



# International Astronautical Federation

# News

2/2024 (February 2024)

## IAF President's Welcome

Dear IAF Friends,

I am pleased to welcome you to the latest edition of the IAF newsletter, where we bring you the recent updates and news from the International Astronautical Federation (IAF) and its member organizations. Today the Federation proudly represents 513 members from 77 different countries on all continents and is the largest non-profit space organization in the world. This showcases the importance of the Federation in bringing together the international space community to collaborate and advance scientific knowledge.



During our last bureau meeting in Baku, we welcomed four new members to the IAF Bureau: **Michal BRICHTA**, Head of the Slovak Investment and Trade Development Agency (SARIO) - Slovak Space Office, has been appointed as IAF VP for Global Membership Development and Financial Matters. **Daming LI**, President, China Academy of Space Technology (CAST), has been appointed as IAF VP for Societies and Museums. **Geraldine NAJA**, Director for Commercialisation, Industry and Procurement, European Space Agency (ESA), has been appointed as IAF VP for Industry Relations and Space Economy. **Asanda SANGONI**, Acting Managing Director, Earth Observations, South African National Space Agency (SANSA), has been appointed as IAF VP for Honors and Awards.

It is also my pleasure to announce the new IAF Special Advisors **Gabriella ARRIGO**, Director International Affairs, Italian Space Agency (ASI), as Special Advisor to the President on the International Space Forum (ISF). **Masami ONODA**, Director Washington Office, Japan Space Exploration Agency (JAXA), as Special Advisor to the President on the IAF Hub. **Giorgio SACCOCCIA**, Senior Advisor, European Space Agency (ESA), as Special Advisor to the President on the IAF Hub.

The IAF is very enthusiastic to continue its many activities in 2024 and keep connecting all the space people around the world. I would like to invite you to our upcoming events: the **IAF Spring Meetings 2024** at the New CAP Conference Centre, 26-28 March 2024, in Paris and the **75<sup>th</sup> International Astronautical Congress - IAC 2024** hosted by AIDAA in Milan, Italy, from 14-18 October 2024. IAC 2024 will be the fifth International Astronautical Congress to be held in Italy but it is actually the first one ever to be organized in the city of Milan. The theme for IAC 2024 is "*Responsible Space for Sustainability*", our intention is to highlight the importance of Space as an environment that must be kept secure and open to exploration, peaceful use, and international co-operation by present and future generations in the interests of the planet and all nations, regardless of their level of development and without discrimination of any kind.

I am looking forward to all of you joining us on this exciting journey in 2024 and beyond!

Clay MOWRY  
IAF President

*Connecting @ll Space People*

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### IAF EVENTS & NEWS

- IAF Spring Meetings 2024
- 75<sup>th</sup> International Astronautical Congress (IAC 2024)
- IAF Committee Briefs – Winter 2024
- Welcome to the New IAF Members

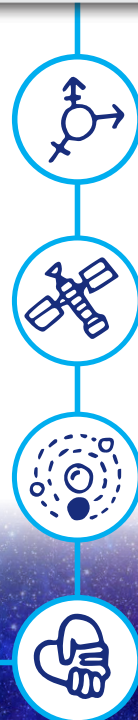
### IAF MEMBERS' CORNER

### OUR LATEST PUBLICATIONS

- [IAC 2024 Call for Papers](#)
- [IAC 2023 Highlights](#)
- [IAF Highlights 2023 Journal](#)
- [How to Engage in the IAC Guide](#)

### IMPORTANT DATES:

- Call for Hosting IAC 2027 - Deadline for notices of intent to submit proposals: **16 February 2024**
- IAC 2024 Submission of Abstract for an oral or interactive presentation: **28 February 2024**
- IAF Spring Meetings 2024: **26 – 28 March 2024**
- IAC 2024: **14 – 18 October 2024**





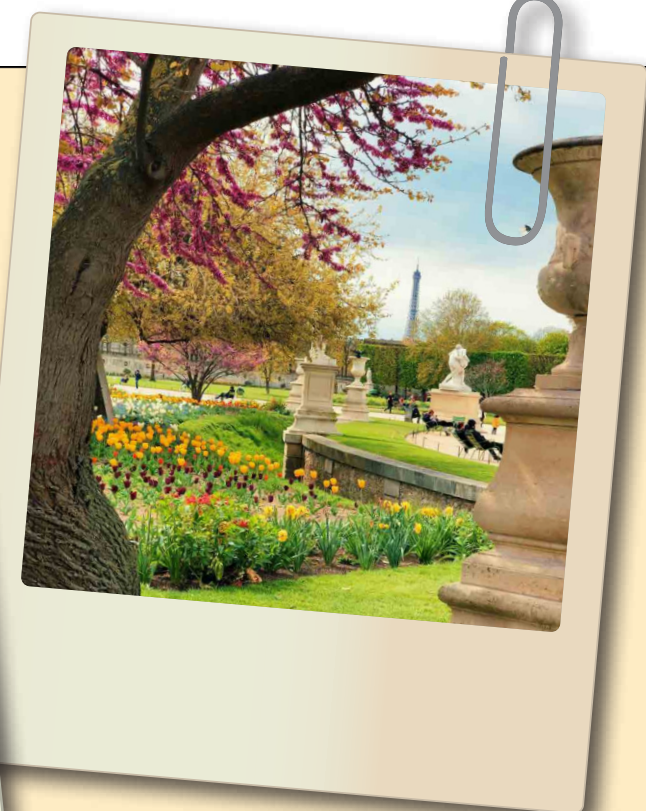


# Spring Meetings 2024

As each year, the IAF is pleased to invite you to its Spring Meetings taking place in Paris, France where the IAF community will get together for three days, from **26-28 March 2024** in **New CAP Conference Centre**.

