TERMS OF REFERENCE
Special Committee (SC) 216
Aeronautical Information Systems Security
(Revision 17)

ORIGINAL REQUESTORS:

Organization	Person
Boeing Commercial Airplanes	Munir Orgun, Electronic Systems Chief Engineer

SC LEADERSHIP:

Position	Name	Affiliation	Telephone	email	Change
Co-Chair	Siobvan Nyikos	**The Boeing Company**	**(425) 210-4697**	siobvan.m.nyikos@boeing.com	
Co-Chair	Patrick Morrissey	**Collins Aerospace**	**(319) 295-9436**	Patrick.Morrissey@collins.com	
Government Authorized Representative	Varun Khanna	**FAA/670**	**(206) 231-3159**	Varun.khanna@faa.gov	
Secretary	Sam Masri	**Honeywell Aerospace**	**(602) 436-4201**	sam.masri@honeywell.com	

BACKGROUND:

Prior to 2007, existing aircraft system safety guidance did not specifically address airborne network and data security issues, which results in non-standardized and potentially inequitable agreements between the various applicants and the various regulatory agencies on an acceptable process and means of compliance for ensuring safe, secure and efficient aircraft network design and operations.

This Special Committee is needed to bring together aircraft manufacturers and systems designers, CNS/ATM systems designers and operators, airlines maintenance and operations personnel and government (primarily civil aviation authorities) to form a consensus and document guidance for security of aircraft systems.

The PMC established Special Committee 216 (SC-216) on June 26, 2007, in response to a request by Boeing to provide guidance for compliance with new Special Conditions for airplane systems information security. SC-216 has produced seven documents, DO-326A, DO-355A, DO-356A, DO-391, DO-392, DO-393, and

a white paper, RTCA Paper No. 120-21/PMC-2151, to address development, certification, and continuing airworthiness processes and methods guidance.

EUROCAE committee WG-72 has produced seven similar documents; ED-202A which is the same as DO-326A, ED-204A which is the same as DO-355A, ED-203A which is the same as DO-356A, ED-201A which is the same as DO-391, ED-205A which is the same as DO-393, and ED-206 which is the same as DO-392. Additionally, EUROCAE ER-013 is the same as RTCA Paper No. 120-21/PMC-2151.

DELIVERABLES:

Product	Description	FRAC Completion Due Date*	Change
DO-326B, Airworthiness Security Process Specification	Generate an update to the existing DO-326A to include guidance on Change Impact Analysis as it relates specifically to Information Security.	**June 2024**	**March 2024**
DO-XXX, Information Security Management System for Aviation Organizations	Generate a new document for publication to address a management system for Information Security which supplements the current Safety Management System.	**December 2024**	**June 2024**
DO-392A, Guidance on Information Security Event Management	Generate a document revision for publication to address performance requirements for event reporting.	**December 2024**	**September 2024**
DO-YYY, Standard on Aviation Data Security	Generate a new document for publication addressing minimum standards for the generation, storage, and delivery of data, including Operational Flight Programs, sensitive maintenance data records and other security relevant data.	**March 2025**	**December 2024**
RTCA Report, Supporting Information for DO-356A	Generate a new report to provide agreed to answers to commonly asked questions and issues faced when using DO-356A and ensure consistent interpretations.	**March 2025****	**New**
DO-356A Change 1, Airworthiness Security Methods and Considerations	Generate a tightly scoped update to the existing DO-356A to reflect the new Supporting Information for DO-356A.	**June 2025**	**New**

DO-355B Information Security Guidance for Continuing Airworthiness	Generate a document revision for publication to provide clarification of responsibilities and additional objectives for continued airworthiness security.	**December 2026**	**New**

*Note: Final Review and Comment (FRAC) Completion Due Date refers to the date that the committee plenary approves the document after completing the FRAC Process. SCs should submit the final document at least 45 days before the PMC meeting where it will be considered for approval.

