



Emerging Issues In Aviation & International Cooperation UAE

**Eighteenth Meeting of the regional Planning and Implementation
Group of the Caribbean and South America
GREPECAS/18**

9-14 April 2018

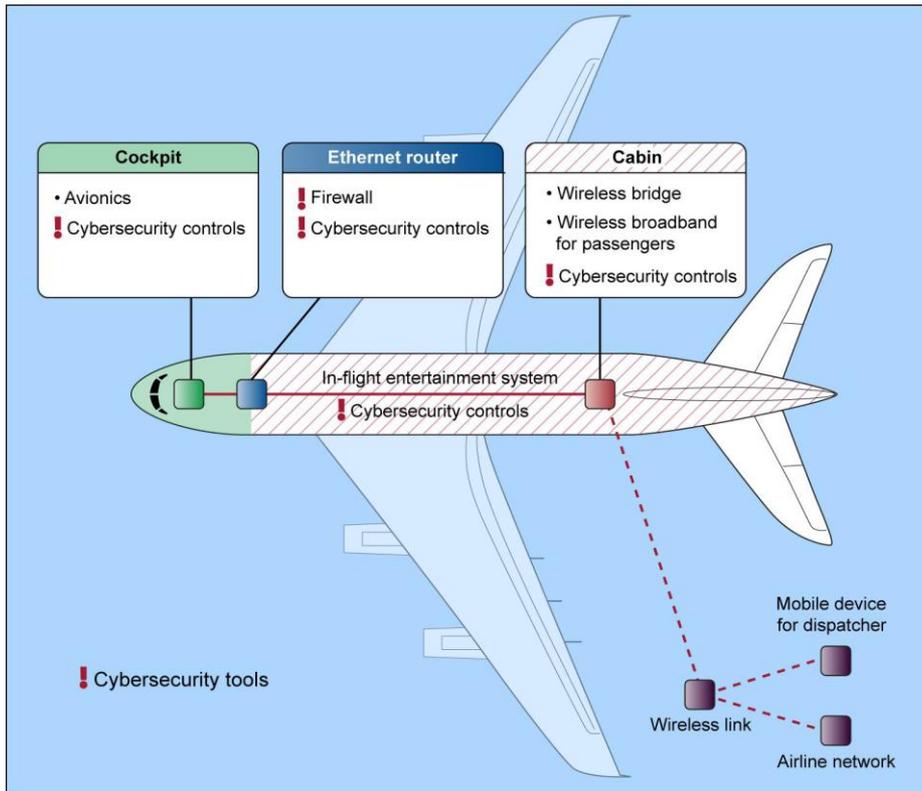
Capt. Aysha Al Hamili
The United Arab Emirates Representative to ICAO Council



Outline

- Future of aviation and ICAO leadership
- International Aviation: Growth and technological advancement
- Emerging Issues
 - Cyber Security
 - RPAS
 - Space Travel
- NGAP
- UAE's International cooperation programmes