## Spring Meetings 2024 at a glance

	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
<b>Tuesday 26 March</b>		IDEA "3G" Diversity Breakfast	IAF Administrative and Technical Committee Meetings				IDEA "3G" Diversity Lunch	IAF Administrative and Technical Committee Meetings									
<b>Wednesday 27 March</b>		IAF Administrative and Technical Committee Meetings				IAF Bureau Meeting - Part 1		TAC Meeting		IAF Administrative Committee Meetings		IAF Global Networking Forum (GNF)		IAF Cocktail			
<b>Thursday 28 March</b>		IPC General Meeting	DSA Ceremony	IAC 2024 Abstract Selection			IAF Bureau Meeting - Part 2										



ORGANIZED BY: HOSTED BY:

CO-HOSTED BY:

**MILAN 2024** **INTERNATIONAL ASTRONAUTICAL CONGRESS**

**RESPONSIBLE SPACE FOR SUSTAINABILITY**



**14 - 18 OCTOBER 2024**  
**MILAN - ITALY**

## 75<sup>TH</sup> INTERNATIONAL ASTRONAUTICAL CONGRESS (IAC 2024)

The 75<sup>th</sup> International Astronautical Congress (IAC), scheduled for **14-18 October 2024**, will see the arrival in Milan of over 8,000 experts from industry, research and the institutions and place Italy at the heart of the international debate on the use of Space to support sustainability.

The candidacy of Milan, which was declared the winner in October 2021, was promoted by AIDAA, ASI and Leonardo, respectively representing the Italian academic world, institutions and space industry, and enjoyed the pivotal support of the Italian Government and local institutions, in particular the President of the Lombardy Region and the Mayor of Milan.

Under the motto **"Responsible Space for Sustainability"**, the intention of the IAC 2024 is to highlight the importance of Space as an environment that must be kept secure and open to exploration, peaceful use and international co-operation by present and future generations in the interests of the planet and all nations, regardless of their level of development and without discrimination of any kind.







With this aim more than 8,000 experts from space agencies, companies, research centres and associations from across the world will meet at IAC 2024 - organized with the contribution of AIM Group International - in the Milano Congress Center (Allianz MiCo), Europe's largest conference venue. There are currently just under 8,000 satellites in orbit, around 5,000 of which are operational, and this number is set to grow significantly in the next few years. Ever more countries and public and private players are becoming actively involved in the space economy. The Earth's orbit is nonetheless a limited resource, and any overcrowding involves risks in terms of security, light pollution and the availability of data and services provided by space technologies. In the economy, industry, agriculture, transport, energy, finance, urban development, communications, environmental monitoring, and security, space systems are a fundamental tool in the creation of a more digital, green and sustainable future. They are likewise vital for the functioning of society, the economy and global trade. Italy is at the forefront in the challenge of using Space responsibly in the name of sustainability. It is one of the few countries in the world with a complete Space economy supply chain: from manufacturing, through new applications development and satellite services management, to propulsion and launch systems.

The country's expertise can be found in the research sector and in companies of all sizes, from start-ups and SMEs to large-scale industry, supported by the institutions. All will come together on 15 July to confirm their commitment to supporting IAC 2024.



**RESPONSIBLE  
SPACE FOR  
SUSTAINABILITY**

## BE INVOLVED IN IAC 2024

Be an active part of the 75<sup>th</sup> IAC in Milan and submit your proposal for a plenary, session or abstract.

You find more information on the below links:

How to Engage in the IAC Guide

IAC 2024 Call for Papers

Plenary Programme



IAF Global Networking Forum



Technical Programme



**WATCH** the IAC Abstracts webinar guiding you through the steps of the abstract submission and providing valuable tips on how to prepare a successful abstract!



## WHITE PAPER BY THE IAF INDUSTRY RELATIONS COMMITTEE

*On the scarcity of workforce in aerospace industries. Roadmap to better attract tomorrow's talents*

Released by the International Astronautical Federation (IAF) Industry Relations Committee (IRC) during the International Astronautical Congress 2023 in Baku, the white paper analyses the current state of the aerospace industry and the complexities of the workforce landscape. The IRC white paper methodically examines potential factors contributing to the widespread workforce shortage, providing valuable insights into the challenges the aerospace industry is facing.

Why Dive In?

- **Global Industry Insight:** Understanding the current state of the aerospace industry
- **In-Depth Analysis:** Investigate the root causes of the aerospace industry workforce shortage
- **Mitigation Measures:** Review what measures are currently being implemented to mitigate further expansion of this critical issue
- **Exclusive Recommendations:** Receive recommendations for industry on how best to support talent recruitment and retention in the future as we build a sustainable international aerospace ecosystem

You can secure your copy of the IRC White Paper from the IAF website. [Download it now!](#)

If you wish to engage with the IAF IRC Committee and delve deeper into the elements of this paper, please contact us at [info@iafastro.org](mailto:info@iafastro.org)





# IAF Committee Briefs

## THE IAF COMMITTEE BRIEFS 2024 WINTER EDITION ARE AVAILABLE ONLINE!

Read about the latest developments and trends in space right now, and learn more about the IAF Committees and their upcoming projects.

The Committees are the backbone of the Federation and powerful sources of knowledge. They are composed of members from all over the world in different space fields, who discuss and anticipate the evolution of space activities.

