

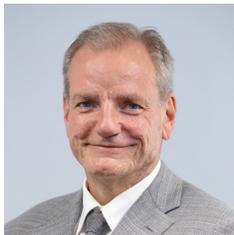


Newsletter 2021 Roundup

A WORD FROM OUR CHAIR

It would be difficult to look back on 2021 without reflecting on the COVID-19 pandemic and the ongoing profound effect it has on our industry. COVID has hit manufacturing, its supply chain and the aftermarket services industries, disrupting cashflow and making government support for R&D activities essential. We are, however, optimistically looking at recovery, while keeping a close eye on continuing issues with the closure of borders and spread of variants. The work of ICCAIA and its members to support industry recovery in 2021 has been tremendous, with great success at the ICAO High Level Conference on COVID, as well as significant contribution to CART guidance and best practices.

We were pleased to welcome a new Associate Member, the Malaysian Aerospace Industry Association, MAIA, in December, and look forward to their members participating in our many activities.



In 2021 we also saw some changes in staff, saying a fond farewell to Mitch Fox whose experience and expertise has helped ICCAIA move forward through these turbulent times. We welcomed a new permanent representative in the Montreal office, Nina Brooks, who joined ICCAIA in June and a new Executive Assistant, Sandrine Kanakri, who joined the organization in January 2022.

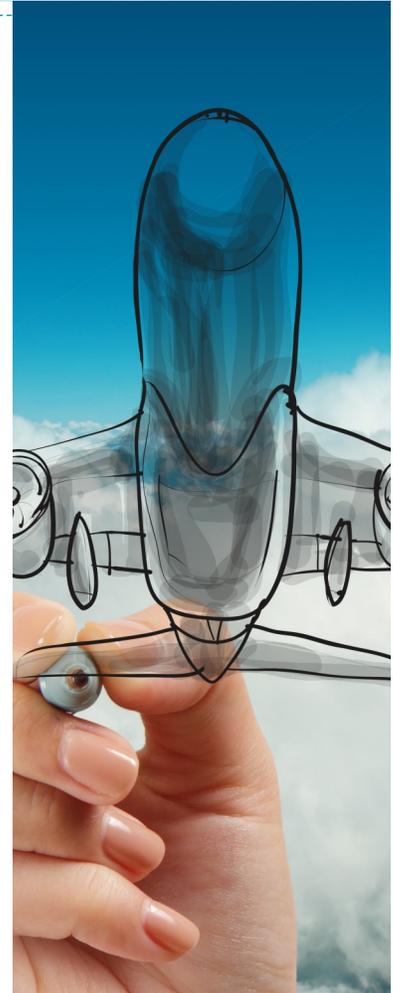
As we look forward, 2022 promises to be an even busier year, with the 41st ICAO Assembly in September, as well as numerous high level conferences and symposia. Planning is already underway for a year that brings us opportunities to contribute our expertise to solve current challenges and showcase innovation for the future.

Jan Pie, Chair, ICCAIA

COMMITTEE NEWS

ICCAIA welcomes new Vice-Chairs to the Aircraft Noise and Emissions Committee (ANEC) - Mark Huising and Olivier Husse, as well as a new Vice-Chair to CNS-ATM, Tim Murphy.

Congratulations to Eric Upton and Claude Pichavant as they move into the chair positions, and a really big thank you to Arnaud Bonnet and Bob Lee, the outgoing chairs.



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SPECIAL POINTS OF INTEREST

- Planning for the 41st ICAO Assembly is underway
- New website has been launched
- ICCAIA commits to Net Zero 2050

ICAO HIGH LEVEL CONFERENCE ON COVID-19

Government and industry stakeholders from around the globe met for the two-week long ICAO High Level Conference on COVID-19 HLCC in October that centred on round-table sessions bringing together Ministers of Transport and Health with senior civil aerospace sector leaders. Focusing on the application of guidance issued by ICAO's Council Aviation Recovery Task-force (CART) for the reopening, rebuilding and resilience of aviation through the COVID-19 pandemic, the meeting also looks to the future and how to resist future shocks.

