

Welcome and opening remarks (Monday, 23 October 2023 – 10:00-10:30)



Mr. Chee Hong Tat, Acting Minister for Transport-Ministry of Transport Singapore

Mr. Chee Hong Tat was appointed Acting Minister for Transport on 12 July 2023, while continuing with his appointment as Senior Minister of State for Finance. He was first elected as a Member of Parliament for the Bishan-Toa Payoh Group Representation Constituency (GRC) in 2015 and was re-elected during the 2020 General Elections.

He had served as Senior Minister of State for Health, Communications & Information, Education, Trade & Industry and Foreign Affairs. Mr Chee was appointed Senior Minister of State for Transport on 27 July 2020 and took up a concurrent appointment as Senior Minister of State for Finance on 13 June 2022. He was also Deputy Secretary-General at the National Trades Union Congress from May 2021 to June 2022.

Mr. Chee was born in 1973 and is married with four children. He graduated from the University of California at Berkeley in 1996 with a Bachelor of Science (Highest Honours) in Electrical Engineering and Computer Science and a Bachelor of Arts (Highest Honours) in Economics. He obtained his Masters of Business Administration from Adelaide University in 2006. He received the Distinguished Service Award from the National Trades Union Congress in April 2021 and was conferred an Honorary Fellow by the Institution of Engineers, Singapore in January 2023.



Mr. Juan Carlos Salazar, Secretary General, ICAO

Mr. Juan Carlos Salazar is the Secretary General of the International Civil Aviation Organization (ICAO).

He was first appointed for a three-year term starting August 2021. His career in international civil aviation spans over 27 years in various advisory and leadership roles. Prior to his appointment as Secretary General, Mr. Salazar served as Director General of Aeronautica Civil of Colombia – Aerocivil. For the twelve years previous to joining Aerocivil, Mr. Salazar was a Senior Advisor to the UAE General Civil Aviation Authority.

His professional experience also includes terms as the President of Latin American Civil Aviation Commission (LACAC), Secretary of the Colombian Civil Aviation Board and Director of its Air Transport Office, Director General of Air Transport at the Colombian Ministry of Transport, Corporate Secretary and Director of the Legal Department of Tampa Cargo (currently known as Avianca Cargo).

Mr. Salazar is a lawyer and has earned advanced degrees from Harvard University (Master in Public Administration - MPA) and McGill University (Master in Air and Space Law - LLM). He is fluent in Spanish, English and French and speaks basic Arabic.

1.1 Setting the Scene (Monday, 23 October 2023 – 10:30-11:10)



Ms. Michele Merkle, Director of the Air Navigation Bureau

Michele Merkle is serving as the Director of the Air Navigation Bureau at ICAO since July 2023. Michele has over 35 years experience working to improve the safety, capacity and efficiency of the global aviation system, providing systems engineering and human factors expertise in the development, evaluation and implementation of aviation systems and advanced concepts.

She has held a number of executive and managerial positions at the United States' Federal Aviation Administration (FAA) where she was responsible for modernizing the United States' Air Traffic Management System and integrating new entrants. She holds a Master's Degree in Industrial Engineering and Operations Research.

At ICAO, Michele is responsible for delivery of safety and air navigation strategic outcomes, integrating security and environmental requirements into developing ICAO SARPs and PANS. She brought about a culture of innovation at the FAA and is working at ICAO to help Member States and industry stakeholders tackle complex aviation challenges, help ICAO achieve greater operational efficiencies, and achieve One ICAO.

1.1 Setting the Scene (Monday, 23 October 2023 – 11:40-12:30)



Mr. Stephen P. Creamer, Former Director of the Air Navigation Bureau

Former Director, Air Navigation Bureau ICAO

Steve Creamer served as Director of the Air Navigation Bureau at ICAO from April 2015 through June 2023.

Steve began his career in air traffic operations and is a private pilot. Steve previously held a number of executive and managerial positions at the U.S. Federal Aviation Administration with over 33 years' experience in the Air Traffic and International Aviation organizations. He served as a member of the ICAO Air Navigation Commission as well.

At ICAO, he was responsible for delivery of safety and air navigation strategic outcomes, integrating security and environmental requirements into developing ICAO SARPs and PANS. During his tenure, ICAO kept pace with industry developments with innovative and engaging symposia, specialized workgroups and now remote conferencing to help Member States and industry stakeholders tackle complex challenges like safe carriage of lithium batteries, safe digital connectivity of safety systems, new remote flying technology, enhanced runway safety procedures and enhanced aircraft tracking systems, among many others.

Steve drew inspiration for his work at ICAO from prior field work where he was deeply involved in cross-functional deployment teams – most notably for FANS satellite-based services, Required Navigation Performance (now PBN), Automatic Dependent Surveillance Broadcast and Reduced Vertical Separation Minimum (RVSM) introductions in five ICAO regions.

1.2 Implementation Expectations and Challenges (Monday, 23 October 2023 – 14:00-15:30)



Mr. Han Kok Juan, Director-General, Civil Aviation Authority of Singapore

Han Kok Juan is the Director-General of the Civil Aviation Authority of Singapore. He is responsible for the development of a safe, vibrant and sustainable Singapore air hub and the provision of air navigation services for the Singapore Flight Information Region.

Kok Juan is Chairman of the Asia and Pacific Air Navigation Service Provider Committee. He is a member of the Executive Committee and the Chair of the Asia Pacific CEO Committee of the Civil Air Navigation Services Organisation (CANSO).

Prior to this, Kok Juan held senior appointments in various Singapore ministries, including of transport, law, national development, trade and industry, finance and health.

Kok Juan graduated with a Bachelor of Arts in Politics, Philosophy and Economics from the University of Oxford, United Kingdom and a Master in Public Administration from the Peking University, People's Republic of China.



Mr. Padhraic Kelleher, President of the Air Navigation Commission

Padhraic Kelleher is President of the Air Navigation Commission at ICAO where he leads ICAO's work on standards for global aviation safety and for the capacity and efficiency of the global air navigation system.

Prior to joining ICAO, he led and managed teams at the UK Civil Aviation Authority addressing safety strategy and policy, industry innovation, international relations and airworthiness covering topics as wide ranging as commercial and ex-military aircraft certification, safety management, unmanned aircraft, commercial spaceflight and cybersecurity.

Padhraic has been a Director of the European Joint Aviation Authorities and of CAA subsidiaries CAA International and Air Safety Support International and was recognised for his leadership in relation to flight operations in reported volcanic ash.

His early regulatory career focussed on certification of Airbus, Boeing and Canadair types building on industry experience at British Aerospace where he was an aircraft flight test engineer developing autoland, engine management, avionics and flight deck systems on the company's business and regional jet programmes

Padhraic holds a first class honours degree in electronic engineering from Ireland's University of Galway, a Master's degree in aerodynamics and flight control from Cranfield University and postgraduate qualifications in management and company direction. He is a Fellow of the Royal Aeronautical Society.



Mr. Tao Ma, Regional Director, ICAO Asia and Pacific (APAC) Office

Mr. Ma joined ICAO as Regional Director for the Asia Pacific Office in September 2021.

Prior joining as ICAO Regional Director Mr. Ma served as the Regional Vice President for North-Asia of the International Air Transport Association (IATA).

He was the Permanent Representative of China on the Council of ICAO in Montreal from 2006 until 2017 and served in a number of different positions including Chairman of working group of governance and efficiency (WGGE); First Vice President of the Council of ICAO and Chairman of Technical Co-operation Committee.

