International Astronautical Federation News

09/2025 (September 2025)

IAF President's Welcome

Dear IAF friends,

Welcome to the latest edition of the IAF Newsletter — your source for news on the Federation's activities, events, and developments. Each edition brings us closer as a community, and I am continually inspired by the progress, innovation, and collaboration that define the world's largest international space non-profit and its nearly 600-member organizations.

At the IAF Global Space Exploration Conference (GLEX 2025) in New Delhi, India from 7-9 May 2025, we reaffirmed our community's strong commitment to collaboration in space exploration. This year's GLEX brought together a vibrant and diverse community of over 1,500 experts, leaders, and visionaries from 36 countries from around the globe. What stood out was the enormous number of students and young professionals present. It's clear that STEM is thriving in the rapidly growing space sector, and India has sown the seeds for their next generation of explorers.

In a few days the 76th International Astronautical Congress kicks off in Sydney, Australia. This will be a landmark event as we return to Oceania seven years after the transformational 68th IAC in Adelaide with an even more powerful platform to amplify regional voices. With the theme "Sustainable Space: Resilient Earth," IAC 2025 is ready to explore how our work in space can contribute to a more sustainable and resilient future for humanity here on Earth.

The IAC 2025 has already set a record with over 3,000 Early Bird Registrations! This extraordinary achievement reflects the global space community's growing enthusiasm and commitment to shaping the future of space. Last year in Milan, Italy we experienced the world's largest gathering of space professionals in history with over 11,200 delegates for a truly extraordinary convocation. This year we are venturing to the opposite side of the planet build deeper connections with our cohort from India, East Asia, Southeast Asia, and Oceania.

Sydney may be a faraway IAC destination for many delegates — but it offers an unmatched opportunity to shine a spotlight on this vast pacific region that is home to more than 60% of the world's population. With the enthusiastic support of our host, the Space Industry Association of Australia (SIAA), and co-hosts the Australian Space Agency and the Government of New South Wales, IAC 2025 promises to be an unforgettable event with diverse programming and a future-facing agenda.

We also look forward to welcoming you in Kigali, Rwanda, from 2-4 June 2026 for the IAF Global Conference on Climate Change, where leading experts will convene in Africa to explore space-based solutions for our planet's most pressing environmental challenges. Additionally, preparations are well underway for the 77th International Astronautical Congress (IAC 2027) in Antalya, Türkiye from 5-9 October 2026 — a broad opportunity to engage with a dynamic space community at the crossroads of Europe and Asia. Now is the ideal time to submit your papers and proposals to contribute to these prestigious events and help shape the future of global space endeavours.

As this IAC 2025 will mark the end of my term as IAF President, I would like to take this opportunity to thank you all — our esteemed members, partners, and broader space community — for your unwavering support and engagement. We have made great progress on my agenda focused on sustainability, investment, and security (SIS) as topics driving the space sector forward. Our SIS task force leaders are now working to fold their multiple activities into standing IAF committees and communities of interest. I want to thank Joe Landon, Agnieszka Kukaszczyk, Carissa Christensen, and Victoria Sampson for spearheading the project and building program content for the IAF community.

It has been an honour to serve, and I am pleased to pass the leadership to my distinguished colleague Gabriella Arrigo, who will carry our Federation forward with expertise, energy, and international insight.

Let us continue building bridges across nations, generations, and disciplines — and make space accessible, sustainable, and inspiring for all. Enjoy reading the Newsletter.

Clay MOWRY, IAF President

IN THIS ISSUE

IMPORTANT DATES & Deadlines:

- **IAF Spring Meetings 2025, Paris, France:** 24 – 26 March 2026
- **GLOC 2026, Kigali, Rwanda:** 2 – 4 June 2026
- **IAC 2026, Antalya, Türkiye:** 5 – 9 October 2026
- **IAC 2026, Poznań, Poland:** 27 September – 1 October 2027

Connecting @ll Space People

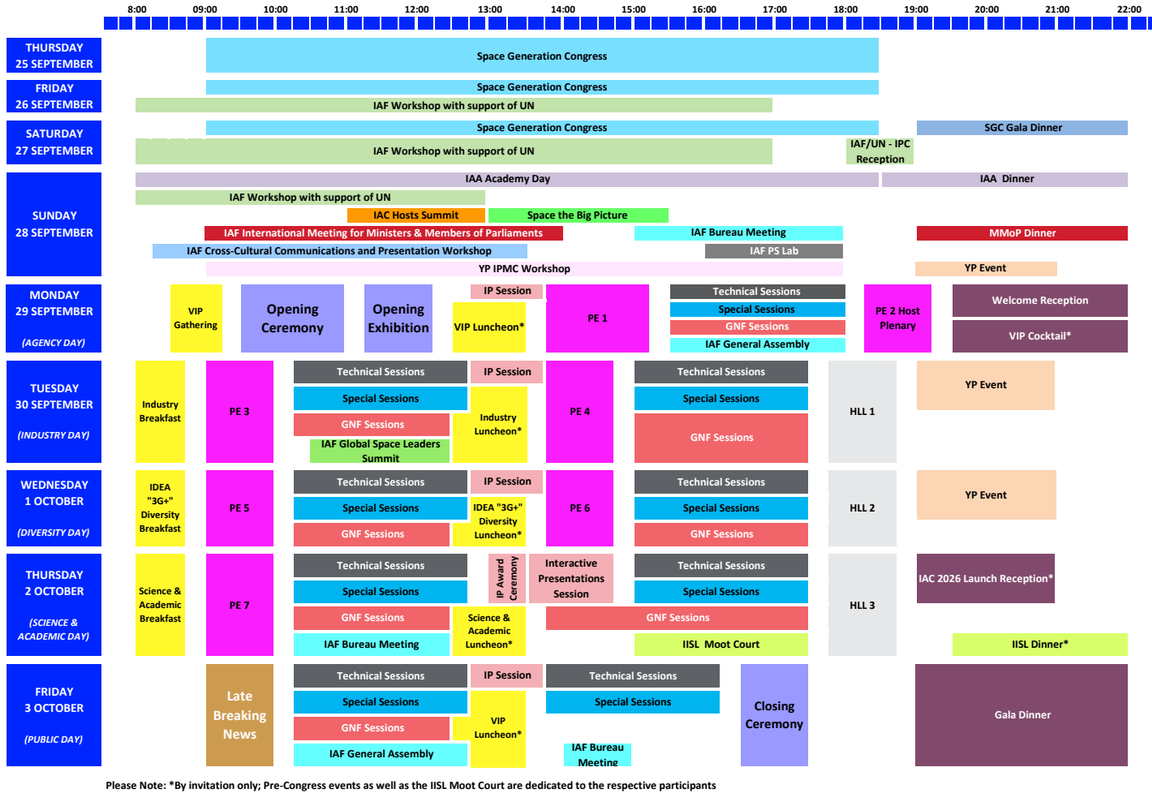
IAC 2025 – SYDNEY, AUSTRALIA

29 SEPT - 03 OCT 2025

About the IAC 2025 Programme

The 76th International Astronautical Congress in Sydney, Australia is just around the corner! Organized by the International **Astronautical Federation** (IAF), hosted by **Space Industry Association of Australia** (SIAA) and co-hosted by Australian Space Agency and NSW Government, IAC 2025 will gather thousands of space professionals, decision-makers, academics, industry leaders, astronauts, and students from across the globe.

IAC 2025 at a Glance



Please Note: *By invitation only; Pre-Congress events as well as the IISL Moot Court are dedicated to the respective participants

IAC 2025 promises an expansive programme featuring high-level plenary and the IAF Global Networking Forum (GNF) sessions, ministerial and agency roundtables, over 200 technical sessions including Interactive Presentations (IP) to compete for the IAF IP Award. Attendees will benefit from unmatched opportunities for cross-sector dialogue, knowledge exchange, and global exposure.

The Final Programmes are divided into five different parts and cover the whole spectrum of the event. Anything you need to know about the IAC can be found in the Final Programmes!

- **Part 1 - General Info & Congress Overview HERE**
- **Part 2 - Public, Plenary & IAF GNF Programme HERE**
- **Part 3 - Technical Programme HERE**
- **Part 4 - Other Events HERE**
- **Part 5 - Exhibition HERE**

IAC 2025 PLENARY PROGRAMME:

PP PE HLL LBN

PLENARY EVENTS:

PE

One-to-One with Heads of Space Agencies

Day: Monday 29 September
Time: 13:45 - 15:15 AEST
Location: Darling Harbour Theatre - International Convention Centre (ICC) Sydney

Beyond integration: Building Earth-Sky Knowledge Infrastructure for Co-discovery in Space and Sustainability

Day: Monday 29 September
Time: 18:15 - 19:15 AEST
Location: International Convention Centre (ICC) Sydney - Darling Harbour Theatre

How a Circular Economy Framework Unlocks Commercial Success in Space
Day: Tuesday 30 September
Time: 09:00 - 10:00 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

Learning to Live on Another World: The International Community's Return to the Moon
Day: Tuesday 30 September
Time: 13:45 - 14:45 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

Healing Earth, Envisioning Space: Indigenous Knowledge and Partnerships for a Resilient Future
Day: Wednesday 1 October
Time: 09:00 - 10:00 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

Designing the Future of Human Spaceflight
Day: Wednesday 1 October
Time: 13:45 - 14:45 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

Space Sustainability: Regional Priorities, Global Responsibility
Day: Thursday 2 October
Time: 09:00 - 10:00 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

HIGHLIGHT LECTURES: HLL

Waratah Seed: Australia's First Industry Ride-Share Satellite
Day: Tuesday 30 September
Time: 17:45 - 18:45 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

ADRAS-J: First Encounter with Space Debris
Day: Wednesday 1 October
Time: 17:45 - 18:45 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

Astronomy from the Moon: a science cornucopia, with challenges
Day: Thursday 2 October
Time: 17:45 - 18:45 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

LATE BREAKING NEWS: LBN

NISAR: Dual Frequencies - Single Purpose - For a Resilient Earth
Day: Friday 3 October
Time: 09:00 – 09:30 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

Launching Australia's First Orbital Rocket – Lessons Learnt
Day: Friday 3 October
Time: 09:30 – 10:00 AEST
Location: Pyrmont Theatre, International Convention Centre (ICC) Sydney

WORLD SPACE AWARD

The IAF World Space Award – Excellence in Space Recognized on the IAC 2025 Stage

The International Astronautical Federation (IAF) is proud to announce the recipients of its most prestigious award: the IAF World Space Award 2025. As the IAF's highest honor, traditionally described as the "Oscar in Space", this award is presented to individuals and teams whose outstanding contributions have made a lasting global impact on space science, technology, law, medicine, or management. This year's awards will be presented during the Opening Ceremony of the 76th International Astronautical Congress (IAC 2025), taking place on Monday, 29 September 2025, in Sydney, Australia.

