CERSENIU!

Romanian Air Forge Magazine No 2 (181) English supplement ♦ April - June 2025 ♦

www.roaf.ro







ROU AF CHIEF OF THE AIR STAFF **INTERVIEW FOR JAPCC JOURNAL**



C-27J SPARTAN

HONORING 15 YEARS AS ROMANIA'S TACTICAL AIR TRANSPORT VANGUARD

ai astra



EDITOR: ROMANIAN AIR FORCE STAFF

EDITORIAL COUNCIL OF CER SENIN MAGAZINE

CHAIRMAN:

Lieutenant General LEONARD-GABRIEL BARABOI

MEMBERS:

Maior General CONSTANTIN DOBRE

Brigadier General IOAN MISCHIE

Colonel CRISTIAN PĂTRAȘCU

Colonel **CRISTIAN SOLEA**

HONORARY MEMBERS

DUMITRU AMARIEI PETRE BÂNĂ NICOLAE RADU

THE EDITORIAL TEAM

EDITOR IN CHIEF. Lieutenant Colonel IOANA TEIȘANU

Warrant Officer MARIA IONITĂ Warrant Officer ALEX NIŢŪ

TEXT EDITOR:

LEANA TUDORAN

PHOTOJOURNALIST: ADRIAN SULTĂNOIU

<u>LAYOUT & DTP:</u> ADRIAN SULTĂNOIU, DIANA ȘUICĂ

COVER I: C-27J SPARTAN | PHOTO BY BOGDAN PANTILIMON

COVER III: DACIAN PUMAS IN EUFOR

ALTHEA | PHOTO BY MĂDĂLINA BURLACU COVER IV: NATO AWACS, ROMANIAN AND POLISH

F-16s PARTICIPATED IN AN EXERCISE OVER BALTIC

AIRSPACE | PHOTO BY HESJA SLAWEK

TABLE OF CONTENTS

ARPATHIAN VIPERS 25	4
OU AF CHIEF OF THE AIR STAFF	
NTERVIEW FOR JAPCC JOURNAL	5-11
AMSTEIN FLAG 2025 EXERCISE	12-15
NATOLIAN PHOENIX EXERCISE	16
DACIAN PUMAS" SECOND ROTATION	17
ACIAN SPRING EXERCISE	20
EDGEHOG 2025 EXERCISE	21







AIR DEFENSE

ALMA MATER

C-27J SPARTAN – 15 YEARS

The articles presented in the magazine are drawn from various sources. If a particular source is not explicitly stated, the information is sourced from the Allied Air Command Public Affairs Office.



COPYRIGHT NOTICE:

All content published in **CER SENIN** - Romanian Air Force Magazine, including text, imagery, and other media, is protected by copyright laws. You may reproduce, distribute or transmit this content only if you credit it exactly as "CER SENIN -Romanian Air Force Magazine".

ROMANIAN AIR FORCE STAFF ŞOSEAUA BUCUREŞTI-PLOIEŞTI, KM 10,5, DISTRICT 1, BUCURESTI E-mail: cersenin@roaf.ro ISSN 3061 - 3574 ISSN-L 3061 - 3566 B 916.10; C 3146.18



Printed by CENTRUL TEHNIC - EDITORIAL AL ARMATEI"

The responsibility for technical editing rests entirely with the editorial staff

This edition ended on June 15, 2025

AIR CHIEFS DISCUSSED CAPABILITY DEVELOPMENT **DURING NATO AIR CHIEFS' SYMPOSIUM 25-1**

On April 2 and 3, 2025, Senior Leadership from Allied and Partner air forces convened to discuss capability development during the first iteration of the NATO Air Chiefs' Symposium (NACS) in 2025.

General James Hecker, Commander Allied Air Command, hosted senior representatives from 28 Allied Nations and 5 Partner Nations at NATO's Allied Air Command in Ramstein.

The focus topic for NACS 25-1 was exchanges on Air and Space Power, with the overarching theme of the symposium being capability development through exercise, experimentation, and operational deployment.

"NACS is a great opportunity to strengthen relationships and improve communications amongst each other," said General Hecker. NACS 25-1 was the last symposium General Hecker would host during his tenure, and he thanked all the Allied Air Chiefs for their continued commitment and cooperation.

Following on from previous NACS topics of NATO Air Command and Control (C2) evolution and implementation, the senior representatives discussed matters relating to NATO's Agile Combat Employment (ACE), Integrated Air and Missile Defence (IAMD), and capability development.

The Keynote speaker, Vice Admiral Jeff Hughes, Deputy Chief of Staff, Allied Command Transformation, delivered a speech with the theme of capability development, focusing on having the right capabilities, the right solutions, and timely delivery.

The NACS is hosted semi-annually by AIRCOM as a vehicle to exchange views and experience in the Joint and Air domain. It also provides an opportunity to compare and discuss cooperation, coordination, and development of NATO Air and Space Power.



Senior representatives from 28 Allied Nations and 5 Partner Nations convened at NATO's Allied Air Command in Ramstein, Germany, to discuss capability development, Ramstein. **Photo by Allied Air Command**



ROMANIAN F-16 FIGHTING FALCONS ASSUMED NATO AIR POLICING MISSION IN LITHUANIA

After the close of *CER SEMIN*'s first edition in 2025, four Romanian F-16 Fighting Falcons arrived at Šiauliai Air Base in Lithuania to commence NATO's Enhanced Air Policing mission. The Romanian Air Force is supported by approximately 100 personnel as it conducts Air Policing alongside a Polish F-16 detachment. The addition of a second national element at Šiauliai provides greater flexibility in NATO's regional air operations planning.

The handover from the French and Italian Air Force was marked with a ceremony in Šiauliai on 31 March, 2025, in the presence of General Gheorghiţă Vlad, Chief of the Romanian Defense Staff, Lieutenant General Leonard-Gabriel Baraboi, Chief of the Romanian Air Force Staff and Major General Valerică Vrăjescu, Commander of the Romanian Joint Forces Command. Also in attendance

was Her Excellency Mrs.
Adriana Octavia Ciamba,
Ambassador of Romania to
Lithuania. Lieutenant
General Thorsten
Poschwatta, Commander of
the Combined Air Operations
Centre Uedem, attended at
the event.

"The Carpathian Vipers
Detachment of the Romanian Air
Force is executing enhanced Air Policing
missions in Lithuania from April to July
2025. Our mission is clear: to safeguard the
security and integrity of Baltic airspace.
Operating under NATO command and in
close cooperation with our Polish and
Portuguese allies, we stand as a testament
to allied unity and unwavering commitment

to peace and collective defense" said Colonel Vasile Petrea, Romanian detachment commander.

This most recent rotation marks the third time Romania has led NATO's Air Policing mission from Šiauliai. The Carpathian Vipers first deployed MiG-21s to the Baltic region in 2007 and returned with F-16s in 2023. This deployment underscores Romania's enduring commitment to regional

Throughout 2025, Romania will receive additional F-16s, enabling the formation of two new multi-role squadrons to meet NATO's strategic objectives. NATO's Air Policing mission remains a cornerstone of the Alliance's collective defense posture, ensuring that all member nations – regardless of national air-defense capability – are protected under a unified command.

With Romanian and Polish fighters on station, NATO maintains a robust and agile air capability in the region, sending a clear signal of the Allies' readiness to preserve territorial integrity.

On 12 May 2025, the Carpathian Vipers detachment executed its first operational Alpha Scramble to identify and intercept a Bogey (a radar or visual contact whose identity is unknown) in proximity to Baltic airspace. Romanian aircrew launched on station in record time, demonstrating superior readiness, mission coordination, and steadfast commitment to NATO's air sovereignty mission. Employing standard tactical intercept procedures, they achieved positive target identification and maintained visual contact until the Bogey cleared the area. The ability to detect, intercept, and monitor potential threats remains critical to maintaining security and stability throughout the Baltic region and the wider allied airspace.













The Romanian Air Force

A Two-decade Transformation – From MiG-21 to F-35

By Lieutenant General Leonard-Gabriel Baraboi ROU AF Chief of the Romanian Air Force Staff

Republished courtesy of JAPCC: May 2025 in Journal Edition 39 https://www.japcc.org/articles/the-romanian-air-force/



Please reflect on the history of the Romanian Air Force and its major accomplishments since joining NATO 20 years ago.

In April last year, we marked an important milestone in Romania's recent history by celebrating the 20th anniversary of joining the North Atlantic Alliance. At the same time, we all celebrated the 75th anniversary of establishing the most powerful political and military Alliance and the 50th anniversary of establishing NATO's first air headquarters, now Allied Air Command. I want to offer the readers an overview of the current missions and challenges faced by the Romanian Air Force (ROU AF), and I want to highlight the efforts of the ROU AF personnel to fulfil their responsibilities amidst the unprecedentedly complex international security environment.

Over the past decades, we faced hybrid, conventional, and asymmetric threats, that cross from the Baltic Sea to the Black Sea, from the North Atlantic to the Mediterranean, and involving non-state actors and failed states. On top of that, on 24 February 2022, we all witnessed Russia's illegal and unjustified invasion of Ukraine, which proved that a long-term land war was still possible on European soil. Therefore, we need to keep pace with the new security environment and hybrid challenges, academically and doctrinally, and our equipment needs to embedded flexibility to adapt to future demands. We must execute our missions in partnership with our NATO Allies and partners to reinforce the cooperation and, at the same time, to effectively contribute to the collective effort to address the threats against Euro-Atlantic security.



The Romanian Air Force's main mission is to establish an adequately manned, trained, and equipped force able to generate, employ, and sustain air power in combat operations together with the allies or coalition partners. Moreover, besides accomplishing its missions assigned within national or collective defence arrangements, the ROU AF also supports civilian authorities during humanitarian crises and natural disasters.



Since joining NATO in April 2004, the ROU AF has made significant strides. The ROU AF immediately began supporting NATO missions abroad, first in 2005 with the deployment of four IAR-330 SOCAT helicopters to Bosnia for a year in support of Operation ALTHEA. Then in 2006, Romania took the lead nation role of Kabul Afghanistan International Airport (KAIA) for four months. In 2007, we deployed four MiG-21 LanceR aircraft to Lithuania to secure the Baltic Nations' airspace as part of the Air Policing mission, and in 2008, we played a crucial role in providing security for the NATO Summit in Bucharest together with our US allies.

In April 2011 we assumed the lead nation role at KAIA once more for an entire year until the end of March 2012. The Romanian Air Force has also contributed to international peacekeeping efforts by participating in MINUSMA – the UN Integrated Multidimensional Stabilization Mission in the Republic of Mali, with an Air Force detachment consisting of 120 military personnel and four IAR-330 L-RM helicopters, from October 2019 to October 2020. Most recently, from April to July 2023, the ROU AF took part in the NATO-led enhanced Air Policing mission in the Baltic States, with a detachment of 100 personnel and four F-16 Fighting Falcon aircraft.

Furthermore, this year, we will once more assume the enhanced Air Policing mission in Lithuania, and from April to July, we will contribute with our F-16s, along with our Allied partners, to safeguard the Baltic Countries' airspace. In addition, we provide support to the ALTHEA mission in Bosnia and Herzegovina from January to December 2025. This support will include four Puma 330 helicopters and 100 military personnel.

How does the Romanian Air Force use training and exercises to enhance interoperability and readiness for NATO missions and achieve its objectives?