RECONNECTING THE WORLD ICAO'S HIGH-LEVEL CONFERENCE ON COVID-19



Alongside industry partners, ICCAIA welcomed the declaration made by the Ministerial participants to address the global crisis in aviation and called on States to implement risk based, pragmatic approaches to aid recovery. The statement also highlighted commitments made by industry for global civil aviation operations to achieve net-zero carbon emissions by 2050.

As we look ahead, we can use the collective wisdom that has been acquired during this pandemic to build the institutional structures and processes that will be necessary to anticipate and respond to the next crisis.

SECURITY

The year 2021 has been rich in cyber-security activities and the security committee has been working on different topics managed within the 2 main ICAO cyber-security related entities; the Secretariat Study Group on Cyber-security (SSGC) and the Trust Framework Study Group (TFSG) as well as within the information exchange restricted Forum (rForum) set up with IATA.

SSGC's activities have focused on:

- The development of improved cyber-security governance proposals
- The Study on International Aviation Legal Instruments for cyber-security
- The Cyber-Security action plan and start of development of associated guidance material.

The TFSG' activities, for their part, focused on creating an International Aviation Trust Framework (IATF) and more specifically:

- Proposals for a governance model
- Development of the elements necessary for the establishment of the confidence framework for information exchange between air transport actors.

The rForum activities provided an opportunity to share information on risk sharing in relation to aircraft operations and on aircraft security testing activities.

Cyber-security related activities in 2022 will continue the activities undertaken in 2021, supporting the changes in ICAO towards a new governance structure and preparing for the ICAO next General Assembly.

On physical security, ICCAIA sponsored and spoke at the ICAO AVSEC Symposium on the evolution of security. Activities in 2022 are expected around innovation, integrated risk management and the management of risk in a health and environmental context full of challenges.

AIRCRAFT NOISE AND EMISSIONS COMMITTEE (ANEC)

The ICCAIA Aircraft Noise and Emissions Committee (ANEC) has been focused on supporting the ICAO Committee for Aviation Environmental Protection (CAEP) work on the feasibility of setting a Long-Term Aspirational Goal to reduce international civil aviation CO2 emissions.

ANEC experts have contributed by identifying opportunities to reduce CO2 emissions brought by the incorporation of new technologies, the adoption of new operational measures, and the use of sustainable aviation fuels. ICCAIA experts also co-led a group of experts to identify CO2 emissions reduction opportunities via new aerodynamic and propulsion technologies.

Recently the ANEC has intensified its preparation for the CAEP/12 meeting, which will define the work programme for the CAEP/13 cycle (2022-2025).

A new group has started within the ANEC to cover the Stockholm and Basel Conventions activities outside of ICAO. These are multilateral environmental agreements on Persistent Organic Pollutants (POPs) and the transboundary movement of hazardous and other waste, respectively.

NET ZERO 2050

As other industry stakeholders, and as per the commitment made by ATAG in the Waypoint 2050 document, ICCAIA also commits to support Net Zero operations by 2050. Our own statement is published on the ICCAIA website and via social media channels to support the push for an ICAO commitment in 2022.



CNS/ATM

Across the industry, the demand for information is increasing. Aircraft operators, aircraft and systems manufacturers all seek to connect their aircraft digitally to improve operations and system performance. The delivery of air traffic services is also seeing increased demand for connectivity and information. The panels under the CNS/ATM committee remit are working to meet those demands.

The Air Traffic Management Required Performance (ATMRPP) and Information Management Panels (IMP) are working on the ability to share information between stakeholders necessary to support trajectory-based operations. Requirements defining the methods of interaction for the exchange of flight and flow information are being developed under ATMRPP. System-wide Information Management (SWIM) requirements are being developed under the IMP.

