



International Coordinating Council of Aerospace Industries Associations

Newsletter

Including 2024 WRAP-UP

A WORD FROM OUR CHAIR

I am thrilled to serve as ICCAIA’s new Chairman for the next two years. First of all, I would like to thank Eric Fanning, President and CEO of AIA, who splendidly fulfilled this role these last two years in the framework of the rotating ICCAIA Chairmanship between AIA and ASD. I am looking very much forward to the further cooperation with him and all ICCAIA members.



As ICCAIA continues its expansion, we look forward to a productive time ahead. ICCAIA’s work is vital not only for the aerospace industry but for the billions of people who rely on aviation every year.

I will continue to advocate for policies and regulations at global level that support both growth and sustainability in aviation, via a continuous and constructive dialogue with governments, regulatory bodies, and other stakeholders.

Having said this, I am in particular honoured to represent the collective voice of global aerospace manufacturers and service providers towards ICAO, which remains the most important platform to contribute to and shape the development of international standards and regulations necessary for the safety, security, efficiency, and sustainability of air transport. Together with ICAO and our global partners, we will ensure that aviation remains a safe, sustainable, and accessible mode of transport for the future.

Last but definitely not least, I would like to thank the entire staff of ICCAIA in Montreal. Without their hard work and profound expertise, our association would not be such a key factor for global aviation regulation and policies. As a Chairman, it is a huge privilege to be able to count on such a great team for all these tremendous challenges lying ahead of us.

**Jan Pie, Chair, ICCAIA
& Secretary General of ASD**

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STRATEGY COMMITTEE,
ANEC, AWC, CNS/ATM,
HFCR, SECURITY, AAM

AVIATION: BENEFITS BEYOND BORDERS

ATAG/Oxford Economics Global Report

Civil Air Transport - Supporting 86.5 million jobs; Economic impact of \$4.1 trillion.

The latest edition of the important *Aviation: Benefits Beyond Borders* document, prepared by Oxford Economics, was released in December by the Air Transport Action Group (ATAG).

Oxford Economics' findings include that, globally, 1.7 million people are directly employed in the civil aerospace manufacturing and service sector – the part of the industry represented by ICCAIA. In all, over 35 million flights carry 4.4 billion passengers annually – or around 12 million passengers per day – in just over 29,000 aircraft. With this, the in-service fleet is now bigger than it was before the pandemic, and it can be noted that Cirium, used by many experts as a point of reference, recently forecast that 45,900 new aircraft will be needed between now and 2043.

ICCAIA, our member associations and several companies represented by ICCAIA made significant contributions to *Aviation: Benefits Beyond Borders*. The full version of the document includes detailed regional and national analyses, and may be downloaded from here: <https://aviationbenefits.org/downloads/aviation-benefits-beyond-borders-2024/>



EXPLORE THE FUTURE OF AVIATION AT “AVIONICS AND TESTING INNOVATIONS”

ICCAIA is pleased to highlight the upcoming “**Avionics and Testing Innovations**” event, taking place this May in London, UK, on 20th and 21st May 2025. This premier conference and exhibition will bring together leading experts, innovators, and stakeholders from the global aviation and aeronautics ecosystem to discuss cutting-edge advancements in avionics and testing technologies.

We are proud to announce that **Mr. Vincent De Vroey**, ICCAIA Strategy Committee member and Civil Aviation Director of the **AeroSpace and Defence Industries Association of Europe (ASD)** will be featured as one of the keynote speakers. His insights will enrich the dialogue alongside exceptional industry leaders, promising an engaging and insightful agenda.

Don't miss this unique opportunity to engage with global experts and explore the latest innovations. For more details, visit the event's website: [Avionics and Testing Innovations](https://www.avionicsandtestinginnovations.com/).

ICAO 80TH ANNIVERSARY CELEBRATIONS

Dan Carnelly

2024 saw the 80th anniversary of ICAO's Convention on International Civil Aviation, more commonly referred to as the Chicago Convention. It was established with the signature of 52 States and establishes the rules of airspace, aircraft registration, safety, security, and sustainability, and details the rights of the signatories in relation to international air transport, remaining the guiding document to this day.

Over the course of the year, ICAO held a number of events culminating in two celebrations towards the end of 2024 to which ICCAIA was invited to participate. Firstly, the ICAO Council, including the recognised international observer organisations such as ICCAIA, were invited by the Quebec government to participate in a reception hosted by Premier Francois Legault at the parliament building in Quebec City. ICCAIA was represented by Permanent Vice-Chair Mike Mueller and Permanent Representative to the ICAO Council Dan Carnelly.

Following this, the ICAO Council held an extraordinary session in Chicago at what is now the Chicago Hilton, but in December 1944 was the Stevens Hotel - the same building in which the Convention was signed. ICCAIA's Chair took the floor in the Grand Ballroom, the room in which the proceedings took place 80 years earlier, to make a short speech to the gathered dignitaries. This was followed by a presentation from the collective industry of a unified declaration underscoring a shared commitment to advancing safe, secure, and sustainable growth of international aviation, continuing the collaborative work for the next 80 years and beyond.



THE GLOBAL AVIATION AND AEROSPACE SKILLS TASKFORCE



The second meeting of the Global Aviation and Aerospace Skills Taskforce (GAAST) took place in November 2024 in Abu Dhabi, kindly hosted by GCAA. The meeting agreed the next set of short and long term deliverables for each of the workstreams, high level requirements for a repository of information and looked into initial analysis and findings from two surveys conducted by GAAST.

Next steps will be to fully define the repository and build a prototype website, with materials from all workstreams. This will form that basis for sharing information globally for the benefit of States and industry, and will contain case studies, examples, best practices and checklists to address attraction and retention of skilled talent across all areas of the sector.

We are also delighted to announce our **formal collaboration with ICAO through the Next Generation of Aviation Professionals Program (NGAP)** and look forward to meaningful discussions at the ICAO Global Implementation Support Symposium and the 42nd Assembly.

ICCAIA COMMITTEES INSIGHTS: 2024 HIGHLIGHTS & ACHIEVEMENTS

Strategy Committee

Strategic Objectives

One of the first key actions taken by the Strategy Committee in 2024 was to agree a new five year strategy for the organization to be presented to ICCAIA's Board of Directors. Following a series of workshops held through January with the Associations and Committees this new strategy was agreed in March 2024 by the Board. It brings the strategic objectives in line with the changing priorities of the industry, in particular focusing on innovation and new technologies and closing completed objectives around the COVID pandemic.

ICCAIA's newly updated six strategic objectives are to:

- Build on ICCAIA's position as a preeminent industry association within the United Nations system, with other international standard-setting bodies and with Member States.
- Promote the resilience of the future aerospace and aviation industry, including in the areas of Sustainability (Net Zero policy), Workforce, Safety and Security and Resilience to Future Shocks.
- Grow ICCAIA's membership and presence while ensuring its continued effective operation.
- Minimize adverse regulatory impact and avoid market distortion.
- Advocate for processes to allow for a regulatory framework compatible with the capabilities and needs of the manufacturer and service provider community.
- Ensure appropriate representation and advocacy for technical and strategic subjects of interest to the sector.

Air Navigation Conference

With the 14th Air Navigation Conference being held in August/Sept 2024, the Strategy Committee formed a small group to develop papers and positions. All the papers were well received and successful in their approach, resulting in actions at the conference and in the ICAO Work Programme. Feedback from members on the process used to prepare and support the conference was extremely positive, and will form the model for the 42nd Assembly.