It is worth mentioning that ROU AF assets and personnel are routinely involved in numerous multinational and bilateral exercises, including ADRIATIC STRIKE in Slovenia, LOYAL LEDA in Poland, ANATOLIAN PHOENIX in Türkiye, AMPLE STRIKE in Czechia, APROC in Spain, and WISE WOLF in North Macedonia, where our IAR 330 Puma helicopters have trained on CAS, CSAR, SOF missions, and executed live firings. Exercises such as THRACIAN VIPER and THRACIAN STAR in Bulgaria,

REAL THAW in Portugal, TLP in Spain, INIOCHOS, and RAMSTEIN FLAG in Greece have seen our F-16 aircraft participate in various missions and improve the interoperability of all participants while exchanging training concepts, doctrine, and multiple tactics, techniques and procedures specific to the air domain. In terms of Surface-Based Air and Missile Defence (SBAMD) training, the ROU AF has actively participated in multinational exercises to enhance operational readiness. Notably, Romania hosted RAMSTEIN LEGACY 24 in June 2024, where live firing and missile launches by different air defence systems from participating nations were the main ingredients, showcasing Romania's growing role as a key contributor to NATO's collective air and missile defence.

Since joining the North Atlantic Alliance, we've transformed the Air Force to accomplish the following objectives: achieve NATO's and EU's commitments, upgrading Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems, enhancing logistic support structures, and modernizing the force through

new acquisition programmes. Our main goals were to develop an Air Force capable of performing a broad spectrum of tasks, including transport, Search and Rescue (SAR), Non-Combatant Evacuation Operations (NEO), air traffic management, reconnaissance, and, most importantly, protecting national and Allied airspace within the NATO Integrated Air and Missile Defence System (NATINAMDS).

What capabilities are you relying on to defend national and NATO airspace?

Romania plays a crucial role in maintaining security and stability in the Black Sea region, which has been strategically important for centuries. Our current

"...the ROU AF effectively contributes to homeland and alliance security by safeguarding its airspace...As we embarked on different missions abroad, we not only carried the legacy of Romanian peacekeepers but also represented the enduring values of integrity, commitment, and tenacity..."

CER SENIN ♦ No 2 (181) ♦ 2025

W W W . r o a f . r o



The Romanian Air Force only operates as a team!

capabilities and future enhancements are designed to address both national defence and regional security challenges.

Today, the core of the ROU AF is represented by our fighters (F-16 Fighting Falcon), helicopters (IAR-330 Puma), transport aircraft (C-130 H, B, C-27J Spartan, and An-26/30), radars, and air defence systems (PATRIOT and Hawk), all of which are seamlessly integrated into our Air Command and Control (Air C2) system.

We are committed to enhancing our operational capabilities through the multirole fighter aircraft procurement programme, projected to achieve full operational capability with three multirole fighter squadrons equipped with fifth-generation F-35 Lightning II Joint Strike Fighters (JSF), through a transition period covered by three F-16 squadrons.

To date, in the first phase of the programme, we have acquired 17 F-16 Mid-Life Upgrade (MLU) aircraft from the Republic of Portugal and have trained our pilots and technicians. The first squadron was declared operational in 2019 and has since performed Air Policing missions. There are ongoing activities to continue the programme; we expect that by the end of 2025, we will receive a total of 32 aircraft from Norway, 16 of them already delivered as of January 2025. Concurrently, we are training additional personnel, and at the same time, we are facilitating the preparations of our national defence industry to perform maintenance and logistic services for our

fleet. The F-16 programme proves its strategic importance at the national and regional levels, strengthening Romania's capacity to contribute to the deterrence and defence posture in the Black Sea region.

Training is a crucial component of our daily operations, which is why we have launched a programme to enhance the capabilities of the IAR-99 aircraft in order to transform it into an advanced training platform. As we integrate the multirole F-16 aircraft into our inventory, the IAR-99 requires updated avionics and flight control systems to transition pilots through to the F-16. This programme aims to upgrade 20 IAR-99 aircraft to a new configuration, enhancing the reliability of onboard systems and extending the aircraft lifecycle. We are pleased that this upgrade programme was predominantly introduced by our national industrial capacity. Concerning movement and mobility, the Air Transport fleet is vital for sustaining our Armed Forces' operations and deployments and national humanitarian relief efforts. Four C-130 B aircraft established our initial airlift capability, further improved by four C-130 H models from the US and the procurement of seven C-27J Spartan aircraft. Their operational flexibility is essential for responding to both military and civilian requirements.

To support missions, the ROU AF operates five Puma helicopter squadrons in different configurations, from the gunship version to transport, Medical Evacuation (MEDEVAC), and Search and Rescue (SAR). The versatility of our helicopter fleet enhances our ability to conduct

ROU AF CHIEF OF THE AIR STAFF INTERVIEW FOR JAPCC JOURNAL

a wide range of operations, from combat and peacetime mission support to central and local authorities during emergencies or disasters and participating in international missions as a part of Romania's commitment. We have recently started an upgrade programme for the remaining helicopters in order to modernize the whole fleet.

Due to our constant drive to better equip our Air Force to address emerging security challenges and to contribute to a robust and resilient defence network in the Black Sea region, a significant acquisition programme was triggered with the decision to procure the long-range surface-to-air PATRIOT missile system. This programme aims to equip the Air Force with seven modern PATRIOT missile systems (3+ configuration), encompassing the missiles, C2 elements, and initial logistic support and personnel training. This system will contribute to safeguarding national airspace and protect vital strategic military and civilian assets. The first four systems were delivered by the end of 2023, and plans are in place to acquire three additional firing units in the near future. The ROU government has since donated one system to Ukraine in order to support their fight to defend their own territory and population.

As part of its commitment to fully implement the Integrated Air and Missile Defence (IAMD) concept, Romania is considering acquiring the Short-Range Air Defence/Very Short-Range Air Defence (SHORAD/VSHORAD) integrated weapon systems.

To maximize our defence capabilities, we have upgraded our digital radar stations such as Fixed Radar Surveillance

(FPS 117), Transportable Radar Surveillance (TPS-79), Gap Filler, and TPS-77. We further aim to establish a reliable and sustainable C4ISR system.

What do you consider as the key factors as you transition from legacy systems to fifth-generation aircraft?

The MiG-21 LanceR served as the backbone of the ROU AF for decades, maintaining Quick Reaction Alert (QRA) to address potential airborne threats. With its retirement in May 2023, this task has been gradually assumed by the F-16s, ensuring increased responsiveness and reactivity.

In light of the MiG-21 LanceR's decommissioning and the acquisition of 32 F-16 fighter jets from Norway's surplus, the Ministry of National Defence has identified the need to train, in a relatively short time, a significant number of Romanian pilots to operate the F-16 fighter jets. Efforts to identify appropriate F-16 training solutions within the Alliance showed that the existing facilities could not accommodate the rapid training of a large number of pilots. Thus, at the proposal by the Kingdom of the Netherlands, negotiations were initiated and carried out for signing a Letter of Intent (LOI) between the Ministry of Defence of the Kingdom of the Netherlands, the Ministry of National Defence of Romania, and Lockheed Martin, the manufacturer of the F-16, to establish and operate an F-16 Training Centre in Romania.

The F-16 Training Centre, the first project of its kind in Europe, marks a significant milestone for

ROU air defence was enhanced by the acquisition of four PATRIOT systems.





Romanian-Dutch cooperation and demonstrates the solidarity and determination of the NATO members. Moreover, the Centre will accelerate the training of the Romanian pilots and technicians to operate the F-16 fighter jets acquired from Norway and to obtain new qualifications for those who already fly and operate the F-16 in Romania. Last year, the first seven Romanian pilots graduated from the F-16 Training Centre in July, and in September, a new batch of pilots started their training programme. Intended initially for training Romanian pilots, the training centre is also open for the participation of personnel from NATO Allies and partners, including Ukraine.

The advancements we have achieved thus far would not have been possible without the unwavering dedication of our Air Force personnel. Consequently, our human resources play a crucial role, and one of our primary objectives is to guarantee that our airmen and airwomen are well trained and equipped to tackle upcoming challenges.

Promoting the military profession and career, along with the selection and training of our personnel, is essential for increasing the force structure manning level. We continuously review our training methodologies and syllabus to enhance situational awareness and leverage knowledge. Ultimately,

our goal is to ensure that the right airmen are making the right decisions to execute the mission most effectively and maintain a robust Air Force committed achieving national and allied objectives.

In summary, how do you envision the Romanian Air Force as a force multiplier within NATO's deterrence and defence plans?

The enhanced Air Policing missions, enhanced Vigilance Activities missions, and, if necessary, Flexible Deterrence Options missions executed in partnership with our NATO Allies and partners reinforce our cooperation and, at the same time, demonstrate Romania's effective contribution to the collective effort to deter and defend against threats to Euro-Atlantic security. In this respect, it is worth mentioning that we have set-up cross-border agreements with our neighbours, Bulgaria and Hungary, to allow our F-16 fighters under NATO Air Policing command (controlled by CAOC Torrejon) to execute cross-border operations and vice versa. On the same line of effort, the Allies have collectively carried out enhanced Air Policing missions in Romanian airspace alongside Romanian fighter jets with frequent common training and exercising for ten years already.

Moreover, Romania has made a significant leap in advancing its defence capabilities, signing a landmark protocol to launch the Romanian Air Force's transition

ROU AF CHIEF OF THE AIR STAFF INTERVIEW FOR JAPCC JOURNAL

to fifth-generation F-35 aircraft. The programme includes the acquisition of 32 F-35 Lightning II aircraft, marking a pivotal moment in Romania's defence modernization efforts. The agreement, finalized through a Letter of Offer and Acceptance (LOA) between the Romanian and USA governments, enables the purchase of the aircraft under the USA's Foreign Military Financing programme. The deal also includes pilot and maintenance training, further enhancing Romania's operational and technical capabilities.

Furthermore, we are in the advanced process of implementing the Agile Combat Employment concept, which represents a basic pillar of our national and NATO air forces' resilience, based on the cooperation of all Allies in the fields of command and control systems, armaments, infrastructure, and personnel. To date, we have aligned the majority of required CIS equipment, developed the necessary infrastructure, and started revitalizing the Aircraft Cross Servicing programme. Our agile and deployable force structure, supported by the ongoing modernization and procurement programmes, will further strengthen

our Air Force and the Alliance's deterrence and defence posture on the Eastern flank.

To conclude, the ROU AF effectively contributes to homeland and Alliance security by safeguarding its airspace. We will continue to upgrade and consolidate our combat capabilities to defend our national and rule-of-law values and respect our country's international commitments to bolster regional and Alliance security. As we embarked on different missions abroad, we not only carried the legacy of Romanian peacekeepers but also represented the enduring values of integrity, commitment, and tenacity. Our contribution to numerous missions executed under NATO, EU, or UN mandate is a testament to Romania's steadfast dedication to global security and cooperation.

As I have mentioned the anniversary of the Allied Air Command, I would also like to quote one of its former commanders, General Frank Gorenc, who said: "Airpower is like oxygen. When you have enough, you don't have to think about it. When you don't have enough it's the only thing you can think about."

AUTHOR

Lieutenant General

Leonard-Gabriel Baraboi

Chief of the Romanian Air Force Staff

Lieutenant General Leonard-Gabriel Baraboi started his military career in 1998 and has flown IAK-52, L-39ZA, IAR 99 HAWK, MiG 21 LanceR and C-27J as a pilot and flight instructor, logging more than 1,400 hours. Throughout his career, Lieutenant General Baraboi has performed executive and command functions, both in Romania and in operational theatres.

