



SMALL
SATELLITES
& SERVICES
INTERNATIONAL
FORUM

#SSSIF2024

keynote speaker

INTERVIEW

ISAAC M.
CRESPO ZARAGOZA

MAJOR GENERAL OF THE SPACE COMMAND
SPANISH AIR & SPACE FORCE



SSSIF INTERVIEWER

We are with Isaac M. Crespo Zaragoza, Major General of the Space Command. Welcome. Thank you for joining us.

ISAAC M.
CRESPO ZARAGOZA

Thank you very much.

SSSIF

What are your expectations for this year's SSSIF, now that it has established itself as a key European New Space event?

ISAAC

The SSSIF is becoming established as an essential event in the panorama of European space events. In this respect, it is crucial to highlight that the Spanish Air and Space Force (EA) has been an active part of this leading international forum for four consecutive years. This presence underlines the strategic importance of space for Spain and the commitment of the EA to the space ecosystem.

At present, the space capabilities of the Armed Forces are mainly focused on large-scale satellite systems such as SPAINSAT, XTAR-EUR, Paz and the future SPAINSAT NG. However, the growing importance of New Space is evident, and the EA is aware of it. In this context, the SSSIF offers the opportunity to get to know these companies better, the latest technological and industrial advances in this emerging field and for them also to get to know our needs better.

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This year's theme is exploration and business in lunar and cislunar navigation. What can MESPA contribute to our country in this major area?

JAVIER

The Space Command, like the other space-related changes within the Armed Forces, has only recently been created. The Defence Staff is currently preparing a document in which the Chief of Defence (CHOD) will establish the level of ambition of the Armed Forces in space and the priority for acquiring additional space capabilities. Nowadays, our first priority is focused on orbits around the Earth. However, exploration of the Moon and, consequently, navigation to it as well as cislunar orbital regimes are and will be of interest to MESPA.

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The Space Command of the Spanish Armed Forces (SAF) will participate in round table 2 on Tuesday 21, entitled SMALL SATELLITES & DEFENCE APPLICATIONS. Can you give us a preview of the main lines of your intervention?



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ISAAC

As I explained earlier, the SAF currently have space capabilities based on satellites of significant size and, therefore, we will try to explain briefly what these systems consist of, which have advantages but also disadvantages if we compare them with smaller satellite constellations.

It seems clear that small constellations, including nanosatellites, open up a range of possible military applications that should be aimed at enabling freedom of action in space and ensuring operations in all domains, not just space. We will discuss the advantages of these smaller satellite systems, which do not compete with the larger ones but complement them.

In this regard, it should be noted that, within the New Generation Earth Observation Systems programme (SEOT NG) led by the Ministry of Defence's Directorate General for Armaments and Material, an R&D project is being studied that focuses on the integration of visual, infrared and radar satellite sensors in small satellites, in line with the principles of New Space.

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16 October 2023 will be remembered in the history of the EA as the date of the establishment of the Space Command (MESPA) at Torrejón Air Base. A fundamental step for our SAF, the EA and for Spain...

ISAAC

There is no doubt that the establishment of the Space Command within the Air and Space Force is an important milestone for our Armed Forces and for Spain. The creation of MESPA promotes the recognition of the strategic importance of space, and underlines Spain's firm commitment to the protection and defence of its interests in it. I would like to stress that the MESPA also constitutes the Operational Command and the Space Component Command under the operational chain of the CHOD. Now that these structures are in place, we need to join forces and progressively provide the MESPA, in accordance with the CHOD's priorities, with the additional space capabilities that will enable it to fulfil the mission entrusted to it.

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What tasks will they be entrusted with?

ISAAC

Space Command's tasks are based on three main pillars:

- The first is to provide protection for the national strategic satellite systems that are decided upon.



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- The second pillar is to ensure that Spain enjoys free and legitimate access to space when the government or our companies require it.

- The third, considering that space is already an operational domain, must contribute decisively to achieving and maintaining the Joint Force's freedom of action in and from space.

The fulfilment of these tasks still requires conceptual and doctrinal development as well as the acquisition of additional capabilities, and we are in the process of doing so.

What are the expected milestones for the still young MESPA in 2024?

2024 will be a decisive year for MESPA. As you know, the Command is undergoing a significant set of milestones for its consolidation as we are newly born in October 2023. The establishment of the MESPA Headquarters at Torrejón Air Base represents a crucial step for the development of space capabilities in the Armed Forces. In the coming months, the complete transfer of the Space Surveillance Operations Centre (COVE) to these facilities will be carried out, which will involve the location of the MESPA, CESAEROB and COVE in the same building, allowing for greater synergy and operational efficiency.

Another important aspect will be the establishment or consolidation of cooperation activities at all levels: within the SAF, with the space commands of friendly or allied countries and, of course, with EU and NATO space organisations. Space is an international endeavour and cooperation must be in our way of doing things from the start.

In line with the expansion and strengthening of capabilities, we hope to be able to continue increasing the number of EA personnel at the MESPA Headquarters by the end of 2024, as well as technical assistance that supports us in technical tasks that the SAF cannot perform. I would like to emphasise that it is hoped that colleagues from the Army and the Navy will also be integrated into the Command's own structure during the course of this year. The plan is ambitious and complicated, as the lack of personnel, especially in the EA, is the main obstacle that could condition it. If all goes according to plan, this growth will provide the necessary basis for progress towards the Command's Initial Operating Capability (IOC), planned for 2025.

Last but not least, the Space Situational Awareness and Control programme, which will involve a major change in COVE software and hardware, will start in the coming weeks. This significant upgrade will provide the necessary systems to enable COVE to reach its full operational capability (FOC) in 2025.



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Sustainability in space exploration is a global consensus, what is your opinion?

ISAAC

We understand sustainability in space exploration as the means to be able to continue these activities indefinitely. In that context, it must allow access to space activities in a fair and legitimate way for different actors, while preserving the space environment for future generations. In our view, the only way to address the sustainability of space is through international cooperation and, of course, international legislation regulating space in its various activities.

It is relevant to note that the EA has actively participated in several international fora on space sustainability, although not directly related to exploration. A significant example is the contribution to the United Nations Committee on the Peaceful Uses of Outer Space, where the Ministry of Foreign Affairs represents Spain and receives technical advice from the Space Agency when necessary. This participation demonstrates Spain's commitment in the international arena to address and promote sustainable practices in the use of space.

SSSIF

Thank you very much for granting us this interview. We look forward to see you soon in Malaga.

ISAAC

Thank you very much and see you there.