**Note: This is the completion date for the Report and not a FRAC completion date. This report will not go through FRAC.

SCOPE:

The special committee will conduct joint committee activities with WG-72. It should point out areas of inconsistency with current security documents and attempt resolution and harmonization where possible.

ENVISIONED USE OF DELIVERABLE(S):

Envisioned use of deliverables in the current TOR is as follows:

- The Security Event Management document update will serve to provide clarification around a single specific topic, reporting guidance and timelines that are not possible with current information.
- The Information Security Management System will serve to clarify Information Security specific guidance for topics that are analogous to the current Safety Management System guidance in use.
- The update to DO-326A will be limited to additional guidance for Change Impact Analyses, specifically concerning the Information Security context.
- The Standard on Aviation Data Security will provide specific technical details and timelines for the protection of data (executables, databases, data load activities, sensitive maintenance data, etc.) from malicious actors.
- Supporting Information for DO-356A will provide clarification on common points of confusion as reported by the community on the use of DO-356A for airworthiness security certification and ensure industry is working to the same interpretations. Such topics include defense in depth, use of SAL, secure coding standards, Common Criteria, supply chain security, and risk assessment methodologies. In addition, this report will address items in response to comments received from DO-326B FRAC but determined to be more appropriate to include in DO-356A.
- DO-356A Change 1, Airworthiness Security Methods and Considerations will be used as a proposed Acceptable Means of Compliance (AMC) and thus reflect topics from Supporting Information for DO-356A that require a change in AMC. Committee will conduct FRAC and submit this deliverable per normal "Change" procedures. In addition, this change will address items in response to comments received from DO-326B FRAC but determined to be more appropriate to include in DO-356A.
- DO-355B Information Security Guidance for Continuing Airworthiness will provide clarification of responsibilities and additional objectives for continued airworthiness

security to address perceived gaps as reported by the community on use of the last published DO-355A.

SPECIFIC GUIDANCE:

EUROCAE Coordination - RTCA SC-216 will coordinate joint activities with EUROCAE WG-72.

Documents	Intended Use
• FIPS 140-3, "Security Requirements for Cryptographic Modules" • FIPS 199, "Standards for Security Categorization of Federal Information and Information Systems" • FIPS 200, "Minimum Security Requirements for Federal Information and Information Systems" • NIST SP 800-37, "Guide for the Security Certification and Accreditation of Federal Information Systems" • NIST SP 800-64, "Security Considerations in the Information System Development Life Cycle" • NIST SP 800-30, "Risk Management Guide for Information Technology Systems" • NIST SP 800-23, "Guidelines to Federal Organizations on Security Assurance and Acquisition/Use of Tested/Evaluated Products" • NIST SP 800-53, "Recommended Security Controls for Federal Information Systems" • ARAC ASISP Final Report, " Recommendations regarding ASISP rulemaking, policy, and guidance on best practices for airplanes and rotorcraft including both certification and continued airworthiness" expected to be complete by August 2016 • DO-326A/ED-202A, *Airworthiness Security Process Specification* • DO-355A/ED-204A, *Information Security Guidance for Continuing Airworthiness* • DO-356A/ED-203A, *Airworthiness Security Methods and Considerations* • DO-391/ED-201A, *Aeronautical Information System Security Framework Guidance* • DO-392/ED-205A, *Guidance on Security Event Management* • DO-393/ED-206, *Process Standard for Security Certification and Declaration of ATM ANS Ground Systems*	The Special Committee should examine the guidance provided by these documents when developing the committee products.

• RTCA Paper No. 120-21/PMC-2151/ EUROCAE ER-013, *Aeronautical Information System Security Glossary*	

TERMINATION:

When the scope of this Terms of Reference is complete, the committee will recommend to the PMC that the committee Sunset, go into Active Monitoring Mode, or spend a period of time in Hiatus. Any change/extension of the committee's work program requires prior PMC approval.