Mr. Ma began his career in aviation with the Civil Aviation Administration of China (CAAC) in 1983. Over the years, he has held positions of increasing responsibility within the CAAC including Director of the Flight Standards Liaison Division, Assistant Deputy Director General of the Department of Flight Standards; Deputy Director General of the Department of Flight Standards as well as Head of Airworthiness Certification Center of CAAC before joining IATA in 2019. He served as Acting Chairman of the North Asia regional technical cooperation Programme, ‘Cooperative Development of Operational Safety and Continuing Airworthiness Programme — North Asia’ (COSCAP-NA).

A graduate of the University of Civil Aviation of China, Mr. Ma also holds a Master’s degree in aviation safety management from Civil Aviation University of China and Ecole Nationale de l’Aviation Civile of France. He holds a Commercial Pilot’s License issued in China.



Mr. Ahmed Al Jallaf, Chairman of MIDANPIRG

Ahmed Al Jallaf is the Assistant Director General Air Navigation Services at the UAE General Civil Aviation Authority. He was amongst the first UAE nationals to validate as an Air Traffic Controller in 2000.

Ahmed holds an MSc degree in Aviation Safety Management. He has led many successful projects. The most notable is the UAE Airspace Restructuring Project implemented in 2017, which resulted in a significant increase in airspace capacity to cater to future global air traffic demands. He was awarded the prestigious 2018 Aviation Executive of the Year Award at the Aviation Business Awards.

In 2019, he completed the “Impactful Leaders Program” from the Mohammed bin Rashid Center for Leadership Development (MBRCLD), whose vision is to “create leaders for tomorrow.” His passion for aviation drives him to innovate and constantly aim to raise the bar in this field.

He is the Chairman of the UAE National Airspace Advisory Committee, GCC Air Navigation Committee, and the ICAO MID Air Navigation Planning & Implementation Group.



Mr. Poh Theen Soh, Director Asia Pacific Affairs of CANSO

Poh Theen is currently the Director Asia Pacific Affairs of CANSO and concurrently Advisor to the Civil Aviation Authority of Singapore. Before this, he was the Deputy Director-General (Air Navigation Services) of the Civil Aviation Authority of Singapore from 2010 to 2021.

He has spent 35 years in both civil and military aviation. As Deputy Director-General (Air Navigation Services) of the Civil Aviation Authority of Singapore, he supervised the provision of air navigation services, development of new systems, and airspace management. During this period, new capabilities like the current generation ATM system, ADS-B, ACDM, ATFM, smart tower prototype, 3-runway operations, and counter-drone systems were introduced.

Before joining the Civil Aviation Authority of Singapore, he was Director Air at the Ministry of Transport. At the Ministry of Transport, he participated in the formulation of various air transport policies and air hub development strategies, including the corporatization of Changi airport.

Before joining the Ministry of Transport, he was the Director of the National Security Coordination Centre and set up the National Security Coordination Secretariat in the Prime Minister's Office after 9/11 to achieve a whole-of-government approach to emerging threats.

He started his career in the Republic of Singapore Air Force as an intercept controller. He went on to helm various senior command and staff appointments in the Republic of Singapore Air Force and the Ministry of Defense, including Commander of the Air Force Systems Brigade, Head of Joint Plans in the Joint Staff, and Commanding Officer of the E2C Squadron.

He is a strong advocate in blending technological and operational approaches to aviation challenges. He has been active in growing research institutes and programmes to modernize ATM. He has been a board member of the Singapore Air Traffic Management Research Institute, MITRE Asia Pacific Singapore, Aviation Studies Institute, and Singapore Aviation Academy. He is also a regular at ICAO forums and meetings. In CANSO, he is working on greater aviation connectivity in the Asia Pacific, including the roles of the technology companies.

He holds a Bachelor of Arts in Philosophy, Politics and Economics from Oxford in the United Kingdom, and a Master of Science (Management) from Stanford in the United States.



Mr. Blair Cowles, Regional Director IATA Asia-Pacific

Blair Cowles is IATA's Asia-Pacific Regional Director focused on Safety and Flight Operations. He is based in Singapore and leads a small team engaged in extensive advocacy work throughout the Asia-Pacific region representing the safety and operational interests of IATA member airlines, primarily with air navigation service providers, transport ministries, civil aviation authorities, airports, ICAO, OEMs and other international organizations.

Prior to joining IATA in 2013, Blair spent twelve years with Airways New Zealand in a variety of operational and managerial ATC roles. In his final role with Airways, he was responsible for ATC service delivery across New Zealand's 30 million square kilometres of oceanic airspace.

Blair has an Executive MBA, a Post-graduate Diploma in Management, a Bachelor of Arts in International Relations, a Diploma in New Zealand Policing, and a Graduate Certificate in Global Business.

2.1 Separation Methods and Minima – Terminal Part I (Tuesday, 24 October 2023 – 09:00-10:30)



Mr. Doug Marek, PBNNAS CEO and former FAA Air Traffic Manager and Technical Officer PBN Programme at ICAO

Doug Marek spent 30 years as an Air Traffic Controller, Traffic Flow Management Specialist, and Assistant Manager of the largest TRACON in the United States.

He served as a technical officer to the PBN Program Office in the Air Traffic Management section of Headquarters ICAO. During his tenure at ICAO, he coordinated and ensured completion of priority projects such as the ICAO CDO manual Doc9931, ICAO/IATA PBN Global Task Force Go-Team, and ICAO Air Space Design Concept workshops.

Mr. Marek currently serves as the Chief Executive Officer for PBNNAS.



Mr. Mike Balder, Director Safety PBNNAS and former FAA ATO Safety and Technical Training and CANSO Safety Standing Committee

Mike Balder is an Internationally recognized expert on air traffic safety, risk identification and mitigation. He spent his early career, in the U.S. Federal Aviation Administration (FAA), as an air traffic controller, among other key operational roles including flow management and safety investigations. He later served in multiple senior leadership positions in the FAA's Air Traffic Organization Safety and Technical Training service unit.

Internationally, Mr. Balder has spent over a decade working with the Eurocontrol Safety Unit and Safety Team Operational Safety Group (SAFOPS). He is a long time member of the Civil Air Navigation Services Organization (CANSO) Safety Standing Committee, including serving as co-chair of the Safety Performance Measurement Workgroup.

Since joining PBNNAS, as Director of Safety and Technology, Mr. Balder has helped to strengthen the concept of "safety by design" in airspace and procedure designs for multiple clients around the globe, ensuring a smooth and seamless process that enables ANSPs to increase safety and efficiency in their operations.



Mr. Walter White, Chief Operating Officer and Director of PBN Airspace Architecture for PBNNAS and Former Technical Officer PBN Programme at ICAO

Mr. White has extensive Air Traffic, PBN, IFP, and Airspace experience, working for ICAO, IATA, and the FAA. He has worked as an air traffic controller and Airspace Manager in the U.S. busiest approach control facility, implementing one of the first CDO STARs in the U.S. into LAX, as well as working to develop EoR PBN Approaches into SEA.

Mr. White was a PBN Technical Officer in ICAO, and assisted in writing the ICAO CDO Manual, CCO Manual, and PBN Airspace Design Manuals. He has been the lead ICAO speaker giving training on PBN Airspace Design, Air Traffic Control, PBN, and CDO/CCO procedures to over 30 countries.

He is currently working with EASA assisting China in developing PBN EoR regulations and approach procedures.

Mr. White is the Chief Operating Officer and Director of PBN Airspace Architecture for PBNNAS.