IACAC Membership

IACAC is an initiative begun by a group of like-minded States at the Glasgow COP-26 meeting in 2021. The Coalition is centred around a Declaration that has so far gathered 64 signatories, mainly States, along with a small group of other organisations. IACAC is a coalition of equals that bridges between the

UNFCCC-COP and the activities undertaken by ICAO, and specifically within the Committee for Aviation Environmental Protection. With Strategy Committee and the Board's agreement, ICCAIA became the first industry member of the coalition and attended a meeting in May, which proposed enablers for engagement, influence and capacity building as well as a timeline for the coalition's work.

ICCAIA Conference

The Strategy Committee took an active role in planning the 2025 Conference and helped to shape the agenda by means of a small group. Many of the members will be in attendance and actively participating in sessions and events.

Membership Changes

Numerous appointments to committees, panel and working groups were approved by Strategy Committee, including the dual-vice chair approach for ANEC, which is now also being adopted for Airworthiness to ensure continuity.

Associate Members Forum

A proposal to establish an Associate Member's Forum in line with the Strategic Objectives was discussed, with a view to ensuring that Associate Members' priorities and needs are considered, discussed, and appropriately represented at the Strategy Committee. Terms of reference are being developed for further discussion and presentation to the Board in 2025.

ICCAIA Expansion

The Strategy Committee welcomed three new members of the ICCAIA Secretariat, Majid Badiey, Director Air Navigation and Safety Policy, Anouck Barreaux, Director Environment, Security, Health & Facilitation Policy and Alexandra Pare, Director Membership, Marketing and Communications. Members of Strategy Committee also participated in ICCAIA's official expansion inauguration event in September.

ACKNOWLEDGEMENTS

ICCAIA would like to sincerely thank all of its members and representatives for their hard work and contributions to our mission in 2024 and beyond.

We would also like to acknowledge the contributors to this newsletter, the Committee Chairs and Working Group leads. We would welcome articles from all members for future issues.

Please let us have your feedback and ideas for future topics at apare@iccaia.org

ICCAIA'S 2025 ANNUAL GENERAL MEETING AND CONFERENCE IS FAST APPROACHING!



ICCAIA is excited to announce our first in-person Annual General Meeting and Conference, taking place from 26 to 27 March 2025 in Montréal, Canada, followed by additional workshops on 28 March.

This important and strategic event is open to ICCAIA members and invited guests. **Register by 7 March 2025 to secure your participation:**

[ICCAIA 2025 AGM and Conference Registration](#)

The programme will feature high-level speakers, including ICCAIA's Board and members, ICAO's Council and Senior Management, and senior industry leaders and will include a gala dinner with excellent networking opportunities on 26th March. Full agenda details are available on [ICCAIA's website](#).

We extend our sincere thanks to our sponsors – **Airbus, Boeing, Bombardier, GE Aerospace, and Pratt & Whitney** – for their invaluable support, and we look forward to welcoming all participants!

Special Thanks to our Sponsors

Dinner **AIRBUS**

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Registration & Information



[*info@iccaia.org*](mailto:info@iccaia.org)

ICCAIA COMMITTEES INSIGHTS: 2024 HIGHLIGHTS & ACHIEVEMENTS

Aircraft Noise and Emissions Committee

The Aircraft Noise and Emissions Committee (ANEC) started 2024 with a refresh of our five-year strategy after successful 2023 meetings (CAAF/3 and COP/28) that outlined global goals for sustainable fuels and mitigation of aviation climate impacts.

One revision of note increased focus on non-CO₂ emissions (NO_x, particulates, and other exhaust by-products emitted during flight) that can have climate and local air quality impacts. The severity and mechanisms of these impacts are poorly understood, and efforts to mitigate these impacts need to be appropriate and correctly directed.



ANEC experts crafted a position detailing our preferred approach to developing understanding and means to control non-CO₂ emissions. This formed the basis for multiple ICCAIA requests for ICAO's Committee on Aviation Environmental Protection (CAEP) to define how non-CO₂ efforts should be addressed by ICAO; an effort that continues at the CAEP/13 meeting in February 2025.

Efforts to update the CAEP standards controlling the emissions of oxides of nitrogen (NO_x) concluded that airborne NO_x levels are adequately controlled by the existing LTO NO_x standards. LTO NO_x limit will likely be revised in the next CAEP cycle and will be integrated with our efforts to better understand non-CO₂ emissions. For engines expected to power the next generation of supersonic aeroplanes, ICCAIA helped develop draft standards for emissions that are far more stringent than existing standards. The draft standards will hopefully be finalized in 2028.

Reduction of CO₂ emissions remained an ANEC focus during 2024. Most of this was manifest in work on the Integrated Dual Stringency for noise and CO₂ reduction. After overcoming some data sharing issues arising due to sanctions, the ANEC provided

technical data to the CAEP process to allow the technical analysis of noise and CO₂ emissions stringency options. Based on this analysis, and some additional considerations, we are confident an acceptable outcome is possible at the February 2025 CAEP/13 meeting.

Two workshops were held in Montreal to find a consensus position for noise and CO₂ stringency-setting, balancing technical feasibility with climate ambition, that guides our current advocacy at CAEP. This work was complicated by changes proposed to the Changed Product Rule, that could modify the conditions that trigger the need for new type certification...

ICCAIA experts also spent 2024 supporting development of a methodology for monitoring progress on the ICAO long term aspirational goal (LTAG) for reducing carbon emissions from aviation. All CAEP resources are leveraged to evaluate progress toward the ICAO/Industry goal of net zero carbon by 2050. ANEC experts also contributed to the Working Group on Carbon Offsetting and Reporting Scheme for International Aviation (CORSA) and advocated for the rapid expansion of sustainable aviation fuel availability.

ICCAIA representation on the Basel and Stockholm Conventions was also ongoing. The complexities of rule interactions among different States have been challenging, with some states leaving out aerospace exemptions for some flame retardants. We worked to manage a ban on most uses of some paraffins, with exceptions for certain aerospace uses. An increased understanding of how future rules on "forever chemicals" will impact aviation is also underway, as some bans will impact critical safety-related uses.

2024 marked the first year with investigations of emerging technology aircraft (ETA). As many advanced air mobility vehicles are expected to be electric, noise is the primary environmental concern. ICCAIA experts, including some from new ICCAIA member companies, are supporting development of new noise standards.

Lastly, a standard for landing and takeoff (LTO) noise for supersonic aeroplanes has been prepared for approval at CAEP/13. This is the first meaningful LTO noise standard for supersonic aeroplanes; requiring future supersonic aeroplanes to meet the same levels as current subsonic aeroplanes, with improvements to the testing procedures to better reflect actual operations.

ICCAIA COMMITTEES INSIGHTS: 2024 HIGHLIGHTS & ACHIEVEMENTS

Airworthiness Committee

2024 Achievements and 2025 Outlook

The ICCAIA Airworthiness Committee is committed to shaping global airworthiness standards by contributing to critical discussions within ICAO panels. In June 2024, the committee convened in Washington, D.C., ahead of the FAA-EASA International Aviation Safety Conference. The meeting was hosted by the Aerospace Industries Association (AIA) and it provided an opportunity to showcase the breadth of activities taking place across the panels and their respective working groups overseen by the Airworthiness Committee. The committee also met virtually four times throughout the year, offering opportunities to highlight latest updates and collaborate among members.

