



# International Civil Aviation Organization CAR/SAM Regional Planning and Implementation Group (GREPECAS)

## INFORMATION PAPER

PPRC/5 — IP/06 05/07/19

# Fifth Meeting of the Programmes and Projects Review Committee (PPRC/5) Mexico City, Mexico, 16 to 18 July 2019

Mexico City, Mexico, 16 to 18 July 2019

Agenda Item 3: Global, Intra- and Inter-Regional Air Navigation Activities
3.2 Preparation for the 40th Session of the ICAO Assembly

# PROPOSED U.S. WORKING AND INFORMATION PAPERS FOR THE 40TH ICAO ASSEMBLY

(Presented by United States)

### **EXECUTIVE SUMMARY**

The United States provided an overview of our key priorities for the 40th ICAO Assembly in WP/20. As a supplement to WP/20, abstracts of proposed U.S. papers currently in development for the Assembly are provided in the **Appendix** to this information paper.

Strategic Objectives:	• Safety
	Air Navigation Capacity and Efficiency
	Security and Facilitation
	Economic Development of Air Transport
	Environmental Protection
References:	PPRC/5-WP/20: Areas of interest for the United States at the 40th Session of the International Civil Aviation Organization (ICAO) Assembly

## 1. Introduction

- 1.1 In preparation for the 40th ICAO Assembly, the United States developed the attached abstracts for eight (8) proposed U.S. papers for the 40th ICAO Assembly:
  - Agenda Item 14: Best Practices in Combatting Human Trafficking (Working Paper)
  - Agenda Item 15: View of the United States on Civil Supersonic Flight (Working Paper)
  - Agenda Item 19: Discussion of Proposed Management Reforms for the 2020-2022
     Triennium (Working Paper)
  - Agenda Item 19: Proposal for ICAO Governance of Cybersecurity and Resiliency (Working Paper)
  - Agenda Item 30: Risk-Based Certification of UAS (Information Paper)
  - Agenda Item 30: Integration of UAS in the United States (Information Paper)

- Agenda Item 30: Pilot Training Improvements to Address Automation Dependency (Working Paper)
- Agenda Item 40: Article 12 of the Chicago Convention: Communication Mechanism and Guidelines to support its implementation (Working Paper)
- 1.2 Please note that these documents are draft and subject to change, and that the United States may put forward additional papers.
- 1.3 If States have questions about these papers or would like to coordinate with the United States on Assembly matters, please contact Mrs. Krista Berquist, FAA Office of International Affairs (krista.berquist@faa.gov).

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### **APPENDIX**

### DRAFT USG WORKING AND INFORMATION PAPER ABSTRACTS

Abstract for agenda item 14: Executive Committee/Facilitation Programmes Paper Title: Best Practices in Combatting Human Trafficking Presented by the United States
POC: Department of Transportation

While the incredible advances in international aviation allow ever easier and growing global connections, not all who use the system are well intended. Human trafficking is a multi-billion-dollar enterprise that has been recognized as the world's fastest growing crime, and aviation, like every mode of transportation, has an opportunity to help combat it. The International Labour Organization estimates as many as 24.9 million men, women, and children are victims of human trafficking globally. Combatting human trafficking in aviation benefits from a comprehensive strategy that includes a commitment from leadership, partnership, including with survivors of human trafficking, policies, reporting protocols, employee training, public awareness, and data sharing.

Aviation personnel, whether the flight attendant, pilot, or other personnel who interact with passengers, and the traveling public alike, if equipped with the know-how of what human trafficking is and how to report it, can help stop this horrendous crime. However, the importance of partnership in combatting human trafficking cannot be understated. Partnerships between air carriers, airports, aviation authorities, law enforcement and non-governmental organizations can facilitate complementary efforts. For reporting instances of potential human trafficking to be effective, a reporting protocol must be implemented with the correct partners and the appropriate contact information to reach the proper authorities. Those who respond must do so with a victim-centered, trauma informed approach that does not endanger the potential victim or the persons reporting the suspected trafficking. Further, data sharing on reported instances of human trafficking is an important component to help inform the effectiveness and direction of efforts.