Lieutenant General Baraboi has completed numerous military and civilian education courses. Most notedly he is a graduate of the US Air Command and Staff College in 2011 and the US Air War College in 2017 and holds several master's degrees. Between December 2017 and April 2023, he commanded the 95th Air Base in Bacău and the 71st Air Base in Câmpia Turzii. In May 2024, he was promoted from Deputy to Chief of the Romanian Air Force Staff. His guiding principle is 'Only as a team!'. He was promoted to the rank of Lieutenant General on 1 December 2024.

Information provided is current as of May 2025



This article is copyrighted.

Copyrigh

All copyrighted and copyrightable materials in this publication, including, without limitation, the design, text, graphics, pictures and other files are copyrighted, ALL RIGHTS RESERVED, by several external and/or third-party licensors. Permission is granted to display, copy, distribute and download the materials on this site for non-commercial, and informational use only; provided that, you may not, without the permission of licensor or the respective copyright owner, (a) copy, publish, or post any materials on any computer network or broadcast or publications media, (b) modify the Materials, and (c) remove or alter any copyright and other proprietary notices contained in the Materials.

Guidelines for the external use of Images

No material is to be sold, used for outside advertising or promotional purposes of any kind. Please note that copyright owners require a credit mention should you make use of its images. **General Conditions**

Copyright protected material may be reproduced in any format or medium — provided it is reproduced accurately and not in a misleading context. Where the material is being published or issued to others, the sources and copyright status should be acknowledged. Where any of the copyright items on this site are being republished or copied to others, the source of the material must be identified and the copyright status acknowledged. Inquiries should be made to: Chief of Staff, Joint Air Power Competence Centre (JAPCC), contact@japcc.org

Imagery

© ROU AF PAO, © CER SENIN/Romanian Air Force Magazine

Sourc

https://www.japcc.org/articles/the-romanian-air-force/

RAMSTEIN FLAG 2025: NATO'S AGILE AIRPOWER IN A MULTIDOMAIN EXERCISE

In early April 2025, NATO's Allied Air Command staged Ramstein Flag 2025 (RAFL25) as a large-scale live-fly exercise to test the Alliance's new concepts for multidomain warfighting. The two-week exercise (March 31–April 11, 2025) brought together over 90 aircraft from more than 15 NATO nations, operating from 12 Allied air bases across Europe. Hosted by the Royal Netherlands Air Force, RAFL25 ran concurrently with the Dutch-led Frisian Flag exercise. The exercise scenario was explicitly designed as a high-end, multidomain challenge – with aircrews and controllers managing missions across air, land, maritime, cyber, and space environments. In practice, this meant allied jets launched from dispersed forward fields, AWACS aircraft circled on station, cyber and electronic warfare threats were injected into the scenario, and even naval vessels helped shape the air battle. NATO described the exercise objective as bolstering integrated air and missile defense, agility, and interoperability – testing if the Alliance could "operate in a complex environment" under a heavy anti-access/area-denial challenge.

AGILE COMBAT EMPLOYMENT AND DISPERSED OPERATIONS

From the outset, RAFL25 emphasized NATO's Agile Combat Employment (ACE) concept – the idea that air forces must be able to disperse to austere fields and fight from multiple locations, rather than depend on a few large bases. Throughout the exercise, fighter jets and support aircraft practiced rapid runway turnarounds on short notice. For example, small detachments operated from reserve strips in Germany, Greece, and the Netherlands, simulating wartime "jump airfields." Pilots flew ground-attack and air-defense sorties out of these forward locations, while maintainers worked shifts in tent camps and ad-hoc shelters. According to NATO, the training focus remained on refining ACE tactics along with counter–A2/AD and integrated air/missile defense procedures.

In one scenario, fighter jets would be guided to land at a forward landing zone, refuel, rearm, and take off again within minutes - then redeploy to the next airfield. Allied controllers sometimes vectored jets through overlapping threat "bubbles" (simulated enemy air defenses) to replicate a contested environment. These distributed operations forced crews to adapt: fuel trucks and mobile command posts rolled in and out of tiny ramps, testifying that every allied pilot must be prepared to 'move and shoot' in unpredictable conditions. This dispersed approach was further underscored by one key interoperability drill: Dutch and U.S. F-35 Lightning II crews literally crossed maintenance lines. Ground personnel from the Royal Netherlands Air Force and the U.S. Air Force swapped duties, servicing each other's F-35s on the ground as part of a "cross-servicing" exercise. In effect, maintainers from different nations followed each other's checklists and hot-pits, proving that an American F-35 could be turned by Dutch crews and vice versa. This hands-on logistics integration – especially involving fifth-generation fighters - demonstrated NATO's emphasis on seamless sustainment under the ACE concept.

LOGISTICS INTEROPERABILITY: FUELING AND MAINTENANCE

Realistic logistics missions were a hallmark of RAFL25. A notable highlight was the inauguration of Turkish KC-135R aerial refueling for F-35 jets. On April 4, a Turkish tanker deployed to RAF Fairford in England rendezvoused with four Danish F-35s from Skrydstrup Air Base and topped off their fuel tanks in flight. This was the Turkish Air Force's first successful F-35 refueling, a milestone that kept the stealth fighters in the air longer during complex training missions. (In total, dozens of air refueling hookups were flown during the exercise, showing that allied tankers could extend any partner's sortie). Those fuel-rich missions went hand-in-hand



Four Danish F-35's refueled from the Turkish KC-135 during Ramstein Flag 25. Photo by Arnaud Chamberlin



A MAAS was installed and certified for the first time on RAF Fairford in support of Ramstein Flag 2025 providing critical safety and operational capabilities for participating NATO forces. Photo by Jessica Avallone



These missions highlight the technical capabilities and operational trust that underpin NATO cooperation. Photo by Turkish Air Force



Successful cross-servicing at RAFL25 is an example of the importance of integrated logistics and maintenance training that enhances Allied readiness. Photo by Sergeant Major Jan Dijkstra



Standing NATO Maritime Group 1 (SNMG1) brought a critical maritime dimension to the integrated air and missile defence training. Photo courtesy of the Royal Netherlands Air Force

with maintenance drills. In addition to the F-35 cross-servicing, teams of maintainers from the U.S. and the Netherlands shared hangar space to service allied fighters, tankers, and surveillance aircraft. Specialized support, like mobile oxygen units and weapons loaders, also moved between bases. These practical drills ensured that no jet was "stranded" because its home nation's support was far away. Through combined maintenance teams and shared spare parts, RAFL25 tested the idea that any ally can service any ally's aircraft when operational necessity dictates. By the exercise's end, officials noted that the integration of logistics and maintenance capabilities – from the cold-weather ground crews to the fuel truck drivers – had achieved a new level of interoperability.

NETWORKED COMMAND AND CONTROL

To tie together these complex operations, NATO deployed its mobile air command and control systems. Well in advance of the first flight, NATO's Deployable Air Command and Control Centre (DACCC) arrived in theater with its DARS (Deployable Air Surveillance and Control) system. The DACCC is NATO's only portable air operations headquarters – a full-fledged C2 node that can plan missions, manage airspace, and fuse sensor data in transit. During RAFL25, the DARS radar and sensor post network became the exercise's air-space backbone. Its advanced radars and data links gathered surveillance data and continuously produced a single Recognized Air Picture. That real-time picture was shared with every allied asset: ground controllers, airborne AWACS, and even warships at sea.

The E-3 AWACS (Airborne Warning & Control System) fleet also flew daily patrols from Geilenkirchen, providing high-altitude surveillance and battle management. With the DARS stations relaying ground tracks and AWACS covering high-altitude threats, NATO controllers could track both friendly and simulated hostile aircraft across national borders. In practice, if a fighter crossed from the German airspace into French or Polish sectors, the picture simply "handed off" seamlessly between CACCs and the AWACS crew. Exercise planners credited this networked C2 for integrating "over 90 aircraft from 15 nations into a synchronized force". In effect, RAFL25 proved that NATO's deployable C2 can connect day one of an operation with the full spectrum of air and missile defense assets.

NAVAL INTEGRATION AND MULTIDOMAIN TRAINING

RAFL25 was notable for its truly multidomain integration. Not only did aircraft train with ground troops and missile defenses, but NATO's Standing Naval Forces were woven into the picture. The Standing NATO Maritime Group 1 (SNMG1) – a flotilla of Netherlands, Belgium, and Germany warships – moved into the North Sea to join the exercise. SNMG1's flagship, the Dutch frigate HNLMS "Tromp", is essentially a floating air-defense radar station. During RAFL25, Tromp and its consorts contributed their advanced radars and communications to the NATO air picture. Their shipboard fighter controllers even directed live sorties, calling out headings and altitudes to the pilots above. In short, the frigates acted as seaborne extensions of the AWACS: they could see low-flying targets at longer ranges and relay vectoring data to any aircraft in the area.

Exercise reports noted that SNMG1 "provided a critical maritime dimension" to the air-defense scenario. By interconnecting ship sensors and weapons systems with the deployable DACCC, NATO planners tested anti-aircraft operations across the sea-air boundary. Commodore Arjen Warnaar, commander of SNMG1,

NATO AGENDA NATO AGENDA

observed that embedding his ships in RAFL25 added realism – pilots and aircrews had to account for seabased radars and even simulated missile launches as part of the threat environment. In practical terms, an air-to-air training sortie over the North Sea might have F-35s buzzing the ships as if they were incoming anti-air missiles, or vice versa, while coordinating via network datalinks. The result was a truly joint play: allied jets were systematically tied in with both land-based air defenses and ships at sea. Even electronic-warfare and cyber events had maritime relevance: for example, simulated jamming of a ship's radar would affect the air picture and trigger contingencies for the pilots.

This integration underscored NATO's emphasis on fighting together. SNMG1's participation highlighted the growing importance of naval assets in air operations – a lesson driven home by Russia's actions at sea and the need to defend littoral zones. In the words of a NATO summary, RAFL25 "highlighted the evolving importance of maritime assets in modern joint operations". In turn, allied naval crews earned their training: the frigate staff rehearsed complex air defense drills and multi-national coordination that will be crucial in any future crisis. All told, the exercise simulated a wartime scenario in which air, land, and sea forces fought as one, supported by space-based ISR and protected by cyber-resilient networks.

NATO'S EVOLVING POSTURE: READINESS AND DETERRENCE

By exercise's end, Ramstein Flag 2025 had become a showcase of NATO's modern warfighting approach. In every sortie and every controller's console, the lessons of recent conflicts were on display: readiness to disperse, adaptability in the face of A2/AD, and agility to switch between domains on the fly. Summing up the results, NATO noted that the "successful execution of RAFL25 reinforces the Alliance's ability to respond rapidly and effectively to emerging threats". The exercise validated the concept that by training as a truly integrated, multinational air team – from fighters and tankers to AWACS and frigates – the Alliance was strengthening its deterrence posture.

General James Hecker, Commander of NATO Allied Air Command, emphasized the significance in no uncertain terms: "Ramstein Flag 2025 underscores the Alliance's determination to adapt, evolve, and deter potential threats across the Euro-Atlantic region". In other words, every mission during RAFL25 was intended not only as training, but as a message: NATO forces are ready and united. The agile basing demonstrated ACE in action. The joint C2 and DARS network proved that NATO's eyes and ears can span land, sea, and sky. And the active integration of maritime and cyber elements showed that future wars will be fought on multiple fronts simultaneously.

In retrospect, ŘAFL25 can be viewed as a step change for NATO's air forces. The exercise's scale and sophistication went well beyond any peacetime routine. It reflected the alliance's shift toward constant readiness and multidomain agility in an era of great-power competition. As senior officials noted after the exercise, NATO airpower "training on this scale" – with distributed flights, tanker teamwork, mixed crews, and networked sensors – directly informs the Alliance's evolving defense doctrine. Ramstein Flag 2025 thus capped a narrative of adaptation: by practicing under realistic, high-end conditions, NATO air forces reaffirmed that they can hold air superiority and project power over any contested battlefield, strengthening deterrence for all member nations.