2.2 Separation Methods and Minima – Terminal Part II (Tuesday, 24 October 2023 – 11:00-12:30)



Mr. Anthony Ang, Technical Expert, Air Traffic Management (ATM) Section, Air Navigation Bureau, ICAO

Anthony Ang is a Technical Expert from the Air Traffic Management (ATM) section in the Air Navigation Bureau of the International Civil Aviation Organization (ICAO). He is a secondee from the Civil Aviation Authority of Singapore (CAAS) with 17 years of air traffic control experience, including operational, instructional and planning capacities.

Anthony's focus areas are Air Traffic Flow Management and Flight and Flow – Information for a Collaborative Environment. He provides support to the Air Traffic Management Requirements & Performance Panel and the Air Traffic Management Operations Panel.

Before his Secondment to ICAO, Anthony held the appointment of Master Air Traffic Control Officer of the Systems Development team in CAAS. He collaborated with internal and external stakeholders to develop the next generation of Singapore's ATM systems. As a trained Safety Officer, Anthony is familiar with safety risk assessments and building a safety culture. Anthony is a certified team leader for On-The-Job Training (OJT) instructors and has coached new OJT instructors and ATC trainees.

In his personal capacity, Anthony is the ex-President of the Air Traffic Controllers' Association (Singapore) and the ex-Executive Vice President Asia-Pacific Region of the International Federation of Air Traffic Controllers' Association.



Dr. Sheila Conway, Technical Fellow, Sustainable Transportation, The Boeing Company

Sheila Conway, a Boeing Technical Fellow, is improving air traffic management (ATM) for traditional and unpiloted vehicles.

She is responsible for research and development of blended airborne/ground systems and techniques that improve flight efficiencies while simultaneously moderate delays, fuel use, emissions and community noise: She consults internationally with numerous traffic management bodies on their implementation.

In a past position with NASA, she helped form the national air traffic research agenda, and was recognized for contributions to burgeoning Automatic Dependent Surveillance - Broadcast technology, now ubiquitous.

Dr. Conway supports many standards and regulatory parties, developing technical requirements for new regulations and equipment. She serves as the industry member to the ICAO Separation and Safety and Air Traffic Management Operations Panels, and as an advisor to the Remotely Piloted Aircraft Systems Panel.

She is a commercial and remote pilot, an instrument flight instructor, and holds numerous ATM-related patents.



Mr. Blake Cushnie, NAVCANADA Program Director, Service Delivery

Blake has been working in ATM for almost 30 years across varied roles in different countries.

Starting as an Air Traffic Controller in London Terminal Control for NATS UK, Blake then moved to Vancouver where he joined NAV Canada as an Approach Controller. Further roles as Tower Supervisor at Vancouver International Airport as well as Project Lead for the Vancouver 2010 Winter Olympics followed before a move to NAV Canada's head office in Ottawa.

During his time in Ottawa, Blake led the Canadian PBN State Plan and related airspace modernisation initiatives and created and led the Canadian RNP-AR Program which has seen these approaches deployed at almost 40 airports nationally. Concurrent to this, Blake joined the ICAO Separation and Airspace Safety Panel where he was involved in the creation of the 'Established on RNP-AR' standard as well as a major re-write of DOC9643 SOIR Manual. In addition, Blake has been a member of the ICAO CAEP Working Groups which aligns with his role in noise management in Canada and as founder and Chair of the Toronto Industry Noise Management Board.

Blake's previous role was as General Manager of the Toronto FIR, where he also oversaw the operational deployment of new technology and initiatives across Canada's four major airports. In addition to continuing to lead these technology deployments, his current position also sees him undertake a leadership role in NAV Canada's move to a full Trajectory Based Operations environment.



Mr. Nick Tallman, *Concept Advancement Lead, Airspace Modernization Group, Mission Support Services, Air Traffic Organization (ATO), Federal Aviation Administration*

Nicholas ‘Nick’ Tallman is an Air Traffic Control and Performance Based Navigation (PBN) expert with the Federal Aviation Administration (FAA) Airspace Modernization Group.

He has over 30 years of broad experience in air traffic control and 15 years with various PBN implementation projects at FAA headquarters.

His current role includes collaborating in development of more efficient separation standards within terminal airspace and supporting strategic deployment of these enhanced capabilities.

Internationally, he has participated in numerous PBN seminars and working groups, he has served as the nominated US member of the ICAO PBN Study Group and continues as an advisor to the ICAO Separation and Airspace Safety Panel.



Mr. David Perks, *Senior ATS Specialist, ATM Standards, Airservices Australia*

Mr. Perks began his career as an air traffic controller in Australia in 1990. In 2001 he began studying law and was admitted as a lawyer in 2010.

After briefly practicing, he accepted a position as a Senior ATS Specialist at Airservices Australia where his substantive role is to ensure the Australian ATC ruleset is up-to-date and fit-for-purpose.

Mr Perks has been the International Federation of Air Traffic Controller Associations (IFATCA) Member on the ICAO Separation and Airspace Safety Panel (SASP) since 2018. In 2021 he was elected Chair.

2.2 Separation Methods and Minima – Terminal Part II – Wake (Tuesday, 24 October 2023 – 14:00-15:30 and 16:00-17:00)



Mr. Jean-François Lepage, *Industry Observer for the International Federation of Air Traffic Controllers' Associations (IFATCA) on the ICAO Air Navigation Commission*

Jean-François Lepage is the Industry Observer for the International Federation of Air Traffic Controllers' Associations (IFATCA) on the International Civil Aviation Organization (ICAO) Air Navigation Commission (ANC) since 2015. He also represented IFATCA on the Next Generation of Aviation Professionals (NGAP) Programme, on the Competency-Based Training and Assessment Task Force (CBTA-TF) and more recently on the Personnel Training and Licensing Panel (PTLP).

Following a career as a commercial pilot (CPL) in Canada, Jean-François entered air traffic controller training at the age of 20. He obtained his ATC licence with Nav Canada, working at the Montréal Area Control Center in 2006. His areas of expertise include procedural (non-radar) and surveillance (radar and ADS-B) control, as well as CPDLC and ADS-C.

He eventually became involved in technology and automation implementation, training, quality assurance, proficiency and other projects. In 2013, he became an operational team supervisor and was in charge of the oversight of proficiency and refresher training. He holds a Bachelor Degree in Business Administration (BAA) from the Université du Québec à Montréal (UQAM) in Montreal, Canada, and a Master Degree (MSc.) in Management - Humanitarian Action and International Development Studies from the Université Laval, in Quebec City, Canada.

With a variety of experience at a global level, with ICAO, and close collaboration with IFALPA and IFATSEA, he has gained a thorough understanding of international aviation rule-making processes, national regulatory environments, and considerable experience in drafting and presenting working papers. He has also a thorough understanding of ICAO mechanisms and SARPs making process. He serves IFATCA at the endorsement of his home association, the Canadian Air Traffic Control Association.



Mr. Frederic Rooseleer, EUROCONTROL Runway Performance – Deployment Support Coordinator, ASBU-WAKE Lead

Frédéric Rooseleer is an Air Traffic Management Expert working at EUROCONTROL Network Manager, in the Airports Unit from the Network Operations Division.

He is coordinating the support to optimisation of Airport Operations. He participated in the development and the implementation of Runway Throughput Solutions enhancing Arrival and Departure Performance, including optimised wake turbulence separation minima such as RECAT or Time-Based Separation (TBS).

He is Member of the ICAO Wake Turbulence Specific Working Group (WTSWG), Advisor to the Aerodrome Operations Panel (ADOP) and to the Separation and Airspace Safety Panel (SASP).



