



EUR 371-20 / WG72-149
RTCA Paper No. 358-20/SC216-117

Saint Denis, 2 February 2021
Washington, 2 February 2021

**EUROCAE WG-72 Plenary Meeting #60 / RTCA SC-216 Plenary Meeting #51
“Aeronautical Systems Security”**

Date	11 December 2020 9 AM – 2PM EST 1500-2000 Central Europe
Place	Virtual Meeting-Webex instead of RTCA HQ
Venue	
Hosted by	RTCA

Attendance:

Initial	Name	Company/Organization
	Adrian Waller	Thales
AC	Alain Combes	Airbus
	Andrew Kornecki	Embry-Riddle Aeronautical University
	Andy Boff	Helios
AG	Anna Guegan	EUROCAE
	Armelle Gauthe	Airbus
	Caroline Prado	The Boeing Company
	Casey Theisen	United Airlines
	Cesar Gomez	FAA
	Charlie Morris	Civil Aviation Authority of New Zealand
	Clive Goodchild	BAE Systems
CR	Cyrille Rosay	EASA
DP	Dave Pierce	GE Aviation
DZ	Dongsong Zeng	The MITRE Corporation
	Ed Hahn	ALPA
	Eric Mok	Universal Avionics Systems Corp.
	Frederique Dauvillaire	Thales
	Hannes Alparslan	EDA
	Jakub Cunat	Helios
JH	Jerry Hancock	Inmarsat
	Joacy Freitas	ANAC
	John Flores	FAA
	John vanHoudt	FAA

JG	Judicael Gros-Desirs	Airbus
	Karan Hofmann	RTCA, Inc.
	Kevin Meier	Textron Aviation
	Laurent Leonardon	Collins Aerospace
	Mohammed Waheed	Aviage Systems
	Marcus Labay	FAA
	Maria Panina	GOSNIAS
	Mariusz Pyzynski	International Air Transport Association
	Mark Kelley	AVISTA Inc.
	Mitch Trope	Garmin
	Osamu Kanmoto	IHI Corporation
	Patrick Mcternen	American Airlines
PW	Phil Watson	Panasonic
	Philippe Marquis	Dassault-Aviation
	Philippe Robert	AEROCONSEIL
	Raoufou Ganiou	Transport Canada
	Rebecca Morrison	RTCA, Inc.
	Sam Masri	Honeywell Aerospace
	Seth Stewart	ENSCO Inc.
	Simone Irti	Thales
SN	Siobvan Nyikos	The Boeing Company
SS	Stefan Schwindt	GE Aviation
	Steven Bates	Panasonic
	Ted Kalthoff	Bombardier
	Ted Patmore	Delta Airlines
VK	Varun Khanna	FAA
	Will Gonzalez	FAA

11 December 2020

Introductions from Dave Pierce and introduction of the agenda



1. Introductory Remarks: RTCA, EUROCAE and Co-Chairs
2. Introductions
3. Status of Regulatory Work: FAA/EASA
4. Approval of Summaries of Previous Meetings
 - a. September 18, 2020 (EUR 266-20 WG72-147/ RTCA 268-20/SC216-113)
 - b. November 17, 2020 (RTCA #50)
5. Review Sub-Group (SG) Progress and Identify Issues for Resolution
 - a. ED-205A/DO-XXX (SG-2, Kristof)
 - b. ISEM (SG-3, Judicael)
 - c. ED-201A (SG-4, Stefan)
6. Change of Chairmanship of SG3
7. Action Item Review
8. Liaison with Other Working Groups
 - a. EUROCAE cybersecurity coordination meeting
 - b. US initiative status on equivalent to ECSCG?
9. Schedule and next meeting
10. Other Business
11. Adjourn

The RTCA Anti-Trust, Proprietary, and Committee Participation Membership Policy statements were then displayed and read through by RTCA and Eurocae representatives, and were accepted by the participants and recorded in these minutes.

Dave presented Eurocae WG-72 and RTCA-SC-216 org structure which was followed by introduction of all participants.

