International Federation of Air Traffic Safety Electronics Associations

IFATSEA

Region Americas

The Global Voice of
Air Traffic Safety
Electronics Personnel

October 14, 2024

ICAO held their 14th Air Navigation Conference (AN-CONF/14) from August 26th to September 6th, 2024, at ICAO headquarters in Montreal. The conference focused on the theme "Performance Improvement Driving Sustainability," aiming to reach a global consensus on performance improvement initiatives to address aviation's environmental challenges and the rapid evolution in aviation operations and technologies.

President Theodore Kiritsis and Vice President Patrick Delaney represented IFATSEA during the conference, contributing to the detailed technical discussions. These discussions are expected to result in high-level recommendations in the field of air navigation and safety, which will be submitted for approval to the ICAO Council and potentially endorsed by the 42nd Session of the Assembly in 2025.

I would like to acknowledge IFATSEA members in attendance at AN-CONF/14 representing their states. Representing your state is an honor as well as a high-level learning experience on the processes of ICAO.

- Ghana: IFATSEA Secretary, Frank Kofi Apeagyei
- Romania: Women ATSEP Co-Chair, Camelia Elisei-Iliescu and Olga Tatiana Gheorghiu
- Nigeria: Christian Nwobu and Terese Ihenachor

As I reported, last year the Air Navigation Commission (ANC) developed new principles for the submission of papers to the Air Navigation Conference. Papers submitted should address topics or issues that have not already been the subject of action taken by the ICAO Council. Actions already taken by the Council include those related to the approval of the technical work program of the organization and the outcomes of previous assemblies. Working papers submitted that do not meet any of these principles will be converted to information papers for the conference, acknowledged in the AN-Conf/14 report, and forwarded to the appropriate expert group(s) for consideration as necessary in progressing their concerned work program.

Subsequently, the conference had 202 papers submitted: 104 working papers and 98 information papers. Thirty-one working papers submitted were converted to information papers, acknowledged in the conference report and forwarded to the appropriate expert group(s).

The conference had four agenda items and eleven subtopics (see below) with two opportunities of interest for IFATSEA. IFATSEA submitted two Information papers addressing ATSEP staffing and the ATSEP roll during cyber events.

- **2.2: Addressing safety risks related to evolving aviation technologies**
  - AN-Conf/14-WP/172: AIR TRAFFIC SAFETY ELECTRONICS PERSONNEL (ATSEPS) RECRUITMENT AND RETAINING
- **4.2: Cybersecurity and information system resilience**
  - AN-Conf/14-WP/173: AIR TRAFFIC SAFETY ELECTRONICS PERSONNEL (ATSEP) ROLE IN CYBERSECURITY

Along with our information we cosigned with International Air Transport Association (IATA) two working papers addressing GNSS spoofing and jamming.

- **2.2: Addressing safety risks related to evolving aviation technologies**
  - AN-Conf/14-WP/76: GLOBAL NAVIGATION SATELLITE SYSTEM RADIO FREQUENCY INTERFERENCE (GNSS RFI)
  - AN-Conf/14-WP/78: RATIONALIZATION OF NAVIGATION INFRASTRUCTURE

Cybersecurity and GNSS spoofing and jamming were highly discussed topics during the conference. One working paper (WP-125) presented by Argentina and supported by 19 members of the Latin American Civil Aviation Commission was of concern to IFATSEA and the role of the ATSEP.

Work paper 125: CYBERSECURITY IN THE PROVISION OF AIR TRAFFIC SERVICES (ATS) addressed the design of mechanisms to support air traffic services (ATS) providers in managing cyber threats and cyber events, and in developing efficient mitigation strategies. Action item “c” was of the most concern: “define the competencies and skills that air traffic controllers need in order to assess and address cyber events and their impacts on ATS provision, so as to achieve cyber-resilience.”

IFATSEA had deep concerns with this paper, which asked for ATCOs to be trained in assessing and addressing cyber events, with no mention of the role of the Air Traffic Safety Electronic Personnel (ATSEP). We were allowed to address this item with an intervention. In the intervention, we pointed out that controllers are fully dedicated to ensuring the safety of aircraft in flight and not assessing their equipment. The tasks of assessing and addressing equipment/system malfunctions, complete outages, or cyber events fall under the skills of the ATSEP.

