TERMS OF REFERENCE Special Committee (SC) 216 Aeronautical Information Systems Security (Revision 16)

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	Dave Pierce
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:

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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.	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.	June 2024	
DO-392A, Guidance on Information Security Event Management	Generate a document revision for publication to address performance requirements for event reporting.	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.	December 2024	

^{*}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.

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):

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.

SPECIFIC GUIDANCE:

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

• Initial Documentation

Documents	Intended Use
FIPS 140-3, "Security Requirements for	The Special Committee should examine the
Cryptographic Modules"	guidance provided by these documents when
FIPS 199, "Standards for Security Categorization	developing the committee products.
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	

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.