ICAO began making efforts to encourage States and aviation stakeholders to become involved in the fight against human trafficking with Circular 352: Guidelines for Training Cabin Crew on Identifying and Responding to Trafficking in Persons, released in May 2018. The Facilitation Panel is also in the process of adopting Recommended Practices to guide States to "take measures to ensure that procedures are in place to combat trafficking in persons, including clear reporting systems and relevant competent authorities" points of contact for airport and aircraft operators" and "take measures to ensure that airport and aircraft operators' personnel in direct contact with the travelling public are provided with awareness training on trafficking in persons."

## **ACTION SOUGHT FROM THE CONFERENCE:**

The Conference is invited to support a U.S. sponsored Assembly resolution underscoring aviation's role in combatting human trafficking and encouraging the continuation of ICAO's efforts to assist States in their initiatives to combat human trafficking in aviation.

Whereas training customer-facing employees and other aviation personnel to identify and respond to suspected instances of human trafficking can help stop this crime; and

Whereas the [recently adopted Recommended Practice 8.47 in Annex 9 encourages Contracting states to take measures to ensure that procedures are in place to combat trafficking in persons, including clear

reporting systems and relevant competent authorities' points of contact for airport and aircraft operators]; and

Whereas the [recently adopted Recommended Practice 8.48 in Annex 9 encourages Contracting States to take measures to ensure that airport and aircraft operators' personnel in direct contact with the travelling public are provided with awareness training on trafficking in persons]; and Whereas conducting awareness campaigns among aviation personnel and the traveling public can help to increase recognition and reporting of suspected instances of human trafficking; and Whereas ICAO should foster the development of clear human trafficking guidelines for each State to implement, including model reporting protocols and a victim-centered law enforcement response.

# The Assembly:

- 1. Urges Member States to give special attention to increasing their efforts to implement new Annex 9 Recommended Practices, including 8.47 and 8.48; and
- 2. Calls on Member States to give due regard to Circular 352 Guidelines for Training Cabin Crew on Identifying and Responding to Trafficking in Persons, in their implementation of the relevant provisions of Annex 9; and
- 3. Requests that the Council ensure that relevant guidance material is current and responsive to the requirements of Member States.

Abstract for agenda item 15: Executive Committee/Environmental Protection – General provisions, Aircraft Noise and Local Air Quality – Policy and Standardization

Paper Title: Views of the United States on Civil Supersonic Flight Presented by the United States

## POC: Office of Environment and Energy (AEE), Federal Aviation Administration

The United States is committed to advancing the development of supersonic aircraft, as part of our broader efforts to support innovation in transportation. We have been working through appropriate channels within ICAO to develop supersonic certification standards, and it is critical that recent progress in this area continue. Such progress is needed due to the expected entrance of civil supersonic aircraft type(s) into the fleet within the next five to ten years.

The FAA is reexamining its policies and regulations concerning supersonic aircraft noise and engine emissions in light of domestic interest and efforts under the International Civil Aviation Organization's Committee on Aviation Environmental Protection. Technical discussions within ICAO must continue towards the development of standards and recommended practices to enable industry to proceed with the development of supersonic aircraft. As more entrants that are new are expected in the near future, it is critical that ICAO implement its proven and objective standard setting process with new types of aircraft.

The United States will clarify its views regarding specific text in Assembly Resolution A39-1 related to sonic boom and misinterpretations we have seen and unintended uses related to supersonic landing and takeoff noise.

### **ACTION SOUGHT FROM THE ASSEMBLY:**

- a) The Assembly agrees to a pro-active workplan and the importance of continuing technical discussions on civil supersonic flight.
- b) The Assembly agrees to the development of Standards and Recommended Practices for certification of supersonic aircraft.
- c) The Assembly does not adopt new language suggesting standards include public acceptability.