Air-to-ground communications capacity needs to be expanded to support future demand. The Communication Panel Data Communications Infrastructure working group (DCIWG) is working on a number of technologies to meeting the demand. L-band Digital Aeronautical Communications System (LDACS), driven primarily by European interests, continues to work through the technical issues of sharing L-band spectrum. It is seen as one system with the capacity to meet growing demand for digital information exchange. Further improvements in voice and data communications are underway to capitalize on newer space-based technologies including work to all dual dissimilar satellite communication systems to replace high-frequency (HF) radios.

Aviation depends heavily on radio frequency spectrum and many areas are under pressure from new services in certain frequency bands. The committee formed an ad hoc group to focus on 5G deployment and the impact on aircraft radar altimeter systems. Work is both technical and industry advocacy in nature.

AIRWORTHINESS

This year the ICCAIA Airworthiness Committee elected Scott Pepper and Dan Burns as chair and vice-chair respectively. The Committee also welcomed Sia Ky (AAIS), Mervyn Sirisena (AAIS), Luis Lizcano (FEMIA), and David Jones (MAIA) as new Associate Members.

The Committee helped draft a paper on duplicative certification for the ICAO HLCC and also supported completion of the related job card tasks associated with reviewing a sample of States' certification and validation procedures and identifying future changes that may be needed. Advisors to the ICAO Airworthiness Panel also assisted in completing Annex 8 amendments related to cargo compartment fire suppression that will be circulated in an ICAO State Letter for agreement. Finally, an MRO Advisory Group was established to support an ongoing ICAO work program to facilitate the recognition of the approvals of MROs by other States.

Other important tasks in 2021 have included ICAO Airport Design and Services Manual updates as well as a new draft framework for Annex 18 identifying inter-relationships between various annexes and providing clarity on the responsibility of States managing dangerous goods. The Accident Investigation Panel helped with inputs to the 12th Edition of ICAO Annex 13 that provides a mechanism for other States to publish safety related information when a final report is unreasonably delayed. In addition, Advisors to the ICAO Safety Management Panel have had significant involvement in the development of proposals for Amendment 2 of Annex 19 related to SMS, information sharing, and risk management.

In 2022, the Dangerous Goods Panel will initiate a Risk Assessment in conjunction with the ICAO safety specialists to determine if there continues to be a risk for no state of charge (SOC) reduction as a requirement for lithium batteries contained in or packed with equipment.

The Cargo Compartment Halon Replacement Advisory Group will monitor progress toward meeting the ICAO mandate on 28 November 2024 and plans to submit an information paper to the ICAO 41st Assembly if risks materialize that may jeopardize industry's schedule for developing a halon replacement or regulatory approval.

The Airworthiness Committee will also continue to support activities related to COVID-19 transmission modeling, disinfection, radio altimeter interference from 5G, validation of firefighting aircraft, and other important topics.

2021 EVENTS

November 2021—Dubai Airshow
ICCAIA spoke about cybersecurity for civil aviation and moderated several panels on topics such as security and innovation



October 2021—HLCC ICCAIA played an active role in ICAO's high level conference on COVID-19, presenting 5 papers and taking part in the Ministerial plenary sessions

September 2021—ICAO Security Symposium ICCAIA highlighted the evolution of security and the need for evolving solutions



September 2021—ICAO Stocktaking Seminars

ICCAIA's Chair and several members spoke at this forward looking event on environment

July 2021—Regional Seminars

ICCAIA hosted seminars for the Asia Pacific region on hot topics for the Aerospace Industry

MAINTENANCE AND REPAIR ORGANIZATION (MRO) ADVISORY GROUP

An advisory group was established under the Airworthiness Committee to assist in the development of guidance on a harmonized process for the recognition of the approval between States of MROs, known at ICAO as AMOs (Approved Maintenance Organizations). Work is ongoing at ICAO in a number of phases. Phases 1 and 2 are complete, including the transfer of standards from Annex 6 to Annex 8, inclusion of a new provision on recognition and development of standardization of an AMO certificate. Further phases 3 and 4 will look at possible provisions in ICAO Doc 9760, standardization of certificates, reduction in certification and surveillance activities and possible regional level activities. The ICCAIA group has been formed to support this work.