Ramstein Flag 25 brings together over 90 aircraft from more than 15 Allied nations supported by Allied refueling asset. Photo courtesy of the Canadian Air Force



NATO's Airborne Warning and Control System was one of the assets delivering command and control throughout the exercise .

Photo By Ben Gorski



The Romanian F-16s conducted rapid refueling and rearming drills at austere forward fields, mirroring the ACE concept.

Photo courtesy of the Romanian Air Force



Three Romanian F-16 Fighting Falcon multirole fighters from the 48th Fighter Squadron and approximately 35 personnel from the 71st Air Base participated in the high-intensity, multidomain training event hosted in the UK



THE ROU AF DEMONSTRATES NATO INTEGRATION AT RAMSTEIN FLAG 2025

The Romanian Air Force (ROU AF) demonstrated its steadfast commitment to NATO's collective defense and operational readiness during Exercise Ramstein Flag 2025 (RAFL25), deploying three F-16 Fighting Falcon multirole fighters from the 48th Fighter Squadron and approximately 35 personnel from the 71st Air Base to participate in the high-intensity, multidomain training event hosted in the United Kingdom from March 31 to April 11, 2025.

Embedded within a coalition of over 15 Allied nations and 90 aircraft operating across 12 European airbases, the Romanian contingent played a vital role in validating NATO's Agile Combat Employment (ACE) doctrine, which emphasizes dispersed operations, rapid turnaround capabilities, and resilience against anti-access/area denial (A2/AD) threats.

The Romanian F-16s, after transiting to their forward operating location, executed complex air-to-air and air-to-ground missions alongside fifth-generation platforms such as the F-35 Lightning II, integrating seamlessly into NATO's synchronized air battle management architecture.

These missions required real-time coordination with allied ground controllers, AWACS surveillance aircraft, and naval assets like the Dutch frigate HNLMS Tromp, which provided maritime domain awareness and simulated threat vectors. The RoAF's participation underscored its ability to operate in contested environments, adhering to NATO's Tactics, Techniques, and Procedures (TTPs) while adapting to dynamic scenarios involving cyber-electronic warfare, space-based intelligence, and multidomain command and control (C2) networks. Notably, the Romanian F-16s conducted rapid refueling and rearming drills at austere forward fields, demonstrating the ACE concept's focus on survivability and operational agility. After the exercise, the aircraft returned to their home station at the 71st Air Base in Câmpia Turzii, Romania, showcasing the ROUAF's capacity to project power across NATO's eastern flank and rapidly reposition assets in response to evolving threats.

RAFL25 also provided critical exposure to cuttingedge Allied capabilities, enabling Romanian pilots and support personnel to refine their proficiency in joint fires coordination, counter-A2/AD tactics, and network-centric warfare. By contributing to the exercise's overarching objective of "fighting as one" across air, land, sea, cyber, and space domains, Romania reinforced its role as a key enabler of NATO's eastern security architecture.

The ROU AF successful participation underscored Romania's strategic investment in modernizing its air fleet and aligning its defense posture with NATO's readiness benchmarks, while strengthening bilateral ties with Allied partners. As articulated by NATO leadership, RAFL25 served as a tangible demonstration of Allied unity and deterrence, with Romania's proactive engagement affirming its resolve to uphold Article 5 commitments and contribute to the Alliance's evolving multidomain warfighting doctrine in an era of great-power competition.

Sources: Official NATO Allied Air Command and Allied Maritime Command reports on RAFL25, defense media coverage and ROUAF PAO



The Republic of Türkiye conducted the multinational live-fly training exercise ANATOLIAN PHOENIX 2025 from May 12 to 23 at 3rd Main Jet Base, Konya, advancing interoperability and combat readiness among NATO Allies and partner nations. The iteration brought together air and ground units from Germany, Italy, Poland, Romania, Slovakia, Türkiye, and the United States to execute complex, scenario-driven operations in a simulated high-threat environment.

Participants focused on refining joint and procedures (TTPs) for cross-border combined warfighting competencies, including close air support (CAS), dynamic targeting, and time-sensitive strike coordination, while emphasizing combat search and rescue (CSAR) mission sets.

Fighter aircraft, rotary-wing assets, and multinational personnel recovery teams conducted integrated drills to locate, authenticate, and extract simulated isolated personnel under contested conditions. The training rigorously tested command-andcontrol architectures and reinforced standardized tactics, techniques, and

interoperability. Türkiye's integration of emerging technologies into its Air Force operations was demonstrated throughout the exercise, reflecting ongoing modernization efforts to counter evolving

The Romanian Air Force contingent confirmed the successful execution of assigned mission objectives, underscoring the exercise's role in strengthening bilateral defense relations between Romania and Türkiye. Romanian personnel highlighted the value of multinational personnel recovery

training in preparing aircrews, aircraft, and recovery forces to execute aligned TTPs in coalition environments.

ANATOLIAN PHOENIX, first held in 2009, remains a cornerstone of Türkiye's commitment to NATO collective security and Allied readiness. The exercise series enables realistic, large-force employment training while fostering trust and cohesion among participating nations. By simulating highintensity combat operations, ANATOLIAN PHOENIX 2025 directly contributed to the Alliance's capacity to project stability, deter aggression, and respond decisively to crises through unified action. Such multinational engagements reinforce NATO's foundational principles of shared responsibility and interoperability, ensuring Allied forces remain postured to defend mutual security interests in an increasingly dynamic global landscape.





ROMANIAN "DACIAN PUMAS" SECOND ROTATION ASSUMED THE DUTIES AND RESPONSIBILITIES OF THE EUFOR AVIATION DETACHMENT

the 2nd Rotation of the "Dacian Pumas" Detachment – comprising four IAR-330 transport, reconnaissance, and medical evacuation helicopters – was held at the 95th Air Base "Hero Captain Aviator Alexandru Şerbănescu" in Bacău. The event was attended by senior military leadership, including Major General Valerică Vrăjescu, Commander of the Joint Forces Command; Major General Cezar Stănciulescu, Commander of the Air Component Command; and Brigadier General Ciprian Marin, Commander of the 95th Air Base. The detachment was placed under the operational command of the Joint Forces Command ahead of its deployment to Camp Butmir, Sarajevo, commencing 12 May 2025.

Starting 20 May, the Second Rotation of the Romanian Air Force Detachment "Dacian Pumas" has assumed the duties and responsibilities of the EUFOR Aviation Detachment from the first Rotation of the "Dacian Pumas" Detachment, in a ceremony held at Camp Butmir, Sarajevo, in the presence of Major General Florin Barbu, Commander of EUFOR Althea in Bosnia and Herzegovina (BiH).

For the next four months, the Second Rotation of the "Dacian Pumas" Detachment will participate in Operation EUFOR Althea with four IAR-330 Puma M and L-RM helicopters and 100 personnel, who will conduct transport, reconnaissance, and medical evacuation missions under EUFOR command.

Commander of the First Rotation, Colonel (AF) Roşca Răzvan, expressed his respect and appreciation for his colleagues from Rotation One: "Their professionalism, dedication, and unity have earned my admiration.

On Wednesday, 7 May 2025, the Transfer of Authority Ceremony for I am proud to address them not only as soldiers, but also as my team, my comrades, my brothers and sisters in arms. On behalf of the Romanian Air Force Detachment – Dacian Pumas – Rotation One, I am honored to report: Mission accomplished!". He then wished success to the military personnel of the Second Rotation.

"With great responsibility and distinct honor, I stand before you today to assume command of the Romanian Air Force Detachment participating in Operation EUFOR Althea, and I must acknowledge that this moment is not only a professional milestone, but also a profound duty," said Colonel (AF) George Diveică, Commander of the Second Rotation of the "Dacian Pumas" Detachment.

"We have gathered today not only to witness a transfer of authority, but also to recognize the enduring commitment of all those who serve under the EUFOR flag," stated Major General Florin Barbu, Commander of EUFOR Althea.

EUFOR Althea, launched in 2004 under a UN Security Council mandate (Resolution 1575), focuses on strengthening local institutional capacities and ensuring a secure environment. Romania has contributed to this mission since 2005, and its current deployment reaffirms its partnership with the 24 participating nations, including EU and non-EU member states. The Romanian Air Force's role in EUFOR Althea underscores its commitment to transatlantic security cooperation and demonstrates its readiness to execute complex operational tasks in multinational environments.

Source: ROU AF PAO Photos: Mădălina Burlacu







NATO AGENDA NATO AGENDA

ALLIED AIR FORCES ENHANCE JOINT INTEROPERABILITY WITH NATO GROUND FORCES **DURING EXERCISE DACIAN SPRING**

Italian Eurofighter Typhoons and Romanian F-16s successfully concluded their participation in Exercise Dacian Spring 2025, a NATO-led training exercise coordinated by Multinational Division Southeast. The exercise brought together over 4,000 troops from ten NATO Allies in a high-intensity scenario simulating the defence of NATO's south-eastern flank.

"Dacian Spring provided a realistic and challenging scenario to validate our swing-role capabilities and enhance joint interoperability with NATO ground forces"

Operating out of Mihail Kogălniceanu Air Base, Romania, the Italian and Romanian aircraft delivered Close Air Support using live munitions in coordination with ground forces engaged in dynamic manoeuvre warfare. Additionally, Italian Joint Terminal Attack Controllers,

integrated with the Multinational Battle Group Bulgaria, ensured effective air-to-ground operations within the Smårdan training area. A key element of the deployment was the swing-role capability of the Eurofighter, allowing seamless shifts between air-to-air and



Exercise Dacian Spring is a NATO-led training exercise coordinated by Multinational Division South East, involving over 4,000 personnel delivering effective air-to-ground operations. Photo courtesy of the Italian Air Force



The Italian and Romanian fighters delivered Close Air Support using live munitions in coordination with ground forces, demonstrated enhanced integration. Photo courtesy of the Italian Air Force

air-to-ground missions within a single sortie. This flexibility underscored both the aircraft's versatility and the high proficiency of Italian aircrews, who executed precision strikes in a contested environment using onboard cannons. The exercise exemplified NATO's focus on joint fires and interoperability. "Dacian Spring provided a realistic and challenging scenario to validate our swing-role capabilities and enhance joint interoperability with NATO ground forces," said Colonel Marcello Vitucci, Commander of the Italian Task Force in Romania. "This training supports the strategic objectives of the Alliance by improving our tactical effectiveness."

The Italian Task Force, comprising four Eurofighter Typhoons and approximately 150 personnel, has been stationed in Romania since March 2025 under NATO's enhanced Air Policing (eAP) mission. Operating under the tactical control of CAOC Torrejon and national command from Italy's Joint Operations Headquarters, the deployment reinforces NATO's collective defence posture on its eastern flank.

Participation in Dacian Spring 2025 has further strengthened Allied multirole capabilities, while showcasing NATO's unity and commitment to deterrence through realistic, complex scenarios that ensure readiness and regional stability.





ALLIED AIR FORCES DEMONSTRATED MULTIDOMAIN INTEGRATION **DURING EXERCISE HEDGEHOG 2025**

Romanian F-16 currently deployed on NATO's Air Policing mission in Lithuania, join Exercise Hedgehog for Close Air Support and Air Interdiction missions. Photo Courtesy of the Romanian Air Force

From May 5 to 23, 2025, Allied forces demonstrate interoperability and integration during Exercise Hedgehog 25. Allied nations Canada, Denmark, Finland, France, Germany, Latvia, Poland, Portugal, Romania, Sweden, the United Kingdom and the United States, join Estonia participating in Estonia's largest annual military exercise focused on defensive multidomain operations. Over 16,000 personnel from the land, sea, and air domains are deployed in supporting of exercise Hedgehog 25.

