



CYBER SECURITY AND RESILIENCE SYMPOSIUM

TOWARDS A RESILIENT AVIATION CYBERSPACE

AMMAN, JORDAN | 15-17 OCTOBER 2019

Session 3- Cyber Threats in Air Navigation Services

Cyber Security Management Framework



Mr. Saulo da Silva
ICAO

Saulo da Silva began his career in the Brazilian Air Force as an Air Traffic Controller in an Area Control Centre in 1985. After finishing his Electrical Engineering course and his Master degree in Air Transport Engineering and a post-graduation in Air Traffic Management he moved to the Brazilian Air Navigation Service Provider where he became a procedure designer and an airspace manager. In his career he participated and provided service as Chairperson of several ICAO regional meetings in the Caribbean and South American Regions as well as represented Brazil in different ICAO Panel of experts.

Saulo joined ICAO in 2007 as an Air Traffic Management Technical Officer and served as Secretary of the Air Traffic Management Requirements and Performance Panel, and the Separation and Airspace Safety Panel, where he led the efforts to develop new concepts and Standards and Recommended Practices related to Information Management, Flight and Flow Information in a collaborative environment and reduced separation minima. Currently Saulo is the Chief of the Global Interoperable Systems Section in the ICAO Air Navigation Bureau and responsible for the development of the Global Air Navigation Plan, the development of system-wide information management (SWIM) and also responsible for the development of a trust framework to help the aviation system to face cyber threats and keep resilience considering the interconnected aviation ecosystem. Saulo is currently pursuing his PhD on cyber safety and resilience.



Mr. Greg Kurten

Mr. Greg Kurten is the Director of Communication, Navigation and Surveillance at the GCAA's Area Control Center in Abu Dhabi. After completing his studies in Electrical Engineering in 1999 he joined South Africa's primary telecommunications provider, Telkom SA in the Core Network Operations division. He specialized in the switching and transmission environment for almost 9 years before accepting a Systems Engineer position at Serco in Abu Dhabi in September 2008.

During his first year at the newly built GCAA Area Control Center, he primarily focused on the network design and configurations of the IPVPN network that was to be used for data communications between all the respective GCAA sites and the airports within the UAE.

In 2010 he was promoted to Head of Engineering, a position he held till 2015 when he was promoted to Director of CNS.

He is married with 2 kids and in his spare time enjoys fishing and various sports such as cricket and rugby.



Mr. Bashar AL Ohali Holds a PhD in Computer Systems Security from LJMU, UK. Have published 15 papers including chapters, articles in journals and presentations at international conferences in Cybersecurity area. Hands-on experience in the fields of information security, IoT, risk management, cryptography, smart city. Currently, working as director of cybersecurity at GACA.

Main roles are creating and managing security strategies, establishing GRC framework, and evaluates the organization to ensure compliance with standards and relevance with security principles.

Mr. Bashar AL Ohali



Mr. Patrick Mana

Mr. Patrick Mana is the EUROCONTROL (the European Organisation for the Safety of Air Navigation) Cyber Security Cell Manager and EATM-CERT Manager (European Air Traffic Management Computer Emergency Response Team).

He has spent his entire career working in air traffic management (ATM). He started 30 years ago working on aviation software development and project/product management.

In 1999, he joined EUROCONTROL, where he led the safety assessment activities, supported ATM stakeholders implementing such practices. He chaired and contributed to international working groups to develop safety related standards (e.g. EUROAE ED12C, ED109, ED120, ED125, ED153).

In 2008, he moved to the Single European Sky Air Traffic Management Research Joint Undertaking (SESAR JU), where he was the Head of the development framework and SJU Programme Manager for all transverse activities including security for six years.

**Mr. Shayne Campbell**

Mr. Shayne is currently the Safety Programme Manager for CANSO, where he oversees the strategic direction of CANSO's safety programme, and manages the daily operations and activities of the Safety Standing Committee and its workgroups. He serves as the focal point on safety matters and coordinates with industry and regulatory organizations on behalf of CANSO.

Shayne was previously with the FAA, where he spent over 20 years in the Air Traffic Organization, the last 11 years focused on operational safety. Shayne holds a Bachelor of Science in Professional Aeronautics with a minor in Aviation Safety from Embry-Riddle Aeronautical University, and a Masters of Business Administration from the University of West Georgia.



Mr. Pete Cooper

Mr. Pete Cooper is giving independent cyber strategy advice to multi-sector businesses and bodies such as IATA and international organizations. Pete was a Royal Air Force fast jet pilot and the Strategic Cyber Operations adviser to the UK Ministry of Defence (MOD) and Govt where he developed and delivered strategies to counter complex cyber threat actors. Pete holds a Post Grad in Cyberspace Operations and has published on the topic of developing legal active cyber defence strategies to disrupt advanced cyber threat actors.

He is also a Fellow of the Royal Aeronautical Society, Atlantic Council Cyber Statecraft Senior Fellow and the founder and Director of the UK's only student cyber strategy challenge, designed to develop and highlight the next generation of cyber security leadership. Additionally, in 2018 he was judged 12th on a list of global cyber security influencers by IFSEC.

As well as advising IATA and on the recently published ICAO Cybersecurity strategy, he is also the author of 'Finding Lift, Minimising Drag', which explored the cybersecurity challenges facing the global aviation sector and advised how regulation, policy and strategy should be developed nationally and internationally to counter the next generation of threats and adversaries. The findings are still being used and have been incorporated into both national and international policy in multiple regions.



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mirror_mod.use_y = False
mirror_mod.use_z = True
...
mirror_ob.select=1
...
mirror_ob.select=1
```

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Thank You