Dave then presented a summary of the outcome from RTCA's SC-216 committee Plenary Meeting #50 and noted committee approval of a revised TOR to include joint work on ED205A with Eurocae. Dave explained that the revised TOR will be presented to PMC on December 18, 2020 for approval. Dave Pierce presented the revised publication dates. Dave added that Siobvan Nyikos has volunteered to be the subgroup Chair and Technical Editor for SC-216 on ED205A.

SG2 Subgroup provided an ED-205A-DO-XXX status summary report.

- JH gave a report on the status of ED205A
- A meeting has been held to get SC-216 up to speed so both groups are in line
- JH gave an overview of the current actions which include the risk acceptability matrix, risk mitigation methodologies
- A first update with a new table of contents has been generated and a further update will follow
- ED205A will be addressing the non-concur comments raised in ED-205
- ED205A will follow same structure as ED201A and will use a five by five matrix used by safety
- The risk acceptance criteria will be sent out for review
- A few gaps have been identified including assurance
- CR made comment "Tolerable" could be renamed as "Conditionally Acceptable"
- DP you need to define under what conditions for conditionally acceptable
- DZ Do we really need this. What benefit will the new category provide
- PW confused by brand image and financial risk, they are not safety related and company risk
- CR explained that it came from Annex 19
- SS Brand and finance should not be part of normative sections
- SN – It could be useful for what we are trying to do for ISEM
- SS didn't think we were going to have Part-IS in ED205A, Part-IS is organizations

- CR – It is not in the current ED-205 ToR to address Part-IS and organization
- JH Decisions still being made on what is sensible to put in document, risk comparability is the important area
- SS ED201A need to know what the matrix will be
- JH The ATM community needs to agree
- JH for the categories other than safety – ED-205 is not just limited to safety
- SS restated that it should not be part of the normative section, as we don't want authorities checking those

That was followed by a report from SG-3 ISEM report.

- FD gave an overview of progress starting with where the documents can be found
- JG gave up update of the revised process and the areas that still needs discussion
 - Wednesday discussed organise and prepare sections which have been completely rewritten
 - Thursday looked at detect section, which was too aircraft centric. The problems started in the analyse section and this needed discussion and there should now be agreement and a way forward. Scoring and 'triage' to be included
 - Respond and recover need to be aviation specific
 - Consistency need to be improved
 - Open topics
 - Detect strategy, scoring, thresholds, Time constraints for respond
 - Definitions 'incident' requires discussion, as definition is just actual, so how should vulnerabilities be handled
 - Main progress
 - Improvement in the content of chapter 3,4,5 and there is a single draft available
 - Issues concern the COVID impact and the stability of the definitions
 - Main risks concern – several sections are only draft and mandatory vs recommendations aspects are not mature. There has been limited time in review in depth but there are items where there is no consensus, and how deep should some sections be developed
 - Way Forward
 - There needs to be regular meetings organised every two weeks until march to address the remaining gaps. A new draft will be available in mid-January to allow times for proper reviews
 - There is a medium confidence that a draft will be ready for OC March 2021
- CR – Have the items been identified where there is no consensus
- JG – List is identified - Scoring and Time for response
- PM - Incident – definition is a real issue
- SS we don't need to use the same definition as Part-IS, we need to be consistent for our selves
- PM who will then translate ISEM to Part-IS, will it be the AMC
- CR – Concurr with SS, the translation of the rule will be done at regulatory level AMC/AC
- SS we are publishing first, rule can do the translation
- JG – need to ensure the gap is not too big
- SS We need to have something in place to look, decide what is benign, analyse the rest, did something happen, is there is a safety impact tell the authorities
- FD Document can be a guidance, can we make it simpler
- SS is only addressing internal and external reporting
- JD No clear indications today what should be assessed and what should be reported
- SS.OR.220 Information security incidents: detection, response and recovery
- SS IS.OR.235 Information security external reporting scheme, IS.OR.215/220/235 from 16 Nov draft
- JD presented schedule
- DP is plan to have smaller meetings to discuss the gaps
- FD Yes
- Konf - I would add also "vulnerability" in the box "event/incident" close to "analyze" oval

SG4 followed with a report on ED-201A/DO-XXX.