The 2025 IAF World Space Award – Individual Category

Awarded to: **Jeff Bezos**

Founder of Blue Origin, Jeff Bezos is recognized for his visionary leadership and commitment to building a sustainable future in space for the benefit of Earth. His lifelong passion for space exploration has translated into real-world impact through Blue Origin's ambitious missions. The first successful launch of New Glenn in 2025 represents a major leap in advancing reusable launch technology. Mr. Bezos' vision aligns seamlessly with this year's IAC theme, "Sustainable Space: Resilient Earth."

The 2025 IAF World Space Award – Team Category

Awarded to: **The Chang'E-6 Mission Team**

In a historic achievement, China's Chang'E-6 mission successfully returned lunar samples from the far side of the Moon – a first in human spaceflight history. This groundbreaking mission marks a major milestone in scientific exploration and reaffirms international ambition toward deeper space discovery.

THE IAC 2025 APP

Through the IAC 2025 Congress App you will be able to connect and collaborate with the entire IAF Community and check on the full IAC 2025 Programme. Please download the IAF App now and let us know what you think about it, what could be improved and of course what you love the most.

ANDROID

iOS

GLOC 2026

The International Astronautical Federation (IAF) and its member - the Rwanda Space Agency (RSA), are thrilled to announce the second edition of the **IAF Global Space Conference on Climate Change (GLOC 2026)**, set to take place in **Kigali, Rwanda** from **2 to 4 June 2026**. The conference theme "*Uniting Space and Earth for Climate Resilience*" aims to harness the power of space-based technologies and applications in addressing the pressing challenges of climate change.

We invite researchers, practitioners, thought leaders, students and professionals to submit abstracts that reflect innovative ideas and solutions across a diverse array of topics, including but not limited to:

- **Climate Adaptation and Resilience**
- **Green House Gas Monitoring and Impact Assessment**
- **AI for Climate Adaptation and Resilience**
- **Service Development and Data Access**
- **Disasters and Emergency Management**
- **Good Governance and Climate Policy, SDGs Alignment**
- **Space Technology and Innovation for Climate**
- **Economy, Finance and Investments for Climate Goals**
- **Outreach, Education, Community Training and Knowledge Sharing/ International Collaboration**

Selected abstracts will be presented as interactive presentations, utilizing state-of-the-art infrastructure to foster engaging discussions. Additionally, these presentations will have the opportunity to compete in the prestigious IP Competition, with awards recognizing outstanding contributions.

Abstract Deadline: **7 November 2025 (23:59 CET)**

SUBMIT YOUR ABSTRACT

In case of any questions regarding abstract submission, ipsupport@iafastro.org

Join us in Kigali as we unite efforts and innovate sustainable future.

We look forward to your contributions that will empower change dialogue!

- GLOC 2026 WEBSITE
- GLOC 2026 BROCHURE
- SUBMIT YOUR ABSTRACT
- ABSTRACT SUBMISSION FAQ
- IPC MEMBERS

IAC 2026

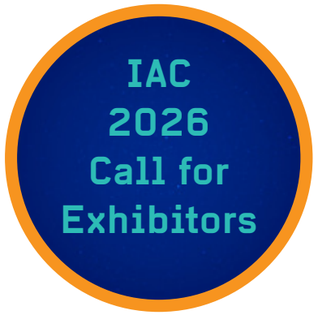
IAC 2026 Antalya Sponsorship and Exhibition Bookings Open on 29 September

The 77th International Astronautical Congress will be hosted in Antalya, Türkiye on 5 – 9 October 2026. Organized by the Interantional Astronautical Federation (IAF), hosted by the Turkish Space Agency (TUA) and co-hosted by SAHA. This event represents a key milestone in Türkiye's continued space journey and will be held under the theme "The World Needs More Space."

As part of the IAC 2026 Exhibition, booth selection will be prioritised by sponsorship tier: Anchor sponsors choose first, followed by Platinum Gold, Silver, and Bronze. Platinum sponsors will also receive 20 complimentary, full-access registration passes for the entire Congress, maximising team participation and networking.

Every sponsorship package includes curated cultural tours of Antalya, offering an immersive experience of the city's rich history, striking landscapes, and vibrant local culture—an ideal complement to the Congress. An à la carte sponsorship menu is available as well, enabling partners to select opportunities tailored to their goals. Early commitments receive priority access to the options that best match each brand's objectives and promotional strategy.

Applications for IAC 2026 will officially open on Day 1 of IAC 2025 Sydney, Monday, 29 September 2025.



Exhibition space will be allocated on a first-come, first-served basis, with priority extended to Anchor, Platinum, Gold, Silver, and Bronze partners (through the priority window ending 5 December 2025).

Sponsors are welcome to propose additional ideas to better align their participation with IAC 2026 objectives.

For proposals and inquiries, please contact the **IAC 2026 Antalya Sponsorship Team** at sponsorship@iac2026.org In addition, **Mr. Murad ÇAKIR** will be pleased to provide support when needed.

2025 IAF DIVERSITY SURVEY

INTERNATIONAL PLATFORM FOR DIVERSITY AND EQUALITY IN ASTRONAUTICS

3G+ GEOGRAPHY • GENERATION • GENDER • +

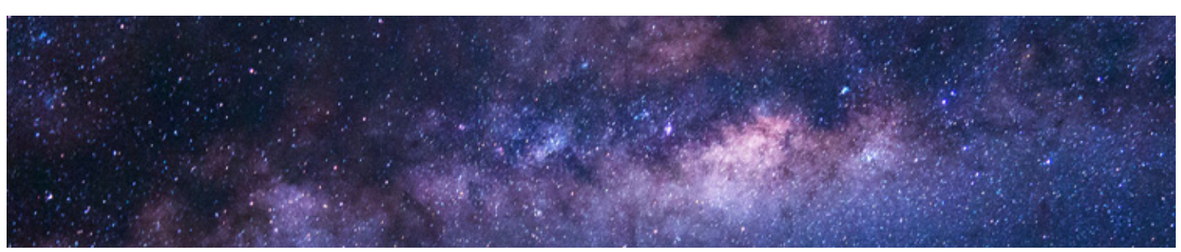
Diversity is one of the principal pillars of the International Astronautical Federation, and we are committed to promoting it within our community through concrete initiatives.

The IAF IDEA Committee invite you to join the Federation in shaping a more inclusive and diverse future for the global space community.

IAF DIVERSITY SUPPORTER IDEA 2025

Fill out the 2025 IAF Diversity Survey

By joining this initiative, you can explore the richness of your own diversity while also setting meaningful goals for your future objectives.



IAF MEMBERS' NEWS!

AIDAA ASSOCIAZIONE ITALIANA

CEAS-AIDAA Joint Conference 2025

The Italian Association of Aeronautics and Astronautics (AIDAA) and the Council of European Aerospace Societies (CEAS) will host a unique event for the **28th AIDAA International Congress** and the **10th CEAS Aerospace Europe Conference**. The CEAS-AIDAA Joint Conference 2025 will be held in Turin, Italy, from December 1 to 4, 2025, and will coincide with the **10th Aerospace & Defence Meetings**. The conference will also host the 9th Moon Village Association Workshop and Symposium, further enriching the program with internationally relevant discussions on lunar exploration and development

This event will bring together scientists, researchers, industry leaders, and policy-makers, offering a valuable opportunity for academic and industrial stakeholders to exchange knowledge and present recent advances through high-level plenary sessions and technical papers, and an exhibition area where student teams, companies, and institutions will showcase their projects

The CEAS-AIDAA Joint Conference 2025 will take place at the **Lingotto Congress Center**, a vibrant venue in the heart of Turin that perfectly combines modernity with historic charm. Once a renowned Fiat factory, this innovative space now hosts international conferences, offering state-of-the-art facilities and unique architectural features.

12th IAA Symposium on Future of Space Exploration

From June 9 to 11, 2025, the 12th IAA Symposium on the Future of Space Exploration was held in Turin, jointly organized by the **International Academy of Astronautics** and the **Italian Association of Aeronautics and Astronautics**, under the patronage of the **Italian Space Agency** and the **Politecnico di Torino**. The event took place at the Thales Alenia Space facility and at the Politecnico di Torino Architecture campus at the Valentino Castle. The participants were in excess of 100, and this established a record with respect to the previous editions. The number of countries represented by the participants was 16, including Japan, the US and representatives of the United Nations.

Aerotecnica Missili e Spazio is indexed in Scopus and Web of Science!

Aerotecnica Missili e Spazio, the official Journal of the Italian Association of Aeronautics and Astronautics (A.I.D.A.A.), active since 1920, and edited by Springer, has been indexed in **Scopus** and also in **Web of Science**.

Aerotecnica Missili & Spazio publishes wide-ranging contributions in the field of aerospace sciences, technologies and systems. This includes disciplines in the area of mechanical sciences like flight mechanics, aerodynamics, propulsion, aerothermochemistry, structures and materials, astrodynamics, as well as other disciplines such as telecommunication, navigation, control, electronics, informatics and all aspects related to ground testing and operations when applied to the aerospace field. Contributions regarding the aeronautical or space vehicle as an engineering system are particularly welcome.

This double achievement is the result of the continued efforts of AIDAA - The Italian Association of Aeronautics and Astronautics and the dedication of a team that believed in the journal's potential. Today, the majority of our accepted papers come from international contributors, reflecting the journal's growing global impact in aerospace research.

AIP Empowering Physical Scientists

Support the Next Generation of Physical Scientists — Sponsor the 2025 Physics & Astronomy Congress

The 2025 Physics & Astronomy Congress is set to take place October 30–November 1, 2025, in Denver, Colorado. The event is supported by AIP and hosted by Sigma Pi Sigma, the physics and astronomy honor society.

This unique event brings together over a thousand undergraduate students, faculty, and professionals to celebrate community, explore careers, and ignite a passion for science.

This year's theme, "*Supporting Our Phase Shifts,*" focuses on guiding students through key transitions in their academic and professional journeys. It's an opportunity for sponsors to play a direct role in shaping the future of physics and astronomy.

Why Sponsor?

- Connect with Emerging Talent: Engage with top physics and astronomy students from across the U.S.—future researchers, engineers, educators, and leaders in STEM.
- Showcase Your Brand: Gain visibility through event materials, exhibit spaces, digital promotion, and speaking opportunities.
- Support Equity in STEM: Your sponsorship helps fund travel and registration for students from underrepresented backgrounds, ensuring broader access to this transformative event.
- Be in Great Company: Join a lineup of prestigious speakers like Jocelyn Bell Burnell, K. Renee Horton, Eric Cornell, and Sarah Hörst, and align your organization with excellence in science.

Whether you're hiring, recruiting, or elevating your brand within the STEM ecosystem, the 2025 Congress is the place to be.