Planned work for 2022 includes;

- Performing a gap analysis of the existing amendments to Annex 8 and the Airworthiness Manual to determine if the Standards, Recommended Practices and guidance materials are sufficient to promote recognition of the approvals of maintenance organizations by States,
- Submitting a paper to the Airworthiness Panel, outlining the results of the gap analysis and any specific proposals for strengthening the provisions
- Analyzing the need, viability and modalities for developing industry standards for auditing maintenance organizations' compliance with ICAO provisions, as well as industry best practices, with the intent of facilitating bilateral and multi-lateral recognition of State approvals of maintenance organizations
- Assessing options for industry-led assessment system versus State framework for multi-lateral recognition to develop recommendation for the path forward.

HEALTH AND FACILITATION

Given the focus on COVID-19 response and recovery, a new ad-hoc group has been created to look specifically at Health and Facilitation, broadening the scope of the excellent work completed on aircraft disinfection and virus transmission modelling by a group of the Airworthiness Committee.

In 2022, the new group will become a permanent committee of ICCAIA, working around three key areas; Crisis Response, Passenger Health related SARPS & Guidance Material and Aircraft disinfection & disinsection.

As well as developing papers for the 41st Assembly, the group will:

- Advocate modeling experience and future use of models for virus transmission, promoting data driven risk assessment
- Advocate on topics such as health measures onboard aircraft, identification of key workers, risk assessment and travel restrictions
- Input to the development of a crisis response framework at ICAO, participating fully in the structure (to be) created from HLCC.

As work ramps up at ICAO in the Facilitation area, the group will also monitor the work of the CAPSCA and its sub-groups, Facilitation panel, ICAO Annex 9 and guidance material working groups, ensuring that coordinated positions are put forward to for regulation and guidance in this area.

CARGO COMPARTMENT HALON REPLACEMENT

The Cargo Compartment Halon Replacement Advisory Group (CCHRAG) is committed to supporting the ICAO 2024 deadline for halon replacement in cargo compartment fire suppression for new type certification aircraft applications submitted after 28 November 2024. The CCHRAG follows up on the respective industry progress.

International differences in upcoming regulations impose a risk on the currently available technical solutions. Most potential Halon replacements, as Halon itself, fall under the PFAS regulation, which is under discussion in the European context. The assessment of the probability and severity of this risk is currently subject of discussion in the group.

In 2021, an update of a technical assessment involving the industry has been performed. Questionnaires have been sent out to the participants and detailed interviews have been performed. The CCHRAG concludes that the industry currently attempts to achieve the 2024 deadline. No technical showstoppers have been identified so far although weight and system complexity issues remain. Materialization of regulatory and schedule risks related to the pandemics might lead to delay.

The CCHRAG plans to issue a working paper to be presented during the 41st ICAO General Assembly as well as providing an informal briefing to the ICAO Air Navigation Commission.



WEBSITE AND ON-LINE TOOLS

2021 saw the redevelopment and launch of ICCAIA's website iccaia.org as part of our new communications strategy. The new website provides up to date information and is dynamic in content. New features planned for 2022 include a members' area and news feeds from ICCAIA members. We also launched a new Sharepoint site for members to work collaboratively and are planning a re-brand.

INTEGRATED ATM

Co-chaired by Airbus and Boeing, ICCAIA has established an Advisory Group on Integrated ATM, working towards a concept of operations for a single global airspace. The first piece of work completed was an analysis of current initiatives, standards and recommended practices, guidance and best practices. This work will help to inform a paper being developed for the 41st General Assembly in 2022 which will call for an integrated approach to the evolution of airspace.

The paper will outline the principles for the development of a single global airspace and IATM operational concept that accounts for the rapidly changing needs of existing and emerging airspace users but also seeks to exploit the poten-

tial safety, efficiency, security and sustainability benefits made possible through recent and ongoing innovation. High level recommendations will focus on:

- Making IATM a priority and garner support and action from member states.
- Identifying a mechanism to ensure that the integration of emerging aviation sectors and the supporting IATM concept is consistently considered across all ICAO activities.
- Identifying resources that can assist in the delivery of the objectives, including industry experts and standards-setting bodies.

