

AIR NAVIGATION WORLD 2023

Shaping the Skies of Tomorrow

28 - 31 August 2023 | Montréal, Canada

DAY 1 – Monday, 28 August 2023

	Assembly Hall	CR 3
14:00 – 14:30	Opening of ANW by Mr. Salvatore Sciacchitano, President of the ICAO Council	
14:30 – 15:30	<p>Setting the Scene – Long Term Global Aspirational Goal</p> <p>The aim of this session is to exchange views and identify key initiatives needed to advance air navigation planning and implementation in an ever-changing aviation environment. The specific focus will be on performance improvement in the context of constrained resources, aviation’s global environmental challenges, and the rapid evolution in aviation operations and technologies, including those that can contribute to helping States achieve the long-term aspirational goal for international aviation of net zero emissions by 2050.</p> <p><i>Panelists - to be announced</i></p>	
15:30 – 16:00	<i>Coffee Break</i>	
16:00 – 17:30	<p>Modern Approaches to Safety - Complex Socio-Technical Systems</p> <p>Aviation is an example of an evolving modern socio-technical system that is seeing higher levels of automation being introduced and as a result, increasingly complex human system interactions are taking place and there are new challenges to manage. This session aims to improve visibility and awareness of different approaches to manage safety risk that can address such complexities.</p> <p><i>Moderator: Stéphane DE WOLF, IBAC</i></p> <p><i>Speakers:</i> Kim WASSON, Joby Aviation; Carina Carla SILVA, Embraer; Dorte NYGAARD ACI Nora JONES, Jeli</p>	
17:45 – 19:15	<i>Reception</i>	

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DAY 2 – Tuesday, 29 August 2023

	AH 1	AH 2	CR 3
08:00 – 09:00			SkyTalks Presentation
09:00 – 10:30	<p>Electronic Certificates and Documents</p> <p>With the emergence of new digital technologies, the global aviation community is moving towards electronic documents and certificates. This session will discuss the benefits of electronic documents and certificates as well as challenges associated with them.</p> <p><i>Moderator: Ismael Pacheco SERRANO, Air Navigation Commissioner, ICAO</i></p> <p><i>Speakers:</i> Mohammad AL ZAROUNI, Principal Airworthiness Inspector, GCAA, UAE Stuart FOX, Director Flight & Technical Operations Safety & Security, IATA Ian KNOWLES, Secretary of the Flight Operations Panel, ICAO Nicolas BARATON, Flight Operations Engineering & Support eXpert, Airbus Helicopters Dario PIERANDREI, Head of Flight OPS & Standards, Lufthansa Systems FlightNav AG</p>	<p>Modern Approaches to Safety - Learning from what goes well</p> <p>Aviation is an example of an evolving modern socio-technical system that is seeing higher levels of automation being introduced and as a result, increasingly complex human system interactions taking place and new challenges to manage. This session aims to improve awareness of approaches which aim to “build in safety” into the design of systems, technology, equipment and procedures supporting day to day operations.</p> <p><i>Moderator: Tzvetomir BLAJEV, Flight Safety Foundation</i></p> <p><i>Speakers:</i> David SCHOENE, IFALPA; Lok LEE, Cathay Pacific; Brian TESKE, Delta Airlines Immanuel BARSHI, NASA Laure BALTZINGER, Thales</p>	<p>Future of the Air Navigation System: Information Revolution - Put data to work and support operations</p> <p>Information, connectivity and service delivery are key to the future of the air navigation system as stated in the Global Air Navigation Plan (GANP). The goal of the Future Air Navigation stream, composed of eight sessions, is to understand how States, industry and the research and development community are tackling these three cornerstones as we start the development of the next major update of the GANP, the Eighth edition. This first session focuses on understanding how data and information, using techniques such as machine learning or artificial intelligence, will support operations.</p> <p><i>Moderator: David BATCHELOR, Chief External Affairs & Communication at the SESAR 3 Joint Undertaking (SJU)</i></p> <p><i>Speakers:</i> Zhenglin XIONG, CEO at Aeroport AI John GULDING, Manager for the System Product and Development Group within the FAA/ATO Office of Performance Analysis Stephane VILLANEUVE, Vice-President, Americas and Europe for SITA For Aircraft</p>
10:30 – 11:00	Coffee Break		