Sponsor now to secure your spot and make a lasting impact. Visit students.aip.org/congress or contact Anna Lee by email: alee@aip.org.

https://bit.ly/4g34stt

Agenzia Spaziale Italiana

Italy hosts IV Latin America-Caribbean Space Agencies Meeting

The Italian Space Agency (ASI) proudly co-organized with the Italo-Latin American International Organization (IILA), the *IV Latin America-Caribbean Space Agencies Meeting*. After having hosted the first IILA Meeting in 2022 in Rome, and after successful editions in Brazil (2023) and Chile (2024), the fourth IILA Space Agency Meeting returned to Italy.

Held from 3 to 6 June under the theme "*Cooperating to Implement Concrete Actions and Address Common Challenges*", the event brought together IILA Member States' delegations from Latin America and the Caribbean for an in-depth exchange with Italian and European institutions, academia, and industry stakeholders. The meeting served as a significant milestone in advancing space diplomacy, reinforcing Italy's role as a strategic bridge between Europe and the Latin American and Caribbean region.

Participants in the Luigi Broglio Auditorium, ASI headquarters, Rome Credit: Italian Space Agency

Four thematic panels were held during the first two days of the meeting held respectively at the ASI and IILA headquarters, focusing on climate monitoring, *e-health and telemedicine, sustainable agriculture and plant growth in space, capacity-building*.

A key highlight of the event was the signing of a cooperation agreement between ASI and IILA to jointly develop training programmes in Earth Observation, space economy, and space governance, satellite data and applications to respond to societal challenges affecting the countries in the region.

IILA Secretary-General, Antonella Cavallari and ASI's President, Teodoro Valente, following the signing of the agreement
Credit: Italian Space Agency

Participants also had the opportunity to visit industrial in the centre of Italy as Thales Alenia Space Italia, AVIO, and Telespazio – gaining direct insights into the excellence and capabilities of Italy's space industry and its commitment to building inclusive and forward-looking partnerships.

As Italy prepares to assume the presidency the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) under the leadership of ASI President, Prof. Teodoro Valente, this meeting emphasized Italy's commitment to promoting a sustainable, cooperative and inclusive global space agenda. With strategic vision and partnerships, ASI continues to position space as a powerful driver of innovation, resilience and sustainable development- throughout Latin America and beyond.

Astroscale Secures Patent for Breakthrough Space Debris Removal System

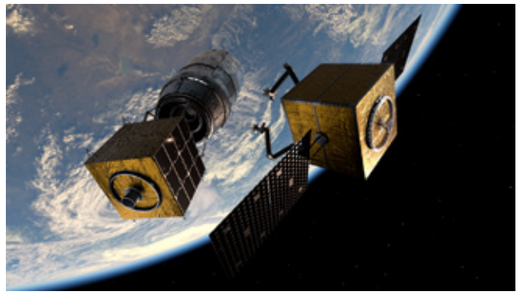
Astroscale has been granted U.S. Patent No. 12,234,043 B2 for its innovative "Method and System for Multi-Object Space Debris Removal." This marks a significant advancement in addressing the growing challenge of space debris in low Earth orbit.

The patented system introduces a reusable, distributed architecture that enables scalable and cost-effective active debris removal (ADR). Unlike traditional methods, Astroscale's approach allows a servicer to dock with a debris object and transfer it to a reentry shepherd vehicle in a lower orbit. The servicer then detaches and continues to engage additional debris targets, while the shepherd guides the initial object safely into Earth's atmosphere. This repeatable process supports the removal of multiple large debris objects per mission.

Astroscale's system also offers flexible mission profiles, including optional shepherd involvement and controlled reentry to minimize risks to populated areas and infrastructure. CTO Mike Lindsay emphasized the sustainability benefits, noting that reusable servicers reduce costs and environmental impact by avoiding destruction during reentry.

This patent complements Astroscale's ELSA-M mission, launching in 2026, which targets "prepared" satellites. The new method focuses on unprepared, legacy debris such as rocket bodies, reinforcing Astroscale's commitment to safe and sustainable space operations.

With this patent, Astroscale strengthens its IP portfolio and continues to lead in developing practical solutions for long-term orbital sustainability.



SPACE Academy of Azercosmos: Building Azerbaijan's Next Generation of Space Talent

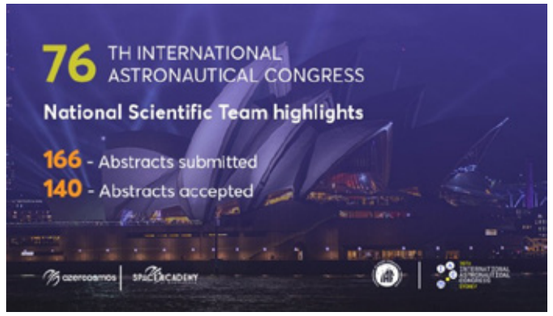
In recent years, space academies have become vital drivers of innovation and talent development, preparing the next generation of experts with knowledge and skills while fostering research and introducing faster, more efficient, and commercially feasible technologies. By bridging education and industry, they are transforming the traditional space sector and supporting its sustainable growth.

On this basis Azercosmos, the Space Agency of the Republic of Azerbaijan established a SPACE Academy - a center for continuous space education.

SPACE Academy is a platform that provides fundamentals in research, design, data analysis, technical writing. Peers and mentors are guide all participants through real case studies across satellite communications, Earth observation, AI for space data, and regulatory and safety topics, identifying promising students and early career researchers, train them in various scientific practices, and connect them with the global space community.

The results of the Academy are impressive. The National Scientific Team, an essential project of the SPACE Academy, presented 166 scientific papers at the 76th International Astronautical Congress in Sydney, all of which passed internal quality screening, with 140 accepted. This achievement positioned Azerbaijan among the leading countries worldwide in terms of both the volume and quality of scientific contributions. The project also aims to ensure active participation of Azerbaijani students and young researchers in the 77th Congress, to be held in Antalya, Türkiye, in 2026.

The SPACE Academy of Azercosmos, contributes to the space ecosystem and plays a crucial role in transforming Azerbaijan into a space hub along the East-West Silk Road.



Bahrain Space Agency (BSA).

The National Space Science Agency (NSSA) has officially announced its new name and logo which is Bahrain Space Agency (BSA).

The BSA has successfully launch its first fully Bahraini satellite AlMunther on March 2025 and has successfully completed the commissioning phase.

BSA's Eng. Yaqoob Alqassab was selected as a Mentor by the Space Generation Advisory Council (SGAC), in recognition of his extensive experience in the field of scientific research.

BSA aims to publish 18 research papers so far this year in SpaceOps 2025 and IAC 2025.

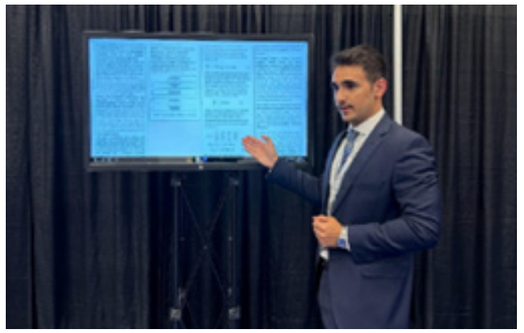
Also, BSA, Rhea Space Activities Company, in cooperation with the University of Strathclyde and S. Elvin Education, organized an event titled "From Labs to Launchpads: Building Space Science Startups".

BSA and the Smart Cities Society Launched a series of educational workshops in the field of space science and its applications to raise awareness of the space field in the community.

BSA's CEO, Dr. Mohamed Alaseeri participated as a keynote speaker at the launch ceremony of "AstroAid", a non-profit scientific organization with more than 53 countries representatives that aims to ensure that every individual receives advanced healthcare through space technologies. Additionally, Dr. Alaseeri participated in a series of workshops organized by the World Economic Forum aimed at developing a model toolkit for national space programs in emerging nations. The BSA also participated in the Annual meeting of the Arab Cooperation Group in Cairo, Egypt.

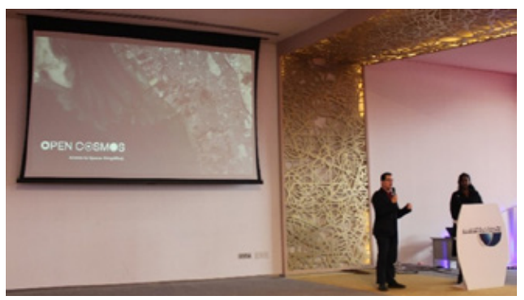
BSA's Engineer Ali Al-Quraan participated in the UTOKYO/ICG training program on GNSS which was held in Nepal.

The Bahrain Space Agency (BSA) participated in SpaceOps 2025 held in Canada with 3 research papers addressing advanced topics related to satellite operations and space mission sustainability.



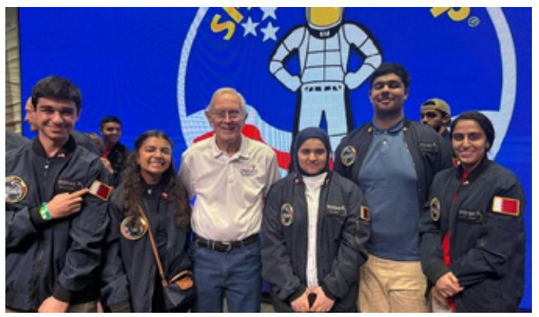
BSA also celebrated the appointment of the Bahraini legal space expert Sh. Hesa bint Ali Al-Khalifa as Second Vice-Chair of COPUOS.

BSA has also organized Data Cosmos Hackathon in Bahrain in collaboration with Open Cosmos and Bahrain Polytechnic with participants that formed 17 teams representing various academic disciplines.



BSA will also participate in IAC 2025 Sydney with 16 research papers, highlighting Bahrain's growing presence and active contribution in global space research.

The BSA celebrated the Kingdom of Bahrain's team that returned from the International Space Camp held in Alabama, USA. The Bahrain team won several awards, including Best Character Award, Best Outstanding Student, Best Educator Award, and the Leader's Trophy.



BSA initiated the payload commissioning operations for its AlMunther mission.

BSA participated in the Youth City event with a series of educational workshops in the field of space science and its applications to raise awareness of the space field in the community.

BSA organized in cooperation with the ICESCO, the Arabian Gulf University, Azercosmos, and the Space Park X Foundation, the international training workshop "Fundamentals of Space Medicine" accredited from National Health Regulatory Authority (NHRA).

BSA also participated in 4 years in a row in the national iLearn program aimed at raising awareness of space and its applications for elementary and middle school levels.

In April 2025, Brasília, the capital of Brazil, hosted the meeting of the heads of the BRICS countries' space agencies, an occasion in which strategic progress was discussed along three central axes: reducing technological asymmetries among member states, promoting sustainability in the use of outer space, and developing the BRICS Remote Sensing Satellite Virtual Constellation.