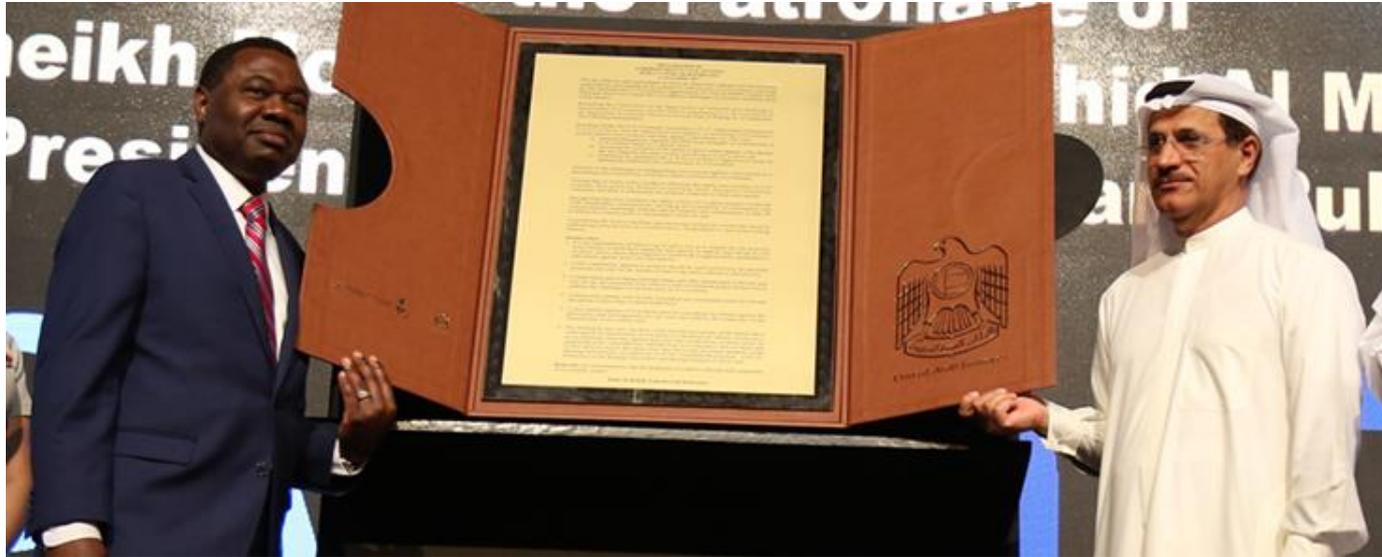
Cyber security and attacks on aviation system



Source: GAO. | GAO-15-370

- **A39-19:** Addressing Cybersecurity in Civil Aviation
- There is increasing concern that aviation systems may be vulnerable to cyberattacks.
- Inconvenience to passengers due to attacks to ground-based airline passenger systems
- Serious threats to safety of life.
- Rapid advancements in technology and low cost of access to these tools.

Cyber security and attacks- Dubai Declaration 2017



- Cyber security symposium : **Dubai Cyber Security Declaration.**
 - Importance “Collaboration and exchange between States and other stakeholders is the sine qua non for the development of an effective and coordinated global framework to address the challenges of cybersecurity in civil aviation;”



RPAS remote piloted aircraft system

- Increased technologies, longer RPAS, more functions
 - National vs. international
 - Regulatory Challenges
 - ATM
 - Licences
 - Registrations
- 
- A large Amazon Prime Air drone is shown in flight, carrying a cardboard box. The drone has the Amazon logo and 'amazon PrimeAir' written on its side. It is a fixed-wing aircraft with four rotors. In the background, several other smaller drones are visible, also in flight.

Risks- Drones Collision (RPAS)



- Collisions- airport vicinity “Drone Strike”:
 - **Shutting down Dubai International Airport due to a drone costs \$100,000 a minute**
 - **Gatwick Airport**
 - **plane approaching Heathrow Airport is believed to have hit a drone before it landed safely**
- UAE GCAA Drones regulations: Licensing of the use of Drones
- Sharing the practice with the international aviation community

New Technologies Vs Régulation



- Air Taxi
- While supporting new technology advancement, the GCAA maintain high level of safety
- UAE GCAA **Registered the world first self-flying Air Taxi under A6-TRA** and Over the next five years,
- Collaboration with the RTA to ensure that the operational requirements for implementing AAT services are put in place.
- Over the five years new laws and policies governing certification of the aircraft will be developed.
- Following the best Practices, and looking for ICAO's guidance



Space Activities



- Space activities, rapid growth, new technologies
 - **Space X : goal of reducing space transportation costs and enabling the colonization of Mars.**
- Challenges to civil aviation
 - Air Traffic Management
 - Regulation
 - ✓ Pilot licensing
 - ✓ Passengers
 - ✓ Insurances and liability



Space Activities

- UAE hosted (ICAO) and (UNOOSA) Aerospace Symposium in 2016
- Aerospace innovation: commercial space transportation and suborbital operations.
- Cooperation with aerospace stakeholders