Abstract for agenda item 19: Executive Committee/Increasing the efficiency and effectiveness of ICAO

Paper Title: Discussion of Proposed Management Reforms for the 2020-2022 Triennium Presented by the United States

POC: Bureau of International Organizations/U.S. Mission to the International Civil Aviation Organization, U.S. Department of State

Given the amount of time and attention that the U.S. has had to put toward management concerns over the past two years, we propose a working paper that outlines key management reforms that the U.S. will promote in the next triennium. The goal of the paper will be to broaden support for our reform agenda and ensure that we take positive decisions. The paper will help member states understand why the reforms are so desperately needed, and will be a way of keeping the issue of management reform at the forefront for the Secretary General, the Council President and the Secretariat. It will also serve as a clear signal to the candidates for Council President regarding U.S. priorities in the area of institutional efficiency and effectiveness.

There are a number of possible management reform topics, though we plan to further review the following and hone them down to the top priorities:

- Transparency in communications between Secretariat and Council (access to Council transcripts)
- Financial management system should be improved to ensure regular reporting to the council and development of a 2023-25 budget based on ZNG (general policy of adherence to ZNG budgets)
- o Assign the new Chief Finance with a full review of the financial management systems and tools in ICAO, preferably with the support of an independent and recognized expert in the field. The review should include advice on how to put in place a financial and accounting framework allowing the preparation of a zero-based budget for the next triennium.
- Budget proposals should be more detailed and show how the organization's work is focused on core missions (safety and security):
- o Budget proposal will present each individual source of funding for ICAO's activities; how funds are allocated across strategic objectives, and across the organizational units of ICAO (HQ and ROs); which posts and non-staff positions are paid for by which funding sources; which existing posts in the budget are vacant; and the trends over the last 6 years in income, expenditure and annual carry over. Secretariat should state clearly what work and staff is included in the regular budget and what would be funded by other sources.
- Accelerated review and reform of ICAO's IT and Cyber systems
- Review of HR policies, including criteria for consultants, interns, etc. and analysis/elimination of long-standing vacant positions
- Institutionalizing the Ethics Framework and new Investigation Procedures
- Whistleblower Policy revision

- Review of ongoing study of Secretariat reorganization
- Travel/mission oversight, streamlining and reduction

# **ACTION SOUGHT FROM THE CONFERENCE:**

The Conference is invited to:

- a) Review the management reform proposals.
- b) As appropriate, signal support for the proposals, and willingness to work with the United States and other like-minded States going forward.

## Abstract for agenda item 19: Executive Committee/Increasing the efficiency and effectiveness of ICAO

Paper Title: Proposal for ICAO Governance of Cybersecurity and Resiliency Presented by the United States

# POC: Office of NextGen (ANG), Federal Aviation Administration

Cybersecurity and resiliency in the aviation ecosystem is a multidisciplinary issue that affects or will affect nearly every aspect of global aviation. As recognized by the 39th ICAO Assembly under Resolutions A39-18 and A39-19, the global aviation system is becoming more complex and integrated through information and communication technology. Due to the complexities and reliance on shared digital information and communication, the need for cybersecurity and resiliency becomes more vital with every advancement in technology and continuous modernization of the aviation ecosystem.

The need for cyber security and resiliency is further evidenced by the ICAO 13th Air Navigation Conference Recommendation 5.4/1, which calls for States and ICAO to, inter alia, work together along with industry to become more aware of threats and undertake cooperative means to mitigate threats. The ICAO 2nd High-Level Conference on Aviation Security also recommended that ICAO develop a comprehensive cybersecurity strategy and a feasibility study for a Cybersecurity Panel.

The need for cybersecurity and resiliency is well documented and actions to address cyber issues are underway at ICAO. Activities have already taken place under the leadership of the ICAO Air Transport Bureau through the Unlawful Interference Committee (UIC), including the formation of the Secretariat Study Group on Cybersecurity (SSGC). The ICAO Air Navigation Bureau also addressed cyber resiliency through the formation of the INNOVA group and then the Trust Framework Study Group as well as in multiple Technical Panels under the Air Navigation Commission (ANC).

