo de Chavela and Navas del Rey, in the western mountains of Madrid.

DSN Madrid will be crucial for missions such as Artemis, which will send man back to the Moon

This station has been part of a worldwide network of three equidistant NASA stations known as the Deep Space Network (DSN), together with those at Goldstone, in the US state of California, and Canberra, in Australia. Separated from each other by about 120 degrees in longitude, their geographical position was chosen so that spacecraft could maintain contact with at least one ground station at all times, regardless of the daily rotational motion of our planet.

The Robledo de Chavela station did not start operating until months after the agreement, in July 1965, with the *Mariner 4* mission, the first to send close-up photographs of the surface of Mars. In addition to this mission, this station and the one at Cebrecos in Ávila, Spain — currently attached to the European Space Agency's Far Space Network — participated in other major missions. These included *Mariner 6* and *7*, which went even closer to the red planet, coming within 3,400 kilometres of it; *Pioneer 10* and *11*, two light spacecraft that crossed the asteroid belt between Mars and Jupiter and approached Jupiter; *Pioneer 11* then continuing toward Saturn; and the *Voyagers* that followed the *Mariner* series. The aforementioned stations also supported manned flights such as *Apollo*, *Skylab* and *Apollo-Soyuz*, although these flights were also controlled for some time by a third station, Fresnedillas de la Oliva (Madrid), now defunct.

CAPACITY

The system allows missions to track, send commands to, and receive scientific data from faraway spacecraft. Now with 14 operational antennas, the network supports more than 40 missions and is expected to support another 40 to be launched in the coming years. As Ambassador Reynoso emphasised, it will be crucial, especially for missions such as Artemis, which will take man back to the Moon.

Each complex consists of one 70-metre antenna and several 34-metre antennas. DSN



Maria José Muñoz/MDE

The US Ambassador to Spain and the Secretary of State for Foreign and Global Affairs showing the agreement in the presence of the Minister of Defence and the Minister of Science, Innovation and Universities.

Madrid is the only one with six operational antennas, as the ones in Goldstone and Canberra each have four.

On 20 April, the six antennas at Robledo de Chavela carried out a test for the first time to see if they could all receive data from *Voyager 1* at the same time. This process known as “arraying” involves

combining the signal strength of multiple antennas enabling the collection of very weak signals from distant spacecraft.

Voyager 1 and its twin spacecraft, *Voyager 2*, are the only ones that have ever flown in interstellar space (the space between the stars). *Voyager 1* is currently more than 24 billion kilometres away.

Therefore, its radio signal takes about 22 ½ hours to reach Earth, requiring a set of five antennas to receive the scientific data it sends. However, six antennas will be required as the spacecraft gets farther away.

The collaboration of the Ministry of Defence, through INTA, has been highlighted on numerous occasions by NASA senior executives, including the award granted in 2020 for the station's performance during the COVID-19 pandemic and the recognition for the special support provided to the *Artemis I* mission in 2023.

Press Agencies



NASA

On 20 April, the six antennas at Robledo de Chavela carried out a test to see if they could all receive data from *Voyager 1* at the same time.



A REFERENCE FOR INTERNATIONAL INDUSTRY

The International Defence and Security Exhibition will be hosting 25% more foreign companies than in previous editions

MORE than 400 firms in this sector are set to get together in Madrid from 12 to 14 May 2025 for Spain's 4th edition of the International Defence and Security Exhibition. Of these, 130 are participating for the first time, while 131 are from abroad. In just four years, this event, organised by the FEINDEF Foundation and institutionally supported by the Ministry of Defence, has become one of

the ten most important security and defence exhibitions in the world in terms of the number of exhibitors and the seventh in terms of exhibition space. The expected attendance, 15% higher than in the previous edition two years ago, has made it necessary to add an additional pavilion at Madrid's international trade fair centre (IFEMA) to accommodate all the companies interested in displaying their capabilities and solutions to the challenges of the in-

ternational defence market. Six months before its opening, 96% of the 50,000 m2 exhibition space has already been booked.