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<p>11:00 – 12:30</p>	<p>Cross-Border Transferability (XBT) The rapid evolution of global aircraft leasing operations has made the transfer of aircraft from one State to the other more frequent and highlighted certain inefficiencies in a global system that was developed when leasing arrangements were not common. This session will discuss issues associated with the cross-border transferability as well as exchange ideas on how to address them.</p> <p><i>Moderator: Kim MILLER, CEO, International Aviation Safety Foundation</i></p> <p><i>Speakers:</i> Iftekhar AHMED, Senior Standards Officer, CASA, Australia Wayne TYRRELL, Senior Legal and Compliance Officer, CAA, Ireland Jeffrey WOOL, Secretary General, AWG Miguel MARIN, Chief, Operational Safety Section, ICAO</p>	<p>Aerodrome Planning Discussing the expected operational and infrastructure changes related to the integration of new generation of aircraft into the airports with a focus on new fuels (hydrogen, electric), AAM, RPAS, etc.</p> <p><i>Moderator: Nina BROOKS, Vice President and Permanent Representative to ICAO, ICCAIA</i></p> <p><i>Speakers:</i> Thomas ROMIG, Vice President Safety, Security & Operations, ACI Claudio CAMELIER, Head of Marketing, Heart Aerospace; Jean Francois TESSIER, Head of commercial, Universal Hydrogen; Marco PELLEGRINO, Head of Airside Operations and First Aid, Aeroporti di Roma; Michael MEYERS, Manager, Airport Engineering Division, FAA</p>	<p>Future of Air Navigation System: Information Revolution - Infrastructure to support big data analytics This second session focuses on understanding what are the infrastructure needs, for instance in terms of storage or processing, to support data analytics.</p> <p><i>Moderator: David BATCHELOR, Chief External Affairs & Communication at the SESAR 3 Joint Undertaking (SJU)</i></p> <p><i>Speakers:</i> Frank MATUS, Director, ATC and Digital Aviation Solutions – Americas, Thales Further panelists - to be announced</p>
<p>12:30 – 14:00</p>	<p>Lunch Break, sponsored by Qatar Delegation</p> 		
	<p>12:30 – 12:50 Lunch Sponsor Talk</p> <p>13:40 – 14:00 SkyTalks Presentation by Thales</p>	<p>13:20 – 13:40 SkyTalks Presentation</p>	<p>12:30 – 12:50 SkyTalks Presentation by La Isla: “Information Revolution Digital Twins for CNS performance” <i>Speaker: Angel MARTINEZ, CEO</i></p>
<p>14:00 – 15:30</p>	<p>Higher Airspace Operations: Concepts and Social and Economic Benefits Industry will showcase the technical aspects of the Higher Airspace Operations and how they</p>	<p>Aerodrome Capacity and Resilience This session looks across the entire airport system on how it can meet future demand, including airport performance management, best use of available system capacity, need for adaptation of</p>	<p>Future of Air Navigation System: Information Revolution - Responsible use of data for a sustainable future This third session focuses on the ethical and legal aspects of the use of data and information.</p>