The large-scale multinational exercise, which takes place in Estonia, is aimed at enhancing interoperability, strengthening NATO's deterrence and defensive capabilities, and improving Allied readiness to respond to any security challenges.

Four Typhoon FGR4 fighter jets from the Royal Air Force, based in Malbork, Poland, on NATO's Air Policing mission, forward deployed to Estonia to contribute to the exercise. The relocation of the Air Policing assets highlights the agility and flexibility in basing options for Allied jets in the Baltic region.

Sgn Ldr Morrison-Smith, Typhoon Detachment Commander at Amarï Air Base said, "This forward deployment of troops from Malbork to Amari allows us to extend the Typhoons mission time. Hot Pit refuelling allows aircraft to be rapidly

refuelled on the ground and returned to the air. This allows us to be an extremely agile force, providing aircraft with the option to refuel via air-to-air tankers or these forward refuelling points that can be established at short notice." Romanian F-16, from the CARPATHIAN VIPERS detachment deployed on NATO's Air Policing mission in Šiauliai, Lithuania, joined the exercise performing Close Air Support (CAS) and Air Interdiction (AI) within the framework of operations to counter the enemy's surface forces (Air Power Contribution to Counter Land Operations - APCLO).

The air component of the exercise featured an array of aircraft, from the fighter jets to transport helicopters. These assets are conducting various missions to simulate real-world scenarios and test the readiness of Allied forces. The integration of air assets with ground and naval units underscores NATO's operational cohesion.

NATO's air mobility capabilities were utilised in an operation on May 9, infantry units were moved from Latvia to Estonia using CH-47 Chinook helicopters provided by the Royal Air Force. The airlift assets proving the alliances the flexibility to move personnel and joint logistics to enhance force projection.

The Estonian Defence Forces showcased advancements in their air defence systems

during the exercise. The 1st Infantry Brigade achieved combat readiness, integrating new technologies such as thermal imaging sights and advanced targeting systems into their anti-aircraft units. These enhancements, including the deployment of the Mistral missile system, aimed to improve the brigade's ability to counter aerial threats effectively.

Exercise Hedgehog 2025 served as a preparatory event for the Estonian Division's participation in NATO's Steadfast Deterrence 25 and Griffin Lightning 25 exercises. These exercises focus on strategic deterrence and regional defence planning, with air operations playing a crucial role in ensuring rapid response capabilities and maintaining air superiority in contested environments.

The exercise provides valuable opportunities for NATO air forces to refine their tactics, techniques, and procedures through realistic training and operating in a joint and multinational context, aircrews and ground personnel enhanced their coordination, communication and camaraderie.

The integration of air assets with other domains during the exercise exemplifies NATO's comprehensive approach to collective defence and its readiness to address emerging security



ITALIAN EUROFIGHTERS SCRAMBLE FROM ROMANIA DURING NATO'S ENHANCED AIR POLICING MISSION

On April 29, 2025, Italian Eurofighters were scrambled from Mihail Kogălniceanu Air Base for the first time since their Air Policing deployment to Romania commenced.

deployed to Romania on NATO's enhanced Air Policing mission, scrambled alongside the Romanian Air Force F16s in response to a

Operations Center (CAOC) in Torrejón, following the detection of a potential threat to NATO airspace. The NATO fighters, under direction of Control and Reporting Center (CRC) in Balotești, conducted aerial patrols along Romania's northern border. The Italian and Romanian jets both on Quick Reaction Alert (QRA) took off to conduct Combat Air Patrol mission.

Eurofighter from the Italian Air Force's Task Force Air 51st Wing, currently potential threat in the north-eastern sector of the country. The Alpha-Scramble order was issued by the NATO Combined Air



In April 2025 a joint and combined Flexible he started his tenue as Commander Allied Air Deterrence Option (FDO) was conducted over Romania, to increase and strengthen long term cohesion across the Alliance territories.

Greek F-16 Fighting Falcon, Italian Eurofighter 2000 and Turkish F-16 Fighting Falcon supported by a French tanker participated together with Surfaced-Based Air and Missile Defence system (SBAMD) from France and Romania. The activity was controlled by Romanian Control and Reporting Centre (CRC). Integrated Air and Missile Defence was set out as a priority for General James Hecker, when

Command. The FDO over Romania was tailored to increase Allies interoperability and designed to complement the permanent NATO IAMD system.

Planning and conducting these kind of event enhance interoperability and multidomain integration in order to achieve air superiority, which is mandatory. This event has also eased the collaboration between Allied Air and SBAMD units into the NATO Integrated Air and Missile Defence.

This activity demonstrated how NATO air and ground based units are capable of conducting complex defensive operations. Practicing and

exercising ensures that NATO entities work seamlessly together at all times, additionally improves readiness of NATO units and if necessary, ensures that NATO forces are ready to defend NATO territory.

NATO IAMD is a defensive component of the Alliance's Joint Air Power, which aims to ensure the stability and security of NATO airspace by coordinating, controlling and exploiting the air domain. It is an essential, continuous mission in peacetime, crisis and conflict, conducted using a 360-degree approach across NATO territory, and is prepared to address the full spectrum of threats.

ALLIED FORCES EXECUTED TWO HIGHLY COMPLEX MISSIONS, SIMULTANEOUSLY, IN POLAND AND ROMANIA

On June 5, 2025, forces from seven NATO nations conducted a NATO-led Find, Fix, Track, and Target (F2T2) exercise in Poland, strengthening Allied integration, interoperability, and combat effectiveness.

F2T2 missions demand precise coordination across all warfighting domains - air, land, maritime, cyber, and space, to ensure successful execution. During the mission, NATO's Airborne Warning & Control System (AWACS) provided airborne command and control, facilitating cross-domain coordination to locate notional targets and swiftly relay target positions to air and ground assets with strike capabilities.

"The successful execution of these simultaneous missions underscores the decisive role of air power in NATO's collective defence"

"Executing F2T2 missions ensures NATO forces remain ready to respond to any potential threat to the Alliance. Multidomain integration exercises offer valuable opportunities to enhance readiness and refine the tactical proficiency of our forces," stated Air Marshal Johnny Stringer, Deputy Commander Allied Air Command.

The mission seamlessly integrated 4th and 5th generation aircraft, including Portuguese F-16 fighters, deployed on NATO's Air Policing mission in Estonia, alongside Dutch and Norwegian F-35s. Fighters were supported and refueled by a French Multi-Role Tanker Transport, enhancing operational flexibility and enabling extended mission endurance. Meanwhile, as the F2T2 mission unfolded in Poland, a second deterrence operation was concurrently conducted to the south in Romania. Italian Typhoons, Greek and Turkish F-16s, and French and Romanian ground assets engaged in a complex joint integrated fires mission, showcasing NATO's ability to execute coordinated,

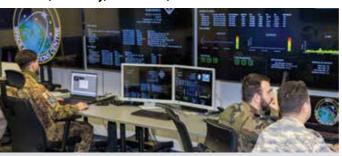
multidomain operations. The successful completion of two simultaneous, highly complex missions in separate NATO nations highlights the agility and strength of Allied forces. These exercises serve as a critical training opportunity, enhancing interoperability while fostering trust and camaraderie among NATO allies.

"The successful execution of these simultaneous missions underscores the decisive role of air power in NATO's collective defence. Allied Air Forces continue to demonstrate unmatched agility, reach, and precision. The missions not only enhance our interoperability, but also sends a clear message of our collective unity and resolve," added Air Marshal Stringer.

NATO's ability to deliver precise, integrated, multidomain effects underscores its readiness and capability to protect NATO territory and populations, safeguard NATO airspace, and deter potential aggression - ensuring the continued security and stability of the Alliance.

NATO SPACE COMMANDERS DISCUSSED **COMMERCIAL CONTRIBUTIONS TO NATO SPACE OPERATIONS DURING CONFERENCE AT RAMSTEIN**

Space Commander's from 19 NATO Nations and two Partner Alliance-led capabilities, enhancing NATO's operational resilience and Nations, Australia and Japan, met for the annual NATO Space Operations Commanders' Conference at Allied Air Command in Ramstein, Germany, June 4 to 5, 2025.



In 2019, NATO recognized Space as an operational domain and Allied Air Command in Germany homes the NATO Space Operations Centre staffed with a multinational team of Space experts. Photo by Arnaud Chamberlin

The conference brought together Space Commanders and subject matter experts from Allied and Partner nations to strengthen collaboration and deepen strategic ties. Since its launch in 2023, the annual event has served as a platform for enhancing cooperation in space by fostering dialogue, sharing expertise, and building integrated approaches to common challenges.

The key focus of this year's conference was commercial contributions to NATO Space Operations. The continued collaboration ensures agile, scalable innovative solutions that complement national and technological edge. This year's conference aimed to deepen multinational and commercial collaboration, featuring panel sessions dedicated to innovative solutions and space capability development. These discussions underscore the importance of aligning innovation efforts, shared standards and interoperability. Space is fundamental to modern public services and global communication. Precise GPS signals guide emergency services and facilitate transportation, satellite imagery is crucial for disaster response and environmental monitoring, and satellite communication supports terrestrial communication infrastructure. Space enables the delivery of reliable mobile phone services and internet connectivity to global broadcasting, vital for daily life, economic stability, and informed societies.

Space also plays an essential role in deterrence, defence, and operational effectiveness. In 2019, NATO recognized Space as an operational domain, the NATO Space Operations Centre, part of the Combined Force Space Component Command is located at Allied Air Command and is staffed with a multinational team of military personnel and civilian experts

The Centre is designed to coordinate Allied Space activities, support NATO missions and operations from Space, and protect Allied Space systems by sharing information about potential threats. The Space centre works closely with the National space operations centres, agencies and organisations, appropriately sharing data, products and services to support the timely decision-making of Commanders across all domains.

The close coordination of Allied Space activities support NATO missions ensuring that NATO can rapidly respond to any current or emerging threat, whilst continuing to promote regional security and stability.



The key focus of this years conference was the Lessons Identified from recent major NATO exercises. Achieved imagery from Exercise Ramstein Flag 24 by USAF/TSgt Emili Koonce



Subject matter Experts from across NATO gathered for detailed discussions to improving collective thinking, in order to achieve mission success. Photo by the DACCC

DACCC HOSTED **THE 2025 OFFENSIVE AIR OPERATIONS** CONFERENCE

From March 17 to 21, 2025, the Deployable Air Command and Control Centre (DACCC) hosted the third iteration of the Offensive Air Operations Conference. The key focus this year was on the implication of the Future Air C2 Model and Lessons Identified from recent major NATO exercises.

More than 30 participants from across NATO gathered in Poggio Renatica, Italy, for discussions around the global implications of future Air Command and Control (C2) capabilities, Composite Air Operation planning and execution requirements, as well as 5th Generation aircraft and Stand Off Weapon employment considerations. In his opening remarks, DACCC Deputy Commander Brigadier General Stefan Scheibl, addressed the key role of such events in improving collective thinking, in order to achieve mission success. "The revised Air C2 Structure will be critical to our survivability and Offensive Ops planners need to seamlessly integrate effective Multidomain Operations that provide us with a decisive edge in contested environments." During the conference, the

international audience of Air C2

experts also received updates from

subject matter experts in air power support to enhance ground and maritime operations, time sensitive targeting, space and non-kinetic capabilities. Analysis of the outcomes of the latest exercises also took place to identify issues and refine processes, then tailored tabletop working groups concluded the week by testing new methods to optimize coordinated air operations.