Please find the list of the IAF Committee Briefs below:

- [IAF Astrodynamics Committee Brief](#)
- [IAF Commercial Spaceflight Safety Committee \(CSSC\) Brief](#)
- [IAF Earth Observations Committee Brief \(EOC\) Brief](#)
- [IAF Enterprise Risk Management Committee \(ERMC\) Brief](#)
- [IAF Human Space Flight \(HSC\) Committee Brief](#)
- [IAF Materials and Structures Committee Brief](#)
- [IAF Microgravity Sciences And Processes Committee Brief](#)
- [IAF Committee on Planetary Defense and Near-Earth Objects \(NEOs\) Brief](#)
- [IAF Space Communications And Navigation Committee \(SCAN\) Brief](#)
- [IAF Space Economy Committee Brief](#)
- [IAF Space Education and Outreach Committee \(SEOC\) Brief](#)
- [IAF Space Exploration Committee \(SEC\) Brief](#)
- [IAF Space Habitats Committee Brief](#)
- [IAF Space Propulsion Committee Brief](#)
- [IAF Space Security Committee Brief](#)
- [IAF Space Transportation Committee Brief](#)

All the IAF Committee Briefs are uploaded here: <https://www.iafastro.org/publications/iaf-committee-briefs/>

Enjoy this reading and do not hesitate to reach out to us in case you are interested in knowing more about an IAF Technical Committee at [support@iafastro.org](mailto:support@iafastro.org)

## WELCOME TO NEW IAF MEMBERS



The International Astronautical Federation is pleased to welcome all the organizations that decided to join the International Astronautical Federation in 2023! Congratulations on joining the world's largest international space organization. Being an IAF Member means to have access to the Federation's outstanding network of 513 member organizations from 77 countries, including the leading space agencies, corporations, space societies, research institutes, universities, associations, and museums worldwide. As an IAF Member, you are part of a global community that advances new technologies and space-based applications, discusses policy matters, and promotes awareness about how space benefits life here on Earth. Together, we engage all space actors, to grow our sector and foster cooperation while pursuing our goal of *Connecting @ll Space People*.

If your organization is interested in becoming an IAF member please get in touch with the IAF Secretariat at [membership@iafastro.org](mailto:membership@iafastro.org)



## NEWS!



Aerospace Italy 2024 paper records. The Calls for Papers for both the Aeroacoustics and ICAS conferences have concluded, achieving all-time high records for abstract submissions. The ICAS2024 conference reached an impressive total of more than 1100 submissions, a significant increase from the abstracts received during ICAS2022. Among these submissions, Italy stands out as the second-highest contributing country, with over 170 papers. Furthermore, the Aeroacoustics conference in 2024 received an outstanding total of 500+ submissions, with approximately 50 coming from Italy, setting another all-time record!



The International Astronautical Federation flag was officially welcomed at Palazzo Lombardia in Milan, marking the beginning of a tour that will span esteemed universities, space research centers, districts, and industrial sites across the country. This initiative will provide a unique opportunity for industry leaders, researchers, and enthusiasts to celebrate the year leading up to IAC 2024! The Flag, handed over to the President of AIDAA, prof. Erasmo Carrera during the IAC Closing Ceremony, arrived in Milan on the 7<sup>th</sup> of October



We are pleased to announce AIDAA's 2024 initiative, designed to welcome international researchers to Italy, alongside 2024's key congresses: AIAA/CEAS Aeroacoustics 2024 ([aidaa.it/aeroacoustics](http://aidaa.it/aeroacoustics)), ICAS 2024 ([icas2024.com](http://icas2024.com)) and IAC 2024 ([iac2024.org](http://iac2024.org)).

- Scholarships:
- For Aerospace Engineering & Science scholars.
  - Weeks at top Italian Universities/Research Centers.
  - €1,000-€1,500 for expenses.
  - Focus: Early-stage researchers, women, and scholars from emerging countries.

Apply now!  
Candidates are required to submit a CV, a detailed one-page proposal, and at least two letters of recommendation to [info@aidaa.it](mailto:info@aidaa.it)



PhD Days Call for Papers: Deadline 5<sup>th</sup> March. The fourth edition of the Aerospace PhD-Days will be held in Scopello (TP), Sicily, from the 6<sup>th</sup> to the 9<sup>th</sup> of May 2024. This event is open to any PhD student in Aerospace Science and Engineering. To participate, an extended abstract on the PhD topic or part of it must be submitted. The main topics will be related to aeronautics, space, and aviation (<https://www.aidaa.it/phd-days-2024/abstract-submission-2024/>)



The American Astronautical Society (AAS) is the premier network of current and future space professionals dedicated to advancing all space activities. With many symposia, competitions, and technical meetings hosted throughout the year, AAS aims to be a source for the space industry to network, exchange information, discuss career aspirations, and expand space knowledge.

### Highlighting some of the events that AAS hosts:

**Von Braun Space Exploration Symposium:** The annual von Braun Space Exploration Symposium took place in-person on October 25-27<sup>th</sup>, 2023 at the University of Alabama in Huntsville. With the theme, "Advancing Space: From Lunar to LEO and Beyond", topics included Artemis, cislunar, propulsion, and more. We also hosted Bill Nelson, Destin Sandlin, and Mike Griffin as Keynote speakers. Learn more at [astronautical.org/vbs](http://astronautical.org/vbs).



**Guidance, Navigation, and Control Conference:** Held annually, the Guidance, Navigation, and Control Conference brings specialists around the world together to discuss topics covering the entire GN&C systems lifecycle while reflecting on the latest advancements of the aerospace industry. The 2024 event takes place on February 1-7 in Breckenridge, Colorado and will kick off with the high school outreach program, STEMscope. Learn more at [aas-rocky-mountain-section.org](http://aas-rocky-mountain-section.org).