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	<p>deliver on the needs of the communities that they intend to serve. <i>Moderator: Crystal KIM, ICAO</i> <i>Speaker:</i> Chris CASARRUBIAS, Vice President Regulatory Affairs, AALTO – Zephyr; Dex HALPIN, Director HAPS - Flight Test, Airworthiness and Safety, AeroVironment; Mikkel VESTERGAARD, CEO, Sceye; Richard DEAKIN, CEO, Stratospheric Platforms; Sanjay NEKKANTI, CEO, Dhruva</p>	<p>operational measures, and possibly infrastructures, preparedness to respond to major natural events. <i>Moderator: Thomas ROMIG, ACI</i> <i>Speakers:</i> Jennifer DESHARNAIS, Director Sustainability, ACI; Ismail POLAT, Chief Planning Officer, IGA Havalimani Isletmesi A.S.; Vivekanandhan SINDHAMANI, Head-Sustainable Aviation and Resilience, NACO/ Royal Haskoning DHV representing Coalition for Disaster Resilient Infrastructure (CDRI); Kent DUFFY, FAA</p>	<p><i>Moderator: David BATCHELOR, Chief External Affairs & Communication at the SESAR 3 Joint Undertaking (SJU)</i> <i>Speakers:</i> Stephane DUBET, Head of International Coordination and Programs within AIS France at DSNA Parimal H. KOPARDEKAR, Director of NASA Aeronautics Research Institute and a senior leader of the Aeronautics Research Mission Directorate LIU Hao, Professor, Acting Chair of the School of Global Governance, Beijing Institute of Technology (BIT)</p>
<p>15:30 – 16:00</p>	<p>Coffee Break</p>		
<p>16:00 – 17:30</p>	<p>Higher Airspace Operations: Enabling ICAO’s role Regulators and service providers will discuss the way forward for the global community to enable these operations and the critical supporting role for ICAO. <i>Speakers:</i> Nathalie LE CAM, Executive Directorate – ATM Department, EASA; Dragos TONEA, Eurocontrol <i>Further panelists - to be announced</i></p>	<p>Upcoming Aerodrome Standards and future needs Industry perspective on proposed regulations, their advantages, and the responsibilities of various stakeholders in implementing them. <i>Moderator: Andrew BADHAM, Policy Principal, UK CAA;</i> <i>Speakers:</i> Cyril FABRE, ICCAIA; Karl BROCHU, Senior Director, Aeroports de Montreal; David ANDERSON, Global Head of QHSE, Swissport; John SYNNOTT, Senior Manager Flight Operations Information Technology, IATA; ONG Chew Sze, Associate General Manager Master Planning & Development, Changi Airport Group (Singapore) Pte Ltd</p>	<p>NOTAM Replacement The current NOTAM system needs to evolve to meet the needs of the diversity of users of the future air navigation system. The aeronautical information world is undergoing a digital and service-oriented transformation enabled by SWIM. Therefore, there is an opportunity to introduce a new model for the establishment of an effective and modern information service that serves as a replacement of the information currently provided by NOTAM. <i>Moderator: Caroline DOUCET, Manager, Standards and Procedures, AIM and IFP Design, Nav Canada</i> <i>Speakers:</i> Lauri SOINI, A320 Captain, Finnish Pilots Association Safety and Security Committee Chairman, IFALPA Brian MURPHY, Manager, Data Systems Team, FAA; Markus LUGINBUEHL, Policy and Rulemaking Air Navigation Services, Swiss CAA</p>
<p>17:45 – 19:15</p>	<p>Reception</p>		

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DAY 3 – Wednesday, 30 August 2023

	AH 1	AH 2	CR 3
08:00 – 09:00			SkyTalks Presentation
09:00 – 10:30	<p>Helicopter Safety This session aims to identify the key areas of work to reduce the global helicopter accident rate.</p> <p><i>Moderator: James VIOLA, President/CEO of Helicopter Association International</i> <i>Speakers:</i> Tim ROLFE, CEO, HeliOffshore; David SOLAR, Head of General Aviation and Vertical Take-off and Landing Department, EASA; Ernst KOHLER, CEO/Chairman, Swiss Air-Rescue Rega; Gang HE, Senior Fellow, Advanced and Applied Technology, Honeywell Aerospace</p>	<p>Age Limitations This session will discuss the factors to consider when determining age limitations for aviation license-holders in international civil aviation operations.</p> <p><i>Moderator: Christoph AMMANN, Swissair</i> <i>Speakers:</i> Antti TUORI, Vice Chairman Human Performance Committee, IFALPA Claude PREITNER, New Zealand CAA Ries SIMONS, ESAM Stuart Fox, IATA Stuart MITCHELL, Qatar Airlines</p>	<p>Future of the Air Navigation System: Full Connectivity - Ubiquitous connectivity for seamless operations This fourth session focuses on understanding how to fully accommodate airspace users with different operational capabilities and needs in an environment with different connectivity solutions.</p> <p><i>Moderator: Bob LEE, GXA Consulting LLC</i> <i>Speakers:</i> Steven BRADFORD, Chief Scientific and Technical Advisor for Architecture and Next Generation Air Transportation System (NextGen) Development, FAA; Nathalie LE CAM, Executive Directorate – ATM Department, EASA; Jerry HANCOCK, Director Aviation Safety Solutions and Cybersecurity, Inmarsat Aviation</p>
10:30 – 11:00	<i>Coffee Break</i>		
11:00 – 12:30	<p>Performance Based Aerodrome Operating Minima (PBAOM) - Operators In this session the implications of PBAOM on flight operations are considered, including the potential benefits in terms of efficiency and possible barriers to effective implementation of the concept.</p> <p><i>Speakers:</i></p>	<p>Mental Health This session on psychological Wellbeing and Mental Health in aviation discusses balancing personal health and aviation safety with specific focus on the role of building trust; training and peer support initiatives.</p> <p><i>Moderator: Anthony WAGSTAFF, EASA</i> <i>Speakers:</i> Dave FIELDING, BALPA; Susan NORTHRUP, FAA;</p>	<p>Future of the Air Navigation System: Full Connectivity - Open architecture for a cost-effective infrastructure This fifth session focuses on understanding how the aviation community is taking advantage of available commodities, such as widely available access to broadband Internet that is faster and a better value for money, and more devices with built-in connection capabilities and sensors enter the market.</p>