. Colonel Josh Coakley, DAOC Director of the DACCC summarized the value of the Conference stating, "Now is an incredibly important time for the Alliance. Changes to the Air C2 structure to meet a dynamic and complex threat environment create challenges and opportunities which are able to be explored during events like this. The exchange of ideas among subject matter experts at all levels and specialties lays the groundwork for our future success."

C-27 J SPARTAN



HONORING 15 YEARS AS ROMANIA'S TACTICAL AIR TRANSPORT VANGUARD

A decade and a half of unwavering dedication, courage, and service. Today, the Romanian Air Force honors a pillar of its operational capability: the 15th anniversary of the C-27J Spartan tactical airlifter. More than machinery, the Spartan has become a symbol of versatility, resilience, and Romanian military valor – rightfully earning its reputation as a "true ambassador of Romanian wings."

A NEW ERA TAKES FLIGHT

The Spartan's legacy began on April 12, 2010, when the first two C-27Js – tactical numbers 2701 and 2702, archive photo above – touched down at 90^{th} Airlift Base Otopeni runway. This historic moment marked the retirement of the venerable Antonov AN-26 fleet and ushered in a modern chapter for Romanian military airlift. Acquired under a 2007 contract with Italy's Leonardo S.p.A. (then Alenia Aeronautica), the Spartans were tasked with revolutionizing Romania's tactical transport capabilities.

Bearing the name of antiquity's elite warriors, the twin-turboprop C-27J proved its mettle as a rugged workhorse. Equipped with cuttingedge avionics, it operates in extreme conditions: short/unprepared runways, day/night ops, and adverse weather. Its inherent robustness made it instantly indispensable.

GLOBAL REACH: COMBAT ZONES TO HUMANITARIAN CRISES

Over 15 years of intensive service, the Spartan fleet (now seven aircraft) amassed **over 25,000 accident-free flight hours**, becoming one of the Romanian Air Force's most active and reliable platforms. Missions spanned national support for civil/military authorities and deployments to global hotspots – from the Middle East and Africa to Eastern Europe. The Spartan delivered troops, critical equipment, and logistical support in complex, high-threat environments. The expertise of the **902**nd **Squadron's** aircrews and maintainers elevated operational readiness, proving the aircraft's capability in dynamic, high-intensity scenarios.

Yet its deepest pride lies in **humanitarian service**. The Spartan became a lifeline for Romanian citizens in conflict zones: the 2021 evacuation from Afghanistan, rapid extractions in Libya and Syria. Each high-stakes mission – requiring precision planning, NATO coordination, and raw courage – stands as testament to Romania's commitment to protect its citizens worldwide.

PANDEMIC RESPONSE, DISASTER RELIEF AND NATO INTEROPERABILITY

The Spartan's strategic value shone beyond the battlefield. During the COVID-19 pandemic, it executed urgent **MEDEVAC sorties** and airlifted vaccines, oxygen, and medical supplies to Romanian and regional hospitals. Its reconfigurable cabin allowed rapid conversion into an airborne ICU, saving lives against the clock.

When floods, wildfires, or earthquakes struck, Spartans were first responders – delivering aid, rescue teams, and equipment. These missions fortified the bond between military and civilian communities.

VALIDATING NATO STANDARDS

From its first sortie, the Spartan proved a vital tool for interoperability. The 902nd Squadron is a fixture in NATO exercises: **Saber Guardian, Swift Response, Defender Europe**, and **European Spartan Exercise** – conducted in Romania and allied bases across Italy, Germany, Poland, and **Emerald Warrior** in the U.S.

FROM NATIONAL ASSET TO ALLIED PILLAR

- long live the Spartan!"

During drills, Spartans executed precision paratrooper drops, tactical troop inserts, and complex cargo operations, validating NATO air mobility standards. Romania's participation demonstrates proficiency and seamless integration within multinational forces. The Spartan is now a beacon of Romania's strategic credibility.

COMMAND PERSPECTIVE: LEGACY AND MODERNIZATION

At the anniversary ceremony, **Brigadier General (AF) Emil Tecuceanu**, Commander of the 90th Airlift Base, underscored the milestone: "Honoring 15 years of C-27J service is a privilege. This is pivotal for the 902nd Squadron – which has operated this platform since day one – our Base, and the Romanian Air Force. Our journey brought challenges and extraordinary achievements."

Brigadier General (AF) Tecuceanu highlighted operational excellence: "Over 25,000 accident-free hours covering the full spectrum: MEDEVAC, firefighting, logistics, paratrooper ops, and combat support. Most critically: every crew returned home. Regardless of season, time, or weather – our personnel stood ready." and confirmed future readiness: "This year, we modernize all seven Spartans. Avionics and navigation upgrades will

ensure compliance with evolving NATO/civil requirements. This sustains a battle-ready fleet."

Brigadier General (AF) Tecuceanu tribute to personnel: "Serving alongside these professionals is an honor. Their dedication and skill are unmatched. In complex times, I trust them to answer any call with resolve. Congratulations

CLEARED FOR THE FUTURE

In an era of evolving threats, the C-27J remains vital to Romania's power projection. It flies carrying not just cargo, but the commitment of generations of aviators and maintainers – transforming steel into hope and security. Beyond a transport aircraft, it embodies resilience, humanity in uniform, and Romania's unwavering pledge to defend its citizens and NATO values. This ambassador of Romanian airpower is cleared for takeoff, ready to write new legacies in the skies.

Text: Maria Ioniță, Adrian Sultănoiu Photos: Adrian Sultănoiu, Bogdan Pantilimon



On 12 April 2010, as a C-27J Spartan taxied (into the background alongside a C-130 Hercules in the foreground) on the runway of 90th Airlift Base Otopeni, the Romanian Air Force inaugurated a new chapter in its airlift history. The arrival of the Spartans established a powerful airlift team – Spartan and Hercules – at the core of Romania's strategic and tactical airlift capability. Over the past 15 years, these two platforms have flown countless missions delivering troops, critical equipment, and humanitarian aid. Whether conducting MEDEVAC sorties during the COVID-19 pandemic, evacuating civilians from conflict zones, or responding to natural disasters, the Hercules-Spartan tandem has proven indispensable to both national defense and allied operations – embodying Romania's commitment to collective security and its enduring contribution to European and NATO air mobility.

CHIRON - A NEW CAPABILITY FOR THE ROMANIAN ARMY

Author: Colonel Cezar CUCOŞ, Deputy Chief of the Romanian Army for Operations and Training



An iconic figure in Greek mythology, Chiron (gr. Xείρων, Cheiron) distinguished himself from the other warrior centaurs by his wisdom, knowledge, compassion and sacrificial spirit. He was accidentally wounded by a poisoned arrow shot by Heracles. To escape pain through death, Chiron chose to give up his immortality by offering it to Prometheus. His noble gesture eventually led Zeus to place him among the stars of the constellation of Sagittarius.

This is, in short, the legend of the centaur Chiron, the Thessalian god of healing, transposed over millennia, through his grace and power, into a formidable defensive weapon.

Motto: In us alone we find reason, passion and action.







South Korean experts train Romanian soldiers

The recent introduction of **CHIRON (KP-SAM)** air defense missile systems into the Romanian Army represents, on the one hand, an important step in the re-engineering of structures specialized in air defense combat and, on the other hand, a first in the introduction of such capabilities in a NATO member country. In terms of air defense, the army's equipment programs are in full swing and aim to provide sensors and strike vectors for close, short, and medium ranges, so that air defense missiles and artillery units can engage hostile aircraft operating at distances ranging from 50-60 km to the closest distances.

The Chiron portable air defense missile system, classified as MANPADS, is designed to engage air targets that appear by surprise and attack from low altitudes and short ranges, in particular helicopters and ground attack aircraft, various types of drones, cruise missiles, and more. The Romanian Army's choice of these systems was based on important considerations regarding their effectiveness, mobility, and ease of integration into existing NATO standards.

One of the particularities of the current operational environment is the use of very low-altitude flight paths by hostile air platforms, which take advantage of terrain features and natural masking that prevent radar detection on their approach paths. Therefore, low-altitude flight by hostile aircraft remains a threat, allowing them to approach their ground targets with minimal exposure to radar detection and countermeasures by air defense systems. In addition, airspace congested with small unmanned aerial platforms and guided munitions made of materials that do not reflect electromagnetic waves makes these threats very difficult to detect with conventional radar equipment. This increases the time required to search for, detect, and respond to strike vectors. In such an operation, portable MANPAD air defense systems equipped with day and night targeting devices and friend-or-foe identification (IFF) systems can play a particularly important role.

In the Republic of Korea – the "Land of the Morning Calm" – the Chiron system is also known as Shingung, which means "New Bow" in Korean. It was designed and manufactured by the South Korean Defense Acquisition Program Administration (DAPA) and LIG Nex1 (formerly LG Innotek). The Republic of Korea Army (RoKA) signed an initial contract worth over \$100 million in October 2005 to launch serial production of the Chiron MANPAD system, which entered service later that year.

Since 2014, the Indonesian Air Force has also been equipped with Chiron air defense systems, which they have integrated with the Oerlikon Skyshield 35 mm air defense gun system.

In December 2023, Romania signed an intergovernmental agreement with the Republic of Korea for the purchase of 54 Chiron systems, including air defense missiles, personnel training, and related maintenance and logistical support services. After the completion of the specific procurement documents, the first systems arrived in Romania in June 2024. In accordance with the contractual provisions, a period of training followed, in series, for the first operators and maintenance personnel, with training courses conducted in both South Korea and Romania.

In November 2024, the second batch of systems arrived in the country. At the same time, training programs were intensified for military

personnel from the Army units that were to be equipped with these systems, marking the first use of South Korean air defense systems by a NATO army.

At the end of February 2025, air defense platoons from the maneuver brigades and the 50^{th} Air Defence Missiles Regiment conducted their first live-fire exercises at the Capu Midia training range, using *Ultra Stick* UAVs and flares as aerial targets, as part of the multinational exercise "DACIA 25," led by the Joint Forces Command. The air defence firing was attended by representatives of the NATO Rapid Reaction Corps (NRDC–Italy) and a British air defense unit led by Major Faye Medlycott.

The very low atmospheric temperatures during that period (minimum temperatures reached -5°C on the ground and -14°C at an altitude of 1,000 m) meant that the combat firing had to be carried out under special conditions, with minimal thermal footprints of the aerial targets. For engagement, they could be tracked by operators through sighting devices, and thermal trap protection measures were activated and deactivated during firing on both types of aerial targets, in order to to evaluate the behavior of the missiles in different situations.

The first air defense launches with the Chiron system in Romania also tested its interoperability under NATO protocols and validated the missile's performance against both UAV air targets and those using thermal decoys. The firings demonstrated the system's ability to engage air targets, its reliability and accuracy, as well as its potential for integration with the air defense assets of the Romanian Army and Air Force.

In April 2025, a new course on operating Chiron air defense systems was held over two weeks in Braşov, at the barracks of the 228th Air Defense Battalion. Under the guidance of South Korean experts, Romanian instructors were trained who, in turn, will apply the *train-the-trainer* principle to train military personnel from the air defense entities within Army force structure, both operators and maintenance specialists for the new systems that have been added to the arsenal.