**Goddard Space Science Symposium:** The 61st Goddard Space Science Symposium is returning in-person on March 20-22<sup>nd</sup>, 2024 at the University of Maryland in College Park, Maryland. The theme is "Space 2024: Pathways to the Future" where anticipated sessions include cislunar infrastructure, space weather, interplanetary missions, and more! The program is still coming together but further details are available at [astronautical.org/goddard](http://astronautical.org/goddard).



**Asgardia** unites people to build a new home for humankind in space. The population of the world's first **Space Nation** now exceeds **1,113,000**.

Our main scientific and ideological mission is facilitating the first childbirth in space — a symbol of human immortality. To achieve this goal, Asgardia conducts research in the fields of artificial gravity, cosmic radiation protection and space embryology. Another step forward was the recent [launch](#) of the **SIRIUS-23** isolation experiment at the **Institute of Biomedical Problems**. Asgardia is participating in **SIRIUS** project with its [programme](#) "Assessment of isolation impact on the microbiological and immunological status and mineral and bone metabolism in female body". A year-long isolation experiment involves Asgardian resident and crew physician [Ksenia Orlova](#) both as a researcher and as a research subject.



In October 2023, Baku, hometown of Asgardia's Founder, was the place of attraction for the highest dignitaries of Asgardia and a significant portion of the international space community as it hosted [III Asgardia Executives' Congress](#) and the 74<sup>th</sup> IAC [featuring Asgardia](#). "We are commencing large-scale work to get Asgardia recognised as an independent nation. Draft bilateral agreements on recognising the independence of the Space Nation will soon be sent to all 193 UN member states," **said Dr Igor Ashurbeyli, Head of Nation and Founder of Asgardia**.







Asgardia, which is now 7 years old, continues to grow steadily, staying true to its objective to provide all the necessary conditions to ensure a full-fledged human life in space.

One Humanity - One Unity



## EOSDA Confirmed EOS SAT-1 Satellite Data Validity



**EOS Data Analytics**, a provider of AI-powered satellite imagery analytics, announced the successful verification of the validity of data that the **EOS SAT-1** satellite collects and provides.

EOS SAT-1 is a small optical agri-focused satellite capable of monitoring up to one million square kilometers daily using 11 agri-related bands. Given the satellite's novel capabilities, it was crucial to confirm the consistency of the data it provides with other satellites and ground measurements. The verification ensures that EOS SAT-1 can be a reliable source for calculating critical plant characteristics such as its moisture level, Leaf Area Index, and others.

To verify the data collected by EOS SAT-1, ground measurements were conducted in Ukraine. These measurements employed The SunScan Canopy Analysis System from Delta-T Devices Ltd.

Ground verification is essential because it provides a direct comparison of satellite data with actual plant conditions, offering a more nuanced understanding than merely comparing data with other satellites.

*"The ground measurements we conducted in Ukraine is a significant milestone for us since they confirm the reliability of EOS SAT-1 data for our clients,"* stated **Oleksii Kryvobok**, Chief Science Expert at EOSDA.

*"The correlation between our ground measurements and the data from EOS SAT-1 validates the satellite's capabilities and underscores our commitment to providing accurate and actionable insights for sustainable agriculture,"* added **Oleksandr Kryvoshein**, Senior Researcher at EOSDA.

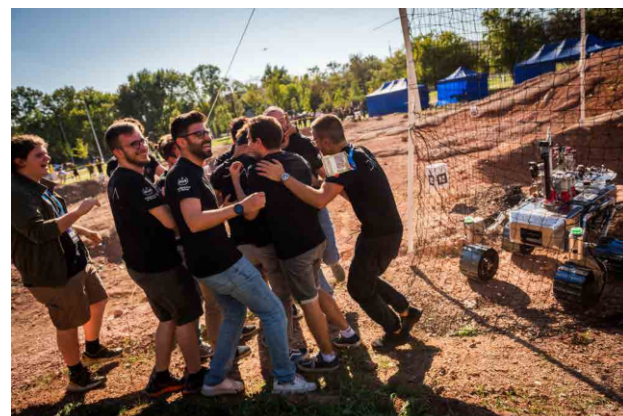
Measurements were carried out on four fields of soybean, maize, and sunflower. On each field, five to seven measurements were made.



## 10 Year anniversary of the European Rover Challenge

The ERC is a prestigious international space and robotics event that has been held in Poland for nearly 10 years. It combines a world-renowned Martian rover competition, a space industry conference, and a STEM exhibit.

The ERC is a thrilling spectacle that showcases the best of the best in planetary exploration. With tasks designed to replicate the challenges faced by real-life rovers on Mars and the Moon, it's a chance for the new generation of engineers to demonstrate their skills and creativity on a global stage under the watchful eye of leading industry experts and space agencies' deputies.



The main objective at the ERC is to design and build a Mars rover that will perform the competition's tasks with the utmost precision, modelled on real NASA and ESA space missions. On September 6-8, 2024, a special tenth anniversary edition of the European Rover Challenge will be held at the AGH University of Krakow. Learn more about the event at [roverchallenge.eu](https://roverchallenge.eu)



The ERC's main organizer is the [European Space Foundation](https://www.esf.eu) – an award-winning organization that supports initiatives prioritizing the future of the new generation, based on STEAM and space technologies. In 2023, the Foundation was the only European entity listed as a winner of the Global E-STEM Award from Pratt & Whitney and the North American Association for Environmental Education (NAAEE).



## The Rocket and Satellite Propulsion Laboratory Center has been opened in Warsaw

Łukasiewicz – Institute of Aviation inaugurated its new facilities for developing, qualifying and testing technologies related to green rocket and spacecraft propulsion.

The infrastructure will enable more efficient execution of research and development projects and commercial collaboration, including:

- development and qualification of environmentally friendly thrusters and engines,
- preparation of new propellants and chemical compatibility testing,
- development of satellite deorbiting systems,
- development of valves for space propulsion,
- maturation of avionics for spacecraft and space transportation systems.