Looking ahead, the committee will reconvene on March 26, 2025, in Montreal, preceding the ICCAIA Conference and Board meeting. To ensure inclusivity, this session will also offer virtual access for members unable to attend in person.

Airworthiness

The ICAO Airworthiness Panel oversees three active Working Groups (WGs) addressing key areas of aviation safety and regulation. WG1, dedicated to Continuing Airworthiness, focuses on maintenance, repair, and overhaul (MRO) from a manufacturer's perspective. WG2, which handles Initial Airworthiness, has made notable progress in harmonizing the classification and definitions of VTOL and powered-lift aircraft while also advancing regulatory frameworks for aircraft health monitoring and the Connected Aircraft Concept. Meanwhile, WG4, centered on Products, contributed to technical reviews of SARPs amendments, with particular emphasis on Electric and Hybrid Propulsion Systems (EHPS) and the harmonization of certification procedures and specifications.

Safety Management

The Safety Management Panel has been actively working to enhance the implementation and expansion of Safety Management Systems (SMS) and the Global Aviation Safety Plan (GASP). For the first time, ICAO's GASP Study Group introduced a Safety Intelligence Manual, providing a framework to extract meaningful data from service providers, and establishing a foundation for a common language and framework for safety intelligence, paving the way for future developments.

ICAO Accident Investigation

The Airworthiness Committee has actively supported ICAO's efforts to enhance accident investigation processes under Annex 13. ICCAIA is working to emphasize the importance of timely investigations and quality final reports as vital safety resources.

During the December 2024 Accident Investigation Symposium in Abu Dhabi, ICCAIA presented industry perspectives, highlighting OEM commitments to supporting Regional Accident Investigation Organizations (RAIOs) and fostering international collaboration. The symposium reinforced the need for standardization and enhanced state cooperation in accident investigations.

Aerodrome Design and Operations

ICCAIA expertise in the Airport Design and Operations Panel has been focusing on the infrastructure requirements for accommodating emerging aircraft technologies. A key achievement in 2024 was the establishment of the Airport Compatibility of Alternative Aviation Fuels Task Force (ACAAF-TF), which is analyzing the operational impacts of hydrogen and battery-powered aircraft. This initiative aims to develop new Concepts of Operations (CONOPS), job cards, and standards, aligning with the Long-Term Aspirational Goal (LTAG) for aviation sustainability.

Pilot Training and Licensing Panel

The Pilot Training and Licensing Panel oversees eight working groups with topics ranging from automation (vs. manual flying skills), to integration of competency-based training and assessment, to simulation training devices, language, age factors, ATC simulation, and more.

Ongoing Initiatives

The ICCAIA Airworthiness Committee has also been engaged in several ongoing projects:

Integrated Risk Management (IRM): In 2024, ICAO launched a Study Group on IRM to address multidisciplinary risks spanning safety, security, airworthiness, and operations. ICCAIA nominated experts to ensure manufacturing concerns are represented.

Runway Overrun Awareness and Alerting Systems (ROAAS): The committee continues to monitor regulatory timelines and certification challenges associated with implementing ROAAS requirements, ensuring alignment among stakeholders.

Aircraft Halon Cargo Replacement: The phase-out of Halon in cargo compartments remains a pressing issue. Manufacturers, supported by the Cargo Compartment Halon Replacement Advisory Group, are navigating complex challenges to find safe, effective alternatives.

Changed Product Rule (CPR): While not a direct relationship with ICAO, the committee has membership on the U.S. FAA's Changed Product Rule (CPR) Aviation Rulemaking Committee (ARC) and maintains a focus on the impacts that future CPR rulemaking may have, such as when manufacturers must adapt existing aircraft fleets to implement new ICAO mandated technologies (e.g., ROAAS, GADSS-ADT, etc.), or where new environmental standards may limit a manufacturer's opportunities to expand their product lineup.

Looking Ahead to 2025

The Airworthiness Committee anticipates a dynamic year ahead, with a focus on contributing to ICAO standards and advancing expertise from OEMs. Key priorities include refining airworthiness standards for emerging technologies like eVTOLs, addressing pilot licensing and training for new aircraft operations, and progressing certification standards for innovative aviation systems.

ICCAIA COMMITTEES INSIGHTS: 2024 HIGHLIGHTS & ACHIEVEMENTS

CNS/ATM Committee

The CNS/ATM Committee coordinates the work of ICCAIA to support 17 different ICAO technical panels, advisory groups, study groups and task forces in the areas of communication and navigation systems and air traffic management. In 2024, the Committee dealt with several key issues including :

GNSS Interference and Spoofing

The global navigation satellite system (GNSS) is a fundamental element for providing communication, navigation and surveillance (CNS) and air traffic management (ATM) services worldwide. Positioning and timing information provided by GNSS is used by numerous aircraft avionics systems. In recent years, there has been a steep increase in reported events of GNSS signal spoofing or jamming, particularly since late 2023. Spoofing in particular is a concern, since it potentially causes GNSS receivers to compute incorrect position, navigation and timing data. The CNS/ATM committee co-authored a working paper with ICCAIA, IATA, IFALPA, IFATCA, and IFATSEA for the 14th Air Navigation Conference (July 2024). The Committee co-chairs also engaged in coordination with IATA which ultimately resulted in delivery of a "Sky Talk" seminar on GNSS Interference at 14th Air Navigation Conference. Further briefings and communications are planned in conjunction with industry partners for 2025.



Extended Minimum Crew Operations (eMCO)

eMCO proposes an aircraft operation with a minimum flight crew composition of two pilots during which extended periods

of the cruise phase is conducted with one pilot at the controls while the other pilot(s) is(are) resting in a specifically designed rest area. eMCO is conducted only in an aircraft certified accordingly. A holistic, hazard-oriented, iterative and robust methodology is needed to demonstrate the safety of eMCO. An ad-hoc group was formed to coordinate an ICCAIA position and plan of action concerning eMCO, including identifying all areas that need additional work and research. This work is ongoing into 2025.

Wake Energy Retrieval (WER)

WER is also known as formation flying where fuel efficiency is gained by having one airplane fly in the wake of another airplane. Trial flights have been conducted and a concept of operations developed. An ad-hoc group was formed to coordinate ICCAIA's position and efforts relative to WER.

True North

ICAO has launched an initiative to study moving from use of magnetic North to True North by 2030. The lead up to the ICAO decision to launch the True North Advisory Group (TRUE-AG) included a survey for which the CNS/ATM committee coordinated the ICCAIA response. The ICAO group is conducting a feasibility study on the subject and identifying possible impacts including during a transition phase. The committee set up an ad-hoc activity to coordinate ICCAIA's position on the transition to True North and to coordinate ICCAIA's work in this area. The nominated ICCAIA member of the Advisory Group was subsequently chosen to co-chair Advisory Group for ICAO and continues to lead a sizeable ICCAIA delegation of advisors as the group progresses.

Hyper Connected ATM (HCATM) and Connected Aircraft

HCATM is being defined with the objective to allow using commercial cabin connectivity in addition to safety protected spectrum links with dedicated mechanisms to convey safety communications, with no impact and no new specific requirements on commercial connectivity systems. CNS/ATM Committee led the development of a paper describing the concept for the 14th Air Navigation Conference. The Conference identified the need for more work to mature the concept and address concerns such as the potential for interference.