**The United Arab Emirates
has announced plans to
launch a mission to Mars
by 2021.**

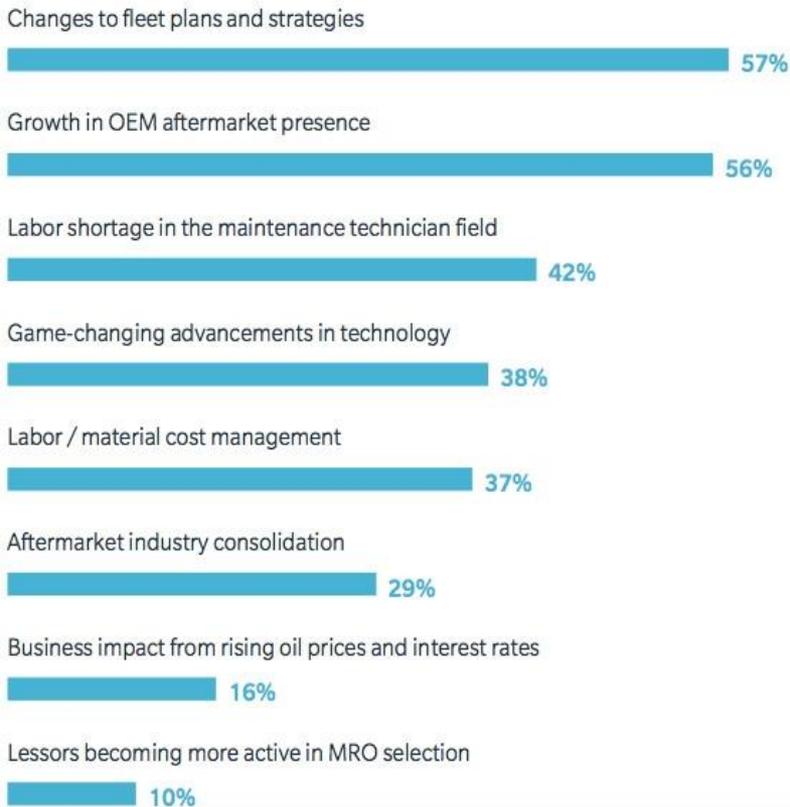




Shortage of Aviation Professional – NGAP A39-29

Potential Aviation Aftermarket Disruptors That Warrant Greatest Attention

PERCENT OF RESPONDENTS



- Shortage of aviation professionals is a global issue - Growth
- What kind of Aviation professionals the industry will need?
- Air Traffic controllers, cabin and ground crew, engineers, inspectors and other professionals to keep the industry moving.
- ICAO Next Generation of Aviation Professionals (NGAP)
 - ✓ Promote aviation
 - ✓ Strategies to insure enough qualified and competent aviation professionals to operate, manage and maintain the future international air transport system.



NGAP – UAE

- Support of A39-29 “ Encourages Member States, international and regional organizations, academia and industry to support the NGAP Programme, as one of the integral elements of capacity building, by providing technical expertise and guidance, and resources (human, financial and data) to help achieve the Program's objectives.”





International Cooperation and Capacity Building Women in Aviation A39-30

- Support of A39-30, the UAE support capacity building for women to achieve **gender equality in aviation**.
- We enabled 12 ladies for the past 3 years from various LACAC member states: **(Peru, El Salvador, Dominican Republic, Costa Rica, Panama, Chile, Venezuela, Argentina)**
- **Future Plan:** the UAE GCAA is planning to welcome 4 ladies from LACAC member states in October 2018 ... waiting your enrollment.





International Cooperation and Capacity Building

“ICAO Ready”

This program aims to

- **Support the ICAO NCLB initiative** and demonstrate the UAE commitment for the fulfillment of Resolution A39-23: No Country Left Behind (NCLB) Initiative.
- Provide **technical assistance / guidance in Safety and Security** to the countries in need and help them put systems and processes in place to meet the ICAO Audits requirements



International Cooperation and Capacity Building

2017	Strategic Planning & Corporate Performance Management in Peru	(35 participants)
2016	International Aviation Negotiations in Peru	(43 participants)
2015	Strategic Planning to Enhance Human Resource Capacity	(27 participants)
2014	Project Management in Aviation in Peru	(38 participants)
2013	Strategic Planning and Project Management in Colombia	
2012	Air transport Financial Management in Peru	(43 participants)
2011	Aviation Strategic Planning in Guatemala	
2010	Aviation Strategic Planning in Paraguay	



Our challenges are global

But no matter where we are, we are connected.

**Aviation is growing
Technological advancements are rapid**

International Cooperating is the only way forward