Mr. Vincent Hwa, Director of Air Traffic Services, Civil Aviation Authority of Singapore

Mr. Vincent Hwa is the Director of the Air Traffic Services (ATS) Division of CAAS.

His division is responsible for the provision of Singapore's air traffic control, aeronautical information services, instrument flight procedures design and coordination for search and rescue.

Vincent is an air traffic controller by training, and is one of the leads in the development of Air Traffic Management in Singapore.

He has contributed to several ICAO panels and working groups, including the ATM requirements and performance panel and the ATM operations panel from 2015 to 2018.

Vincent believes in driving towards a sustainable ATM, and he actively leads his team in the implementation of key ATM initiatives such as Long-Range Air Traffic Flow Management, Direct Route Operations, Continuous Descent Operations, Free Route Airspace and, FF-ICE/R1 services.



Mr. Mohammad Al Dossari, Senior Director - Air Navigation and Aerodromes Aviation Safety Affairs, General Civil Aviation Authority, United Arab Emirates

Mohammad holds an MSc in Aviation Safety and is currently the Senior Director Air Navigation & Aerodromes Department at the UAE General Civil Aviation Authority.

Responsible for regulating and over-sighting the Air Navigation Services and Aerodrome Operators. Such responsibility includes but not limited to UAE Airspace, International Airports, Domestic Airports, Landing areas, private aerodromes, Search and Rescue, Air Traffic Services, Air Traffic Management, Aeronautical Information Services, Communication Navigation Surveillance, Aviation Meteorology, Rescue Firefighting Services and Aerodrome Emergency Services, including Heliports, Vertiports, Helidecks and Unmanned Aircraft Operations.

Mohammad is heavily engaged in the international and regional arena, representing the UAE. He previously held the role of Assistant Director General for Air Accident Investigation in the UAE and was responsible for the Air Accident Investigation body and the implementation of ANNEX 13.



Mr. Blake Cushnie, NAVCANADA Program Director, Service Delivery

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Mr. Sebastiaan de Stigter, Senior Project Manager at LVNL – Air Traffic Control, Netherlands

Sebastiaan de Stigter is a Senior Project Manager at LVNL – Air Traffic Control The Netherlands, working in the Systems and Infrastructure division.

He is responsible for managing large changes, primarily in the Tower-Approach domain.

As project manager for the RECAT-TBS project he managed the introduction of RECAT-EU WTC combined with the introduction of Time Based Separation at Schiphol Airport. These changes were put into operation on January 26th 2023.



Mr. Wai Hon Anfernee POON, Atg. Senior Operations Officer (Strategic Planning), Hong Kong Civil Aviation Department

Anfernee Poon is a Senior Operations Officer of the Hong Kong Civil Aviation Department, responsible for the strategic planning of the Air Traffic Management Division. He came into the role with sixteen years of experience as an ATCO and as an Approach Supervisor and Flow Manager at the Hong Kong ATC Centre. His areas of expertise are air traffic flow management and capacity and efficiency enhancement initiatives. He is now focusing his time on the Three Runway System project for Hong Kong International Airport.

2.4 Separation Methods and Minima – En-route (Wednesday, 25 October 2023 – 09:00-10:30)



Mr. Noel Dwyer, National Manager, ATS Standards Delivery, NAV CANADA

Mr. Dwyer began his career as an IFR controller with NAV CANADA before progressing through different disciplines such as IFR training course director and ATC procedures specialist, before taking on management responsibilities that have emphasized awareness of the increasing role of technology in the aviation industry, the importance of strong customer relations and the necessity of effective coordination with the regulator.

As Canadian member to the Separation and Airspace Safety Panel (SASP) from 2009 to 2023, he lead the development and publication of performance based separation standards aligned with advanced data link technological capabilities (5 minute longitudinal, 23 NM lateral) and more recently lead the incorporation of space-based ADS-B technology into PANS-ATM separation standards. He has subsequently been directly involved in both the regulatory approval process for use of those separations in the North Atlantic (NAT) region and Canadian sovereign airspace and for the system and procedures development required for their implementation.

In addition to his SASP participation, Mr. Dwyer is the Canadian member to the NAT Regional Implementation Management Group (IMG) and Safety Oversight Group (SOG).

Mr. Dwyer holds Bachelor of Arts (English Literature) and Bachelor of Education degrees as well as a Master of Education (Adult Learning).



Dr. Steve Barry, Risk Intelligence Lead, Airservices Australia

Dr Steven Barry works for Airservices Australia as Risk Intelligence Lead, and is Rapporteur of the Mathematics Sub-Group of the ICAO Separation and Airspace Safety Panel (SASP).

After a degree and PhD in Applied Mathematics, he did a Post-doctoral fellowship in Mechanical Engineering in Toronto before spending 10 years as a university academic, researching and teaching industrial applied mathematics.

In 2012 he joined Airservices, working on aviation risk analysis, encompassing raw data collection, reporting, analysis, automation and developing new analytical methods for monitoring and quantifying airspace risk.

He was part of the SASP team that developed new oceanic separation standards using space-based ADS-B now in use in the North Atlantic.

Dr Barry is also an Adjunct Associate Professor at the University of Adelaide and has written over 60 academic publications, 130 ICAO papers and two editions of a mathematics textbook.



Mr. Andrew Wee, Deputy Director, Safety and Standards, Civil Aviation Authority of Singapore

Andrew joined the Civil Aviation Authority of Singapore (CAAS) as an Air Traffic Control Officer (ATCO) in December 1984. He is trained in aerodrome control (Changi/Seletar), area control and approach control services. Having acquired the knowledge and experience in the provision of air traffic services, Andrew was posted to the Air Traffic Management section as a project officer from 2002 to 2006 and was responsible for planning and advancing ATS initiatives including the successful implementation and operationalisation of independent simultaneous approaches to three parallel runways at Changi Airport.

He was posted to the Singapore Air Traffic Control Centre (SATCC) as Deputy Chief in 2006 and assumed the position of Chief (SATCC) in end 2006. He assumed the role of Chief Changi Tower in 2007 and spearheaded the construction of two ‘back-up’ cabins as contingency to the main tower. This was followed by addition and alteration works to the main tower with on-going live operations. In 2011, he helmed the role of Head (Safety & Standards) and digitalised the Air Traffic Services manuals for better document control and user friendliness. He returned as Chief (SATCC) for a second tour in 2012, overseeing the transition to the new ATM system, LORADS III. In 2015, he was posted to the Air Navigation Services Safety and Security Branch (ANSSSB), responsible for ensuring effective operation of the CAAS Air Navigation Services Group’s Safety Management System and security oversight.

In 2018, he returned to the Air traffic Services Division as Deputy Director (Safety & Standards), with the aim of achieving the highest standard of safety compliance of air traffic services. He successfully formulated the ATS Safety Action Programme to prepare ATCOs readiness to handle the recovery of air traffic to pre-covid level and beyond, in safe and effective manner.



Mr. Paul Radford, *Monitoring, Oceanic Systems Development Specialist, Airways New Zealand*

Paul has over 50 years of aviation experience in both the military and in air traffic control. Paul is a qualified Air Traffic Controller and has worked in both ATC training and oceanic operational requirements roles since 1990. He has been closely involved with the operational introduction of AIDC, FANS1/A, PBCS, and the performance based procedural separations.

Paul was the lead operational specialist during the development and introduction of Airways New Zealand's Oceanic Control System and has supported the introduction of AIDC, FANS1/A, and PBCS at both a global and regional level. He was a member and former chair of the Communication Panel's Operational Data Link Specific Working Group (OPDLWG) (formerly the Operational Data Link Panel), former chair of the Informal South Pacific Coordinating Group (ISPACG) Data Link working group, and a member of RTCA SC189 during the development of DO-306 Oceanic Safety and Performance Standard and DO-258 FANS1/A Interoperability Standard.