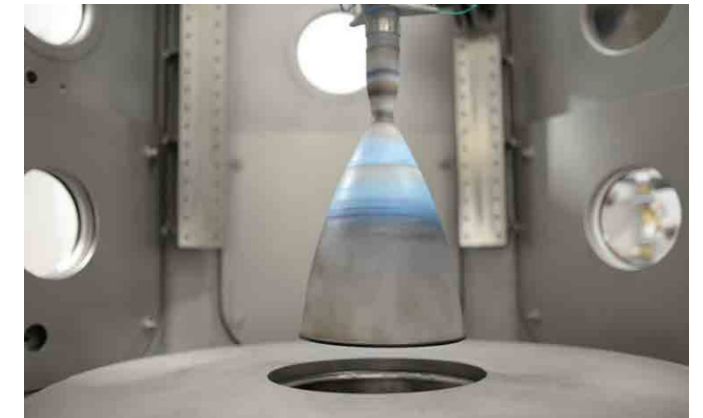


Photo credit: Łukasiewicz – Institute of Aviation

Thanks to the new facilities, Łukasiewicz – Institute of Aviation will be able to provide one-stop-shop ECSS-compliant services including advanced manufacturing, quality control and mechanical and environmental testing at one campus. With its portfolio of 30 projects from the European Space Agency, the Polish R&D entity is becoming one of the region's most active players in the domain of space technology.

The new center received financial support from the Regional Operational Program of the Mazowieckie Voivodeship for the years 2014-2020.

More information:

- <https://www.youtube.com/watch?v=ol9BP9OGGI0>
- [https://www.youtube.com/watch?v=uNR2B\\_ramto](https://www.youtube.com/watch?v=uNR2B_ramto)



## Timau National Observatory of Indonesia

Indonesia is set to host Southeast Asia's largest telescope next year. It is a 3.8-meter telescope equipped with a 3-band optical camera and a near-infrared camera as its initial instruments. Nestled at an elevation of 1300 meters above sea level, the Timau National Observatory of Indonesia (TNOI) is situated in one of the nation's regions renowned for remarkably clear skies, with a yearly clear sky fraction exceeding 65% and far from



light pollution. Positioned just 10° south of the equator, this observatory offers a unique vantage point, allowing extensive observation not only of the southern hemisphere but also the northern hemisphere. This cutting-edge facility will facilitate advanced astronomical studies in Indonesia, encompassing galactic structure, interstellar matter, extrasolar planets, and various other fields. Beyond this, the big telescope will support the smaller telescopes on-site in the context of space situational awareness, particularly in observing near-Earth objects and space debris. These capabilities will allow the country to stand at the forefront of astronomical and space research endeavors. TNOI will be opened for international research collaborations.



**Place your press relations on a strategic level, otherwise don't do it.**

I worked for almost 25 years with Ariespace's communications team, years of meetings, procedures, stress and passion. The European space activities were built around Ariane by visionaries like MM.F.d'Allest, H.Curien and a few other personalities, but also thanks to the launcher's technological successes, a good alignment of the planets for sales and dream teams.

When there was a serious technical problem, it was F.d'Allest himself who explained it by drawing a sketch on a board - and everyone understood. Jean-Yves Le Gall worked the same way. Ariespace dominated the world launcher market for a long time, in a period that was fairly straightforward (launching geostationary satellites 36,000kms away) but less dreamy than launches for exploration. We forget that Ariespace employees invented so many things, such as customer launch service, launch contracts, live launch broadcasts (video-transmission) etc... Each Ariespace lift-off was broadcast on the 20H French news and beyond. A strong brand that made sense, I remember that the Ariespace brand was for a long time (1995-2010) in a battle (No. 1 or 2) with Airbus in the brand polls of French aeronautical engineering schools – A space european triumphant but at the end of the cycle.

A revolutionary actor appeared in 2013, the SpaceX enterprise and its genial founder Elon Musk. The departure of J-Y Le Gall as President of CNES and the opening up of the private market in the United States and Europe gave me the idea of creating the **communications-smart agency** to support young space entrepreneurs in all aspects of communications and international press relations. Startups such as ThrustMe and Exotrail were keen to make a brand name for themselves in the international space community as quickly as possible (within 14 months). Private projects have multiplied and newspace news were of interest to readers. The production of serialized

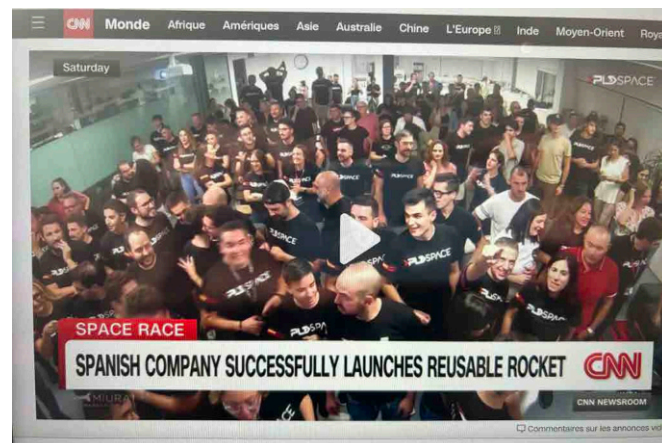
information in France and internationally quickly became the agency's priority.

My recipes worked, and even experienced friends like SES, Leosat and Newspace-Factory asked me for help. Press relations are strategic, and for it to work I need to speak regularly with a senior manager, listen to him/her and set up a timeline with the company's storytelling. #Newspace stories are exciting but complex, so it's all about making yourself understood. Newspace entrepreneurs must explain methodically and support the press, those who placed their press relations at the strategic level have had remarkable results.

