WORKING PAPER

AVSEC/FAL/RG/8 — WP/07
09/08/18

**Eighth Meeting of the ICAO/LACAC NAM/CAR and SAM Aviation Security and
Facilitation Regional Group (AVSEC/FAL/RG/8)**
Mexico City, Mexico, 13 to 17 August 2018

Agenda Item 4: **Programmes and Projects - Aviation Security (AVSEC)**
4.3   Civil aviation cybersecurity – Coordinator State: Jamaica

DEVELOPMENTS ON CYBERSECURITY IN AVIATION SECURITY

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This working paper presents information on recent cybersecurity developments to face this new threat, and urges appropriate authorities to consider the fact that it should not be presumed that the civil aviation industry is immune in this regard.	
Action:	Suggested action is presented in Section 3.
Strategic Objectives:	• Security & Facilitation
References:	• ICAO Assembly Resolution A39-19

1.   Introduction

1.1   The ever changing nature of the threat to civil aviation has become increasingly evident as the world moves deeper into the technological era. The increased sophistication with which calculated attacks are carried out on our industry warrants a new paradigm in the way we address these new challenges. A growing concern for the North American, Central American, Caribbean and South America (NAM/CAR and SAM) States is the threat of cyber terrorism and other cyber-related crimes, and our ability to adequately prevent and respond to critical incidents of this nature. Entities that seek to do harm to air transport are seemingly more minded to engage the industry in the cyber-arena, which impact in the real world is being potentially as devastating as a physical attack on an aviation interest.

2.   **Discussion**

2.1   Cybersecurity challenges have been recognised by ICAO, being proposed as a working document at the 2012 ICAO High-Level Conference for further discussion at the 12th ICAO Air Navigation Conference. This resulted in the formation of a cybersecurity task force to evaluate the extent of the problem. At its 25th meeting the ICAO AVSEC Panel had deliberations on a number of cybersecurity related matters.

2.2   From 20 to 23 March 2018 a Civil Aviation Cyber Security Workshop was held in Montego Bay, Jamaica, as part of the actions taken by the Cyber Security Programme of the ICAO and LACAC NAM/CAR and SAM Aviation Security and Facilitation Regional Group (AVSEC/FAL/RG). The Meeting concluded that State authorities should be aware of this important and delicate matter proposing to:

a) assign the necessary resources for training of personnel at all levels of civil aviation, but mainly of information and communication technology (ICT) experts
b) establish civil aviation cyber security incident response teams (CSIRTs)
c) develop procedures based on national criteria to be applied by cyber security emergency response teams (CSERTs) for handling and countering potential attacks to civil aviation.

2.3   Regarding ICAO Assembly Resolution A39-19, ICAO is still working on a unified regulatory framework to strengthen cyber security. In this scenario, the United States is working directly with ICAO, as well as with partners in different regions, to identify threats and the risk of possible cyber security incidents in critical civil aviation operations and systems, and to promote a common interpretation of cyber threats, risks and mitigation of cyber incidents.

2.4   Related to next cybersecurity initiatives to be developed in the NAM/CAR regions, the United States will carry out a cybersecurity tabletop exercise from 17 to 19 July 2018 in Washington D. C., United States, proposing different scenarios allowing an open exchange of ideas. This exercise will be also used to enhance general awareness and validate existing plans and procedures to establish a common model of cyber incident response and recovery.

2.5   The abovementioned was also informed in the Eighteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/18) held in Punta Cana, Dominican Republic, from 9 to 14 April 2018, where the Meeting pronounced its support to this initiatives. Several States expressed their interest in the simulation or initial exercise proposed by the FAA in coordination with ICAO and commented the possible extension of scenarios to other air navigation areas that manage critical data in electronic/digital formats. The Air Navigation Bureau Director of ICAO Headquarters commented that ICAO is working to initially be able to defend against cybernetic attacks and in a second moment to recover from these, emphasizing data interchange. Moreover, he urged the States of the CAR and SAM Regions to go further as soon as possible in this important issue.

2.6　　　　　Furthermore, in GREPECAS/18 Cuba and Dominican Republic presented their experience on cybersecurity. Dominican Republic informed that it is working to solve issues on safety that could be affected by cyberattacks, and it advocated to include safety specialists in future training events on the subject. Cuba, on the other hand, commented the work done at a national level, in line with the recommendations and guidance provided by ICAO.

2.7　　　　　In attention to the requests of the States, the ICAO NACC Regional Office commented the preparation of a bilingual cybersecurity workshop for the NAM/CAR/SAM Regions, to be delivered in December 2018, where cyber-threats and possible mitigation measures will be addressed from the aviation security and air navigation points of view. Industry representatives will also participate in this workshop to present their initiatives on this matter. Therefore, it is recommended that the States send their aviation security and/or air navigation specialist to this event.

3.　　　　　Suggested action

3.1　　　　　The Meeting is invited to:

a)　take note on this relevant issue;

b)　share experiences on cybersecurity and cyber-attacks and how they have been solved/addressed; and

c)　nominate aviation security and/or air navigation specialist to the event mentioned in paragraph 2.7. when the invitation to the event is submitted.

— END —