Paul assisted in the development of the Asia Pacific Regional AIDC Interface Control Documents (ICD's) and the merge of the North Atlantic and Asia Pacific ICDs into the PAN Regional ICD for AIDC in 2014. Paul was a member of the editorial team from OPDLWG that published the GOLD Manual (Doc 10037) and the PBCS Manual (Doc 9869).

Paul is currently employed in a part-time role monitoring FANS1/A performance in the Auckland Oceanic FIR (NZZO) and providing administration support for the Central Reporting Agency (CRA) website.

3.1 ATS data link operations – (CPDLC, ADS-C, AIDC, PBCS) (Wednesday, 25 October 2023 – 11:00-12:30 and 14:00-15:30)



Ms. Shelley Bailey, *International Coordination Air Traffic Specialist, NAV CANADA*

Shelley Bailey, NAV CANADA - International Coordination Air Traffic Specialist
Chairman Communication Panel – Operational Data Link Working Group (CP_OPDLWG)

Ms Bailey's background is in both domestic and oceanic air traffic control and has worked as an automation specialist advancing NAV CANADA's oceanic ground system. Her technical expertise is in communication technology and is actively involved in supporting data link implementation (CPDLC and ADS-C) and in the global development of a performance specification for voice technologies including SATVOICE with direct communications between flight crews and controllers.

She is also a member of the RCTA Special Committee 214/EUROCAE Working Group 78 (Standards for Air Traffic Data Communication Services) that have developed Safety and Performance Requirements (SPR) and Interoperability Requirements (INTEROPS) documents for the Air Traffic Services (ATS) baseline 2 data communications.

Ms. Bailey is the Canadian member and Chair of the ICAO - Communication Panel -Operational Data Link Working Group and is an advisor to the

Canadian member of the Air Traffic Management Requirements and Performance Panel. She also participates in the ICAO North Atlantic Technical Interoperability Group and ICAO North Atlantic Procedures and Operations Group.

Holding a Bachelor of Education and a Master of Education in Workplace learning, she has extensive experience in educational course development and design as well as in classroom and simulation instruction.

She is a winner of the 2019 ATCA Annual Aviation Systems Specialist Safety Award and the 2019 NAV Canada Chairman's Award for Employee Excellence for customer service.



Mr. Paul Radford, *Monitoring, Oceanic Systems Development Specialist, Airways New Zealand*

Paul has over 50 years of aviation experience in both the military and in air traffic control. Paul is a qualified Air Traffic Controller and has worked in both ATC training and oceanic operational requirements roles since 1990. He has been closely involved with the operational introduction of AIDC, FANS1/A, PBCS, and the performance based procedural separations.

Paul was the lead operational specialist during the development and introduction of Airways New Zealand's Oceanic Control System and has supported the introduction of AIDC, FANS1/A, and PBCS at both a global and regional level. He was a member and former chair of the Communication Panel's Operational Data Link Specific Working Group (OPDLWG) (formerly the Operational Data Link Panel), former chair of the Informal South Pacific Coordinating Group (ISPACG) Data Link working group, and a member of RTCA SC189 during the development of DO-306 Oceanic Safety and Performance Standard and DO-258 FANS1/A Interoperability Standard.

Paul assisted in the development of the Asia Pacific Regional AIDC Interface Control Documents (ICD's) and the merge of the North Atlantic and Asia Pacific ICDs into the PAN Regional ICD for AIDC in 2014. Paul was a member of the editorial team from OPDLWG that published the GOLD Manual (Doc 10037) and the PBCS Manual (Doc 9869).

Paul is currently employed in a part-time role monitoring FANS1/A performance in the Auckland Oceanic FIR (NZZO) and providing administration support for the Central Reporting Agency (CRA) website.



Mr. Yukio Imada, *Special Assistant to the Director, Air Navigation Services Planning Division, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan*

2021-Present Special Assistant to the Director
Air Navigation Services Planning Division
Air Navigation Services Department, Civil Aviation Bureau (CAB)
Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
- Member of ICAO Communications Panel Operational Data Link Working Group (CP-OPDLWG)
- Advisor of ICAO Air Traffic Management Requirements and Performance Panel (ATMRPP)

2020-2021 Special Assistant to the Director

Air Traffic Control Division
Air Navigation Services Department, CAB, MLIT
2009-2020 Air Traffic Management Officer, Air Traffic Management Center (ATMC), CAB, MLIT
1997-2009 Air Traffic Controller, Tokyo Area Control Center (TOKYO ACC), CAB, MLIT



Ms. Lisa Bee, *Director of Air Traffic Services, Viasat+ Inmarsat Aviation*

Lisa Bee brings more than 30 years of experience in air traffic management to her present position as Director of Air Traffic Services at Inmarsat. Ms. Bee's career includes over 20 years with the United States Federal Aviation Administration in air traffic control, air traffic management, system requirements development, air traffic procedures development, test and evaluation, safety management, and strategic planning.

Since 2016, when she joined Inmarsat, Ms. Bee has been responsible for developing concepts, strategies, and requirements to support air navigation services and integration of uncrewed aircraft using satellite communications and data link capabilities. Her work involves direct engagement with air traffic service providers, regulatory bodies, regional air traffic coordination groups, and industry organizations.

In addition to serving as Chair of the Informal South Pacific Air Traffic Services Coordinating Group (ISPACG) FANS 1/A Interoperability Team (FIT), Ms. Bee participates in a number of International Civil Aviation Organization (ICAO) and informal regional ATS coordinating groups and ICAO panels and working groups as an advisor to ICCAIA, including the Remotely Piloted Aircraft Systems Panel (RPASP) and the Separation and Airspace Safety Panel (SASP). Ms. Bee also Chairs the Civil Air Navigation Services Organization (CANSO) Communications, Navigation, and Surveillance (CNS) Working Group, and she serves as the CANSO Member to the ICAO Operational Data Link Working Group (OPDLWG).



Mr. Dung Nguyen, *Principal Systems Engineer, Data Link Systems, Boeing Company*

Mr. Nguyen has 35 years of experience at the Boeing Company in the areas of Datalink Communications. He is involved in the design and development of the data link systems for 737, 757, 767, 747 and 777 models. He is also responsible for the overall Data Communication Strategy for the Boeing Commercial Airplanes Company.

Mr. Nguyen was the main design engineer of the Future Air Navigation (FANS) datalink system. He brought the FANS system from an ICAO concept through the final certified system on 747 in 1995. He was the Boeing representative on the ICAO Aeronautical Telecommunication Network (ATN) Panel and ICAO Operation Datalink Panel (OPLINK) Panel. He is currently working on the next generation of FANS (FANS-3) for all Boeing models.

He earned a bachelor degree in Electrical Engineer from Washington State University. He is a certified Boeing Software Engineer.



Capt. Paul Vissers, *ATS Committee Chairman, International Federation of Air Line Pilots' Associations*

Paul is the Chair of the IFALPA ATS Committee and also the IFALPA member of the ICAO ATMOPS Panel and the European Region Aviation System Planning Group (EASPG).

He is presently flying as a Line Trainer on the Airbus 320 series for a European airline.

Previously he was a member of the SESAR ConOps team and participated in a variety of working groups within EUROCONTROL.



Ms. Crystal Kim, *Technical Officer, Air Traffic Management (ATM) Section, Air Navigation Bureau, ICAO*

Crystal Gusul Kim is Technical Officer in the Air Traffic Management (ATM) Section, Air Navigation Bureau of the International Civil Aviation Organization (ICAO).