The President of the Brazilian Space Agency (AEB), Marco Antonio Chamon, highlighted the importance of cooperation to balance the technical capacities of the agencies, emphasizing that not all BRICS countries have the same level of infrastructure and expertise. In this context, proposals were presented for the exchange of students and researchers, as well as the creation of joint training programs, leveraging existing structures in member states.

Another point of relevance was the joint commitment to space sustainability, aligned with global discussions that will unfold at COP30, to be held in Belém in November. The importance of sharing data from the BRICS satellite constellation was also reinforced, with applications in areas such as environmental monitoring, agriculture, and natural disaster management.

For more, visit: https://brics.br/en
In parallel with the multilateral discussions, AEB and the United Arab Emirates Space Agency (UAESA) signed a Memorandum of Understanding (MoU). The MoU is focused on bilateral cooperation in the fields of space science, technology, and applications.

Fore more: https://www.gov.br/aeb/pt-br/assuntos/noticias/brasil-e-emirados-arabes-unidos-assinam-acordo-de-cooperacao-espacial-durante-reuniao-do-brics

Founding an International Legacy

The British Interplanetary Society (BIS) played a pivotal role in founding the International Astronautical Federation (IAF) in 1951. The BIS was one of 13 national space societies that together established the International Astronautical Federation. All other founding members are no longer in existence as national societies, leaving the BIS as the sole-surviving founder.

In 1949 a proposal was made, that a conference should be arranged to establish mutual cooperation, and the British Interplanetary Society organised a conference in London in 1951 that became the world's first International Congress on "The Artificial Satellite".

The British Interplanetary Society was founded in Liverpool, England in 1933 by Philip E. Cleator and is the oldest-surviving space advocacy organisation in the world. For over nine decades, the BIS has been devoted to initiating, promoting and disseminating new concepts and technical information about space flight and astronautics through meetings, symposia, publications, visits and exhibitions, as well as through distinguished publications such as the Journal of the British

Interplanetary Society (JBIS), first published in 1934 and the first to describe many aspects of space travel, which are now commonplace.

The BIS is a UK registered charity and a membership organisation that connects a global network of professionals and innovators from industry, agency, government, academia and enthusiasts, in its mission to promote the exploration of space through all aspects of astronautics for the benefit of humanity, making it an ideal partner for the IAF community.

CubeSpace Expands Reaction Wheel Range with Advanced MicroSat Solutions, Slashing Costs and Lead Times

CubeSpace (CS), a leader in Attitude Determination and Control Systems (ADCS), has extended its flight-proven Reaction Wheels to include several MicroSat options. This expansion addresses critical industry needs like shorter lead times, increased affordability, and uncompromising reliability, empowering satellite manufacturers to go from order to orbit faster.

With over a decade of experience and more than 1,400 reaction wheels in orbit, CS has a strong reputation for reliability. Its new MicroSat wheels feature a range of advanced capabilities, including full redundancy, built-in dampers available in pyramid configuration, in-house designed motors coupled with bearings and lubrication from industry-leading suppliers, and integrated high-resolution encoders.

CS's products are up to half the cost of competitors and come with a standard 12-week lead time, significantly reducing the financial and logistical burden on customers. The company already meets the requirements of ISO9001 and is actively working towards AS9100 certification, ensuring all products are designed and manufactured in line with industry best practices.

CS is a trusted supplier to major space agencies, as well as many constellation primes and ambitious commercial satellite builders. They have 350+ turn-key ADCS systems and 4,000+ products already operating in orbit, including Sun Sensors, Star Trackers, Magnetometers, Magnetorquers and Reaction Wheels. Supporting customers from design through to commissioning, CS is setting a new gold standard for control systems globally.

The Dalian-1 Lianli satellite, a 17-kg 12U high-resolution remote sensing CubeSat, was developed to validate a series of innovative technologies, including sub-meter high-resolution remote sensing imaging, the high-reliability OpenHarmony real-time operating system (RTOS), and the nontoxic hydroxylamine nitrate propulsion system. With the assistance of the three subsystems, the Dalian-1 Lianli satellite successfully captured remote sensing images with a resolution better than 1 m, meeting the expected requirements.

Fig. 1. Technical parameters and scientific objectives of the Dalian-1 Lianli satellite.

Fig. 2. Imagery of Dalian Suoyuwan Football Stadium Captured by the Dalian-1 Lianli satellite.

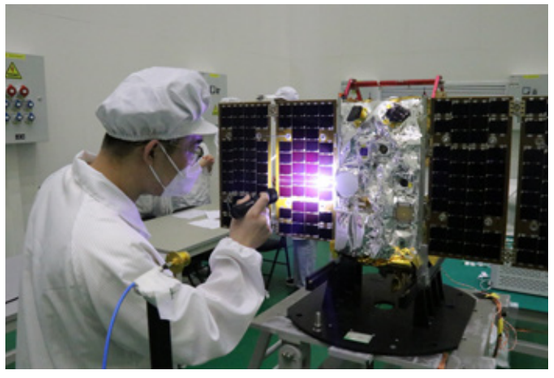


Fig. 3. Prof.Yu Xiaozhou was checking the satellite before launch.

Launched on May 10, 2023, aboard the Tianzhou-VI cargo spacecraft, the satellite was successfully deployed into orbit on January 18, 2024, following 253 days of in-orbit storage at the China Space Station.

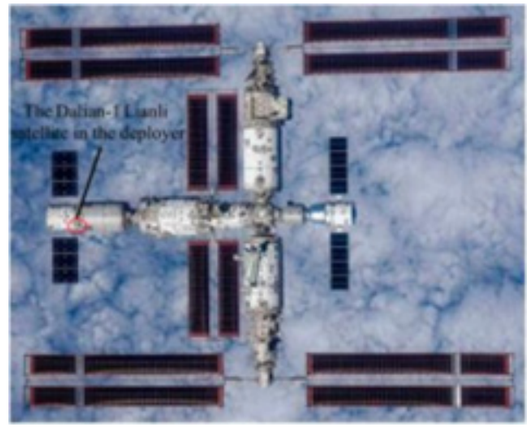


Fig. 4. China Space Station and Dalian-1 Lianli satellite.

OpenHarmony RTOS is the cornerstone that transforms micro/nano-satellites from "capable but fragile" into "mission-critical and resilient."

- Ultra-low latency (< 2 µs task switch) guarantees that attitude sensors close their control loops within milliseconds, turning raw data into precise pointing without jitter.
- Its micro-kernel architecture shrinks both code size and fault surface, cutting radiation-induced failure rates and delivering > 1000 h of continuous, on-orbit stability—an unprecedented figure for CubeSat-class subsystems.
- A unified, open-source driver framework slashes integration time; the same OS image now runs magnetometers, sun sensors, and attitude units without re-engineering, making rapid constellation deployment economically viable.

Two next-generation meteorological satellites launched successfully

It was a busy and exciting summer for the meteorological community, with the successful launch of two new next-generation EUMETSAT meteorological satellites.

Meteosat Third Generation sounding satellite (MTG-S1) was launched from Cape Canaveral in Florida, US on 1 July. MTG-S1 is the first ever European sounding satellite in geostationary orbit and will provide high-frequency data on temperature, humidity and trace gases throughout the atmosphere – enabling forecasters to detect the earliest signs of severe weather, improve forecasting and weather warnings and help protect lives

and property. It also hosts the Copernicus Sentinel-4 mission to provide hourly data on pollutants and aerosols – including from wildfires and volcanic eruptions.

Launch of SpaceX Falcon 9 carrying MTG-S1 satellite
Copyright: SpaceX

The second satellite launched is the first of the next generation of European polar-orbiting satellites, Metop Second Generation A1 (Metop-SGSA1), part of the EUMETSAT Polar System. It launched from Kourou in French Guiana on 13 August.

The Metop-SGA1 satellite hosts six atmospheric sounding and imaging instrument missions that will soon begin transmitting a wealth of timely, high-resolution and high-quality observations. These data will continue the Metop's role as Europe's most important source of meteorological observations for forecasts ranging from 12 hours to 10 days ahead. The satellite also hosts the Copernicus Sentinel-5 mission which will supply detailed data on atmospheric composition and trace gases affecting air quality.

The EUMETSAT community is now gearing up for the launch of the Copernicus Sentinel-6B satellite from Vandenberg Space Force Base in November, which will secure the continuity of mean sea level rise monitoring. EUMETSAT will operate the satellite and deliver its data to users.

Metop - Second Generation A1 (Metop-SGA1) - also carrying the European Union's Copernicus Sentinel-5A mission - lifts off on an Ariane 62 rocket from Europe's Spaceport in Kourou, French Guiana, 02:37 CEST, 13 August 2025.
Copyright: ESA, CNES, Arianespace

More information here: https://www.eumetsat.int/our-satellites/upcoming-launches

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HE SPACE it's all about people
A CS COMPANY

HE Space and CS Group shaping Space & securing Earth together!

At HE Space and CS Group innovation serves a clear ambition: to make space operations sustainable and to ensure a safer Earth. With decades of expertise in mission-critical systems, we position ourselves as trusted partners for institutions, industries, and operators facing today's most pressing challenges.
In space, we develop cutting-edge solutions for **space situational awareness and space traffic management**, helping to keep orbits safe and secure. By monitoring satellites and debris in real time, our experts and platforms enable operators to anticipate collisions, protect assets, and preserve space as a shared environment for future generations.

On Earth, we transform **satellite data into useful information**. Leveraging artificial intelligence and advanced processing chains, we provide decision-makers with key insights for climate monitoring, disaster response, and resource management. From **tracking wildfires and floods** to **supporting energy transition**, we help communities anticipate risks and adapt to change.

Sustainability is at the heart of our approach. Through **digital engineering, cybersecurity by design, and operational excellence**, we ensure that innovation goes hand in hand with responsibility. Every solution aims to optimize performance while reducing impact by supporting a vision of resilient infrastructures, smarter operations, and long-term sustainability.

By connecting ***space innovation with Earth resilience***, HE Space and CS Group demonstrate how technology can serve humanity. Our commitment is clear: to safeguard orbital environments, protect our planet, and contribute to a sustainable future where space and Earth evolve together.

THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

Celebrating Diversity and Driving Innovation: PolyU's Latest Milestones in Space Exploration

The Hong Kong Polytechnic University (PolyU) is immensely honored to be the recipient of the prestigious "IAF Excellence in '3G+' Diversity Award". PolyU is grateful to the IAF Inclusion, Diversity and Equity Administrative Committee (IDEA) for this recognition to its exceptional contributions to aerospace technology and profound commitment to fostering diversity, equity, and inclusion within the global space sector, making it the first institution in China and East Asia receiving this esteemed honor.