While ICAO, Member States and industry are, diligently working to address cybersecurity and resiliency issues the current approach to this work is disconnected and focuses on individual sectors and varying expertise instead of the holistic global aviation ecosystem. The SSGC is making progress in creating the ICAO Cybersecurity Strategy found in ICAO Secretariat Assembly Working Paper xxx, however, the governance of cybersecurity and resiliency is still lacking within ICAO. The lack of proper governance creates inefficiencies and a lack of information sharing that properly addresses cybersecurity and resiliency in a holistic approach that centrally manages policy, integration of industry standards and potential development of technical Standards and Recommended Practices (SARPs).

In accordance with Section III, Rule 17 a) of Doc 7559/10 "Rules of the Council", the United States proposes forming a Council Technical Committee on Cybersecurity and Resiliency similar to the Council Committee on Aviation Environmental Protection (CAEP). Doc 7559/10 states that the Council may establish other Commissions, Committees or Working Groups, either Standing or Temporary. A new Committee of the Council may be devised to deal with problems involving technical, economic, social and legal aspects of international civil aviation, which, for the advancement or resolution thereof, require expertise, which is not available to the Council through other means.

The proposed Technical Committee will work under the direct control of the Council, which will also develop the proposed Committee's Terms of Reference and membership. The SSGC and Trust-Framework Study Group will reorganize under the new Technical Committee in full consideration of the tasks, the efforts and costs involved for proper management of the new Committee. The Committee will

properly utilize subject matter experts from various cross cutting disciplines without the added bureaucracy of multiple bureaus, offices and priorities, and will coordinate with existing Panels and other expert groups as needed in the development of any future SARPs or guidance material.

## **ACTION SOUGHT FROM THE CONFERENCE:**

The Conference is invited to:

- a) Request that ICAO establish a new Council Technical Committee on Cybersecurity and resiliency as proposed in this paper;
- b) Support the proposed ICAO Cybersecurity Strategy presented by the SSGC;
- c) Support the work of the Trust Framework Study Group;
- d) Possible resolution for the establishment of the Committee

Abstract for agenda item 30: Technical Commission/Other Issues to be considered by the Technical Commission

Paper Title: Risk-Based Certification of Unmanned Aircraft Systems (UAS)
Presented by the United States

POC: Aviation Safety Organization (AVS), Federal Aviation Administration, (with support from Singapore as the Asia Pacific Unmanned Certification Working Group (UCWG) Co-Chair and from the APAC UCWG members)

Aircraft are certified based on the level of risk the operations pose to the public. Existing ICAO Standards and Recommended Practices (SARPs) and associated guidance materials for manned aircraft promote a risk-based safety continuum to ensure an appropriate level of safety is achieved for a particular aircraft based on its performance and the intended operations. A similar approach must be utilized for UAS to support their safe integration and encourage technical innovation. Applying the same expectations for design, airworthiness, and operational safety to all UAS regardless of performance or intended operational use restricts innovation and integration. The Asia Pacific Unmanned Aircraft Certification Working Group (UCWG) has developed a safety continuum, similar to the framework for manned aircraft, with the intent of facilitating a harmonized, scalable approach to UAS certification.

## **ACTION SOUGHT FROM THE ASSEMBLY:**

The Assembly is invited to:

- a) Note the work done by the Asia Pacific Unmanned Aircraft Certification Working Group;
- b) Encourage interested States to engage with the UCWG about incorporating a risk-based safety continuum into UAS design and airworthiness certification processes.