Visibility is a very strong support for sales. Working your brand in the media introduces the possibility of highlighting your leader, your business and solutions you provide to worldwide markets and citizens. The international market and customers are the kings of the space ecosystem, congratulations to the space agencies and institutions (#ESA, #CNES, #IAF, etc..) that have evolved so well.

Visibility is a very strong support for sales. Working your brand in the media introduces the possibility of highlighting your leader, your business and solutions you provide to worldwide markets and citizens. The international market and customers are the kings of the space ecosystem, congratulations to the space agencies and institutions (ESA, CNES, IAF, etc..) that have evolved so well. With Jean-Jacques #Dordain we organized many "startup spotlights" at the best conferences and imagined #YEES Syndicate.

We need to be proactive, even opportunistic but always with a smile on your face. The energy and agility of the private sector make me optimistic for the future, I had the chance to meet passionate inventors such as at Exotrail, PLD Space, Unseenlabs, Share My Space and many others.



**My mission is to build your company's core press target. Here we are in 2024, that is to say 10 years of activity with communications-smart at the service of young space entrepreneurs.**

## MISSION SPACE

**University of Luxembourg and Mission Space team up to create the world's most accurate space weather forecasting system**

The Luxembourg-based space tech startup [Mission Space](#) and the University of Luxembourg's Interdisciplinary Centre for Security, Reliability and Trust (SnT) announce the signing of a partnership agreement for joint development of Machine Learning (ML) models in the field of space weather.

Space weather is one of the most dangerous natural hazards that affect space and ground-based technological systems as well as the health and life of humans. The potential global economic impact of space weather events is great and [could incur](#) losses totalling €38,4 BN per day.

To address the lack of comprehensive solutions in the field, Mission Space is developing a unique technology that combines 24/7 space weather monitoring, analytics and sector-specific predictions. With the expertise of researchers at SnT, the technology aims to increase the forecast accuracy and enable the timely dissemination of critical information to affected organizations.

The research will be led by Prof. Andreas Hein and Dr. Maxime Cordy. According to Hein, the team will improve existing methods for space weather forecasting by uniting SnT's research strength in the areas of space systems engineering and in ML.

The resulting development could have an impact in various arenas across the space industry. The technology may also improve the responsiveness of electric power grids, pipeline infrastructure, railway and navigation systems, aviation, emergency management systems, amongst others, in the event of weather events.

Mission Space founders Alex Pospikhov and Alexey Shirobokov say that developing this technology will position Luxembourg as a global hub for space weather studies.

The duration of the project is 3 years and coincides with the deployment of the Mission Space monitoring constellation.



[Moon Village Association's 7<sup>th</sup> Global Moon Village workshop and symposium](#) was held on December 6 - 10, 2023 in Kurashiki and Tottori, Japan. The goal of the event was to provide a unique

My dream is of course to continue the journey, work on the first newspace launches (PLD Space) and help put young space projects into orbit from the Guiana Space Center (CSG), French Guiana – deep in my heart.

**Jacques Denavaut, President of communications-smart Lda, Former senior communications VP of Ariespace.**

[www.communications-smart.com](http://www.communications-smart.com) @communicatsmart



**KBR Awarded Top Contractor Title at Two NASA Centers for the Second Year**

KBR's [legacy of excellence with NASA](#) continues with recent prestigious awards including 2023 Large Business Prime Contractor of the Year wins at both NASA Johnson Space Center (JSC) and NASA Goddard Space Flight Center (GSFC), marking a two-year winning streak for GSFC.

KBR's dual NASA Small Business Industry Awards recognize its excellent contract performance, NASA outreach, small business utilization, and strong ethical practices. Nominated by satisfied customers, this achievement reflects KBR's ongoing strategic efforts to empower its small business teammates.

Serving GSFC for more than six decades, KBR is one of the center's largest contractors with three prime contracts, including the Ground Systems and Missions Operations (GSMO) III, as well as multiple subcontracts and joint ventures. Some pertinent on-site projects KBR supports include the recent [ILLUMA-T launch](#) and [PACE mission](#), which focus on space communications and Earth atmospheric research, respectively.

Similarly, KBR's legacy at JSC dates back to 1962 and currently includes three major prime contracts, including the Human Health and Performance Contract (HHPC), Mission Systems Operations Contract (MSOC), Integrated Mission Operations Contract (IMOC) III, as well as several significant subcontractor roles. At JSC, KBR experts are embedded throughout the [Artemis mission](#), including helping to develop [NASA's next-generation spacesuit](#), and can be found around-the-clock managing mission control posts. mission control posts.

KBR's top-tier performance in support of NASA and small businesses continues years of recognition, including 10 similar industry awards from the past five years.



opportunity for stakeholders from around the world to directly contact one another, exchange opinions, make new contacts, and build relationships. In the presence of 200 participants, the first MVA Moon Markets award was given to ispace and in 2024, there will be nine Moon Market awards for categories identified by the Lunar Commerce Portfolio. The Global workshop and symposium was hosted by Okayama University, Tottori University and Kyoto University and were kindly supported by MASC, SUHPHS, Kurashiki City and JAXA. The complete list of sponsors can be found [here](#).



Ispace wins the first MVA Moon Markets Award

The 8<sup>th</sup> edition of the Global Moon Village workshop and symposium location was also announced during the event. Luxembourg will host for the year 2024 (3-5 December) and will be supported by the Luxembourg Space Agency. More details will be published on the MVA website in the coming months.