Further demonstrating its engagement in the global space community, PolyU will actively participate in the 3rd International Conference on Deep Space Exploration (TianDu), held in Hefei, China from September 4-5, 2025. PolyU will co-organise the "Planetary Science Exploration Sub-Forum and Exchange Session for Hong Kong and Macao Scientists". During the conference, PolyU professors will present the University's pioneering deep space research and aspirations, alongside groundbreaking work on 3D morphological modeling for asteroid exploration.
This collaborative momentum was recently strengthened by a strategic framework agreement signed with the Technology and Engineering Center for Space Utilization of the Chinese Academy of Sciences (CSU.CAS) in April, and swiftly followed by a highly productive CSU Briefing Workshop held at PolyU in July, where experts detailed the scientific experiment opportunities aboard the China Space Station. This session significantly enhanced PolyU researchers' understanding and has paved the way for concrete cooperation in key areas such as space manufacturing, lunar exploration, and artificial intelligence, solidifying the University's role in supporting national space strategy.

Launch and Re-Entry Safety Analysis

September 22-26 2025
Australian Space Agency (Canberra – Australia)
Registration fee: Euro 1760,-

The course is intended to provide the participant with an understanding of analyses for launch and re-entry safety, understanding the significance and procedures of range safety processes; and identifying resources for implementing launch re-entry safety. The participant will gain an understanding of

hazards associated with space launch and re-entry operations, the data required to quantify the hazards, methods for quantifying the risks from these operations, and effective means for mitigating the risk.

Flyer

IAASS Course information & registration

Space Nuclear Systems Safety

October 27-30 2025
SBIC – Noordwijk (The Netherlands)
Registration fee:
IAASS Member- Euro 1900
IAASS non-Member- Euro 1990

Space nuclear systems (SNS) have been launched into space for over 50 years. The SNS have evolved during this time in an effort to improve their safety and meet the needs of mission planners. The launch approval process has also evolved and with commercial space on the horizon will need to continue to adapt. Ensuring the safety of persons while allowing society to benefit from technological advancements is a balancing act. The course is intended to provide the participant with an introduction to SNS and associated launch approval processes. The participant will gain an understanding of the design of SNS, the approval process for launch of SNS, hazards associated with a failed launch of SNS, and contingency planning.

Flyer

IAASS Course information & Registration

www.iaass.org

Space Tech Expo Europe: Connecting Europe's Space Supply Chain

Space Tech Expo Europe is returning to Bremen, Germany this November! With over 800 exhibitors and 10,000 attendees, Space Tech Expo Europe offers you the opportunity to engage with top industry players, discover cutting-edge advancements, and forge meaningful business connections, all in one location. From satellite manufacturing and launch systems to ground support equipment, sustainable space exploration, and so much more, this is your chance to connect with the space supply chain.

Alongside the exhibition is a comprehensive conference programme, with dedicated Industry, Smallsats, Connectivity and Technology Conferences.

It's more than just an event, it's a catalyst for progress. Wherever you sit on the supply chain, this is your chance to elevate your expertise, expand your network, and contribute to Europe's thriving space ecosystem.

Register for free today, as together we shape the future of space.
https://utm.io/ui5aD

International Lunar Observatory Association: Pioneering Astronomy, Observation and Lunar Commercial Communications

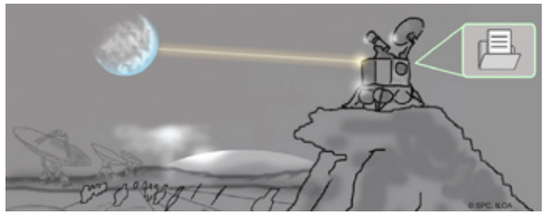
International Lunar Observatory Association (ILOA Hawai'i) is at the forefront of enabling observation and lunar commercial communications to help advance humanity as a multi world species, driving innovation in astrophysics, exploration and commercial enterprise.

ILOA is developing its flagship ILO-1 and ILO-2 missions, targeting the Moon South Pole region for 2027 landings. ILOA and Astrolab of Hawthorne CA reached agreement in June 2025 to mount the ILO-1 payload on the FLEX-C rover lightbar. ILO-1 is planned to operate for at least 1 year. The instruments aim to capture the first-ever robotic image of the Milky Way Galaxy / Center from the surface of the Moon, and other astronomical phenomena.

Through its affiliate, Space Age Publishing Company, ILOA will broadcast these images to Earth via weekly transmission, integrating lunar-acquired data, space news, industry insights, and brand messaging for a global / interglobal audience.

The ILO-C instrument is being integrated and tested aboard the Chang'E-7 lunar lander. It is intended to launch and land near Shackleton Rim about 90°S in late 2026. The ILO-C Workshop in Kamuela HI, USA hosted local Maunakea Observatories leaders and international participation in August 2025.

The ILO-X mostly successful precursor mission, launched in 2024 aboard Intuitive Machines IM-1 Nova-C Odysseus lander, marked a historic milestone by deploying a resilient camera to the lunar surface at Malapert A 80°S, capturing images of and from the Moon surface. This achievement, developed with Canadensys Aerospace, near Toronto, validated key technologies for sustained lunar operations.



Poland Celebrates AMBER's Milestone Anniversary and Opens Call for Payloads

On 3 July 2024, the Polish suborbital rocket ILR-33 AMBER 2K, designed by the Łukasiewicz – Institute of Aviation, successfully lifted off from Andøya Space Sub-Orbital in Norway and reached an altitude of 101 km, crossing the Kármán line. This marked the first rocket in the world that reached space using 98% high-test hydrogen peroxide as an oxidizer and a historic achievement for Poland's space sector.

One year later, the AMBER program is expanding beyond its record-breaking flight to build a broader ecosystem for suborbital missions in Poland. Having won a contract released by the Polish Space Agency (POLSA), Łukasiewicz – ILOT is opening new avenues for research and industry by launching a call for experiment concepts to be tested on future suborbital flights.
The initiative will allow universities, research institutions, and companies to validate technologies and experiments in conditions of short-duration microgravity and the extreme environment of the upper atmosphere — a chance that goes far beyond what traditional laboratories can offer. By providing access to space-like environments, it paves the way for advancements across diverse fields, including materials science, defence, medicine, and biology.

This undertaking demonstrates Poland's commitment to building a sustainable suborbital testing ecosystem. By opening new opportunities for international collaboration, it positions Poland as an emerging hub for innovative spaceflight services in Europe.

Beijing MinoSpace Technology Co., Ltd. (MINOSPACE), a key player in China's commercial Earth Observation (EO) satellite industry, was founded in August 2017 and is headquartered in Beijing, China.

MINOSPACE boasts advanced satellite Assembly, Integration, and Test (AIT) facilities and employs a team of over 320 elite engineers with expertise in the space industry. The company provides comprehensive, one-stop solutions for both satellite and ground segments, specializing in manufacturing satellites with resolutions from 10m to 0.3m and ground stations with diameters from 2.4m to 11m.

To date, MINOSPACE has launched 27 satellites into orbit, including milestones such as China's first 0.5m X-band and Ku-band commercial SAR satellites and the first 0.5m high-resolution optical satellite.

Furthermore, MINOSPACE offers customized solutions, including: satellite design, assembly, testing, and in-orbit delivery;

Subsystems design and manufacturing for Optical and SAR Payloads and Platforms, and the construction or provision of ground stations.

The Moon Village Association (MVA) proudly marked another milestone with the successful International Moon Day (IMD) 2025 Main Event, held on 20 July at the University of Dubai, United Arab Emirates. The event celebrated global achievements in space exploration and inspired future generations, in line with this year's theme: *One Moon, One Vision, One Future*.

The program featured keynotes, panels on lunar governance and industry. With the participation of the UNOOSA Deputy Director and leaders from government, academia, and industry, the event highlighted the UAE's growing role in space and the contribution of NGOs such as MVA to international cooperation.

IMD 2025 also set a record with 50 Global Events across 26 countries. Activities ranged from student workshops and public exhibitions to online webinars and city-wide festivals, demonstrating the creativity and enthusiasm of communities worldwide. **To further expand participation, the Global Event window has been extended until 31 October 2025. Organizations and individuals are invited to host activities and join this global celebration of lunar exploration**. More information can be found at https://internationalmoonday.org/host-an-imd-global-event

Looking ahead, preparations are underway for the **9th Global Moon Village Workshop & Symposium**, scheduled for 3–4 December 2025 in Turin, Italy, hosted by The Italian Association of Aeronautics and Astronautics (AIDAA) at the Lingotto Fiere Exhibition Centre. With the theme *Towards a new "giant leap" for humankind: A peaceful and sustainable Moon Village*, the Workshop will feature thematic and general sessions. Registration is open and preliminary program available at:

https://moonvillageassociation.org/9th-global-moon-village-workshop-symposium

Space Summit in Singapore, 2-3 February 2026

Space Summit 2026, a leadership forum, will convene on 2–3 February 2026 in conjunction with Singapore Airshow 2026. Singapore's established role as a hub for aerospace and technology makes it the natural home for the Space Summit – an initiative designed to have impact across Asia-Pacific and beyond. Themed "*New Frontiers: Shaping a Responsible and Inclusive Space Future*", the Summit will bring together space agencies, policymakers, investors and industry leaders to address capability, regulatory and investment gaps, and chart pathways for sustainable growth in the global space economy.

Programme highlights include the Heads of Space Agency Plenary on collaborative partnership models, and a Southeast Asia panel on how space technology improves daily life through navigation, weather forecasting, disaster response, agriculture and connectivity. These discussions align with regional initiatives such as the Earth Observation Initiative, launched in 2025.

Organised by Experia Events and officially endorsed by Singapore's national space office – the Office for Space

Technology & Industry, Singapore (OSTIn), the Summit is also proudly supported by the Singapore Economic Development Board (EDB), Maritime and Port Authority of Singapore (MPA), Defence Science and Technology Agency (DSTA) and the Association of Aerospace Industries Singapore (AAIS).

Taking place during the week of Singapore Airshow 2026, one of the most influential airshows globally, there will be rich cross-sector engagement across aviation, connectivity and emerging technologies.

Networking events will be held in the lead-up, including one on 30 September at the International Astronautical Congress (IAC) 2025 in Sydney.

Join us in Singapore to shape the partnerships that will define Asia-Pacific's role in the in-space economy. The 8th Singapore Space Symposium, jointly organised by OSTIn and Nanyang Technological University, will take place on 4 February 2026 (the day after Space Summit); details to follow.

Register your interest for Singapore Space Summit 2026 today to enjoy early bird rates: https://spacesummit.singaporeairshow.com

Rakia Mission's Global Impact During Axiom Mission 4

Guided by the vision of "space for all," Rakia is a public benefit corporation advancing Israel's space ecosystem through human spaceflight, education, and international collaboration.

As part of Axiom Mission 4, Rakia continued its mission to connect space exploration with meaningful public impact — leading educational outreach, scientific partnerships, and cross-cultural initiatives.