The official presentation took place on 30 October 2024 with the attendance of the Spanish Secretary of State for Defence, María Amparo Valcarce; the Director of the National Intelligence Centre (CNI), Esperanza Casteleiro; the Secretary of State for Industry, Rebeca Mariola Torró; the Chief of Staff of the Navy, Admiral



Ángel Olivares, president of the FEINDEF Foundation, presenting the 4th edition of the exhibition.

General Antonio Piñeiro; the President of the FEINDEF Foundation, Ángel Olivares; and representatives of the main industries in this field.

Valcarce emphasised the great number of international firms attending FEINDEF. "It is becoming a leading international exhibition, which is growing daily and exceeding expectations. It is the most important exhibition in the security and defence field", she added, "and positions Spain among worldwide events of great international significance. Above all, it offers new opportunities to our companies and this implies more creation of wealth and well-being for the Spanish people".

The Secretary of State confirmed that in the upcoming edition of FEINDEF "neither Israel nor any Israeli company will be participating institutionally. Spain is committed to peace and security in Palestine and Lebanon, as well as to respect for International Humanitarian Law, and FEINDEF cannot overlook this fact", she explained.

In addition to displaying some of the major systems and developments currently being used by the Spanish Armed Forces, the exhibition will reflect the Ministry of Defence's main strategic lines. All the service branches will be represented, demonstrating their commitment to society. "With this exhibition we are promoting the security and defence culture, which is pivotal in order to have the support of the citizens", said Ms Valcarce. "We wish to demonstrate that we invest in defence to protect our rights and freedoms," she added. "We cannot have a strong defence without a competitive and innovative defence industry. However, we cannot have a robust defence and a competitive industry without the support of society as a whole".

According to the Secretary of State for Defence, FEINDEF 25 represents an excellent opportunity to strengthen ties, forge alliances, define international partnerships and offer new technological solutions to our defence industry. "In these times of profound changes and unprecedented challenges," she said, "innovation and technological transformation have become fundamental pillars for maintaining the competitiveness and leadership of the Spanish defence industry". A sector that is a driving force



Maria Amparo Valcarce, Secretary of State for Defence

"Companies in this sector are a driving force for innovation and add value to national security and defence, helping to equip our Armed Forces with the necessary military capabilities".



Ángel Olivares, President of the FEINDEF Foundation

"Spain's defence industry is a strategic and driving force that can play a decisive role in achieving the major objective of increasing the weight of industry in the Spanish economy".

due to its ability to "create wealth, high-quality jobs, retain talent, generate fiscal returns and add value to the supply chain".

STRATEGIC SECTOR

Ángel Olivares, the president of the Foundation, began the official presentation of FEINDEF 25 and highlighted the importance of the defence industry in the Spanish economy as a whole.

A sector that contributes 17,300 million euros to the Gross Domestic Product, generates more than 211,000 direct, indirect or induced jobs, and has a great capacity to create highly qualified employment. "We also contribute to the State's external action", he pointed out, "since 78.3% of the total turnover is dedicated to exports to 70 countries,

thereby building ties that promote cooperation and stability in international relations. It is also the industry that invests the highest percentage of its turnover in research and innovation: 12.2%".

During his speech, Olivares emphasised the importance of the exhibition in fostering business, innovation, partnerships and cooperation between companies. He also highlighted Spain's participation in European projects. "The European Defence Fund has financed 155 projects in the last three years. Spain participates in 74% of those projects and coordinates the majority of them, 30". Activities will be carried out during the upcoming FEINDEF seeking to generate new business opportunities and strategic collaborations between professionals, authorities, government agencies and international delegations.

One of the main projects will continue to be Women, Engineering and Defence, as well as Innova Space, paying special attention to young university and vocational training students. "We want young people to know about the defence industry in order to become aware of the job opportunities it offers and how important it is for the defence of peace, freedom and national sovereignty," he added.