She is responsible for providing technical advice and assistance on matters related to air traffic management (ATM) in general to the ICAO Member States, governing bodies and the Secretariat. She concurrently serves as the Secretary in two ICAO expert groups, namely, the Air Traffic Management Requirements and Performance Panel (ATMRPP) and the Operational Data Link Working Group of the Communications Panel (CP-OPDLWG). She also serves as the Co-Secretary of the Communications Panel.

Crystal joined ICAO in 2009 and served the Air Navigation Bureau as a management support officer, subsequently moving on to become a portfolio manager for various projects in the development of electronic safety and air navigation tools as well as associated policies and procedures.

Prior to joining ICAO, she worked for the Ministry of Transport of the Republic of Korea, serving as an ICAO Affairs Officer and Assistant National Safety Oversight Coordinator (NSOC), where she gained extensive knowledge and experience in the legal, financial, administrative and technical matters of civil aviation.

Crystal started her aviation training in 2000 as an air traffic controller and a flight dispatcher at a small tower in Goyang City in the Republic of Korea.

She earned a bachelor's degree in aeronautical science with a major in Air Traffic and Logistics Management and completed graduate studies in Air and Space Law at Korea Aerospace University.

Crystal lives in Montreal, and has a husband and an 8-year-old son.



Mr. Kwek Chin Lin, ATC Specialist, Operations Technology, Civil Aviation Authority of Singapore

Kwek Chin Lin is a professional with over four decades of dedicated service to the aviation field, currently holding the position of Specialist Systems Technology at the Civil Aviation Authority of Singapore.

With a career spanning over 40 years, Chin Lin's journey in aviation began as an Air Traffic Control Officer, earning the ratings of tower, approach, and area. With 17 years of expertise in the operational aspects of air traffic management, he transitioned to specialise in the System domain for the next 23 years.

During his tenure, Chin Lin grew with the evolution of Singapore's Air Traffic Management System (ATMS) and contributed to developing and implementing three generations of ATMS. His contributions include leading the successful implementation and transition of LORADS III, Singapore's third-generation ATMS.

Chin Lin has been actively participating in various ICAO regional meetings over the past two decades and served as the Chairman of the FANS Interoperability Team for the Asia Pacific region.

Currently, Chin Lin holds the position of Co-Chair of the ATM Automation Task Force for APANPIRG, where he continues to shape the future of air traffic management in the Asia Pacific region. Additionally, he serves as the Vice-Chair of the Operational Data Link Specific Working Group of the Communications Panel.

3.2 Free Route Airspace Concept (Wednesday, 25 October 2023 – 16:00-17:00)



Mr. Tihomir Todorov, Head of Section Airspace Design, EUROCONTROL

2001 - 2023: Representing EUROCONTROL at ICAO EUR/NAT Region, MID Region and APAC Region airspace related meetings (FLOE, FLO, TARTAR, RDGE, NATPOG, ATM-SG, etc.).

Since March 2013 - Head of Section Airspace Design (currently this Section is part of the Network Management Directorate, Airspace and Capacity Division, Operations Planning Unit)

March 2001 - Joint EUROCONTROL HQ in Brussels, Belgium as Airspace Design Assistant and further promoted as Airspace Design Expert.

1993 - 2001: Chairman of the Route Development Group - Eastern Part of the ICAO EUR Region (RDGE).

Representing the Republic of Bulgaria at ICAO EUR Region airspace related meetings (FLOE, FLO, TARTAR, RDGE, etc.)

Part of the Bulgarian Project Team to adapt local ATM provisions to ICAO SARPs.

Maintained the ATCO licence at Sofia ACC.

Joint BULATSA HQ as Airspace Design Expert and later became Head of Section Airspace Design.

1989 - 1993: Training, licencing and working as flight data assistant at Sofia ACC, ATCO at Sofia TWR and Radar ATCO at Sofia ACC.

1988: October 1988 - Joint BULATSA the Bulgarian Air Traffic Services Authority.

August 1988 - Finished Bulgarian Military Aviation Academy as civil ATCO.

3.3 Contingency planning, crisis response and safety risk assessments (Thursday, 26 October 2023 – 09:00-10:30)



Mr. Chris Dalton, Chief, Air Traffic Management (ATM) Section, Air Navigation Bureau, ICAO

With nearly 30 years in the ANB, Chris is responsible for Annexes 2, and 10 (Volume II), 11 and 12, and the PANS-ATM – focused on airspace, air traffic services and search and rescue. This subject matter occasionally leads to the handling of sensitive matters, requiring close coordination with States, and the leadership and governing bodies of ICAO.

In the earlier part of his career, he played a management role that culminated in the implementation of performance-based RCP and RSP.

He is currently the lead for the preparations for the Fourteenth Air Navigation Conference, projected for 3rd quarter 2024.

3.4 Transitioning from FPL2012 to the flight and flow information for the collaborative environment (FF-ICE) (Wednesday, 25 October 2023 – 11:00-12:30 and 14:00-15:30)



Mr. Henk Hof, Head of the ICAO and Concept Unit, EUROCONTROL

Henk J. Hof started his professional carrier in 1985 as policy advisor on Communication, Navigation and Surveillance matters for the Dutch ATC authorities. He was member of the Dutch delegation for the ICAO FANS I and II committees and member of a number of ICAO Panels (SICASP, ATNP etc)

In 1991, Henk joined the EUROCONTROL Agency where he started as Project Manager responsible for the standardisation and implementation of the Aeronautical Telecommunication Network (ATN).

He continued, as Head of the Master Plan Maintenance Unit and was responsible for the development and maintenance of the European ATM Master Plan (process and content); the strategic plan for the evolution of European ATM.

Henk's current position (since more than 10 years) is Head of ICAO and Concepts. He is responsible for the contribution of the EUROCONTROL Agency to ICAO and for strategic initiation and facilitation on Concept development.

Henk was chairman of the ICAO Aircraft Tracking ad-hoc working group (AHWG) which produced the GADSS Concept and chaired the ICAO GADSS implementation advisory group.

Henk was member of the GANP Study Group and Chair of the ASBU Panel Project Team and assisted in the transformation of the GANP to its current form.

Henk is the EUROCONTROL member and the chairman of the ICAO ATM Requirements and Performance Panel (ATMRPP).



Mr. Yean Guan Tan, Director, Air Traffic Management Plans and Development Division, Civil Aviation Authority of Singapore

Mr Tan Yean Guan is the Director of Air Traffic Management Plans and Development division in Civil Aviation Authority of Singapore (CAAS). He oversees the formulation of ATM strategies and development of ATM masterplan, and steers research and development programmes to build capabilities to ensure long term ATM sustainability in Singapore.

Yean Guan joined CAAS in 1996 and was trained as an air traffic controller with two ATC ratings. He is also trained in flight procedure design, and played a major role in the development of the national and the Asia Pacific regional PBN plans.

Throughout his career, Yean Guan held several appointments and gained deep expertise in airspace management, airport and ATM master planning, as well as helmed leadership roles in ATC system planning, and staff management and development. He is the Singapore nominated member currently serving as the vice-chair of the ICAO ATM Requirements and Performance Panel (ATMRPP).



Mr. Augustin Gheorghe, Senior Expert, EUROCONTROL

Augustin is an EUROCONTROL ATM Senior Expert who's at the core of the implementation of FF-ICE/R1 by the European Network Manager and contributes to various European 4D trajectory related projects.