Leadership Changes

There has been significant churn in experts in the committee and in several panels, including new members of the Surveillance Panel, Information Management Panel (IMP) and Remotely Piloted Aircraft Panel (RPASP). We would like to sincerely thank the outgoing members, Vincent Capuzzo, David Almeida and Fredrik Nordström for their work and contributions.

ICCAIA COMMITTEES INSIGHTS: 2024 HIGHLIGHTS & ACHIEVEMENTS

Health, Facilitation and Crisis Response Committee

Committee Summary

In 2024, the ICCAIA Health, Facilitation, and Crisis Response (HFCR) Committee played a vital role in shaping coordinated industry positions on aviation facilitation, public health, and health-related safety concerns.

The committee is tasked with contributing to the development of a crisis response framework and response mechanism at ICAO and offering industry expertise on guidance material to ensure safety concerns and best practices are adequately represented.

Key contributions are also expected in the development of passenger health-related Standards and Recommended Practices (SARPs) and the creation of a framework to respond to future health crises. The committee also leverages expertise to model experience on virus transmission for future use and actively advocates for health measures in air travel, such as disinfection, disinsection, risk assessments, identification of key workers, and travel restrictions.

Through these efforts, the HFCR Committee reaffirmed its commitment to promoting health and safety within the global aviation industry.

2024 Committee Highlights and Key Activities

This year, the HFCR Committee actively participated in the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA).

The committee contributed to the five newly formed CAPSCA working groups, **MANUAL**, **PREPARE**, **INNOVATE**, **IMPLEMENT** and **PATIENT**, tasked with defining a comprehensive framework to address future health crises. Following the kick-off meeting in

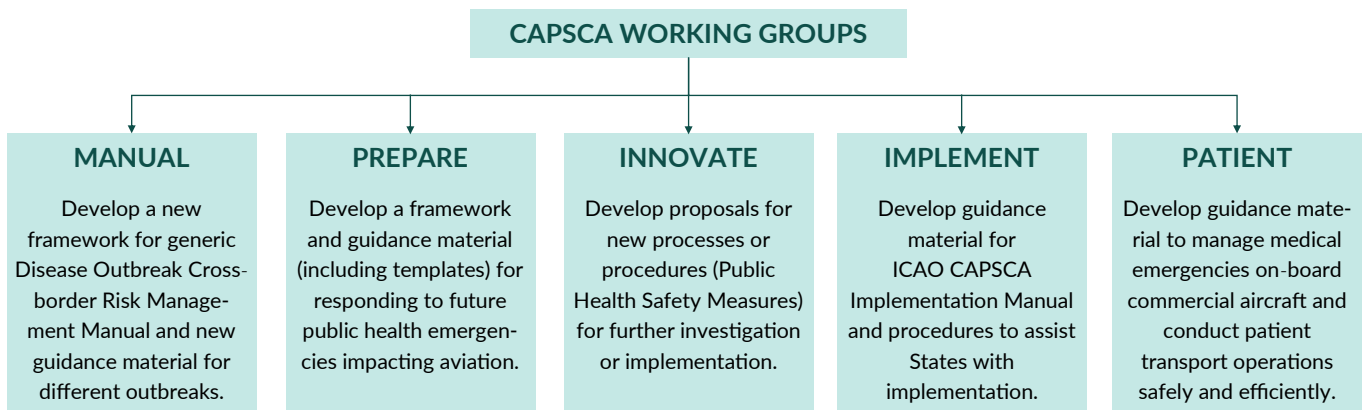
May 2024, ICCAIA ensured at least one expert participated in each group, the aim being to present a final CAPSCA report at the ICAO 42nd Assembly in 2025.

In February 2024, the HFCR Committee engaged in ICAO's Facilitation Panel, where new and revised SARPs were adopted, including relocating existing health-related SARPs to Chapter 10 for Amendment 30 to Annex 9 – Facilitation. The Panel was also advised of relevant Facilitation-related developments in the United Nations and other international organizations, impacting on ICAO's FAL Programme and considered reports of the Working Group on Annex 9 and the one on Guidance Material.

Further efforts included participation in the Working Group on Assistance to Aircraft Accident Victims and their Families. This new Working Group is tasked with developing relevant guidance material in line with Standard 8.47 in Annex 9 and other relevant ICAO Annexes to assist States in implementing the relevant provisions. Members from the HFCR Committee also contributed to the associated symposium, held from November 26th to 28th in the Netherlands.

Accessibility in international civil aviation was another area of focus for the HFCR Committee. Members participated in the ICAO Working Group on Accessibility and attended the first ICAO/IATA/ACI Joint Symposium on Accessibility, held from December 2nd to 3rd, 2024.

Through these activities, the HFCR Committee has reinforced its commitment to enhancing global aviation safety, health, and accessibility while fostering collaboration among industry stakeholders. As 2025 starts, the committee's work continues to align with ICAO's strategic objectives and broader international goals.



ICCAIA COMMITTEES INSIGHTS: 2024 HIGHLIGHTS & ACHIEVEMENTS

Security Committee

In 2024, as in the previous years, the Security Committee continued its robust engagement in cybersecurity-related activities, reflective of the growing digital transformation and connectivity to meet Capacity, Safety, Aviation physical/cyber-security and environmental challenges.

Throughout the year, numerous initiatives were executed, spearheaded by two major panels dedicated to the subject, the Cyber Security Panel and the Trust Framework Panel, alongside activities by the Communication, Navigation, and Surveillance Panels. These efforts aimed to better integrate cyber security into the Strategic Security Plan (GASeP issue 02) and to equip air transport stakeholders with a better understanding of the cybersecurity risks (e.g. Global Cyber Risk Considerations / Doc 10209), to enhance their ability to prevent and respond to cyber attacks through publication of guidance manuals (3 published on the ICAO website, 5 under review and 9 under development), to secure digital exchanges between them (Trust Framework Concept), and to secure aeronautical communications (e.g., ATN/IPS) and satellite-based navigation capabilities.

In addition to ICAO activities, the Security Committee has actively contributed to the activities of the rForum in conjunction with IATA, working to align the understanding of risks and the practical solutions to be put in place to ensure a continuum of security between OEMs and operators. The Ad Hoc Cybersecurity Coordination Committee (AHCCC) convened its second session, continuing the alignment and rationalization of ICAO's cybersecurity efforts scattered in many entities.

Due to a lack of a nominated ICCAIA observer, the Committee has only very occasionally participated in AVSEC panel activities, while monitoring the work related to Aircraft Operations Over or Near Conflict Zones which persists as a significant challenge.

Committee members contributed to the preparation of ICAO Fourteenth Air Navigation Conference (AN-CONF/14), which addressed cyber-security matters through its agenda item 4,



ICAO

CYSECP/3
3-6 June 2024



thus demonstrating the awareness that cybersecurity is an integral part of air navigation activities and must be addressed in a multi-disciplinary manner. They also took part in the development of the Muscat Declaration, ratified during ICAO Security Week 2024 held in Oman at the end of last year, which reiterated the imperative need for security issues to be addressed by the industry players and the need for cooperation and the provision of resources.