In Hungary, Rakia partnered with the national space program HUNOR to co-lead the UHU lightning experiment, a continuation of the ILAN-ES project focused on studying thunderstorms from space. Together with researchers from Israel and Hungary, Rakia helped train the Ax-4 crew to capture high-resolution imagery of transient luminous events (TLEs) from the ISS. The data collected is now contributing to ongoing climate and atmospheric research in both countries.

In India, Rakia collaborated with City Montessori School (CMS)—the world's largest school—to support a large-scale educational program around the mission of Group Captain Shubhanshu Shukla. This was not only a national milestone for India but a deeply personal journey for the CMS community, as Shukla is a proud alumnus of the school. His inspiring journey from student to astronaut resonated with thousands and ignited a renewed passion for space among students and educators alike. Rakia formed a strong bond with the Shukla family, accompanying them through all stages of the mission and adding a personal, human layer to the collaboration. Together with CMS's teachers and volunteers, Rakia helped design activities that made space exploration tangible for students: from naming the mission and designing patches to hands-on exhibitions, live mission tracking, and real-time splashdown engagement. A control center was established at the school to serve as both an educational hub and a celebration of India's return to human spaceflight. In total, the collaboration reached thousands of students across CMS campuses and the broader Lucknow community.

These initiatives contributed to 5 UN Sustainable Development Goals (SDGs), including quality education, innovation, climate action, reduced inequalities, and global partnerships.

By bridging space and society, Rakia continues to bring the inspiration and benefits of spaceflight to communities around the world.

Sovereign Satellites. Connected Systems.

ReOrbit is a leading manufacturer of sovereign satellites that give customers full control and ownership of their critical space infrastructure, ensuring national security, resilience, and sustainable growth. Our satellites enable secure, resilient networks, protecting sensitive data and critical communications. Safeguard your operations, power digitalisation, and achieve strategic autonomy for connectivity and intelligence for civil and military users to operate seamlessly in peace, crisis and conflict.

Headquarters in Helsinki, Finland, we engineer innovative, intelligent and secure satellite solutions that adapt, defend and empower. Beyond technology, ReOrbit builds capability, and we are your long-term partner in developing national space ecosystems. Through technology co-development and knowledge transfer, we empower your teams, tailoring systems to your vision and ensuring a robust, self-sufficient foundation for the future. We guarantee security, precision, and reliability across the entire lifecycle of your satellite mission.

Alongside our rapid growth, ReOrbit just closed a significant Series A funding round, which will accelerate our mission even further. Keep a lookout for more exciting announcement very soon.

https://www.reorbit.space
https://www.linkedin.com/company/reorbit/

International Youth Initiative

St. Petersburg State University of Aerospace Instrumentation (SUAI, Russia) jointly with Vitebsk State University named after P.M.Masherov (VSU, Belarus) held a summer school on information technology and artificial intelligence from July 7 to July 12, 2025.

SUAI summer school was held at the Institute of Aerospace Instruments and Systems. Students from Belarus attended classes on computer vision systems, image recognition in the feature space, fully connected neural networks, image filtering and quality improvement, and modern automatic image recognition algorithms.

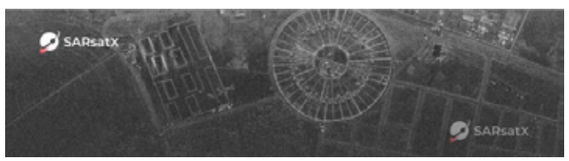
VSU summer school was held at the Faculty of Mathematics and Information Technology. SUAI students attended lectures and practical classes on design patterns, mobile development, virtual reality technologies and other advanced IT technologies. In addition, guided tours of the university, including the astronomical center, as well as visits to iconic historical sites of the city were organized for them. After completing the training, the students received certificates of participants. Undoubtedly, the knowledge gained will be useful to the students in their future work, including in the aerospace industry. The universities expressed their intention for further cooperation in the format of summer schools and other joint events.

SARsatX: Seed Round, First Light, and EarthLife Beta Launch

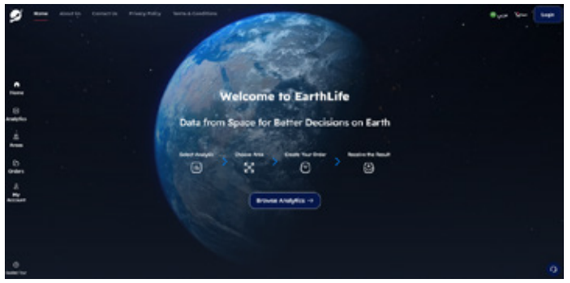
SARsatX, a Saudi space-tech startup specializing in Synthetic Aperture Radar (SAR), has successfully closed a $2.6 million seed round, led by TONOMUS (NEOM), with participation from Wa'ed Ventures (Aramco), Access Bridge Ventures, and KAUST Innovation Ventures. Lab7, a subsidiary of Aramco, has also supported SARsatX. The company also became the first space startup in the Middle East and North Africa (MENA) region to graduate from the Seraphim Space Accelerator.

SARsatX achieved "First Light" with its SARsatX-1 (SSX-1) airborne radar system — the first SAR payload designed, built, and flown in Saudi Arabia. SSX-1 supports applications in both civilian and defense sectors such as:

- Land use change detection: to monitor construction, urban expansion, or illegal land use
- Infrastructure monitoring: to detect problems with large pipelines and railways
- Environmental analysis: to observe vegetation changes and growing or shrinking bodies of water



Finally, SARsatX launched the beta version of EarthLife, its Earth Observation analytics platform, now live at https://earthlife.sarsatarabia.com/. Through an interface available in both English and Arabic, users can request services in urban change detection and agricultural monitoring, with additional analytics services added regularly.



These milestones pave the way for ArabiaEye — a planned constellation of 16 SAR and optical satellites — reinforcing Saudi Arabia's position as a leader in space innovation and supporting the country's drive toward technological sovereignty.

For more information, visit https://sarsatarabia.com/en/home/ or contact info@sarsatarabia.com.

Space Industry Association of Australia

Meet the Australian Space Industry at IAC 2025

Space Industry Association of Australia (SIAA) looks forward to warmly welcoming you to IAC 2025 Sydney later this month. Come and say g'day to our **SIAA team on stand 151** between JAXA and Turkish Space Agency.

Make sure you mark your calendars with our **IAC 2025: A Taste of Australia event at 3-4pm on Wednesday, 1 October** in the Australia zone. Here you'll be able to experience true Aussie hospitality while meeting our industry and exploring our space capability.

To find out more about our Australian space industry, explore our Australian Space Industry Capability Dabatase or check out our Member Capability Brochure.

To get in touch with our team, please email:
operations@spaceindustry.com.au

SIAINDIA An association for space industry

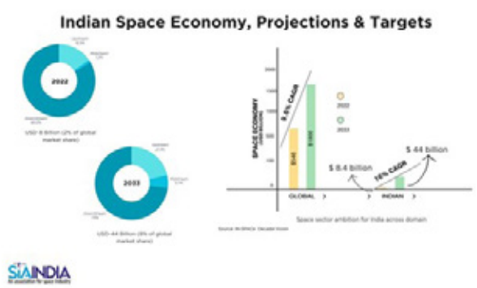
How India is Aligned with the IAF Mission: A Platform of Trust, Talent, and Transformation

India's space leadership is powered by the unique synergy of public innovation and private enterprise. At the helm are two institutions — the Indian Space Research Organisation (ISRO), a globally respected national space agency, and SIA-India, the apex industry body representing the country's vibrant space ecosystem. Together, they reflect India's evolving model: a fusion of scientific excellence, policy innovation, and inclusive growth. Their joint efforts for IAC 2028 reflect this powerful collaboration, rooted in capability, credibility, and a shared vision.

India's progress is in deep alignment with the IAF's mission of advancing international cooperation, developing space science and technology, and building a sustainable space future. With over 230 space missions to its credit, including 130 satellite launches and 100 launch vehicle missions, ISRO has established strong cooperative ties with 60+ countries and signed over 290 international agreements. India's PSLV has launched over 433 foreign satellites for global partners such as the USA, UK, Germany, France, Brazil, and Singapore.

India's growth story is one of transformation — not just in technological capability, but in democratization, accessibility, and global leadership. India's neutral geopolitical stance, inclusive space policy, and democratic governance make it an ideal platform to host the IAC 2028. India's open regulatory environment, commitment to multilateralism, and rule-based approach to international collaboration embody the very ethos the IAF stands for. Hosting IAC 2028 in India would add a vital chapter to the IAF's enduring legacy of championing international dialogue, equitable participation, and shared progress in space.

This is further exemplified by landmark partnerships like the $1.5 billion NASA–ISRO Synthetic Aperture Radar (NISAR) mission — a fusion of American and Indian technical strengths that is now a model for bilateral cooperation. India's Gaganyaan (human spaceflight), Chandrayaan-4, Venus Orbiter Mission (VOM), Bhaskara Advanced Spacecraft (BAS), and Next-Gen Launch Vehicle (NGLV) are all slated for significant milestones around 2028, making the proposed timeline for IAC both symbolic and strategic.



India's space economy, valued at $8.4 billion in 2022, is expected to reach $44 billion by 2033 with a CAGR of 16%, far outpacing the global average. The future expansion would be heavily relied in global cooperation with the space fairing nations. Fuelled by policy liberalization, India has witnessed a 200x growth in its space-tech startup ecosystem in just a few years — now counting over 200 companies. India ranks 6th globally and 2nd in Asia for the number of space tech startups.

Beyond technology, India's broader macroeconomic and diplomatic indicators add momentum to its bid. As the world's fifth-largest economy and fastest-growing major economy (IMF, 2024), India has demonstrated its ability to lead global conversations — from hosting the G20 Summit in 2024 to shaping inclusive agendas in the Global South. India also hosted the World Telecommunication Standardization Assembly (WTSA-24), the UN-GGIM Asia-Pacific Plenary-2024, and most recently hosted GLEX 2025 in collaboration with IAF and ASI.

India's past engagement with the IAF is long-standing and deep. It hosted IAC in 1988 (Bengaluru) and 2007 (Hyderabad), and has consistently been among the top 6 contributors in abstract submissions. For IAC 2025, India submitted 565 abstracts — a significant share of the 6,400 global submissions — and will be sending its largest-ever delegation to Sydney. ISRO's pavilions remain among the largest at IACs, highlighting India's consistent engagement and global stature.

India's youth — over 65% of the population is under 35 — and its annual production of over 1.5 million STEM graduates make it a cornerstone for future space leadership. With 25% of IAC participants under 35, IAC 2028 in India would directly empower the next generation of global space professionals.

