



EASA

European Aviation Safety Agency

ETSO Workshop 2018

Cybersecurity aspects

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Your safety is our mission.

An agency of the European Union 



Information Security

**The protection of
information and
information systems**

**from unauthorized access,
disclosure, disruption,
modification, destruction.**

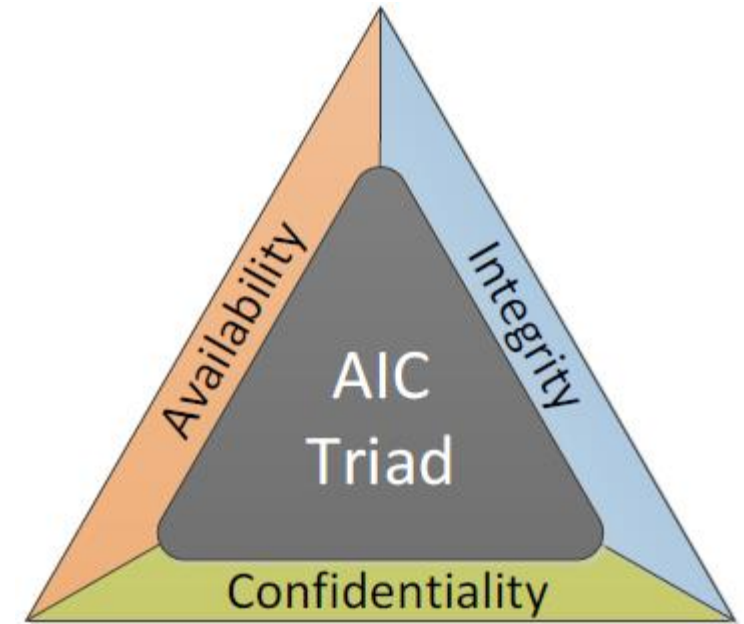


What is Cyber Security?

Availability – Ensure timely reliable access to data and information services for authorized users.

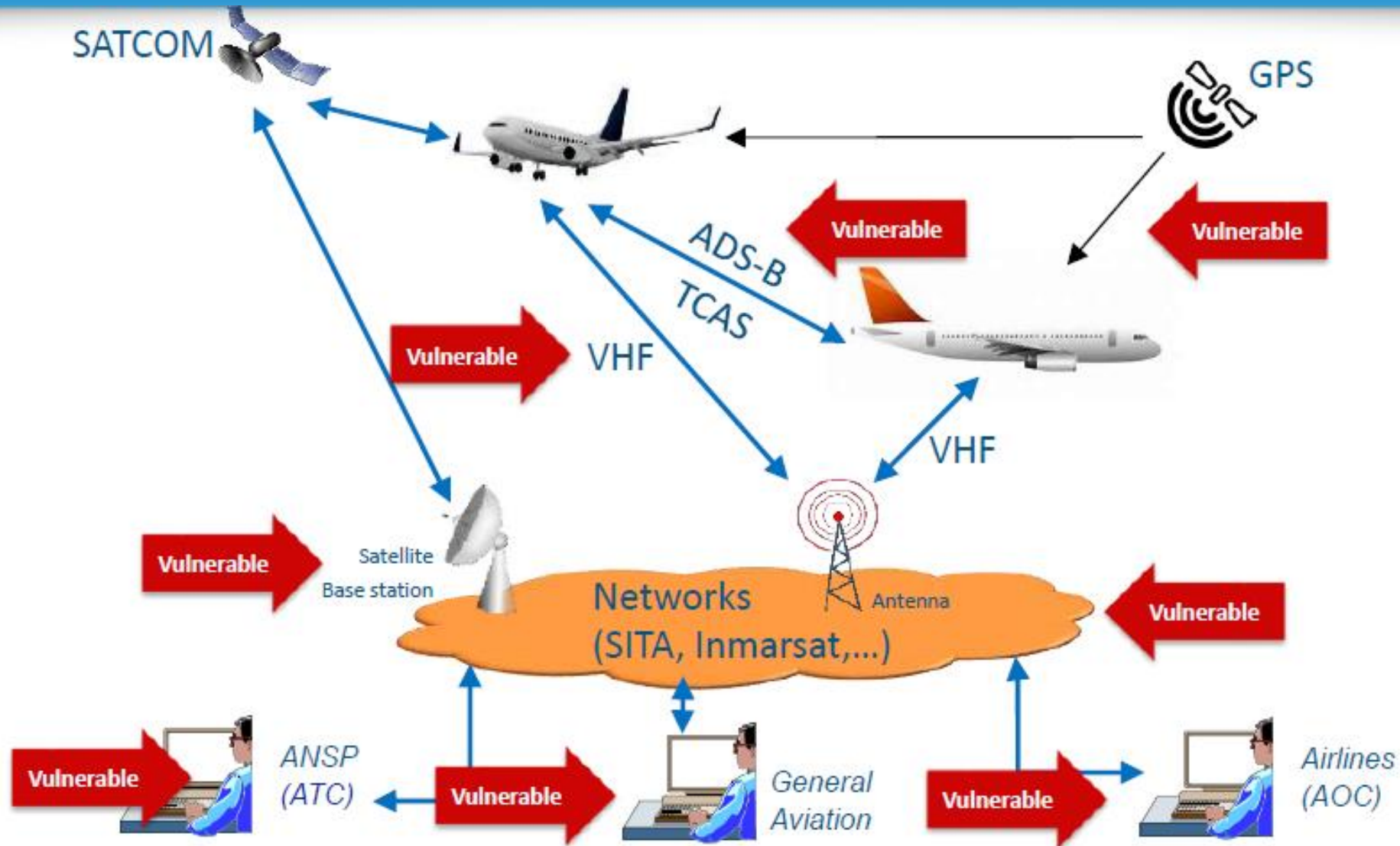
Integrity – Provide accuracy and reliability of the information. Unauthorized modification is prevented.