Chiron air defense systems stand out thanks to their *counter-countermeasure* technology, which ensures infrared guidance of the missile, as well as their modular, easy-to-operate design, with a launch system weighing 24.3 kg, thus offering significant operational flexibility in the tactical field. The launch system includes the aiming devices and the IFF interrogator. Mounted on a tripod, it can rotate 360° horizontally and move vertically at an elevation angle of -15° to +60°, making it sufficiently maneuverable. Normally, in combat, the system is operated by two soldiers, but in special battlefield conditions, a single soldier can engage the air target.

The self-guided missile is relatively compact, with a length of 1.68 m, a diameter of 80 mm, and a weight of 14.4 kg. It has a two-stage propulsion system and uses passive infrared self-guidance. The guidance control unit is small in size, and the missile's homing head incorporates a dual-color infrared (IR/UV) search system to reduce vulnerability to enemy infrared countermeasures (IRCM).

The guidance system allows the missile to effectively track its target based on infrared emissions, making it particularly effective against a variety of air targets, such as fixed-wing aircraft, helicopters, drones, and even cruise missiles. The infrared guidance capability also makes the Chiron system difficult to detect and counter, thus increasing its effectiveness in the tactical field.

The missile has a highly explosive fragmentation warhead weighing approximately 2.5 kg, composed of tungsten balls. It is initiated by a proximity fuse, which activates at a distance of 1.5 meters from the target, giving the missile a very high probability of destruction.

The missile can reach an altitude of 3.5 km and has a maximum



launch range of 7 km, which is remarkable for a MANPADS system. The missile's two-stage solid-fuel engine can propel it to Mach 2.1 (2,590 km/h).

From a tactical point of view, MANPADS, as short-range air defense systems, are particularly important components in achieving a layered air defense of the current battlefield, in the context of national and/or allied defense. The Chiron system can be used both in air defense battalions as specialized structures and by maneuver units, with the possibility of mounting it on various land, sea, or air platforms.

The first live-fire tests conducted in Romania highlighted the effectiveness of the Chiron MANPAD system and its potential to strengthen national and allied short-range air-defense capabilities, especially against low-altitude threats, with strengths including maneuverability, resistance to modern countermeasures, operational reliability, and ease of training and operation.

In order to protect forces and assets, combat elements, critical infrastructure, and populated areas against air attacks of any kind, all specialized components must contribute to a robust air defense system characterized by three essential attributes: namely *interoperability*, *stratification*, and *high density of strike vectors*.

Photos courtesy of Romanian Army



Live Fire Exercise, Capu Midia Training Range, February 2025

"HENRI COANDĂ" AIR **FORCE ACADEMY ELEVATES ALLIED READINESS AND GENDER INTEGRATION**

In April 2025, the "Henri Coandă" Air Force Academy inaugurated a new chapter in NATO-aligned military education with two landmark initiatives: the International Air Defense Semester (IADS) and the 6th Erasmus + Seminar on Military Gender Challenges. Both programs reflect Romania's strategic commitment to forging interoperable allied leadership and embedding gender equality as a force multiplier in modern air operations.

From the moment cadets and junior officers from Romania, Poland, and Bulgaria reported for the first day of IADS in early March, the stakes were clear. Over eight weeks, 45 participants immersed themselves in a rigorous curriculum covering NATO command-and-control (C2) procedures, advanced aerial interception systems, and ioint crisis response drills. Simulations ranged from simulated hostile incursions into European airspace to real-time coordination

of multinational air defense assets. Air Force Brigadier General Marius Şerbeszki, PhD, Commander of the Academy, wrap up at the closing ceremony on 30 April: "This semester forges the tactical and personal bonds we depend on when allied squadrons operate as a cohesive shield. It's our collective ability to trust and synchronize in the air domain that secures NATO's skies." Under his guidance, the Academy has become a crucible for transnational cooperation, mirroring the alliance's integrated command philosophy. As the concluding presentations underscored, each national delegation brought forward innovations shaped by their own operational environments. The Romanian team proposed enhancements to ground-based radar arrays for better detection of asymmetric threats. Their Polish colleagues detailed the integration of 5G-enabled surveillance nodes to accelerate data flow across the battlespace. The Bulgarian officers unveiled refined quickreaction protocols for intercepting airspace violations. Together, these insights now form the backbone of a joint EMILYO certification, signifying that graduates are equipped to plug seamlessly into multinational air defense task forces.

BRIDGING DOCTRINE AND GENDER INTEGRATION

Even before the IADS graduation, the Academy had laid groundwork in cultural and doctrinal transformation. From 3 to 4 April, senior officers and gender-policy experts convened for the Erasmus+ Seminar "Good Practices and Role Models - Military Gender Challenges", organized in collaboration with Romania's "She for Romania" campaign.

The two-day forum marked its 6th edition by delivering actionable recommendations to enhance gender integration across NATO forces. Colonel Manuela-Elena Mihai, Chief of the Gender Integration and Policy Office, opened the seminar with a challenge to tradition: "Gender equality isn't an adjunct to operations; it's integral. Diverse perspectives sharpen our threat analysis, refine decision cycles, and strengthen unit cohesion." Her keynote set the stage for discussions that ranged from revising curricula to mandating mentorship chains for emerging female officers.

Speakers from multiple services revealed progress and setbacks alike.

Lieutenant Colonel (AF) Simona Maierean from the Romanian Air Force Staff recounted her journey as one of the first Romanian women to complete advanced fighter tactics training. Lieutenant Colonel Ana-Maria Grandel, commander of the 1st CIMIC Battalion, spoke candidly about female officers in peacekeeping deployments, emphasizing that diverse teams achieved better outcomes under complex rules

Major Anca-Elena Aron from the Naval Forces Staff shared lessons learned in integrating mixed-gender boarding teams during maritime security patrols.



Data presented by Major Andreea Muntean, the Academy's Gender Representative, highlighted a 30 percent increase in mission effectiveness when units maintained balanced gender representation. Workshop participants crafted proposals for mandatory genderstudies modules in all European military academies and outlined a structured mentorship framework to guide female officers along command pathways.

A UNIFIED COURSE AHEAD

Both events, IADS and the Erasmus+ Seminar illustrate the Academy's dual-track strategy for 21st-century readiness: honing cuttingedge air-defense capabilities while cultivating an inclusive culture that maximizes human capital. Looking forward, the Academy plans to expand IADS participation to six NATO member nations by 2027 and establish a European Center for Gender Studies in Defense on its Brasov campus. Complementing these steps, the





forthcoming EMILYO Digital platform will enable virtual exchanges, ensuring that allied officers remain interconnected even between in-person semesters.

General Şerbeszki distilled the Academy's mission with characteristic clarity: "We don't simply train soldiers – we shape allied leaders capable of securing the air domain and advancing our shared values. Whether countering advanced aerial threats or harnessing the strength of a diverse force, our innovation and interoperability define the future of NATO operations."

With its April initiatives complete, "Henri Coandă" Air Force Academy stands as a model for how military education can simultaneously drive technical excellence and cultural evolution preparing officers not only for the missions of today, but for the collaborative battlespaces of tomorrow.

> Source: "Henri Coandă" Air Force Academy





AFASTUD 2025 BRINGS STUDENTS TOGETHER THROUGH INTERCULTURAL DIALOGUE

From 22 to 24 May, "Henri Coandă" Air Force Academy convened the Student **Scientific Session "Communicating Across** Cultures" - AFASTUD 2025 - spotlighting academic growth, international cooperation, and intercultural exchange. Over three days, Academy cadets and invited delegates from military and civilian institutions in the country and abroad delivered studies and shared insights on the complexities of global communication in today's multicultural security environment. Discussions ranged from the role of intercultural leadership and the design of education and training programs for diverse student bodies to strategies for international defense cooperation and the impact of values, identity, and cultural diversity on operational effectiveness. By hosting AFASTUD 2025, the Academy underscored its dedication to academic excellence, critical thinking, and unit cohesion while forging new avenues for partnership across allies and institutions.

> Source: "Henri Coandă" Air Force Academy



Brasov 21 - 23 May, 2025

FROM DREAM TO COCKPIT

A TESTIMONY OF COURAGE, PERSEVERANCE AND PASSION FOR FLIGHT

Lieutenant Andrei Curiman: From Dream to Reality, My Story as a Military Pilot

When we watch an aircraft lift off the runway, few of us think about the dozens of decisions, sacrifices and years of training that go into the cockpit. For some, flying is merely a spectacle in the sky. For others, it is a calling. In the lines below you will find the story of a young man who answered the call of flight – starting from a teenage dream and, step by step, coming to represent Romania in an elite international program. It is an authentic account of determination, military training and the power of believing in one's own destiny.



"My path to aviation began in an unexpected way. I was in 11th grade when I first learned about the Romanian Aeroclub and its subsidized ultralight pilot courses. The idea of flying instantly captured my imagination, and the enthusiasm of those involved convinced me to enroll. I completed ground school and logged around five hours of flight time. Although I didn't earn a license, those hours were enough to awaken in me a deep, irreversible passion for aviation.

One year later, during my senior year, I made one of the most important decisions of my life: I chose to abandon my plans to pursue computer engineering and instead prepare for admission to the Air Force Academy, with the clear goal of becoming a military pilot. After undergoing a rigorous selection process – including psychological and medical evaluations – I was approved to compete for the supersonic jet pilot track. That decision, while bold, proved to be a defining moment in my life.

In the fall of 2018, I officially began my journey in military aviation. Any cadet will tell you: the most exciting part of Academy life is the flight training. I couldn't agree more. My passion to fly never faded, and every takeoff was a reminder of why I chose this path.

During my practicum, I also attended the Civil Aviation Higher School to obtain my private pilot license. In my third year, I began flying the IAK-52 at Boboc and continued training on that platform at the Air Force Application School. This critical phase allowed me to accumulate about 90 flight hours and develop the fundamentals of military flying.

It was during that period, while reading Cer Senin - Romanian Air Force Magazine, that I first came across an article about the Strategic Airlift Capability (SAC) and the Romanian pilots flying the C-17 Globemaster III out of Pápa Air Base, Hungary. The multinational nature and high level of professionalism in the program left a strong impression on me. From that day, I dreamed of joining that select group. I knew I was far from meeting the experience requirements – but I never stopped believing it was possible.

I graduated from the Air Force Academy in 2022, assigned as a weapons section chief in the fixed-wing track. At my assignment selection, I chose the 90th Air Base, 901st Strategic Transport Squadron, to fly the C-130 Hercules. Transitioning to such a large and complex airframe was a real challenge – my first exposure to a platform of that magnitude. But with the guidance of dedicated instructors, I adapted and made steady progress. To date, I've logged about 120 flight hours on the C-130.

And now, just three years after reading that article, I find myself in Altus, Oklahoma, attending the initial qualification course for the C-17. I'm preparing to fill one of Romania's three positions in this elite international program. It's an immense honor, and I feel deeply motivated to represent Romanian military aviation with professionalism, integrity, and commitment.

The Strategic Airlift Capability program stands as a remarkable example of multinational defense cooperation. Twelve partner nations jointly operate three C-17 Globemaster III aircraft from Pápa Air Base, Hungary. I'm currently undergoing one of the most demanding yet rewarding phases of my career – training alongside allied personnel and learning from our American counterparts. I look forward to the day I set foot in Pápa and begin contributing to the Heavy Airlift Wing's mission, alongside both Romanian colleagues and international partners. It is a privilege – and a responsibility – I embrace it with pride and determination.

Looking back, it all began with a spark of curiosity in a classroom. Today, that spark has become a purpose-driven career in which I serve under the wings of my childhood dream."