COMPANIES IN THE SECTOR

Representatives of leading companies in this sector attended the exhibition's

**Over 400 defence
companies will
be involved, of
which 130 will be
participating for the
first time and 131 are
from abroad**

presentation. Among them were some global sponsors: Airbus Helicopters España, Escribano Mechanical & Engineering, the Amper Group, Oesía, Indra and Navantia. They discussed future challenges in the defence industry; the drive behind cutting-edge and innovative technologies to boost this sector's technological autonomy; how to keep the various players interoperable: how to be competitive and integrate AI and big data in the defence sector; and what the keys are to remaining at the forefront.

The CEO of Airbus Helicopters España, Fernando Lombo, outlined the challenges facing his company. First, delivering platforms and weapons systems that are disruptive in a hyper-connected environment. Second, working in a European environment since "if the programmes do not allow us to develop them individually, partners must collaborate", citing Eurofighter and FCAS as examples. In his opinion, the third challenge is to speed up deliveries by increasing production capacity. "This requires a stable budgetary environment and legislative agility that will allow us to join the main programme packages from the beginning, because those that have more money have an advantage" he said.

Ángel Escribano, president of Escribano Mechanical & Engineering, highlighted the healthy state of the Spanish defence industry: "In the last ten years, it has demonstrated its capacity to reinvent itself.



Representatives of the exhibition's global sponsors discussed future challenges, competitiveness and the drive behind cutting-edge technologies to boost technological autonomy.

We have gone from being subcontractors to taking the initiative. But the best moment is yet to come", he pointed out.

Amper Group CEO Enrique López argued the importance of communications in a hyper-connected world. "The better your communication capabilities are, the more data you get. However, that data must be converted into information in order to be able to make decisions in a theatre of operations. Although for those communication and analysis capabilities to be efficient, they must be interoperable

and that is where the need for cooperation between industry and countries comes in". The Oesía Group's Director for Institutional Relations and Communication, Gema Giner, described the goals of her company's strategy: hyper-specialisation, investment in disruptive dual-use technologies, cooperation and "the strong boost for the internationalisation of the company".

Indra's CEO for Defence and Security, Borja Ochoa, pledged to invest in talent and recalled that his company employs more than 1,000 people specialised in Artificial Intelligence, almost 3,000 in data and another 3,000 in complex development architectures. In his opinion, our country should be "able to generate an ecosystem made up of large corporations, start-ups, development institutes and the world of training, and to have a flexible legislative environment".

As Navantia's president, Ricardo Domínguez, pointed out the most important challenge for this company to remain at the forefront of the naval sector is innovation, and also participation in European cooperation projects.

This company and many other Spanish and foreign companies will show their capabilities to those who come to IFEMA next May, where FEINDEF 25 will be held for three full days, 30% longer than the three previous editions.

Elena Tarilonte
Photos: Hélène Gicquel



Defence industries will showcase their latest innovations in the 50,000 m2 display area at IFEMA trade fair centre, Madrid, with one more pavilion than in the past edition.

Pepi Díaz

CATÁLOGO RAZONADO DE BANDERAS Y ESTANDARTES DEL MUSEO DEL EJÉRCITO (1843-1931). CABALLERÍA Y OTROS CUERPOS

Autor: Luis Sorando Muzás

702 páginas

Edición impresa: 25,00 €

Edición electrónica (PDF): 7,00 €

Tamaño: 24 x 17 cm

ISBN 978-84-9091-917-0



TACTICAL LEADERSHIP PROGRAMME. ENTRENANDO A LOS LÍDERES

Autor: Cuartel General del Ejército del Aire y del Espacio

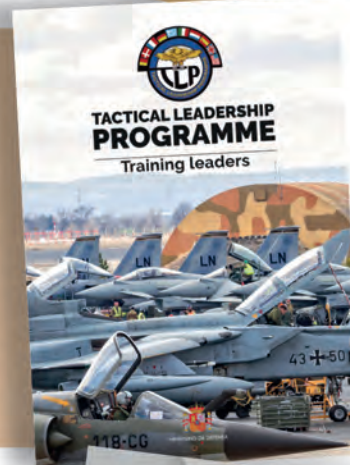
440 páginas

Edición impresa: 24,95 €

Edición electrónica (PDF): Gratuita

Tamaño: 30 x 21 cm

ISBN 978-84-9091-934-7



NUEVAS AMENAZAS A LA SEGURIDAD NACIONAL. CUADERNOS DE INTELIGENCIA

Autor: Escuela Superior de las Fuerzas Armadas (ESFAS)