Abstract for agenda item 30: Technical Commission/Other Issues to be considered by the Technical Commission

Paper Title: Integration of Unmanned Aircraft Systems in the United States Presented by the United States

POC: Unmanned Aircraft Systems Integration Office, Aviation Safety Organization (AVS), Federal Aviation Administration

This paper provides an update on the U.S. Federal Aviation Administration's (FAA) activities to integrate Unmanned Aircraft Systems (UAS) into the U.S. National Airspace System (NAS). The paper will include updates on rulemaking, remote identification (ID), the Drone Advisory Committee (DAC), the UAS Integration Pilot Program (IPP), Low Altitude Authorization and Notification Capability (LAANC) and UAS Traffic Management (UTM), and FAA Reauthorization.

## **ACTION SOUGHT FROM THE ASSEMBLY:**

The Assembly is invited to:

a) Note the content of this information paper and visit the FAA's UAS website for more detailed information.

## WP Abstract for Agenda Item 30: Pilot Training Improvements to Address Automation Dependency

## **POC: FAA Aviation Safety Organization**

Concerns over flight deck human factors have created additional pressure to increase reliance on automation in commercial aviation. Although increased use of automation has enhanced safety, this trend is also likely contributing to a lack of practice and therefore a degradation of pilot manual flight skills. These skills are essential for pilot confidence and competence, and they are necessary to take control of the aircraft when automated systems do not function as intended.

This issue is further complicated by the variation of pilot background and skills entering air carrier service worldwide. This paper outlines recommendations for the Assembly to mitigate the consequences of automation dependency, and how it may be addressed at a global, regional, and national level.

### **ACTION SOUGHT FROM THE ASSEMBLY:**

The Assembly is invited to:

- a) Direct ICAO accomplish the following:
- Examine pilot training systems and operational policies of a representative sample of Member States to identify the scope of automation dependency globally and the methods, if any, used by Member States to ensure air carrier pilots maintain manual flight operations skills;
- ii. Develop recommendations for pilot training and operational policies that would enhance skills necessary to manually take control of the aircraft when appropriate;
- iii. Develop Standards and competency requirements for pilot manual flight operations skills; and
- iv. Conduct outreach to Member States to promote the results of items a-c above;
- b) Recommend that States identify and take steps to mitigate automation dependency and promote manual flight operations skills for air transport pilots;
- Recommend that States work bilaterally and multilaterally to assist in implementation of recommended practices for the advancement of manual flight operations skills; and
- Recommend that States of Design work with manufacturers of transport category aircraft to promote training programs and operational policies that focus on greater understanding of aircraft automation capabilities and awareness of manual skills needed for intervention when needed, including when automation does not function as intended.

Abstract for agenda item 40: Legal Commission/Other issues to be considered by the Legal Commission

Paper Title: Article 12 of the Chicago Convention: Communication Mechanism and Guidelines to support its implementation

Presented by the United States and Brazil

POC: Office of the Chief Counsel (AGC), Federal Aviation Administration

## **SUMMARY:**

Article 12 of the Chicago Convention sets the basis for States to cooperate in order to promote compliance with the rules and regulations related to the flight and maneuvering of aircraft. Brazil and the United States acknowledge that cooperation in civil aviation, specifically with regard to implementation of Article 12, will contribute to enhancing flight safety. The enforcement of aviation rules requires prompt notification and communication of alleged violations between aviation authorities. Therefore, ICAO should establish a legal and technical Working Group to develop a communication mechanism for the timely and efficient notification of violations. The Working Group should establish common procedures and best practices regarding the preparation of enforcement cases, including appropriate evidence and documentation.

### **ACTION SOUGHT FROM THE ASSEMBLY:**

The Assembly is invited to:

- a) Acknowledge that aviation safety is at the core of ICAO's objectives and the implementation of Article 12 is essential to achieve that objective;
- b) Acknowledge that safety issues below the level of accidents and incidents are still important as they may identify a risk to the safety of the operating environment;
- c) Request that the [Council] create a legal and technical Working Group, within the Legal Committee, to study the mechanisms to support the implementation of Article 12.
- d) Agree that the Working Group shall develop an effective process for the timely and efficient notification and communication of alleged violations between the involved authorities; and establish common procedures and best practices regarding the preparation of enforcement cases, including appropriate evidence and documentation.