The value of having IFATSEA members attending the conference representing their states allowed them to lobby our concerns with their delegates. We asked them to join IFATSEA with an intervention stressing that the role of the ATSEP is as the first responder called when there is an equipment malfunction or complete outage. The intervention from Ghana and Spain (representing European states) emphasized that the role of the ATSEP should be assessed with the need for cyber training. The United States intervention mentioned IFATSEA and agreed with our intervention. Working paper 125 was not very favorable to the conference attendees, but as you can see in the final report (AN-Conf/14-WP/214), it does not mention the role of the ATSEP during cyber events. This highlights the need for IFATSEA members to participate in ICAO meetings and panels at both international and regional levels. We need to represent IFATSEA to ensure our voices are heard.

> *"AN-Conf/14-WP/125, presented by Argentina and supported by 19 LACAC Member States7, highlighted the need for including cyber considerations in the management systems of ANSPs and for the development of technologies, procedures and arrangements for the safe provision of ATS and recovery from cyber incidents. The Conference noted that the development and implementation of specific technologies was not within ICAO's remit. However, it agreed on the need for measures, including appropriate competencies and skills, to be in place for recovery from cyber incidents, recognizing that cyber incidents had the potential to impact other areas beyond air traffic control. The Conference further agreed to refer the paper to the appropriate expert group(s)".*

To review all the AN-CONF/14 working and information papers, along with the complete reports of the conference, please use the link below.

https://www.icao.int/Meetings/anconf14/Pages/working-papers.aspx

AN-CONF/14 Agenda Items

Agenda Item 1: Update on the ICAO 2023-2025 Business Plan and Long-term Strategic Planning
- **1.1: Reprioritization of the ICAO 2023-2025 Business Plan**
- **1.2: Strategic alignment of global plans for performance improvement**
- **1.3: Evolution of the Technical Commission of the ICAO Assembly**

Agenda Item 2: Timely and safe use of new technologies
- **2.1: Evolving aircraft technologies contributing to LTAG**
- **2.2: Addressing safety risks related to evolving aviation technologies**
- **2.3: 2026-2028 Edition of the Global Aviation Safety Plan (GASP)**

Agenda Item 3: Air Navigation System Performance Improvement

3.1: Proposals to improve the efficiency of air navigation services contributing to LTAG
3.2: Phasing out legacy systems
3.3: Eighth Edition of the Global Air Navigation Plan (GANP)

Agenda Item 4: Hyper-connectivity of air navigation system

4.1: Connected aircraft concept and associated challenges
4.2 Cybersecurity and information system resilience

AN-CONF/14 Working Paper 125 Intervention

Thank you, Mr. Chair,
The International Federation Air Traffic Safety Electronics Association: IFATSEA is partly in agreement with working paper 125 presented by Argentina and supported by 19 members of Latin American Civil Aviation Commission. We welcome the importance of addressing cybersecurity, but we believe that the way forward is different from what working paper 125 suggests.

Working paper 125 points out the rise in cyber threats and cyberattacks in the aviation industry air traffic controllers need new competencies and skills to assess and address cyber events.
If you have been in an air traffic control room or a tower when a controller is experiencing an equipment malfunction or complete outage, you will see the controller's world rapidly accelerates.

The controllers are focused on maintaining aircraft separation, maintaining communication and keeping track of the last known position of multiple aircraft. They are fully dedicated to ensuring the safety of the aircraft in flight. The tasks of assessing and addressing equipment/system malfunctions, complete outage or cyber events fall under the skills of the Air Traffic Safety Electronic Personnel also known as the ATSEP.

Air traffic management, communications, navigation, surveillance (ATM/CNS) and information systems are the cornerstones of our air navigation system. These systems are maintained by ATSEP. Paragraph 1.4, 2.3 (b), and 2.5 refer to the work performed by the ATSEP. The ATSEP is the first responder called when there is equipment malfunction or complete outage.
Currently there are no regulations for standardized training for ATSEP, including cyber training. Training for ATSEP varies significantly across different regions, which can impact the efficiency and effectiveness of system recovery during malfunctions or outages. The lack of standardized cyber training is a critical gap, especially given the increasing importance of cybersecurity in air traffic management. Addressing this gap could help improve the resilience and recovery times of affected systems globally.

IFATSEA urges Argentina and all Air Navigation Service Providers (ANSPs) worldwide to investigate and enhance the role of ATSEP personnel. Standardizing training ensures that ATSEP personnel are well-equipped to handle the systems they maintain, which is crucial for maintaining the integrity and resilience of the air navigation infrastructure. Including cybersecurity training is particularly vital given the increasing threats in the digital landscape.
By focusing on these areas, we can improve the overall safety and efficiency of air navigation services globally. This initiative underscores the critical role of ATSEP personnel in ensuring the robustness and reliability of air traffic management systems.

Thank you, Mr. Chair