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	<p>Hayden GOLDBERG, Director Financial Planning & Analysis, Avelo; Thea FEYEREISEN, Honeywell; Further panelists - to be announced</p>	<p>Punita MASRANI, India; Quay SNYDER, AsMA</p>	<p>Moderator: Bob LEE, GXA Consulting LLC Speakers: Ruby SAYYED, Head of ATM Advocacy, IATA Steve BRADFORD, Chief Scientific and Technical Advisor for Architecture and Next Generation Air Transportation System (NextGen) Development, FAA; Nathalie LE CAM, Executive Directorate – ATM Department, EASA; Jerry HANCOCK, Director Aviation Safety Solutions and Cybersecurity, Inmarsat Aviation</p>
12:30 – 14:00	<p>Lunch Break sponsored by Indra</p> 		
	12:30 – 12:50 SkyTalks Presentation	12:30 – 12:40 Lunch Sponsor Talk	
		13:40 – 14:00 SkyTalks Presentation	13:20 – 13:40 SkyTalks Presentation
14:00 – 15:30	<p>Performance Based Aerodrome Operating Minima (PBOAM) -Air Traffic Management</p> <p>In this session the implications of PBAOM on air traffic management are considered, including the impact of mixed basic and advanced aircraft operations on flow management and sequency, as well as information requirements for controller regarding aircraft capabilities.</p> <p>Panelists - to be announced</p>	<p>Evolution of Medical Certificates</p> <p>This session will discuss the existing or proposed new national medical certification practices for general aviation pilots and its implications in aviation safety</p> <p>Moderator: Declan MAHER, ESAM Speakers: Chong HON, Singapore CAA Cristian PANAIT, EASA Jim COON, IAOPA Kate MANDERSON, CASA Turan KAYAGIL, NTSB</p>	<p>Future of the Air Navigation System: Full Connectivity - Resilience for a sustainable future</p> <p>As a result of this globally rich information sharing environment, it is also essential to move towards a global approach to information security. This sixth session focuses on understanding how the aviation community is addressing information security.</p> <p>Moderator: Bob LEE, GXA Consulting LLC Speakers: to be announced</p>
15:30 – 16:00	<p>Coffee Break</p>		

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<p>16:00 – 17:30</p>	<p>Performance Based Aerodrome Operating Minima (PBAOM) - Aerodromes</p> <p>In this session the implications of PBAOM on the aerodrome design and operation are considered, including the challenges of operating in very low visibility and the need to consider how to accommodate advanced aircraft operating at the aerodrome.</p> <p><i>Moderator: Thomas ROMIG, Vice President Safety, Security & Operations, ACI</i></p> <p><i>Speakers:</i> Thea FEYEREISEN, Sr. Technical Fellow, Human Factors, Honeywell; Adam EVANSCHWARTZ, Director of Product and Advanced Technology Strategy, Collins;</p> <p><i>Further panelists - to be announced</i></p>	<p>Medical Science, Patient Transport and Air Ambulance Operations</p> <p>This session discusses advances in technology to provide patient care on board aircraft, including commercial aviation, emergency response and specialized air ambulance services with focus on operational challenges and harmonization of procedures.</p> <p><i>Moderator: David POWELL, IATA</i></p> <p><i>Speakers:</i> Andy MEYER, IBAC Clive GILLARD, International SOS Daniel LANDERT, Rega Khalil AL KHALIL, Jordan Paolo ALVES, Medaire</p>	<p>Use of New Technologies in Aviation Personnel Training</p> <p>This session will explore use cases in all aviation professions' training of extended reality (XR - including VR, AR and MR) and provide examples of experience feedback and identify the way forward.</p> <p><i>Moderator: Dr. Julian ABICH, Senior Human Factors Engineer, Quantum Improvements Consulting</i></p> <p><i>Speakers:</i> Fabian RIESEN, CEO, Loft Dynamics; Marshall TETTERTON, Professor of Aviation Maintenance Science, Embry-Riddle Aeronautical University Raghoonundun "Birdy" GUNPUTH, Senior Manager Safety Training, Lufthansa Aviation Training GmbH;</p>
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DAY 4 – Thursday, 31 August 2023