Finally, with regard to the ICCAIA's internal activities, the committee held 2 sessions and engaged in a dialogue with the airworthiness committee on Integrated Risk Management (State Letter ref. AN8/19-IND/24/5), culminating in a proposed paper for discussion. Preliminary reflections were made on subjects that would be relevant to put on the table at the next ICAO General Assembly, building on the conclusions of (AN-CONF/14) and the ICAO Security Week .

ICCAIA COMMITTEES INSIGHTS: 2024 HIGHLIGHTS & ACHIEVEMENTS

Advanced Air Mobility (AAM) Advisory Group

Advanced Air Mobility: Updates from the ICAO AAM Study Group

Advanced Air Mobility (AAM) is transforming aviation with groundbreaking innovations. However, globally harmonized standards, certifications, and infrastructure are essential for safe, sustainable, and coordinated implementation.

ICAO AAM Study Group: Driving a Unified Framework

In response to AAM's growing significance, ICAO launched the AAM Study Group in spring 2023, following a 41st ICAO Assembly mandate. The group's mission is to establish a strategic, globally harmonized framework for AAM. Key objectives include:

- ◆ Conducting a comprehensive assessment and gap analysis of the AAM ecosystem.
- ◆ Identifying critical enablers for Urban Air Mobility (UAM).
- ◆ Evaluating emerging traffic management systems and required ground infrastructure.

The group provides ICAO member States with recommendations and guidance to support AAM technologies' safe and efficient adoption.

ICCAIA AAM Study Group: Supporting Industry Collaboration

Over the past two years, the AAM Study Group has worked with ICCAIA and 34 other stakeholders, including state authorities, industry leaders, and standards organizations. Key achievements include:

- ◆ Developing initial guidance for member States to facilitate early AAM implementation.
- ◆ Aligning efforts with ICAO panels such as the Remotely Piloted Aircraft System Panel (RPASP) and the Vertical Flight Infrastructure Working Group (VFIWG).

This collaborative approach underscores the importance of stakeholder engagement in shaping a unified AAM framework.

A Milestone Event: The First ICAO AAM Symposium

In September 2024, ICAO hosted its inaugural AAM Symposium at its Montreal headquarters, its most-attended event ever. Experts explored key themes:

- ◆ Regulatory frameworks.
- ◆ Technological advancements.
- ◆ Societal impacts.
- ◆ Sustainability in AAM.

The symposium underscored the Study Group's significance and global commitment to advancing AAM.



ICCAIA's Vice-Chair Mike Mueller participated in the one of the cornerstone discussions of AAM2024

Leadership Transition in the ICAO AAM Study Group

The 4th session of the ICAO AAM Study Group marked a leadership transition. ICCAIA extends gratitude to Kirsten Riensema (UK CAA) for her exemplary leadership as Chair and welcomes Dale Sheridan (Australia) as the new Chair, anticipating continued progress under her guidance.

Outlook for eVTOL Development in 2025

2025 is expected to be pivotal for eVTOL manufacturers as they focus on:

- ◆ Transitioning prototypes into certified, scalable products.
- ◆ Meeting stringent safety and performance standards.
- ◆ Advancing battery technologies for longer endurance.
- ◆ Integrating operations into evolving traffic management systems.

Collaboration with regulatory authorities is vital to harmonize certifications and address airspace and infrastructure challenges. Manufacturers must also align globally on sustainability and urban mobility solutions while building public trust through safety and innovation.

ICCAIA's AAM Study Group remains dedicated to supporting ICAO and stakeholders to achieve safe, reliable, and sustainable AAM operations.

ICAO AIR NAVIGATION COMMISSION VISIT TO BELL-TEXTRON

Majid Badiey

On November 12, 2024, Bell Textron Canada hosted a landmark site visit at its Commercial Assembly and Delivery Centre in Mirabel. Organized by ICCAIA, this event brought together members of the Air Navigation Commission (ANC), representatives from international organizations, and observers from Member States. The visit aimed to foster dialogue on safely and harmoniously integrating emerging technologies into global aviation.

Exploring Bell Textron's Operations

Participants were offered an exclusive look at Bell's extensive Canadian operations, which form a significant portion of Textron's global business. The Mirabel facility, employing a large workforce, serves as a hub for civil helicopter production. Its capabilities include a Composite Centre, Final Assembly Line, Flight Test Certification, and Aircraft Completion and Painting sections, showcasing a comprehensive infrastructure that supports end-to-end manufacturing.

Technological Evolution in Rotorcraft

Bell Helicopter continues to lead the industry by adopting advanced technologies, including Fly-By-Wire systems, which present unique challenges and opportunities compared to fixed-wing aircraft. These innovations enhance vertical takeoff and landing capabilities, optimize weight through advanced materials, and improve aerodynamics, resulting in safer and more efficient operations.

A key discussion during the visit revolved around the emergence of electric Vertical Take-Off and Landing (eVTOL) aircraft. Participants explored how eVTOLs could complement helicopters in urban environments with strict noise regulations. While eVTOLs show promise for specific applications, helicopters remain indispensable in rugged, infrastructure-limited regions such as remote energy operations.

Looking forward, the industry is delving into hybrid propulsion systems and other advanced technologies to address specialized operational needs. Safety remains a cornerstone, with ongoing R&D focusing on adapting these innovations to the unique dynamics of rotorcraft flight.

Navigating Regulatory and Cybersecurity Challenges

The visit also highlighted the complexities of certifying hybrid propulsion systems and addressing the growing demands of cybersecurity in aviation. Collaborative discussions between regulatory bodies and Original Equipment Manufacturers (OEMs) emphasized the potential for performance-based regulations to simplify certification while maintaining safety.



Members of the ICAO Air Navigation Commission and ANC observers at the Bell Textron facility in Mirabel, Quebec, on November 12, 2024.

Cybersecurity emerged as a critical focus area, with compliance now requiring thorough assessments across all aircraft systems. While OEMs and vendors are making progress in tackling these challenges, the absence of standardized approaches and shortages in skilled professionals remain key obstacles.

Takeaways

The ANC's visit to Bell Textron Canada provided a valuable platform for engaging with industry leaders, exploring state-of-the-art manufacturing processes, and discussing regulatory and technological advancements.

ICCAIA WELCOMES ALEXANDRA PARÉ AS DIRECTOR MEMBERSHIP, MARKETING AND COMMUNICATIONS



ICCAIA is delighted to welcome our new Director of Membership, Marketing, and Communications, Alexandra Paré, who joined us on November 4th, 2024.

Alexe brings over 12 years of experience in multinational and global organizations, specializing in business development, events, communications, marketing and sales. Having worked for 10 years

at ICAO in a project management role within the Events and Business Development Unit, she is well-known and respected in the aviation community.

During her time at ICAO, Alexe made significant contributions to ICAO's Ancillary Revenue Generation Fund (ARGF) by delivering over 20 global events, including ICAO's last Assembly (A41), ICAO's 14th Air Navigation Conference, and the AAM 2024 Symposium. She also built long-term business relationships with industry partners and managed key revenue-generating projects such as the ICAO States Today 2022 publication.

Since joining ICCAIA in November, Alexe has taken on responsibility for ICCAIA's communications, with the ICAO 80th anniversary being her first mandate, along with overseeing marketing efforts. She also assumed responsibility for planning our 2025 Annual General Meeting (AGM) and Conference and has started working on member relations and opportunities to grow our membership.

In the coming months, Alexe will focus on further developing and expanding ICCAIA's Membership and refining our communications strategy.