Confidentiality – Information is NOT disclosed to unauthorized Persons, Processes and Devices.



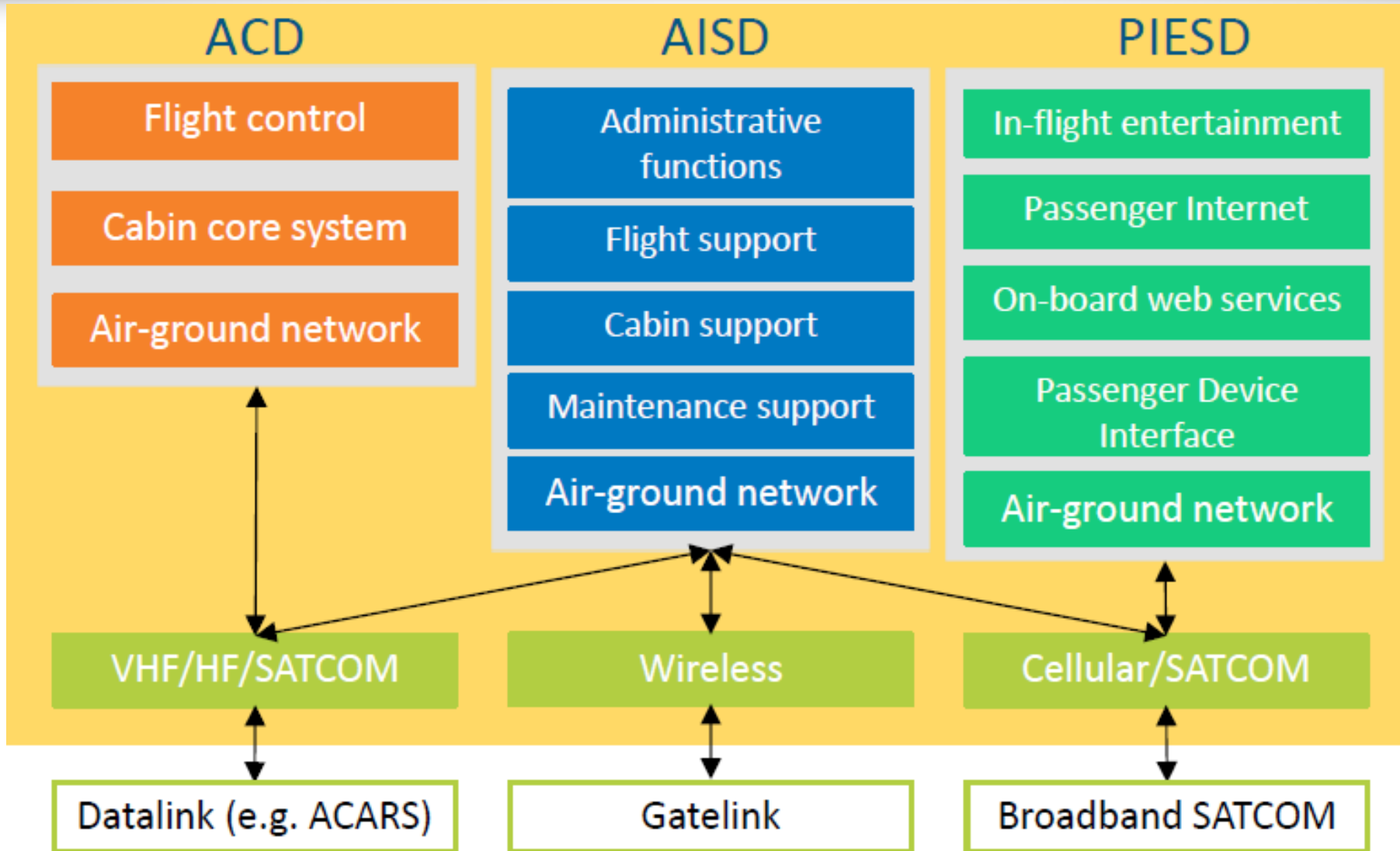


Aviation Security Environment - Flying





Aircraft Security Domain





What happened so far

Perth Airport hack: Vietnamese hacker steals significant amount of security details, building plans

■ The hacker managed to get away with sensitive security details, building plans and physical security details of the airport buildings.