Augustin joined EUROCONTROL (European Organisation for the Safety of Air Navigation) in 2001 as operational and technical support for the European Data Link Implementation Programme - Link 2000+, and after a couple of years he was entrusted with the management of the Link 2000+ Integration Team. He is one of the members of the core team that contributed at the development of the joint EUROCAE/RTCA Interoperability requirements for Data Link Services. In this capacity he's been presented with an RTCA award for Leadership in production of DO-280B, the 'Interoperability Requirements for ATN Baseline 1'.

Augustin graduated from the Bucharest Polytechnic University in 1993 as an Avionics engineer (Master's degree) and, during his career, he gained hands-on operational experience as Area Radar Controller and ATS Expert.



Ms. Diana Liang, Enterprise Portfolio Manager, Federal Aviation Administration

Diana Liang works in the Federal Aviation Administration NextGen Organization, Ms. Liang has successfully provided direction and oversight on the development and fielding of many of the FAA's NextGen Programs and enabling technologies.

As the NextGen Enterprise Portfolio Manager, she helps to prioritize all NextGen Research and Development activities within the FAA to help the National Airspace System recognize many of the planned performance improvements.

Ms. Liang is also the technical advisor for US nominated panel member to the ATM Requirements and Performance Panel working on FF-ICE, Connected Aircraft and TBO.



Mr. Yukio Imada, *Special Assistant to the Director, Air Navigation Services Planning Division, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan*

2021-Present Special Assistant to the Director
Air Navigation Services Planning Division
Air Navigation Services Department, Civil Aviation Bureau (CAB)
Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
- Member of ICAO Communications Panel Operational Data Link Working Group (CP-OPDLWG)
- Advisor of ICAO Air Traffic Management Requirements and Performance Panel (ATMRPP)

2020-2021 Special Assistant to the Director
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Air Navigation Services Department, CAB, MLIT
2009-2020 Air Traffic Management Officer, Air Traffic Management Center (ATMC), CAB, MLIT
1997-2009 Air Traffic Controller, Tokyo Area Control Center (TOKYO ACC), CAB, MLIT



Dr. Amornrat Jirattigalachote, *Strategic Planning Manager (Engineering) Aeronautical Radio of Thailand Ltd*

Dr. Amornrat Jirattigalachote is currently working for AEROTHAI in the position of Strategic Planning Manager (Engineering).

Since 2013, she has been responsible for strategic planning as well as conducting study and analysis on new operational concepts, technologies, and engineering systems for AEROTHAI.

Her focus is on modernization planning related to future air navigation concepts such as SWIM (System-Wide Information Management), FF-ICE (Flight and Flow Information for a Collaborative Environment), and TBO (Trajectory-Based Operation).

Dr. Jirattigalachote is also a Thailand-nominated member of ICAO Air Traffic Management Requirements and Performance Panel, Information Management Panel, and Trust Framework Panel, responsible for developing concepts, policies, and provisions related to FF-ICE, TBO, SWIM, information security, etc.

At the regional level, she is presently a Co-Chair of ICAO Asia/Pacific SWIM Task Force and a member of Asia/Pacific FF-ICE Operational Requirements Small Working Group.

3.5 Air Traffic Flow Management (Thursday, 26 October 2023 – 16:00-17:00)



Mr. Elie El Khoury, *Technical Officer, Air Traffic Management (ATM) Section, Air Navigation Bureau, ICAO*

Elie is the Technical Officer in the Air Traffic Management Section, Air Navigation Bureau of the International Civil Aviation Organization (ICAO).

Elie joined ICAO first in 2012 as the Regional Officer for Air Traffic Management and Search and Rescue at the ICAO Middle East Regional Office based in Cairo. Elie has been promoting and supporting the implementation of the ICAO provisions related to air traffic services, air traffic flow management, civil-military cooperation, and airspace management.

Elie is the Air Navigation Bureau Regional Coordinator, the Secretary of the Wake Turbulence Specific Working Group and the Secretary of the Regional Monitoring Agencies Coordination Group.



Mr. Joaquim Lobo Junior, *Head of Air Traffic Management Regulation Section, Department of Airspace Control, Brazil*

Air Traffic Controller, ATM/ATFM Specialist, Master Science degree in Airspace Science, head of the Brazilian ATM Legislation sector, former head of the Brazilian ATFM Ops Room and ATC Capacity Section at Brazilian ATFM Unit (CGNA).

Member of the ATFM Working Group and Rapporteur of the AFIS Working Group of the ICAO Air Traffic Management Operations Panel.



Piyawut Tantimekabut (Toon), *Air Traffic Management Network Manager, Aeronautical Radio of Thailand Ltd (AEROTHAI) and Chair of the ICAO APAC ATFM Steering Group*

Piyawut Tantimekabut (Toon) is Air Traffic Management Network Manager, Aeronautical Radio of Thailand Ltd (AEROTHAI).

Toon is responsible for strategic ATFM operations, ATFM concept development & implementation in Thailand and beyond.

Toon started working at AEROTHAI in ATS Engineering R&D Department where he was deeply involved in ATFM Operations for the nighttime overflight through Afghanistan airspace using the BOBCAT system since 2005 from Concept of Operations development, software development and post-operations analysis.

Toon further leveraged his experience with the BOBCAT project to further develop Cross-Border ATFM operations in the Asia-Pacific region through joint leadership of CANSO Bangkok – Singapore CDM pilot project (2011), which evolved into the Asia-pacific cross-border Multi-Nodal ATFM Collaboration (AMNAC) project.

Apart from his work on the AMNAC project, Toon serves several other key international roles:

- Thailand Member, ICAO ATM Operations Panel (ATMOPSP)

- Member, ATFM Working Group
- Thailand Member, ICAO Wake Turbulence Specific Working Group (WTSWG)
- Thailand Member, ICAO Global Air Navigation Plan Study Group (GANP-SG)
- Member, ASBU Panel Project Team (2017 – present)
- Runway Sequencing Thread Leader (2017 – present)
- Chair, ICAO APAC ATFM Steering Group (2019 – present) – ICAO APAC body responsible for recommending appropriate guidance on ATFM & Airport CDM (A-CDM) in the Asia/Pacific Region, maintaining overview of ATFM & A-CDM implementations in the region to facilitate coordination, alignment while also promoting harmonized procedures and interoperability
- ANSP Observer, IATA Air Traffic Management Working Group – IATA Headquarters body providing advice to relevant IATA bodies on matters related to Air Traffic Management, composing of airline representatives and up to five ANSP observers



Mr. Hamad Al Belushi, Chairman of ICAO Middle East Region ATFM Task Force

Hamad Rashid Al Belushi, Senior Expert – Air Traffic Management at UAE General Civil Aviation Authority (GCAA) is a prominent figure in the Air Navigation Services arena of the GCC and the Middle East. He has more than 25 years of vast experience in managing, designing, testing, training and implementing Communication, Navigation and Surveillance systems and procedures.

Originally an Air Traffic Controller (ATC), Hamad progressed steadily in his career through the roles of Quality Control Officer, Air Traffic Service Instructor, Head of ANS Research and Dataset, Director Air Traffic Management, Air Navigation Services Specialist and chairs several task forces and committees including Chairman of ICAO Middle East Air Traffic Flow Management (ATFM) Task Force.

He managed many Projects throughout his career including the ATM system in Sheikh Zayed Air Navigation Centre as well as three UAE airports and has been the Project Manager of the first operational Arrival Management system in the Middle East and Manager of the Next Generation ATM system project, catering for air traffic growth in the UAE Flight Information Region (FIR) until 2035.