India will not just align with the IAF's mission — it will advance it with scale, speed, and spirit. By 2028, India will represent more than a host nation — it will stand as an anchor for a multipolar, inclusive, and forward-looking space order. Its convergence of democratic values, scientific excellence, youthful talent, and industrial ambition will offer the IAF a partner capable of bridging aspirations across geographies — from the Global South to the established spacefaring nations. As the space domain enters a decisive decade of transformation, India will offer a platform grounded in trust, driven by talent, and committed to co-creating a sustainable and collaborative future. IAC 2028 in India will not just be a gathering of minds — it will be a meeting of hopes, shared purpose, and the collective drive to shape a better space future for all.

More updates on India's preparedness to host IAC 2028 are available at https://india4iac2028.com/.

SPACE IN AFRICA

Space in Africa is the leading analytics and consulting company in the space sector, serving both the institutional and commercial markets with a particular focus on Africa. Our experience builds on a long track of past projects executed for international organisations, national governments, and commercial players, with high stakes in the space business. Space in Africa's proprietary, research-based business and market intelligence predicts critical outcomes on what happens next in the industry.

Some of our most recent projects include:

The NewSpace Africa Conference 2025 was organised by Space in Africa in collaboration with the Africa Space Agency and hosted by the Egyptian Space Agency in Cairo, Egypt, from 21st to 24th April 2025. Monumentally, the conference was marked by the official inauguration of the African Space Agency and the launch of the EUR 100 million Africa–EU Space Partnership. Watch highlights from each day of the conference on our YouTube channel, and read more about the conference proceedings from the report here.

Participants at the NSAC 2025

Exhibitors at the NSAC 2025

The inauguration of the African Space Agency

African Space Budget Report, 2025

Explore key insights from the 2025 African Space Budget Report, covering national allocations, agency priorities, and year-on-year trends and where new opportunities are emerging in the African space ecosystem. Download the report here.

Scheduled Projects:

- **African Space Industry Report; 2025**
- **NewSpace Africa Industry Report; 2025**
- **African Satellite Manufacturing Report, 2025**

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SPiN
Simplify Space Manufacturing

SPiN-2 Mission Ready for October Launch

SPiN is proud to announce the successful integration of SPiN-2, In-Orbit Demonstration mission launching October 2025 that will further validate our game-changing MA61C CubeSat plug-and-play solution. This mission showcases SPiN's ability to seamlessly integrate cutting-edge technologies—including ARCA Dynamics' advanced Space Situational Awareness payload and LIST's innovative directly printed sensors—into a modular architecture in a generic satellite platform. Operating in Sun-Synchronous Orbit for up to 18 months, SPiN-2 demonstrates our commitment to simplify space manufacturing and making space technology accessible, cost-effective, and truly modular for organizations of all sizes.

SPiN-2 platform integration at GOS Premises, Copyright: SPiN

Powered by the European Space Agency's ScaleUp INVEST programme and by strategic partnerships with Europe NewSpace companies, SPiN-2 represents the future of scaling up manufacturing. MA61C, our universal adapter eliminates traditional non added value activities during integration, dramatically reducing development timelines and costs while maintaining the highest performance standards. As CEO Ran Qedar noted, "This mission will validate our approach to simplifying and revolutionizing space access through smart, modular solutions." As we prepare for this pivotal mission, SPiN is democratizing space access by transforming exclusive, expensive satellite deployment into a streamlined, plug-and-play solution that unlocks unprecedented innovation opportunities for businesses, research institutions, and emerging ventures across every industry.

SPiN will be exhibiting at IAC2025, come and visit us at booth 103 to know more about this exciting mission.

SPACELAND

During the fifth SpaceLand Conference, this time in Dubai on October 20–22, 2025, the SpaceLand Group will present its latest achievements and strategic developments. As known, SpaceLand is active across the USA, Europe, Asia and Africa, and is internationally recognized for pioneering inclusive access to microgravity with cutting-edge aerospace records in actually democratizing the Space Economy. Led by history-first private cosmonaut-engineer candidate, Doct. Carlo Viberti, proposed by the U.S.-Russian company Mir Corp to enshrine the dawn of the commercial space age back in 2000, and officially appreciated by NASA and Space Florida, and seed-funded by ESA for Technology Transfer studies addressing the Olympic Games, since 2005 SpaceLand has led a history-first series of public-access weightless R&D campaigns, achieving global firsts such as flying the youngest (Kim Marco Viberti, 11 years old), oldest (93 years old Cesare Massano) and first-ever fully physically disabled participant (Elma Schippa) in zero gravity, with co-funding from Regione Piemonte and the Italian State TV. These missions, conducted largely at NASA's Kennedy Space Center, have enabled groundbreaking STEM experiments for universities, research centers, hospitals and Nobel Prize Laureates - contributing, among other milestones, to better understand how to develop A.I.-based satellites and how the brain works in microgravity with major applications regarding countermeasures against the Alzheimer syndrome: all these trailblazing activities were carried out on-board pathfinding flight missions at the NASA Space Shuttle L.F. in the period 2005-2007, also paving the way to disabled astrophysicist Stephen Hawking's historic zero-G flight later on.

SpaceLand is now expanding its turn-key solutions for preparing people, hardware and software for qualification prior to actual spaceflights as well to facilitate satellite deployment for low-budget entities. This includes the design and operation of airborne labs simulating Lunar and Martian gravity, low-cost satellite air-launch systems and eco-sustainable technologies for Martian habitats with eco-friendly terrestrial applications especially in emergency housing and refugee support. The group proposes long-term systemic collaboration with other IAF members to integrate capabilities and offer comprehensive, cost-effective services: this includes the creation of SpaceLand Centers and Cities near strategic airports, convertible into horizontal spaceports thanks to SpaceLand solutions, and the deployment of two advanced aircrafts for innovative parabolic flights and air-launching capabilities with superior passenger capacity and launch efficiency.

With over USD 200 million in signed Letters of Intent and USD 4 million in startup capital, SpaceLand invites partners to join its mission to democratize the Space Economy: combining technological innovation with unprecedented social impact.

See you in Dubai on 20-22 October: 20% fee reduction for conference participants mentioning SpaceLand during application on https://astronomysummit.org/

SPACETIDE

SPACETIDE2025: The Flagship Event of SPACETIDE Foundation Was Held in Tokyo from July 7 to 10

This year marked the 10th anniversary of SPACETIDE since its inception in 2015. The conference welcomed over 2,000 participants from 35 countries and regions, representing 25 industries—an increase of more than 30% compared to last year. When we hosted our first conference in 2015, the commercial space industry in Japan and globally was still in its infancy, and the event gathered just around 400 attendees, mainly from Japan. Ten years on, the space industry has seen remarkable growth and so has our conference.

Under this year's theme, *"The Next Decade: Unlocking Space for All Humanity"*, we hosted a record number of over 200 speakers and held more than 100 sessions covering a wide range of forward-looking topics, including the expansion of the space economy, user industries, dual-use, democratization, commercial space policy, growth strategies, next-generation players, and industrial infrastructure.

Beyond the sessions, the exhibition area, networking programs, side events, and workshops provided valuable opportunities for participants to connect, deepen relationships, and spark new space business collaborations.

As we move beyond this 10-year milestone, SPACETIDE is committed to advancing toward the next decade. Our mission remains unchanged: to act as a neutral industry hub, solving common challenges across the sector.

We will be present at IAC2025 in Sydney. We are always eager to make new connections with the global space community, so please contact us if you want to meet up there!

STARBOUND

Starbound have been awarded $1.2M in research funding through the Australian Research Council Linkage Program, in collaboration with Griffith University. The funded project 'Ontology-Driven Automated Compliance Checking for the Space Industry' builds on our neurosymbolic reasoning engine.

Starbound is pioneering modular AI in design and delivery across the full mission cycle. Starbound build digital twins of expert wisdom and apply the wisdom to engineering workflows. Starbound's revolutionary neurosymbolic reasoning architecture provides the reliability of logic-based systems with the flexibility of modern NLP, operating on-premises to address export control requirements, and minimising cost and ESG Scores. Starbound's technology is fully air-gapped with no risk of LLM hallucination.

Starbound's MVP reduces engineering documentation time by 40%, with enhanced traceability and unmatched verification capabilities. Starbound will be showcasing AI products Virgil and Pythia at IAC 2025 (Stand 320 - QLD).

- Copy-paste your top talent and deploy your niche expertise at scale.
- Retain your top talent by reducing their documentation burden.
- Move faster without cutting corners.

Pythia elicits, clarifies, and curates human wisdom:
- Digitise human knowledge
- Fully independent, human-readable knowledge base
- Geofenced cloud service/On-premises installation
- Preserve institutional knowledge

Virgil applies at scale the digitised rules and niche human wisdom curated by Pythia:
- Requirements: Extraction, Generation, Gap Analysis
- Self-audit against space-related regulations
- Regulatory evidence reports
- Natural Language interaction (link-budgets, TID-estimates, pass-prediction)
- Integration with MBSE tools
- Context-based search of SOPs
- Context-based operations recommendations
- Automatic ops shift handover notes

AACII

Space goes future into a dynamic era

These words resonated at the AACII Aviation Aerospace Congress and continue to define the inspiring dialogue among leaders in aerospace and research during Expert Talks worldwide.

The Space Forum, chaired by COSPAR Prof. Dr. Pascale Ehrenfreund, welcomed hundreds of distinguished leaders from 20 countries, including IAF with Dr. Christian Feichtinger, ESA-ESOC, Datentreiber, and Heinzinger.

The Aviation Forum, led by TU Vienna Prof. Dr. Michael Weigand, honored outstanding achievements, awarding DLR Board Member Prof. Dr. Michael Szodruch and Hans Rudolf Wöhrl. On stage were Schaeffler Aerospace, Fraunhofer Aviation, and ATT, the joint venture of Rolls-Royce and Liebherr Aerospace. Keynote speaker Pilot Cordula Pflaum emphasized the AACII motto: "Together for a Better World."

The Satellite Forum, chaired by OHB Systems Dr. Axel Müller, spotlighted advances in small satellites, featuring Rivada Networks from the United States and the Austrian Space Forum, underscoring their growing influence in space innovation.

The Cyber Security Forum, hosted by VDE Bavaria Klaus Bayer with experts from Itonics, Diehl Security, Lantech, and Schaeffler, examined challenges across science and industry sectors.

The Science Talks, moderated by Prof. Klaus L. Wübbenhorst of the EU Metropolitan Region, included contributions from FAU, TU Dresden, and Sweden, offering deep insights into airship simulation and aerospace research.

The New Generation Forum, led by FAU Prof. Dr. Siegfried Balleis, celebrated young talents including Diana AlJbour from Jordan, Richard Emeder from TUM WARR, Felix Klein from TU Stuttgart Hyend, and Sanyukt Mishra, showcasing their innovations.