354 páginas

Edición impresa: 10,00 €

Edición electrónica (PDF): Gratuita

Tamaño: 24 x 17 cm

ISBN 978-84-9091-941-5



GEOPOLÍTICA AZUL. LOS OCÉANOS, ESPACIOS CLAVES EN EL NUEVO ORDEN GLOBAL

Autor: Instituto Español de Estudios Estratégicos

227 páginas

Edición impresa: 10,00€

Edición electrónica (PDF): Gratuita

Tamaño: 24 x 17 cm

NIPO 083-24-233-X



NOVEDADES EDITORIALES

<https://publicaciones.defensa.gob.es/>



GOBIERNO DE ESPAÑA

MINISTERIO DE DEFENSA

SUBSECRETARÍA DE DEFENSA
SECRETARÍA GENERAL TÉCNICA

SUBDIRECCIÓN GENERAL DE PUBLICACIONES Y PATRIMONIO CULTURAL



Tel.: 91 364 74 27

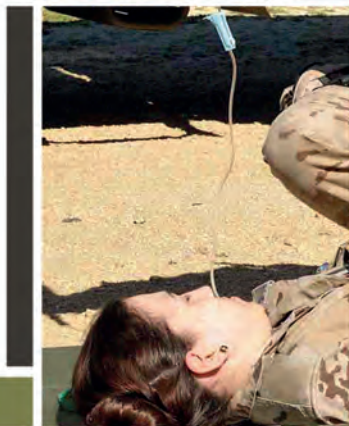
publicaciones.venta@oc.mde.es

<https://publicaciones.defensa.gob.es>

EL VALOR DE TU TÍTULO DE MEDICINA



SACRIFICIO



Las Fuerzas Armadas buscan incorporar a su plantilla, **licenciados o graduados en medicina**, tanto con especialidad como sin ella, siendo una excelente opción para desarrollar una carrera profesional en el campo sanitario.

La **Sanidad Militar** tiene como funciones principales el apoyo en permanencia a través de la Red Sanitaria Militar, el apoyo sanitario a las operaciones terrestres, marítimas o aéreas, así como tomar parte en operaciones multinacionales en las que España participe.

Aquí obtendrás una formación específica si ya eres médico especialista o podrás elegir entre un amplio abanico de **especialidades médicas** de las que habitualmente se ofertan.

Además, pasarás a formar parte del Cuerpo de Oficiales de las Fuerzas Armadas.

Si tienes un título de medicina, puedes trabajar con nosotros.

Necesitamos jóvenes con talento que compartan nuestros valores, como tú.



MUCHO MÁS DE LO QUE CREES



GOBIERNO DE ESPAÑA

SUBDIRECCIÓN GENERAL DE RECLUTAMIENTO Y DESARROLLO PROFESIONAL DE PERSONAL MILITAR Y RESERVISTAS DE ESPECIAL DISPONIBILIDAD



FUERZAS ARMADAS

Facebook.com/reclutamientoES

Twitter.com/reclutamientoES

Youtube.com/reclutamientoES

www.reclutamientoes.wordpress.com

www.reclutamiento.defensa.gob.es



GOBIERNO DE ESPAÑA

MINISTERIO DE DEFENSA

SUBSECRETARÍA DE DEFENSA SECRETARÍA GENERAL TÉCNICA

SUBDIRECCIÓN GENERAL DE PUBLICACIONES Y PATRIMONIO CULTURAL