Hamad played a lead role in transitioning all Area Control Centre (ACC) Sectors to the new state of the art facility without any disruption to air traffic flow when the UAE GCAA moved its Air Navigation Services Provision Sector to Sheikh Zayed Air Navigation Centre in 2009.



Mr. Tihomir Todorov, Head of Section Airspace Design, EUROCONTROL

2001 - 2023: Representing EUROCONTROL at ICAO EUR/NAT Region, MID Region and APAC Region airspace related meetings (FLOE, FLO, TARTAR, RDGE, NATPOG, ATM-SG, etc.).

Since March 2013 - Head of Section Airspace Design (currently this Section is part of the Network Management Directorate, Airspace and Capacity Division, Operations Planning Unit)

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Representing the Republic of Bulgaria at ICAO EUR Region airspace related meetings (FLOE, FLO, TARTAR, RDGE, etc.)

Part of the Bulgarian Project Team to adapt local ATM provisions to ICAO SARPs.

Maintained the ATCO licence at Sofia ACC.

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1989 - 1993: Training, licencing and working as flight data assistant at Sofia ACC, ATCO at Sofia TWR and Radar ATCO at Sofia ACC.

1988: October 1988 - Joint BULATSA the Bulgarian Air Traffic Services Authority.

August 1988 - Finished Bulgarian Military Aviation Academy as civil ATCO.



Mr. Stuart Ratcliffe, Co-Chair of the CANSO ATFM/A-CDM Work Group

Mr. Ratcliffe is an operational specialist with 45 years of experience in Air Traffic Management (ATM), Air Traffic Flow Management and Collaborative Decision Making (ATFM/CDM), working in a variety of regions across the globe including USA, Africa, Asia Pacific, Australia, Middle East, China, and Latin America.

Mr. Ratcliffe serves as the AireonFLOW Product Manager and as a subject matter expert on ATFM/CDM at Aireon.

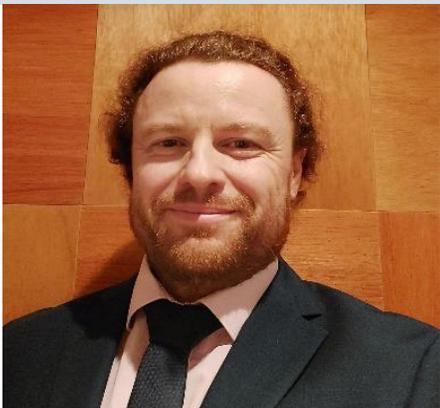
Prior to this role, he was a ATFM SME with Metron Aviation. Mr. Ratcliffe is one of the CANSO ATFM/CDM Work Group Co-Chairs where he is part of the ICAO ATFM task group who completed a rewrite of ICAO Doc9971 and is also a contributor to the multiple CANSO documents on ATFM/CDM. In addition, he represents CANSO as an ATFM/CDM subject matter expert in the APAC, Middle East and African regions.

Mr. Ratcliffe has extensive experience in developing and presenting ATFM/CDM training courses in many of the aforementioned countries. Mr. Ratcliffe also served as the lead ATFM SME for the development of the Regional Concept of Operations for the APAC region.

Prior to his specialization in ATFM, he was an active Air Traffic Controller (Tower, Approach and En-route - radar/procedural) for 25 years, holding positions of acting ATC Center management and Area/Approach/Tower managerial positions at an international airport.

Mr. Ratcliffe has completed a Senior Management Program at the University of Stellenbosch Graduate School of Business.

3.6 The Global Aeronautical Distress and Safety System (GADSS) (Friday, 27 October 2023 – 09:00-10:30)



Mr. John Welton, Technical Officer, Air Traffic Management (ATM) Section, Air Navigation Bureau, ICAO

John Welton is a Technical Officer in the Air Traffic Management (ATM) Section, Air Navigation Bureau of the International Civil Aviation Organization (ICAO).

John is responsible for providing advice and assistance on matters related to ATM and search and rescue (SAR) to the ICAO Member States, governing bodies, and the Secretariat. He currently serves as the Secretary to both the ATM Operations Panel (ATMOPSP) and the ICAO/International Maritime Organization (IMO) Joint Working Group on Harmonization and Aeronautical and Maritime SAR (JWG-SAR).

John joined ICAO in 2019 following 16 years as an air traffic controller in London, United Kingdom. He lives in the Cantons-de-l'Est with his wife and two children in search of the mountain life.

INDUSTRY SKYTALKS SPEAKERS



Mr. Hugh Rodrick, *AIR Lab Deputy Director – Chief Product Owner, Thales AMS*

Throughout his 36-year career Hugh has focused on distributed systems architectures for safety critical systems, working in Oil & Gas extraction, Mining, Petro-Chemical processing, Pharmaceuticals and Telecommunications before specializing in ATMS.

During his 26+ year ATMS tenure he has contributed to projects deployed in 20+ countries and represented Thales as contributor to international research and innovation programs including three years serving on SESAR project groups.

Hugh has been an international “wanderer”, serving stints in Belgium, Switzerland, UK, France and now Singapore, where he is the Chief Product Owner and Deputy Director of the Singapore AIR Lab.

Hugh holds a Bachelor of Applied Science from the Swinburne University of Technology, with specialization in process automation and computer science.



Mr. Stuart Ratcliffe, *Co-Chair of the CANSO ATFM/A-CDM Work Group*

Mr. Ratcliffe is an operational specialist with 45 years of experience in Air Traffic Management (ATM), Air Traffic Flow Management and Collaborative Decision Making (ATFM/CDM), working in a variety of regions across the globe including USA, Africa, Asia Pacific, Australia, Middle East, China, and Latin America.

Mr. Ratcliffe serves as the AireonFLOW Product Manager and as a subject matter expert on ATFM/CDM at Aireon.

Prior to this role, he was a ATFM SME with Metron Aviation. Mr. Ratcliffe is one of the CANSO ATFM/CDM Work Group Co-Chairs where he is part of the ICAO ATFM task group who completed a rewrite of ICAO Doc9971 and is also a contributor to the multiple CANSO documents on ATFM/CDM. In addition, he represents CANSO as an ATFM/CDM subject matter expert in the APAC, Middle East and African regions.

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Mr. Ratcliffe has completed a Senior Management Program at the University of Stellenbosch Graduate School of Business.



Mr. Juan-Jose Cornejo, Director of Business Development, Startical

My professional activities have been focused on Aeronautical and Aeroespacial Operations and Management.

In 2021 I become the Director of Business Development and International Relations of the brand new initiative Startical, a joint venture of ENAIRE (the Spanish ANSP) and Indra to launch a constellation of satellites into orbit that will provide VHF Comms and ADS-B from space.

Previously, since 2005, I developed my career in ENAIRE, the Spanish Air Navigation Service Provider as a professional in the field of Satellite-Based Navigation. Responsible of the European GNSS System EGNOS Unit in Spain.

Involved in the GNSS department projects such as performance validation and interference detection, GBAS implementation, GNSS R&D and PBN.



Dr. Tony Ng, CTO and Solution Architect for the Civil Transportation Solutions division, Leidos

Dr. Tony Ng is the CTO and Solution Architect for the Civil Transportation Solutions division of Leidos. He is the lead systems architect for several US Federal Aviation Administration (FAA) programs to modernize US air traffic management automation under the FAA Next Generation Air Transportation System (NextGen) initiative. Tony has designed air traffic control systems for more than thirty years, and engages in research to increase the safety, efficiency, capacity, predictability, and resiliency of aviation. He published many articles in the areas of fault tolerant, distributed, and real time systems. He has a PhD in computer science from MIT.