On 20<sup>th</sup> July, MVA will be celebrating the International Moon Day - an annual educational, cultural and scientific event. The event is designed to raise awareness among the public and generate support for sustainable lunar exploration and utilization. This year's theme is "Illuminating the Shadows". The proposals for organizers and sponsors are now open - visit the IMD [website](#) or [contact us](#) directly for more details.



The National Space Science Agency (NSSA) has initiated several collaborative lunar projects that will be announced in the coming months, as the agency is extending its reach for space exploration, as well as contributing to the Artemis Accords.

The agency participated in the first-ever Space Agencies Leaders' Summit organized by UAE Space Agency at COP28 in Dubai. This

summit addressed the challenges and opportunities found in the sector with a focus on the sustainability and preservation of our universe for future generations.



A member of the agency, Eng. Aysha Alharam won the Space & Satellite Professionals International (SSPI) 20 under 35 Award for young professionals to watch in the coming years.



The NSSA participated in the UN/WHO International Conference on Space and Global Health organized by UNOOSA. This participation has provided various ways to utilize space and its technology to aid the health sector in the Kingdom of Bahrain by providing valuable information and support in improving the delivery of services.



The agency has also participated in the GIS Day 2023 and discussed the application of space technologies to empower agriculture data analysis. Additionally, the agency participated in the UK Space Conference that was held in Belfast where various space entities exchanged ideas, plans, and partnerships that encouraged development and success in the emerging space age.



In addition to commencing its new strategic plan for the next five years (2024-2028) starting this January. This marks a significant milestone for the agency and showcases the opportunities that lie ahead.

**Singapore:**  
Home to a thriving space sector & location of choice for Space businesses



Singapore's thriving space sector is home to more than 2,000 professionals and researchers across more than 60 local and international companies across the space value chain.

Singapore's national space office, the Office for Space Technology & Industry (OSTIn), manages the \$150M flagship Space Technology Development Programme that supports the

development of space technologies for terrestrial applications, and disruptive small sat technologies for innovative and sustainable applications.

Our pursuit in the abovementioned niche space technology areas is supported by Singapore's strengths in **Innovation, Advanced Manufacturing, and Artificial Intelligence.**

- 1. Innovation** – Singapore has a vibrant ecosystem featuring global R&D labs for leading Fortune 500 companies, as well as over 400 venture capital firms, and over 200 incubators and accelerators. We work with companies to develop solutions to solve the world's most pressing problems.
- 2. Advanced Manufacturing** – With deep engineering and innovation capabilities, Singapore is recognised as the global leader in high-value manufacturing, and the world's 5th largest exporter of high-tech products. The Singapore Government is investing more than S\$3 billion over 5 years to boost our advanced manufacturing capabilities.
- 3. Artificial Intelligence (AI)** – Singapore is known globally as a competitive hub for AI talent, having invested around S\$70M in AI talent and opened 3 new centres of innovation to help small and medium size enterprises create and adopt new AI products and solutions.



Situated at the heart of Southeast Asia (SEA), businesses can tap into a US\$3.2 trillion economy, which is fast-growing and forecasted to be the 4th largest economy by 2030. **Singapore is an excellent gateway to SEA**, with its extensive connectivity, network of Free Trade Agreements and digital cooperation initiatives.

Learn more about Singapore's space sector via [www.space.gov.sg](http://www.space.gov.sg), and connect with us on [LinkedIn](#) for news and regular updates.



**2023 as a fruitful year for the international involvement of Slovakia**

In 2023, Slovakia further strengthened its position as an active member of the international space community. It experienced its first year as an Associate Member of the European Space Agency, already engaging in the optional programmes of ESA



such as Future EO or General Support Technology Programme and further broadening its international industrial collaborations.

The Slovak Space Office – Industry Branch (SARIO) organized another successful edition of its leading conference Emerging Space for the first time in the capital city of Bratislava, involving important institutional and industry partners, such as ASD Eurospace, International Astronautical Federation, EU Agency for the Space Programme (EUSPA), European Space Agency, Eurisy, Space Foundation, Space Generation Advisory Council, Thales Alenia Space, Airbus, GMV, SAB Aerospace, and Beyond Gravity. SSO-SARIO has also increased the international footprint in practically all of its ecosystem-building activities, including the startup incubation and hackathons.

In 2023, the Slovak Investment and Trade Development Agency organized the historically first exhibition of the Slovak companies at the SIAE 2023 as well as business missions at Dubai Airshow and the IAC in Baku. The last year's IAC saw also election of Michal Brichta, the Director of Slovak Space Office – Industry Branch, as the first Slovak Vice President of the IAF.



## Space Architecture Learning Journey and Executive MBA

Embark on an unparalleled learning experience with the **Space Architecture Learning Journey** in Houston, Texas, organized by the TU Wien Academy for Continuing Education, a proud member of the International Astronautical Federation (IAF). This exclusive study trip takes place from September 18-26, 2024, and is an integral part of our innovative **Executive MBA in Space Architecture** program.

During this immersive journey, you will explore the Space Center at the University of Houston, engage in company visits, attend lectures, and participate in group workshops with international experts and academics. The itinerary includes excursions to

NASA, Lunar Planetary Institute, Space Center Houston, and Sasakawa International Center for Space Architecture (SICSA).

Our unique innovative MBA program bridges the gap between space and Earth by tackling real-world challenges and connecting economics, engineering, architecture, and various technical and social sciences. This part-time, English-taught program spans 4 semesters with 92 ECTS credits, plus a Master's Thesis.

As an IAF member or employee of an IAF member, you are eligible for a **5% discount** off the regular price for our Executive MBA in Space Architecture at TU Wien.

This program prepares you for a career in the international and interdisciplinary space architecture field. Gain insights into space habitat approaches, methods, and the latest advancements in technology and engineering.