We warmly welcome Alexe to ICCAIA and look forward to her contributions in communications, marketing, and membership growth. We are confident that her expertise will enhance ICCAIA's presence and position within the aviation community.

ICCAIA'S GROWING TEAM AND FIRST TEAM BUILDING

Less than a year ago, the ICCAIA team was half the size it is today. With the addition of three new directors - Majid, Anouck, and Alexe - in 2024, ICCAIA has doubled in size and is now a true team.

Recently, we had the opportunity to organize our first team building event to celebrate the holiday season. This fun and light-hearted get-together helped foster closer bonds and a true team spirit, filled with laughter and silliness.

We are ICCAIA — a team dedicated to promoting a safe, secure, efficient, and sustainable international air transportation system, supported by a thriving civil aerospace manufacturing and services industry!



42ND SESSION OF THE ICAO ASSEMBLY

Guiding the Future of Global Aviation

The ICAO Assembly is the governing body of the International Civil Aviation Organization (ICAO) and serves as its highest decision-making platform.

Convening every three years, it brings together representatives from all 193 member states to evaluate the progress of global aviation, establish priorities, and set policies that will guide the organization's activities for the next triennium. Additionally, the Assembly elects the ICAO Council for the upcoming term.

By fostering international cooperation, the Assembly plays a critical role in ensuring the safe, efficient, and sustainable development of civil aviation. Its sessions typically extend over two weeks and involve plenary meetings as well as intensive committee discussions to address pressing industry issues.

The 42nd ICAO Assembly is scheduled to take place from September 23 to October 3, 2025, at ICAO Headquarters in Montreal, Canada.



ICAO's Triennial Assembly, where Member States and international organizations gather to shape global aviation policies.

ICCAIA's Collaborative Efforts

Recognizing the importance of presenting a unified and impactful voice, ICCAIA is working diligently to prepare for the 42nd Assembly. ICCAIA's Small Group is focused on refining and prioritizing topics to develop relevant and meaningful working papers alongside a supporting set of information papers.

The list below outlines the papers we have planned so far; these papers will be developed over the coming weeks and are likely to be supplemented by additional papers on environment related topics following the conclusion of the next CAEP meeting in February. A heartfelt thank you to all the authors and the team assisting with paper development.

Working papers

- ◆ Approaches to the applicability dates of ICAO Standards
- ◆ Mitigating GNSS Radio Frequency Interference (RFI)
- ◆ Cargo compartment fire extinguisher halon replacement
- ◆ Non-CO2 emissions impacts
- ◆ Cybersecurity in aviation - Integrated Risk Management

Information papers

- ◆ Advancing the Standardization Roadmap with LTAG technologies
- ◆ AI applications and opportunities in aerospace
- ◆ Manufacturers support for Accessibility
- ◆ Addressing workforce challenges in the aviation and aerospace industries

There is also potential for ICCAIA to support other organizations' papers on subjects such as integrated airspace.

ICCAIA TOUR IN ASIA

In November 2024, Dan Carnelly took the opportunity to pay a visit to each of ICCAIA's Members and Associate Members in the Asia region, starting in Malaysia with the *Malaysia Aerospace Industry Association* (MAIA), participating in the Second International Conference on Green Aviation as a guest of the *Chinese Society of Aeronautics and Astronautics* (CSAA) in Chengdu, China, passing through Japan with the *Society of Japanese Aerospace Companies* (SJAC), and rounding off with the *Association of Aerospace Industries, Singapore* (AAIS).



Dan Carnelly with Minoru Hanakata (SJAC), David Jones (MAIA), Sia Kheng Yok (AAIS), and Dr. Fang Liu (previous ICAO Secretary General) during his 2024 Asia tour.

In Malaysia, following an industrial visit to the facilities of Spirit AeroSystems, Dan joined the MAIA Board hosted by Senior Aerospace Upeca for discussions on national and regional aerospace priorities. A common theme both in Malaysia and in the later visit to Japan was the challenge being faced in the disruption to the global supply chain. This is both a hang over from the COVID era and a result of ongoing worldwide challenges for the aerospace sector. On a more positive note, MRO business is booming, with ICCAIA engaged on the cross-border recognition of maintenance certification being of key interest, and the advanced air mobility and drone sector is seeing an upsurge of activity in the region.

At the International Conference on Green Aviation, Dan moderated a panel session of ICCAIA manufacturers, including Airbus, Boeing, COMAC and SAFRAN. The panel looked at progress towards the ICAO Long Term Aspirational Goal (LTAG) and discussed the role of SAF and new energy types in China and across the Asia-Pacific region. It was also a pleasure to run into ex-ICAO Secretary General Dr. Fang Liu during proceedings.

With the upcoming CAEP/13 meeting about to take place in Montreal, discussions in Japan with the Japanese Civil Aviation Bureau (JCAB) centered around industry expectations for the setting of a new dual stringency for both noise and CO2 emissions and around future work for the CAEP during its next cycle. This was followed by an industrial visit to Subaru Aerospace, the centre of excellence for wing design in Japan, in Utsunomiya hosted by CEO Yoshihiro Saito.

Discussions on the final leg, in Singapore, centred around facilitating links with additional Associations in the region and with the idea of ICCAIA holding an event in the region on the sidelines of the 2026 Singapore Airshow – watch this space! A final industrial visit to Wah Son Engineering wrapped up a very productive tour that delivered a key insight into regional priorities and expectations.

JOIN THE ICCAIA FAMILY

BECOME A MEMBER: HAVE YOUR VOICE HEARD BY POLICYMAKERS

ICCAIA unites international aerospace industry associations, creating a global community of over three thousand companies involved in the design, development, manufacture, and in-service support of aeronautical and space products and technologies, including ground-based systems and services.

Our Priorities

Through membership with ICCAIA, associations ensure their members are effectively represented in global policy discussions, with their voices heard on the international stage. As a recognized observer at the International Civil Aviation Organization (ICAO), ICCAIA directly conveys the perspectives of the manufacturing and services community to global policymakers. This involvement provides members with valuable opportunities to participate in key ICAO events, panels, and working groups. Our members contribute their expertise to over fifty ICAO panels and groups, addressing critical topics such as airworthiness, communication, navigation and surveillance/air traffic management, security, environmental sustainability, facilitation and health, cybersecurity, and advanced air mobility.

Membership Benefits:

- ⇒ Highlighting local and regional challenges and opportunities
- ⇒ Ensuring that manufacturers' views are heard when global policy is formulated
- ⇒ Bringing together the world's experts to recommend new channels for development and innovation
- ⇒ Providing a supportive community to help and advise on ideas, issues, and challenges
- ⇒ Strengthening the global voice toward better, outcome focused, flexible regulation
- ⇒ Advancing the agenda on sustainability, digitalization and innovation



If you are interested in becoming a member or would like more information, please reach out to Alexe Paré, our Director of Membership, Marketing and Communications, at apare@iccaia.org.

ICCAIA PANEL AND COMMITTEE VACANCIES

We urgently need experts to fill the following positions:

- Health Facilitation and Crisis Response Committee Chair
- Airworthiness Committee Vice-Chair
- Airport experts to support the ICAO Aerodrome Design and Operations Panel and airport relating working groups
- Security experts including cybersecurity for participation in panels and rForum group, as well as AVSEC Panel representation

Please contact Nina Brooks at nbrooks@iccaia.org for additional information.