By Hyacinth Mascarenhas

Updated December 11, 2017 04:28 GMT



Turkish Airlines passenger jet is diverted after passengers discover Wi-Fi network named 'bomb on board'



Researcher Successfully Hacked In-Flight Airplanes - From the Ground

IOActive researcher will demonstrate at Black Hat USA how satellite equipment can be 'weaponized.'

It's been four years since researcher Ruben Santamarta rocked the security world with his chilling [discovery of major vulnerabilities](#) in satellite equipment that could be abused to hijack and disrupt communications links to airplanes, ships, military operations, and industrial facilities.

Santamarta has now proven out those fears and taken his research to the level of terrifying, by successfully hacking into in-flight airplane WiFi networks and satcom equipment from the ground. "As far as I know I will be the first researcher that will demonstrate that it's possible to hack into communications devices on an in-flight aircraft ... from the ground," he says.



Experts working with Homeland Security hacked into Boeing 757



A comprehensive approach to Cybersecurity in Aviation

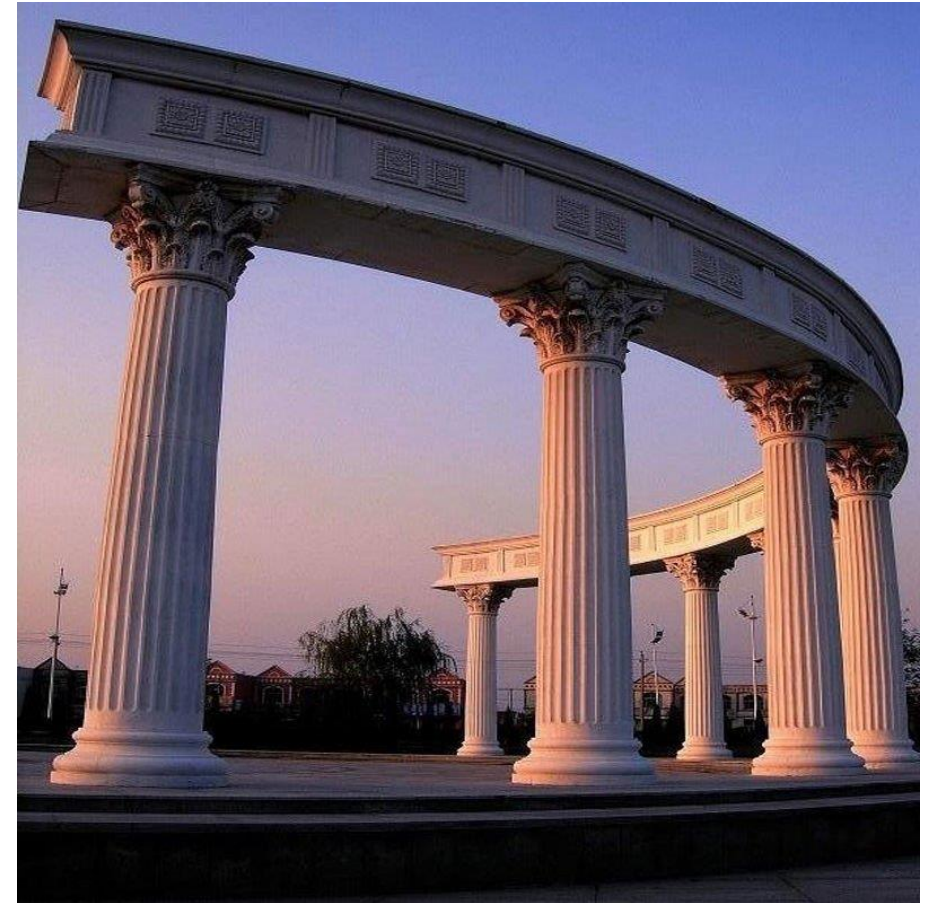
Information Sharing, Threat Assessment & Coordinated Response (ECCSA/CERT-EU)

Research & Studies (Cryptographic recommendations, Threats to Critical Systems, Vulnerabilities Database)

Knowledge & Competence Building (training initiatives / safety promotion through event participation)

International Cooperation & Harmonization (ICAO, FAA, NATO, ECAC, ERA, EMSA, Nat. Sec. Agencies ...)

Industry Standards, Regulations and Oversight (RMT.0648: CS for products, RMT.0720: Horizontal Rule for Information Security Management System)





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Thank you for your attention!

Any questions?

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