“Joint cooperative action is paramount to getting to net zero carbon emissions,”

Jan Pie, ICCAIA Chair

ICAO STOCKTAKING

ICCAIA's Chair presented on the subject of “Green Policies to Foster Sustainable Development in Aviation” during the 2021 Stocktaking, and went on to participate in a roundtable discussion with government and academic stakeholders. He laid out the need for collaborative partnerships to be formed across all actors in order to deliver a sustainable future for aviation and provide the industry's ‘license to grow’. High-level contributors from across the ICCAIA Membership presented their companies' strategic views on “Building the Sustainable Aircraft of the Future”, discussing concrete plans to introduce CO₂ reduction technologies into the fleet. Other sessions focused on Sustainable Aviation Fuels (SAF) and infrastructure changes needed to enable carbon reduction for the whole sector, with keynote speeches given by retired UN Secretary General Ban-ki Moon, Norway's Minister for Transport and the President of the World Economic Forum.



ICF—INDUSTRY CONSULTATIVE FORUM

ABOUT ICCAIA

ICCAIA's members are engaged in the design, development, manufacture and in-service support of aeronautical and space products and technologies, including related ground-based systems and services.

Recognized by the International Civil Aviation Organization (ICAO), ICCAIA provides an avenue for the world's aerospace manufacturers and service providers to offer their industry expertise toward the development of the international standards and regulations necessary for the safety, security, efficiency and sustainability of air transport.

Advocating for the interests of the manufacturing community, we bring the manufacturers' views and experience to improve the understanding of challenges and opportunities to key policy makers and regulators, both at ICAO and across the world.



Dan Carnelly



Nina Brooks



Sandrine Kanakri

June 2021 saw the first session of the ICF, a forum that ICCAIA had been pressing for since the 40th General Assembly to allow a direct exchange of views on topics of importance to the industry between CEOs and the ICAO Council. This first meeting was used as a "Horizon Scanning" exercise to allow the CEOs to inform ICAO of the top priorities facing the various industries. It revealed a strong alignment between manufacturers, airlines, airports and air navigation service providers (ANSPs) in both the list and order of priorities. The recovery from the pandemic and the need to build resilience against future shocks was, unsurprisingly, the top level priority for all sectors. Secondly, the need to rebuild aviation sustainably for long term growth was identified as the second priority, with the environmental issues seen as a major threat to the sector. Emerging technologies such as Artificial Intelligence along with the associated Cybersecurity risks were seen as the third most important issue with the need for vertically-integrated airspace to accommodate UAMs, space vehicles and regular international traffic seen as the final topic of importance.

With the HLCC tackling the highest priority, it was agreed by all stakeholders that the second ICF should be held in Q1 of 2022 with a focus on Sustainable Aviation Fuels, with the aim to bring fuel producers, suppliers and refiners together with manufacturers, airlines, airports and ICAO to have a holistic view of what is needed to enable this important carbon-reduction technology and bring it to market in industrial quantities.

PLANNING FOR 41ST ICAO ASSEMBLY

Planning is well underway for the ICAO 41st Assembly, to be held September-October 2022. ICCAIA has created a small group of its Strategy Committee to work on papers to be presented.

Hot topics include COVID recovery, environmental protection, many aspects of innovation, integrated airspace, Integrated Communications, Navigation, Surveillance and Spectrum and halon replacement.

The cornerstone paper to bring all of these aspects together will look at how regulation can be developed in a flexible, outcome-focused way to support and enable innovation, as well as the role and contribution industry can make to the standards-setting process.

Many of these issues are common to all industry stakeholders, and we will work with industry partners towards joint positions wherever possible. ICCAIA papers will be drafted by the end of March for approval, translation and submission to ICAO.

ACKNOWLEDGEMENTS

ICCAIA would like to sincerely thank all of the contributors to this newsletter, the Committee Chairs and Working Group leads. We would welcome contributions from all members for future issues.

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