NEWS FROM ICCAIA MEMBERS

EXCITING DEVELOPMENTS IN THE SINGAPORE AEROSPACE INDUSTRY

Association of Aerospace Industries (Singapore)

As a small nation without a hinterland, aviation has long been the lifeblood of Singapore's economy, connecting the city-state to global markets and enabling businesses to thrive. Central to this connectivity is Changi Airport, which handled 67.7 million passengers in 2024, earning its place as the world's fourth-busiest international airport. Notably, three of the world's top 10 international flight routes - Kuala Lumpur to Singapore, Jakarta to Singapore, and Bangkok to Singapore - culminate in this global hub^{i,ii}.

A Leading Hub for Aerospace Activities

Over the decades, Singapore has shaped its reputation as a hub for aerospace activities, particularly in Maintenance, Repair, and Overhaul (MRO). The nation contributes over 10% of global MRO output and holds a 15% market share in the aerospace engine MRO sector. This is sustained by a robust ecosystem of more than 130 key industry players, including major aircraft manufacturers, engine makers, and homegrown giants. In 2023, Singapore's aerospace sector recorded an output of S\$15.4 billion, demonstrating a significant 73% nominal growth over the past decade (2013 to 2023). Preliminary data for 2024 show a 14.7% year-on-year growth, pushing the estimated output for the year beyond S\$17 billion. This trajectory is generally set to continue with increased fleet sizes and air travel demand in the Asia-Pacific region.

Investments Driving Growth

Last year, the Singapore Economic Development Board announced that a record S\$750 million worth of investment has been committed across aerospace projects over the next three to four years, focusing on innovation, advanced MRO capabilities, and next-generation aerospace manufacturing. Here is a look at some of the key investments:

Singapore Aero Engine Services Limited (SAESL): A joint venture between Rolls-Royce and SIA Engineering Company, SAESL is investing S\$242 million for the expansion of its facility in Loyang and a new facility at Seletar Aerospace Park. This will increase SAESL's engine MRO capacity by 40%, and upon completion in 2027, it will become the world's largest MRO facility for Rolls-Royce's latest engines.

GE Aerospace: The company is transforming its Singapore repair facility into a "Smart Factory" through a S\$14.8 million investment, incorporating automation and digitalisation. Singapore now accounts for over 60% of GE Aerospace's global repair volumes.

Pratt & Whitney: Has committed S\$27 million to expand its Seletar Aerospace Park manufacturing capacity and is also adding an MRO line for Leonardo AQ139 helicopter engines.

Safran Electrical & Power: The company is opening a new 2,800 sqm facility in Seletar Aerospace Park dedicated to the manufacturing and MRO of aeronautical electrical equipment.

ST Engineering Aerospace: ST is in the midst of developing its new 84,000 sqm, S\$170 million airframe facility at Changi Creek, which will house four widebody aircraft hangar bays. The first bay is expected to be operational by mid-2025, and the other three in 2026.

Thales: Announced plans to establish an Avionics Centre of Excellence at its Avionics Asia-Pacific Industrial Centre in Changi North Rise. This centre will support the industrialisation of new flight avionics products and undertake Smart Factory transformation initiatives.

Conclusion

Another significant development is the upcoming Changi Airport Terminal 5. Set to commence construction in the first half of 2025, Terminal 5 is designed to handle up to 50 million additional passengers annually upon its expected completion in the mid-2030s, bringing Changi's total capacity well over 100 million per annum. These developments reflect a strong optimism for the future of Singapore's aviation and aerospace sectors. Coupled with strong government support, active contributions to international aviation policy and standards development, and a commitment to innovation, Singapore is positioning to harness the full potential of the sector.



Credit: SAESL (January 2025)

ⁱ<https://www.oag.com/busiest-airports-world-2024>

ⁱⁱ<https://www.oag.com/busiest-routes-world-2024>

NEWS FROM ICCAIA MEMBERS

SINGAPORE SUSTAINABLE AIR HUB BLUEPRINT

Association of Aerospace Industries (Singapore)

As a member state of the International Civil Aviation Organization (ICAO), Singapore is committed to the Long-Term Aspirational Goal of achieving net-zero carbon emissions by 2050. Recognising the critical importance of sustainable development, Singapore prioritises the growth of its air hub in an environmentally responsible manner.

In 2024, the Civil Aviation Authority of Singapore (CAAS) unveiled the [Singapore Sustainable Air Hub Blueprint](#), a comprehensive strategy aimed at decarbonising the nation's aviation sector. The blueprint sets ambitious targets: a 20% reduction in domestic aviation emissions from 2019 levels by 2030 and achieving net-zero emissions for both domestic and international aviation activities by 2050. The blueprint addresses emissions from current operations at Changi Airport's Terminals 1 to 4 and Seletar Airport, covering vehicles, facilities, and buildings involved in aircraft, passenger, baggage, and cargo handling. Separate targets will be established for Terminal 5 and Changi East as their developments progress.



Credit: CAAS

Adoption of Sustainable Aviation Fuel (SAF)

A highlight of the blueprint is the strong commitment to adopting Sustainable Aviation Fuels (SAFs), recognised globally as a critical pathway for reducing aviation emissions. Singapore is leading SAF adoption in the region, having conducted successful pilot programmes at Changi Airport. Neste, a Finnish energy company, has established the world's largest SAF production facility in Singapore, with an annual capacity of up to one million tonnes.

In a significant policy move, Singapore will mandate the use of SAF for all departing flights starting in 2026, beginning with a 1% SAF target. This target is expected to increase to between 3% and 5% by 2030, contingent on global developments and SAF availability.

To support SAF uptake, CAAS will implement a levy to finance centralised procurement. As the SAF supply market is still emerging and prices can fluctuate, a fixed cost envelope method will be used to offer cost predictability for airlines and passengers. Levy amounts will be predetermined based on SAF targets and estimated prices, adjusted according to travel distance and class.

Advancements in Airport Operations and Air Traffic Management

Beyond fuel initiatives, Singapore's airports are transitioning to cleaner energy sources, including adopting electric vehicles and increasing the utilisation of solar power. In air traffic management, CAAS is deploying advanced tools such as demand-capacity balancing, performance-based navigation, and gate-to-gate trajectory optimisation to enhance efficiency and reduce fuel consumption.

Industry Collaboration and Future Outlook

Complementing government efforts, industry leaders are making significant contributions. In early 2024, Airbus announced plans to establish a Sustainable Aviation Hub in Singapore, focusing on technology, research, and innovation. The hub will concentrate on three key areas: researching SAF supply chains and hydrogen-based technologies, advancing maintenance and operations through cutting-edge practices, and modernising air traffic management systems, including unmanned traffic management. Located within the Airbus Singapore Campus in Seletar Aerospace Park, the hub will collaborate with local businesses, universities, and research institutions to facilitate knowledge sharing, talent development, and joint research projects.



Airbus Sustainable Aviation Hub MOU signing, February 2024. Credit: Airbus

The Singapore Sustainable Air Hub Blueprint underscores the nation's resolve, detailing medium- and long-term strategies alongside concrete steps that CAAS and aviation stakeholders are taking towards national and global decarbonisation goals. By collaborating with industry leaders, innovators and policymakers, we aim to develop, test and implement solutions that benefit the global aviation ecosystem.