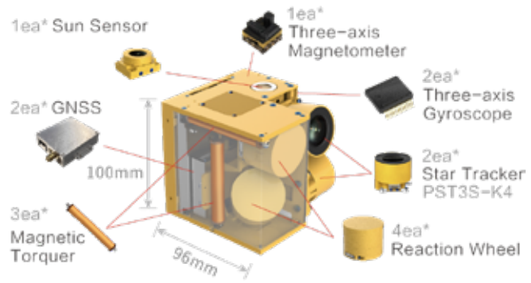
Finally, the Expert Summit, chaired by BDI Matthias Wachter with Bundeswehr and FAU, reaffirmed commitment to innovation, sustainability, and the future of global aerospace.

天银星际 TY-SPACE

TY-Space Technology (Beijing) Ltd. was established in 2015. With over 20 years of space technology research and development in space optronics of Tsinghua University, TY-Space specializes in the development of astronomical attitude determination and control systems.

TY-Space manufactures star trackers and sun sensors, as well as specialized testing equipment, such as star simulators and sun simulators. The company' s quality management system is compliant with ISO 9001 using automated production lines and validated space-grade reliability systems. TY-Space products comply with Chinese aerospace CAST and ESA's ECSS standards. Currently annual production capacity is 2,000 units.

New product: PnP ADCS-A2,on-orbit successfully service for NS-1, NS-2 Satellites, lunched on JUN15,2024, and NS-3,NS-4 Satellites, lunched on NOV15,2024.



Key Technologies

- A high-performance and highly reliable microsystem(PnP -ADCS) based on on-board plug-and-play technology (SPA), by advance micro-nano components: the nano-reaction flywheel and the nano-type magnetic torque.
-
- An active perception of on-orbit multi-mode intelligent control strategy and the rapid identification based on inertial attributes response to improve the PnP ADCS performance, reliability, and achieve to plug and play.

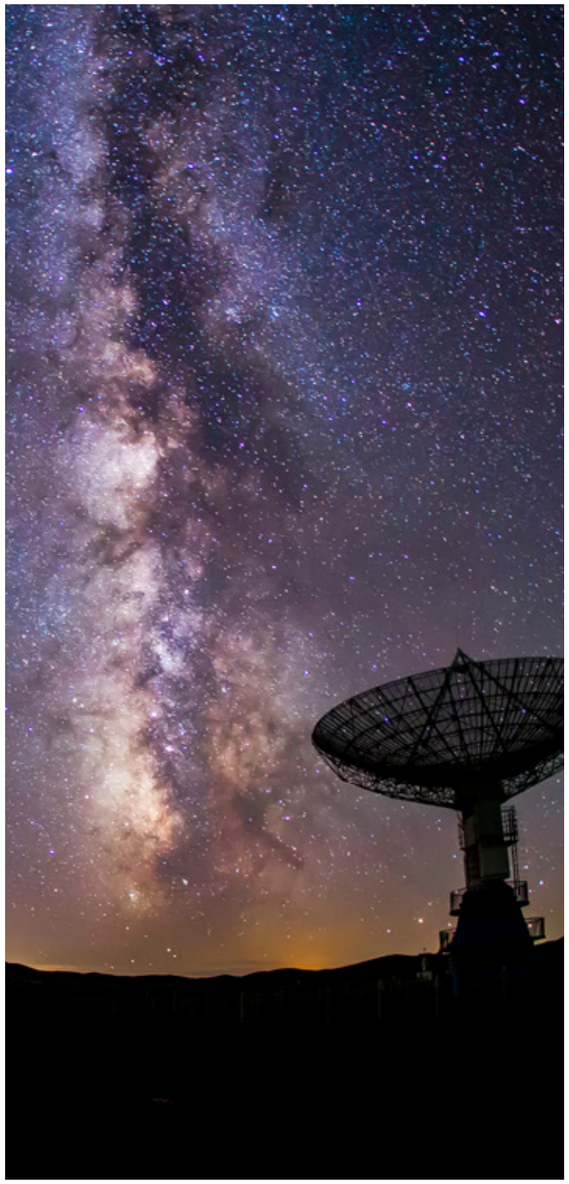
USC Viterbi School of Engineering

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 propulsion rocket engines using cryogenic propellants, regenerative cooling, and 3D printing technologies.

In 2025, the student-operated and led LPL completed seven hot fires across five new and upgraded systems, which provided a wealth of data to analyze and will drive future rocket engine development. Students also upgraded the Atlas Prime test stand to support high-mass-flow, high-pressure testing and the validation of throttle and thrust vector control (TVC) systems. The new capabilities enable precise control over engine performance, including dynamic thrust profiling and gimbaling in all directions, bringing LPL closer to flight-ready technologies and reusable propulsion architectures.

The Laboratory debuted its newest engine, Nomad, which achieved over 90% combustion efficiency in a rapid-fire series of tests using a copper heatsink chamber. The Prometheus project also reached a critical milestone, successfully completing 27 repeatable ignitions of a methane-oxygen spark system, paving the way for fully integrated engine tests in upcoming campaigns. This academic year, LPL focuses on long-duration firings, regenerative cooling validation, and subsystem integration into future flight platforms.



ENRICO PALERMO,
HEAD, AUSTRALIAN SPACE AGENCY

AS HEAD OF THE AUSTRALIAN SPACE AGENCY AND IAF VICE PRESIDENT FOR SPACE AGENCY RELATIONS, WHAT ARE YOUR KEY PRIORITIES FOR FOSTERING INTERNATIONAL COLLABORATION IN THE SPACE SECTOR?

International collaboration is fundamental to the space ambitions of many nations, including Australia, and to ensuring space remains a safe, secure, and sustainable domain. As IAF Vice President for Space Agency Relations, I believe in strengthening multilateral engagement, enabling bilateral partnerships with both established and emerging space nations, and fostering inclusive access to space technologies. As the world's leading space advocacy body, the IAF plays a critical role in connecting all space people and driving global cooperation.

In Australia we are committed to working with our Indo-Pacific neighbours to support capability uplift and to promoting responsible norms of behaviour in space. At the Australian Space Agency, we see our role as a bridge connecting global opportunity with local innovation across a wide range of space programs and activities. We are proud to have strong and enduring international partnerships spanning decades related to space exploration, science, commercial collaborations, and trade and investment opportunities.

"Australia is a bridge to the Indo-Pacific – connecting global opportunity with local innovation."

AUSTRALIA HAS BEEN MAKING SIGNIFICANT STRIDES IN SPACE EXPLORATION AND INDUSTRY DEVELOPMENT. WHAT ARE SOME OF THE MOST EXCITING PROJECTS CURRENTLY UNDERWAY OR ON THE HORIZON?

Australia is proudly pursuing its first missions to the Moon, including our Trailblazer program, delivering a semi-autonomous lunar rover in partnership with NASA as part of Artemis. As the world looks to the moon and beyond, Australian innovation is contributing to many planned lunar missions as well as advancing state of the art in space-based agriculture. Of note, the ARC Centre of Excellence in Plants for Space, an international research consortium, is building novel solutions for long term space habitation and on-Earth sustainability.

We're advancing sovereign launch capabilities and return-to-Earth science, while supporting a vibrant ecosystem of startups, research institutions and industry across the whole value chain. It's an exciting time for Australian firsts with the nations on-orbit 'space heritage' advancing quickly to deploy capabilities that are important for life here on Earth. These include applications in enhancing aviation safety, critical minerals exploration and biodiversity protection.

WITH THE INCREASING COMMERCIALIZATION OF SPACE, HOW IS THE AUSTRALIAN SPACE AGENCY SUPPORTING LOCAL BUSINESSES AND STARTUPS IN BECOMING COMPETITIVE PLAYERS IN THE GLOBAL SPACE ECONOMY?

Australia's space sector is built on partnerships and many of those are with industry. We've launched funding initiatives like the Moon to Mars Trailblazer Program, as well at the Australian Government's National Reconstruction Fund.

Through regulatory reform, streamlined licensing and support for space launch and return, we are striking the balance to encouraging entrepreneurialism and ensuring community safety.

We also back programs that connect startups to international supply chains and mission opportunities, creating a launchpad - literally and figuratively - for Australian technologies on the world stage.

THE 76TH INTERNATIONAL ASTRONAUTICAL CONGRESS (IAC 2025) WILL BE HOSTED IN SYDNEY. WHAT DO YOU THINK WILL MAKE THIS VERY IAC A UNIQUE ONE?

IAC 2025 in Sydney will be truly special. This is an IAC for the region, a congress in the Indo-Pacific, showcasing a fast-growing space ecosystem, and held in a city that blends deep scientific talent with vibrant culture and iconic landscapes.

What makes it unique is not just the location, but the moment. Australia is stepping forward with real capability, and IAC 2025 is a platform to connect with partners across the globe, from established agencies to emerging players, in an open, future-focused setting.

And with an array of diverse side events and tours around the nation, we are increasing the offering to all visitors as well. We are proud to welcome the global space community to experience Australia's warm hospitality.

THE LAST IAC 2017 HOSTED IN AUSTRALIA CONTRIBUTED TO THE ESTABLISHMENT OF THE NATIONAL SPACE AGENCY. WHAT LEGACY DO YOU THINK THE 76TH IAC WILL LEAVE FOR AUSTRALIA?

IAC 2017 was the spark. IAC 2025 will be the launch. This Congress will demonstrate that Australia is not just a participant in space, we are a contributor, a convener, and a collaborator.

The legacy of IAC 2025 will be new missions launched, new partnerships formed, and new talent inspired. It will also help embed space deeper into Australia's national story, economically, strategically, and culturally.

We look forward to welcoming the world and sharing what's next, together.

"IAC 2017 was the spark.
IAC 2025 will be the launch."

INTERNATIONAL ASTRONAUTICAL FEDERATION

Join the world's leading space advocacy body!

Our Benefits

NETWORKING

- **Access a global network** of potential business partners and meet decision makers
- Promote your organization to the **workforce of tomorrow**
- Attract and exchange with s**tudents** and **young professionals** at our targeted events
- Interact with your peers in exclusive **IAF members lounges**
- Shape the space community by nominating an **IAF Bureau Member**

VISIBILITY

- **Promote your organization** on the IAF website, social media and the IAFastro app
- Reach more than **36.000 subscribers worldwide** through the **IAF Newsletter** and **Members' Corner**
- Gain visibility for your organization through the **IAF publications**
- Be included in all **IAF promotional materials**

RECOGNITION

- Earn public recognition of your organization's **achievements**
- **Nominate** candidates and b**e nominated** for the IAF Awards
- Access IAF events through **IAF Grants Programmes**
- Get privileged connection with **IAF's media partners**
- Boost your organization's awareness through **IAF Plenary Programmes**

FINANCIAL BENEFITS

- Get **discounted rates on registration** and **exhibition** fees
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- Book **complimentary meeting facilities** during IAF events
- Have **privileged access to sponsorship** opportunities at IAF events

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