Seize this unique opportunity to advance your career with our Executive MBA in Space Architecture.

For more information and to secure your spot, visit our website: [https://www.tuwien.at/en/ace/landing-pages/space-architecture-iaf?utm\\_source=iaf-newsletter&utm\\_medium=email&utm\\_campaign=emba-space&utm\\_term=newsletter&utm\\_content=iaf](https://www.tuwien.at/en/ace/landing-pages/space-architecture-iaf?utm_source=iaf-newsletter&utm_medium=email&utm_campaign=emba-space&utm_term=newsletter&utm_content=iaf)



After celebrating its 5-year recently, Türkiye's first astronaut, Alper Gezeravcı, is launched on Thursday, Jan. 18 at 4:49 p.m. ET for the Axiom Mission 3 (Ax-3) to the International Space Station (ISS). This historic moment marks a significant milestone in Türkiye's space endeavors, and we eagerly anticipate Mr. Gezeravcı's contributions to space exploration. It is planned to execute 13 experiments during his 14-day mission. These experiments were gathered from all around the Türkiye.



## About Space Technology Conference:

Turkish Space Agency (TUA) is thrilled to partner with Dialogue Events (UK) Ltd for the Space Technology Conference (STC) in Ankara from April 24 to 26, 2024.

The conference and co-located showcase will be held in the 5-star JW Marriott Hotel and incorporate panel discussions, showcase display stands, technical round tables, one to one c-level G2B and B2B meetings, site visits, numerous networking events and a post event trip to Cappadocia.

Türkiye looks forward to welcoming global leaders, industry experts, and innovators to discuss the future of space exploration, technology, and collaboration.



## About IAC 2026 in Antalya:

We are thrilled to bring you exciting news from the world of space exploration and international collaboration. The Turkish Space Agency (TUA) has emerged as the successful bidder to host the prestigious International Astronautical Congress (IAC) in 2026!

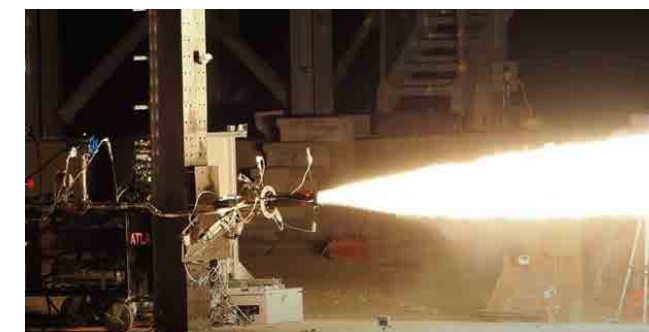
The picturesque city of Antalya, Türkiye, will be the focal point of global space discussions from October 2-6, 2026. This enchanting destination, known for its rich history, cultural diversity, and stunning landscapes, sets the stage for an unforgettable IAC experience.

The next few years promise exciting developments, and we encourage all IAF members and space enthusiasts to join Türkiye on this remarkable space journey.



## Viterbi School of Engineering, USC Liquid Propulsion Laboratory

The Viterbi School of Engineering's Liquid Propulsion Laboratory (LPL) at the University of Southern California (USC) designs, builds, and tests industry-grade liquid rocket engines and feed systems. The student-operated LPL static fired its regeneratively cooled 675 lbf (3 kN) thrust Kerosene/LOX engine in December 2023. The previous 10-second duration test of this engine in April 2023 verified the regenerative cooling design. The recent firing tested for the first time a new technology -- thrust vectoring.



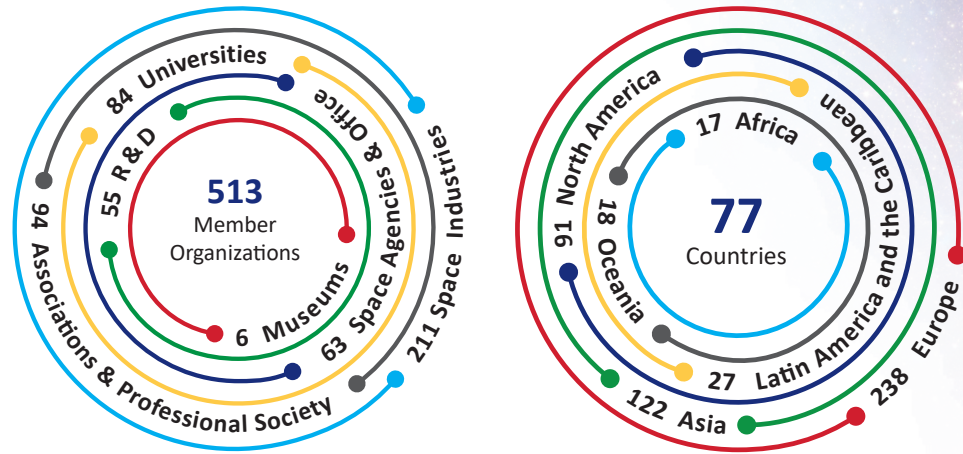
During the firing in December, the engine was vectored 7 degrees in each direction. In addition, USC LPL successfully tested a new data acquisition system and a new feed system, named Atlas, which were designed and built for the lab's larger 2250 lbf (10 kN) thrust Kerosene/LOX engine, named Balerion. Both engines were manufactured using novel laser powder bed fusion (L-PBF), thereby strengthening the lab's additive manufacturing knowledge and design capabilities. Looking into 2024, USC LPL plans to static fire both engines again, further validating their thrust vectoring technology and attempting throttling.





# INTERNATIONAL ASTRONAUTICAL FEDERATION

## Join the world's leading space advocacy body!



### OUR BENEFITS

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*Connecting @ll Space People*



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