NEWS FROM ICCAIA MEMBERS

NURTURING A RESILIENT AND FUTURE-READY AEROSPACE WORKFORCE

Association of Aerospace Industries (Singapore)

Singapore is home to one of Asia's largest and most diverse aerospace ecosystems. At its core lies a highly skilled workforce of over 22,000 professionals, seven in ten of whom are Singaporeans.

The Asia-Pacific region is set to experience the fastest growth in fleet expansion and Maintenance, Repair, and Overhaul (MRO) services in the next decades. To support this trajectory as well as anticipated growth fuelled by investments, Singapore's aerospace industry plans to hire more than 2,500 workers over the next three to five years. At the same time, advancements in areas such as next-generation aircraft and sustainability are increasingly incorporating green and digital elements into job roles. Together, these trends present challenges in recruiting talent with the requisite skills, in an already competitive labour market.

Career Conversion Programme (CCP) for Aerospace

To address these challenges and ensure a future-ready workforce, the Singapore government, through its agency, Workforce Singapore, has launched a series of Career Conversion Programmes (CCPs), including one specifically tailored for the aerospace sector. The CCP for Aerospace supports Singapore-based companies by subsidising training for individuals transitioning from other industries, professionals shifting to new roles within the sector, and current aerospace employees taking on expanded or redesigned responsibilities.

Managed by the Association of Aerospace Industries (Singapore) (AAIS), the CCP for Aerospace programme provides funding support, offering up to 90% salary subsidies for on-the-job training of such individuals for up to nine months. Since its launch in 2019, the CCP has supported the reskilling and upskilling of over 5,000 individuals across more than 70 companies in the aerospace and air transport industries, enabling the sector to boost capacity, expand capabilities, and drive transformation.

Cultivating the Next Generation of Aerospace Professionals

Academic institutions play a pivotal role in nurturing future talent and ensuring a sustainable talent pipeline for the industry. Singapore's Institutes of Higher Learning (IHLs) provide hands-on learning environments featuring real aircraft, hangars, and support equipment such as flight and maintenance simulators.

Collaborations between educational institutions, industry, and government agencies facilitate outreach initiatives that inspire young people to explore aerospace and aviation careers. One example is "Aerospace Day," which introduces over 1,000 tertiary students to the industry through career exhibitions, talks, workshops, and company visits, providing valuable insights into its diverse roles and opportunities. This year's Aerospace Day, scheduled for May, is eagerly anticipated by students and industry alike.

To deepen its engagement with students, AAIS recently formalised partnerships with select university aviation and aerospace clubs through the "AAIS-Affiliated Student Clubs" programme. The initiative aims to connect students passionate about aviation with industry opportunities and resources. In conjunction with this, AAIS organised an inaugural Student Leaders Summit in January 2025 to strengthen ties between students and the aerospace sector and spark excitement about future possibilities. The event featured keynote speeches by industry leaders, interactive panel discussions, hands-on workshops, and networking opportunities.

Embracing Job Redesign and Inclusive Talent Pools

Beyond these efforts, Singapore aerospace companies are optimising roles to enhance efficiency, flexibility, and job satisfaction. This includes adopting advanced technologies, fostering a more agile workforce, and improving employee experiences. Efforts are also being made to enhance inclusivity and rethink work arrangements to accommodate diverse needs. Through strategic policies and collaborative efforts, Singapore aims to continue cultivating a skilled workforce, for sustained growth and innovation in the decades ahead.



*Company visits during Aerospace Day, April 2023.
Credit: Aerophotoworks for AAIS*

2025 EVENTS CALENDAR

Dates	Meeting	Place/Notes
10-12 February 2025	ICAO Global Implementation Support Symposium (GISS 2025)	ICAO Abu Dhabi
17-28 February 2025	Thirteenth Meeting of the Committee on Aviation Environmental Protection	ICAO HQ
23-26 February 2025	2025 ICAO Seminar on Air Traffic Flow Management (ATFM) and Flight & Flow Information for a Collaborative Environment (FF-ICE) for the Asia/Pacific and MID Regions	ICAO-Dubai
24-26 February 2025	Eighteenth Meeting of Civil Aviation Authorities of the South American Region	ICAO-Brazil
27 February 2025	Ninth meeting of the MID ATFM Task Force (MID ATFM TF/9)	ICAO-Dubai
03-07 March 2025	Sixth meeting of the Meteorology Panel (METP/6)	ICAO HQ
04-05 March 2025	2025 ICAO EUR/NAT Workshop on Gender Equality and Empowerment of Women in Aviation	ICAO-Almaty, Kazakhstan
04-06 March 2025	10th Joint Meeting of the Airport Economics Panel and Air Navigation Services Economics Panel	ICAO HQ
07 March 2025	International Women's Day High Level Panel Discussion	ICAO HQ
11-12 March 2025	ICAO EUR/NAT Workshop on Aviation Training and Skills	ICAO-Paris
18-20 March 2025	Second Asia/Pacific FF-ICE Ad hoc Group Meeting and Workshop	ICAO-Bangkok
26-28 March 2025	ICCAIA 2025 Annual General Meeting and Conference	Montreal
01-03 April 2025	ICAO European and North Atlantic Regional Seminar on Aviation Cybersecurity	ICAO-Belgrade
07-11 April 2025	Thirty-sixth Meeting of the Aviation Security Panel	ICAO HQ
09-11 April 2025	First ICAO Global Air Cargo Summit	ICAO-Antalya
14-17 April 2025	Facilitation Conference (FALC 2025)	ICAO-Doha
23-25 April 2025	Eighteenth Meeting of the Air Transport Regulation Panel	ICAO HQ
23-25 April 2025	Third Meeting of the Ad Hoc Cybersecurity Coordination Committee (AHCCC/3)	ICAO HQ
28 April 2025	Workshop on New Entrants Integration in the NAT Region	ICAO-Paris
04-08 May 2025	Twelfth Meeting of the Regional Aviation Safety Group, Middle East	ICAO-Doha
04-08 May 2025	Twenty-Second Meeting of the Middle East Air Navigation Planning and Implementation Regional Group	ICAO-Doha
02-06 June 2025	2025 ICAO LTAG Stocktaking on aviation in-sector CO2 emissions reductions	ICAO HQ
02-06 June 2025	Fourth Meeting of the Cybersecurity Panel	ICAO HQ
16-22 Juin 2025	55th International Paris Air Show - Salon International de l'Aéronautique et de l'Espace	SIAE-Paris Le Bourget
16-17 July 2025	ICAO Asia Pacific Regional Aviation Training Symposium 2025 "Enhancing Training Co-operation: Building Human Capital for the Sustainable Development of Civil Aviation"	ICAO-Singapore
28 Jul-01 Aug 2025	60th Conference of Directors General of Civil Aviation, Asia and Pacific Region	ICAO-Sendai, Japan
Aug-25	Thirteenth North & Central American and Caribbean Directors of Civil Aviation Meeting	ICAO-Washington DC
21-22 September 2025	ICAO Innovation Fair 2025	ICAO HQ
23 Sep-03 Oct 2025	42nd ICAO General Assembly	ICAO HQ
20-24 October 2025	Twenty-fourth meeting of the Remotely Piloted Aircraft Systems Panel	ICAO HQ
27 Oct-07 Nov 2025	Seventeenth meeting of the Instrument Flight Procedures Panel	ICAO HQ
27-31 October 2025	Thirtieth meeting of the Dangerous Goods Panel	ICAO HQ