Lieutenant Andrei Curiman is at the start of his career in military aviation. For him, each flight, each mission, and each day in uniform represents duty, growth, and commitment. His story is not one of chance – it is about choosing to follow a dream with courage and perseverance. His message to those aspiring to the skies is simple and clear: the courage to begin is what matters most. The rest is built through discipline, passion, and hard work. Dreams become reality only when you choose to pursue them all the way.

Recorded by Ioana-Cristina Teişanu Photo: personal archive



LEADERSHIP TAKES FLIGHT



A CRUCIAL STEP IN DEVELOPING MILITARY LEADERSHIP

LEADERSHIP TAKES FLIGHT: ROMANIAN AIR FORCE DEBUTS AT U.S. AIRMAN LEADERSHIP SCHOOL

For the first time in history, Romania was represented at the prestigious Airman Leadership School (ALS), hosted by the TSgt Adam K. Ginett Airman Leadership School of the United States Air Force at Aviano Air Base, Italy. The 24-academic-day course – comprising a total of 192 instructional hours – is designed to develop authentic leaders prepared to supervise and lead work teams in support of air, space, and cyberspace missions. This training marks a defining stage in the professional journey of any military member, focusing on leadership development, critical thinking, decision-making, and effective communication.

Warrant Officer Ovidiu Poncea and Senior Airman Andrei Botez were the two Romanian service members who participated in this high-intensity professional development experience, marking a historic first for the Romanian Air Force.

Warrant Officer 5^{th} Class Ovidiu-Eduard Poncea, currently serving with the 74^{th} PATRIOT Regiment, has been in the military for a year and a half. He is a graduate of the Military School for Warrant Officers and NCOs in Communications, Sibiu, with a specialization in computer science.

Senior Airman Andrei Liviu Botez began his military career in 2012, first assigned to the intervention and traffic control section of the Military Police Platoon. Since 2016, he has been part of the 573rd Cargo and Personnel Processing Company, handling key responsibilities in air transportation operations (APOD/APOE) and liaising with foreign partners deploying to or transiting through 57th Air Base as part of host nation support.

Throughout the course, the primary areas of focus were interpersonal communication and teamwork. "What I appreciated

For the first time in history, Romania was represented at the prestigious Airman LeadershipSchool (ALS) by Senior Airman Andrei Liviu Botez and Warrant Officer 5th Class Ovidiu-Eduard Poncea







most was the emphasis on hands-on learning," said Warrant Officer Poncea. "The instruction was largely practical, offering direct experience and giving each participant the opportunity to actively engage and strengthen their communication and collaboration skills." As the course name suggests, leadership was the central theme, covering a wide range of critical subjects: professional and personal relationships, communication, emotional intelligence, team organization and evaluation, decision-making in crisis situations, financial literacy, physical and mental health, personal development, and public speaking. Daily physical challenges – 300 push-ups and a 5km run – were also part of the program. "Every topic was addressed professionally and effectively, with a well-structured approach focused on building real-world skills," added SrA Botez.

The instructors played a key role in shaping future military leaders, sharing both theoretical knowledge and lessons drawn from their own operational experiences. The peer-to-peer exchange among international classmates further enriched the learning environment. "The instructors stood out not only through their professionalism but also through their ability to build genuine connections with the students," noted Poncea. "They created an open environment where we truly learned from one another. Our American classmates welcomed us with great enthusiasm and a strong spirit of collaboration. That cross-cultural exchange was invaluable, allowing us to observe NATO standards firsthand and gain new perspectives on solving complex problems."

The 16-member team, which included the two Romanian Airmen, was led by SSgt Kayla Jerido, described by her students as the perfect balance between a trusted mentor and a commanding presence. She provided Class 25-C "Phantom" with both high-quality instructional material and essential practical leadership skills.

"By the end of the course, a deep bond had formed among the class," recalled SrA Botez. "The cultural diversity within our team brought varied solutions to each challenge and showed us that shared goals unite perspectives. We worked side by side in study groups, mutual assessments, physical fitness events, and competitions. One of the course's primary goals – continuous collaboration – was achieved, from grammar checks in English to peer-reviewing assignments. Success wasn't measured individually, but collectively."

Through their participation, WO Poncea and SrA Botez demonstrated not only the professionalism and adaptability of Romanian Airmen in a high-performance international environment, but also served as ambassadors of the Romanian Air Force's values and traditions. They actively contributed to the exchange of best practices among NATO partners, proudly

representing their service and country.

Completing this course is not just a personal milestone for these two Airmen – it's also an institutional achievement for the Romanian Air Force. It signals clearly that the professionalism, commitment, and military readiness of Romanian personnel are respected and acknowledged at the highest international levels. "The lessons I took from this course will help me enhance communication within my team and organize our activities more effectively to accomplish future missions," said SrA Botez. "One of the most important takeaways for me was that building a strong team means recognizing and leveraging each member's unique strengths."

"This course will significantly benefit my career," added WO Poncea. "One of the most valuable things I learned is that leadership isn't just an innate talent – it's a skill that can be developed through experience and dedication. Knowing how to motivate your people is essential in any operational context. This course helped me understand how to foster a positive and effective work environment – for both myself and those I lead. Professionally and personally, this experience was transformative, and I'm confident the skills I've gained will serve me well going forward."

Through this meaningful step forward, the Romanian Air Force strengthens its role in strategic partnerships and demonstrates a firm commitment to developing the military leaders of

Text: Ioana Teișanu Photo: Personal Archive







CER SENIN ♦ No 2 (181) ♦ 2025

W W W . roaf.ro

SHADOW FLIGHT: PSYCHOLOGICAL CONSEQUENCES OF DRONE OPERATORS' ACTIVITY

Psychologist, 71st Air Base

Unmanned aerial vehicles (UAVs), also widely known as drones or remotely piloted aircraft (RPA), have been part of military operations for decades (Keane & Carr, 2013). Although, the U.S. Air Force initially deployed drones for tactical reconnaissance during the Vietnam War (U.S. Air Force, 2005), their widespread and strategic use has surged only in recent years. This increase is largely due to improvements in technology that enhanced their effectiveness in conflicts like those in Iraq, Afghanistan, and Kosovo (Bone & Bolkcom, 2003). It was not until 2002 that drones were first equipped to deliver lethal payloads (Gertler, 2012). According to the U.S. Department of Defense, drones are powered aircraft vehicles that rely on aerodynamic forces to achieve lift. They can fly autonomously or under remote control, may be recoverable or expendable, and are primarily used for either surveillance or combat missions especially when armed (Bone & Bolkcom, 2003). Their strategic value lies in their ability to collect intelligence and engage targets at a distance, all while removing the physical risk to human pilots (Bone & Bolkcom, 2003; Gertler, 2012). Because drone missions are managed from remote control centers, operators are often said to be "deployed in garrison"—engaging in missions while physically located far from the combat zone. A U.S. government report documented a dramatic rise in drone use, noting that the Department of Defense's UAV fleet grew from just 167 in 2002 to nearly 7.500 by 2010 (Gertler, 2012). Today, more than 30 countries have incorporated drones into their military capabilities, with new nations adopting the technology every year (Cole, 2012; Cole, 2015).

Two of the most widely recognized drones, the MQ-1 Predator and MQ-9 Reaper, have gained significant attention both in military circles and the media (U.S. Air Force, 2005). These drones are prized for their versatility, including their roles in surveillance, intelligence gathering, precision targeting, and protection of allied forces (Gertler, 2012). The ground crew required to operate these UAVs typically consists of a pilot who handles navigation, a sensor operator responsible for surveillance and targeting systems, and a mission coordinator who relays crucial information to intelligence analysts and commanders (Chappelle et al., 2010). The configuration of drone operation teams depends on the mission type and the drone model but usually involves a compact team (Asaro, 2013).

As the use of drones has expanded, the operational workload has likewise increased,

psychological exposure to combat through of violence and destruction. Research highlights that drone operators face a make a cup of coffee or tea, doing some light distinctive set of occupational challenges stretches, etc. We can integrate all these (Singer, 2009). Since they perform combatrelated tasks while remaining physically located at home bases, they may struggle to balance their professional responsibilities with family and personal life. This overlap of roles can contribute to operational burnout, a state marked by severe mental and physical exhaustion, difficulty concentrating, and emotional detachment (Ouma et al., 2011). As a result, operators may find it harder to manage job duties or maintain supportive interpersonal relationships, often showing decreased levels of empathy and patience.

Depersonalization or the feeling of alienation involves emotional detachment from others, co-workers and supervisors. It is characterized by a behavior that tends to be harsh, cold, indifferent and the responses are delivered in a negative manner. Often, a cynical attitude is displayed, which can lead to diminished work quality or even leaving the military institutions.

Low performance is felt both subjectively and objectively: a sense of declining competence emerges and actual performance decreases. The military personnel may feel they are no longer able to successfully carry out the tasks and operational missions they are assigned.

The presence of a high level of **exhaustion**, even among a small group of drone operators, can raise concerns in aerospace medicine and psychology due to the increased risk of accidents and mission failure (Tvarvanas & MacPherson, 2009). 2011). Through long-term video surveillance of enemies, drone operators become familiar with the daily routines of their potential targets and are required to continue observing them after the attack to ensure complete destruction (Singer, 2009). In addition, overtime work (50 or more hours per week), shift work, humanmachine interface issues (such as the ergonomic design of equipment and ground control stations; inefficiencies in computerbased input and command procedures); difficulties in balancing personal life demands with military operations (e.g., the garrison lifestyle), apathy, reduced efficiency, frustration and even despair (Ouma et al., 2011) are among the most frequent symptoms characteristic of operational burnout.

To prevent operational burnout, one healthy habit we can introduce at the workplace is to take **short breaks** that allows us to "recharge our batteries". These small

By Maria loana TELECAN, PhD with more mission hours, night shifts, and breaks can last from a few seconds to a few minutes and can include any activity we live surveillance footage, including moments enjoy—reading a few pages from a book, going for a walk, getting up from the desk to activities into our work schedule to help improve our productivity and focus. Furthermore, short breaks can reduce stress, fatigue, and anxiety, boost our health and make work a more enjoyable activity. Another way to combat operational burnout is by developing self-awareness skills. We should try to answer a few questions honestly: What do I need right now? How did I get here? What are my strengths? What are my weaknesses? By answering these questions, we can direct our behavior to align with our values and abilities. This way, we can achieve good results and make progress. Last but not least, setting SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound) and creating a monitoring plan for those goals can bring a sense of accomplishment and improve self-esteem.

> Given the high operational tempo, along with the overtime and shift work needed to support 24/7 military operations, it is no surprise that operational burnout occurs. However, this issue must be addressed because operational burnout can lead to degraded effectiveness and has been identified as one of the major contributing factors to aerospace safety and psychological incidents and accidents (Tvaryanas & Thompson, 2008). Given the nature of this activity, it is imperative to minimize the number of accidents, as they can lead to loss of human life, loss of multimillion-dollar aircraft, threats to national security and foreign relations (Ouma et al.,

Bibliography

Armour, C., & Ross, J. (2017). The health and well-being of military drone operators and intelligence analysts: A systematic review. Military Psychology, 29(2), 83-98. https://doi.org/10.1037/mil0000149 Chappelle, W., McDonald, K., Prince, L.,

Goodman, T., Ray-Sannerud, B. N., & Thompson, W. (2014). Assessment of occupational burnout in United States Air Force predator/reaper "drone" operators. Military Psychology, 26(5-6), 385. https:// doi.org/10.1037/mil0000046

Telecan, M., I. (2020). Sindromul burnout - cum apare, cum se manifestă, ce e de făcut. Psihoteca. [Link: Sindromul burnout - cum apare, cum se manifestă, ce e de făcut - Psihotecal