- Stefan gave an overview of the progress on ED201A
 - All comments received have been addressed
 - Expectation for who raised comments to look at comment sheet and confirm resolution by 18th December
 - We still need agreement with SG-3 on information sharing guidance and need the inputs from SG-2 on risk levels and categorisation
 - There was also a discussion around organisations and this has now been agreed and we list the type of organisation. An appendix will have a mapping of the organisations and regulations
 - ISMS objectives were also discussed and it was agreed to remove them as ED201A should be an umbrella document. Each sector will have different issues so this should be a standalone ISMS standard or set of standards
- Path:
 - These will be an updated draft in January followed by another validation exercise
 - Updated draft for 2021 and validation. There will then be a new draft and the intention is to go to an open consultation in March

Cyrille Rosay/EASA (Chair WG-72) followed by presenting an overview of Liaison with other groups:



Liaison with other groups

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- EUROCAE leadership meeting Nov 19, 2020
- One agenda item was “Cybersecurity in EUROCAE standardisation activities”
- Objective was to agree on a process to handle cybersecurity in other standards
 - Other groups should identify cybersecurity issues that are specific to their area
 - In case coordination is needed
 - WG-72 would check if the existing ED/DO series of standards can address the issues identified
 - if new guidance needed:
 - WG-72 will report to European Cybersecurity Standards Coordination Group (ECSCG)
 - ECSCG would identify which groups should address the gaps



ESCG

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- European Cyber security for aviation Standards Coordination Group
- Membership: ACI-Europe, ARINC, ASD, ASTM, CANSO, CEN, EASA, ENISA, EC, ECAC, EDA, ETSI, EUROCAE, EUROCONTROL, IATA, SAE, etc.
- Second version of Cyber security Rolling Development Plan published Q3/2020
- Website to come live shortly: <https://ecscg.eu/>
- Meetings:
 - Last Meeting #8: 8 October 2020
 - Meeting #9: scheduled 26 January 2021

Risk acceptability and safety continuum




→ Table 2-2 was developed for large aircraft
 → May need be tailored by products

Level of Threat	Severity of the Threat Condition Effect				
	No Safety Effect	Minor	Major	Hazardous	Catastrophic
Very High	Acceptable	Acceptable	Unacceptable	Unacceptable	Unacceptable
High	Acceptable	Acceptable	Unacceptable	Unacceptable	Unacceptable
Moderate	Acceptable	Acceptable	Acceptable	Unacceptable	Unacceptable
Low	Acceptable	Acceptable	Acceptable	Acceptable	Unacceptable
Extremely Low	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

Src: ED-203A

→ EUROCAE WG-112 SG3 is developing tailored table for VTOLs
 → tailored risk acceptability matrix required for CS-29 and 27

On regulatory status Cyrille Rosay/EASA noted no change in status. FAA's Varun K. Varun mentioned that AIR is going thru and organizational structure realignment. He added that an AC is planned for mid-2022 or late 2022. The AC may go out to public comments mid-year 2021. Issue papers will be modified to accept RTCA documents as a means of compliance for security. This should be by spring 2021. Engine and propellers will be part of the new rule. Varun thanked everyone for their efforts during the challenging time.

Approval of minutes from the September and November Plenaries approval was postponed to give participants some time to review. Dave mentioned that they are posted and asked for comments.

SG3 Leadership change was presented accepted by the SC-216. No opposition was noted. Alain Combes will take over leadership of SG-3 from Judicial Gros-Desire.

Proposed future meetings schedule was presented and discussed:

SC-216/WG72 Proposed Schedule

September 14-18, 2020 TBD	DO-xxx/EDxxx FRAC/OC Committee Review Disposition (EUROCAE Paris)
October 5, 2020	DO-xxx/EDxxx FRAC/OC Release to FRAC/OC
November 23, 2020	DO-xxx/EDxxx FRAC/OC Complete
December 7-11, 2020 TBD	DO-xxx/EDxxx FRAC/OC Disposition Meeting (Atlanta or Brazil or RTCA DC)
January 18, 2021	DO-xxx/EDxxx final version to RTCA PMC / EUROCAE TAC
March 15-19, 2021	Virtual
TBD	FRAC/OC
June 7-11, 2021	Face to Face in Europe?
September 13-17, 2021	Face to Face in DC?
Telecon	F2F Meeting
	Milestone
	ISEM=DOxxx/Edxxx
	ED201=DOyyy