	Assembly Hall (AH 1 and AH 2 combined)	CR 3
09:00 – 10:30	<p>Future of the Air Navigation System: Service Delivery - Agile systems for flexible operations</p> <p>This seventh session focuses on raising awareness among the aviation community to shift to and enable the operator to manage the flight trajectory, while ANSPs focus on managing constraints and air navigation resources.</p> <p><i>Moderator: Carlos CIRILO, CANSO's permanent representative to ICAO and Head of Montreal office</i></p> <p><i>Speakers:</i> Diana LIANG, NextGen Enterprise Portfolio Manager, FAA Amornrat JIRATTIGALACHOTE, PhD Policy and Strategy Management Bureau Aeronautical Radio of Thailand Ltd. Adrian V. SOLOMON, Thales ATC and Digital Aviation Solutions – Americas</p>	<p>Evolution of harmonized and quantitative meteorological information services</p> <p>Information session on global trends towards the provision of advanced meteorological information and foreseen scientific advancements in the field of aeronautical meteorology, including: Future integration of MET information into ATM decision making, Provisions of quantitative and harmonized meteorological information (e.g. next generation WAFS product, Quantitative Volcanic Ash forecast information (QVA), Space Weather Information Service, Hazardous Weather Information Services (HWIS)), Migration into meteorological information service under SWIM (MET-SWIM), long-term goal and foreseen developments in aeronautical meteorology.</p> <p><i>Moderator: William MAYNARD, Transport Canada; Rebecca KOTTEN, FAA</i></p> <p><i>Speakers:</i> Stéphanie WIGNIOLLE, WMO; Jean-Francois GROUT, Assistant Director ICAO Relations, IATA; Dov BENSIMON, Environment and Climate Change Canada; Foeke KUIK, Campbel Scientific Inc.</p>
10:30 – 11:00	Coffee Break	

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<p>11:00 – 12:30</p>	<p>Future of the Air Navigation System: Service Delivery - Sustainability impact of System of systems</p> <p>This eighth session focusses on the definition of new approaches to achieve the optimum decision-making scenario ensuring access and equity. The simple rules of rationing air traffic flow management and time-based scheduling, implemented in the past, need to be replaced through a gradual introduction of “market rules” with regulations adapted to the needs and possibilities of the market to self-regulate, as long as the performance of the overall network is not negatively impacted, and access and equity are preserved so as to accommodate all demand.</p> <p><i>Moderator: Carlos CIRILO, CANSO's permanent representative to ICAO and Head of Montreal office</i></p> <p><i>Speakers:</i> Remzi SEKER, Ph.D. Vice President for Research and Innovation Western Michigan University</p>	<p>Delivery, use and integration of future meteorological information</p> <p>Information session on global requirements for the provision of advanced meteorological information including:</p> <ul style="list-style-type: none"> Current and foreseen user requirements of advanced meteorological information services, Enhancement of meteorological observation and forecast solutions, Integrated use of quantitative meteorological information into ATM operational decision making and risk assessment. <p><i>Panelists - to be announced</i></p>
<p>12:30 – 13:45</p>	<p>Lunch Break</p>	
	<p>12:30 – 12:40 Lunch Sponsor Talk</p>	
<p>13:45 – 15:15</p>	<p>Moderator recap</p> <p>The moderators of each session will provide an overview and summary of topics discussed, focusing on potential action items and the way forward.</p>	
<p>15:15 – 15:45</p>	<p>Closing Remarks by Juan Carlos Salazar, Secretary General of ICAO</p>	