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Saint-Denis and Washington, 7 October 2019

**EUROCAE WG-72 Plenary Meeting #54 / RTCA SC-216 joint Meeting #44**  
**“Aeronautical Systems Security”**  
**Plenary Minutes**

<b>Date (all sessions)</b>	<b>Monday 9 to Thursday 12 September 2019</b> 9:30 am – 5 pm
<b>Place</b>	<b>EUROCAE</b>
<b>Venue</b>	<i>9-23, rue Paul Lafargue, 93200 Saint Denis, FRANCE</i>
<b>Hosted by</b>	<b>EUROCAE</b>

**Attendance:**

Contact		organisation	12 Plenary
Mark J Kelley		AVISTA	M
Judicael Gros-Desirs		AIRBUS SAS	M
Brian Hoffman		ALPA	M
Tian Lirong		AVIC – ACTRI	M
Zhang Shuang		AVIC- ACTRI	M
Clive Goodchild	CG	BAE Systems	M
Peter Davis	PD	CAA/SRG	M
Laurent Leonardon		Collins Aerospace	M
Patrick Morrissey		Collins Aerospace	M
Philippe Marquis	PM	DASSAULT AVIATION	M
Ted Patmore		Delta Airlines	M
Cyrille Rosay		EASA	M
Claudio Henrique de Castro		Embraer	M
Anna Guégan		EUROCAE	M
Varun Khanna	VK	Federal Aviation Administration	M
Benjamin Nagel		F-secure Cyber Security Services Oy	M
David Pierce	DP	GE Aviation Systems US	M
Stefan Schwindt	SS	GE Aviation Systems UK	M
Elena Gromova		GOSNIIAS	M
Andy Boff		Helios	M

Mark Perini	MP	Honeywell International	M
Sam Masri		Honeywell International	M
Kai Florian Tschakert		Lufthansa Technik AG	M
Philip Watson		Panasonic Avionics Corp.	M
Steven Bates	SB	Panasonic	M
Ravi Nori	RN	Teledyne Controls LLC	M
Adrian Waller		Thales Group	M
Frederique Dauvillaire	FD	Thales Group	M
Brittany Skelton		The BOEING COMPANY	M
Brian Daly		Transport Canada	M
John Angemayer			W

## **12 Sept. WG-72 SG-3 SC-216**

### **Welcome and Tour de table**

Introductions and tour de table conducted. The RTCA and EUROCAE IPR and Policy statements were displayed and read through by Anna which were accepted by the participants and recorded in these minutes.

### **EASA Strategy – Led by Cyrille Rosay**

Currently we are event driven, security need to be more proactive. DP We see safety affect the aircraft rarely, are you concerned more of a common mode problem aircraft, fleets, ground, yes. CR - We now have potentially one access to all the fleet. The focus has changed its not one plane its more than that, when we have a safety event we analyse, service bulletin etc. With Security if we use that system it will take too long. It could take months to certify a new patch. So we need to think differently. A vulnerability was identified on an aircraft, which would allow access to the data loader, it took more than six months to address. So need to be more systematic approach that can withstand new threats without significant disruptions.

Need safety and security to work better together, and cyber resilience scope should be holistic and trans-organisational. Need policies and guidance that fit together. How do you make all the ecosystems work together to a level of threat?

EASA strategy is out and will drive the regulatory material development down to the references to industry

It may explain why in some area may not have the same objectives

EASA expects WG-72 standards and guidance materials to support the ongoing EASA rulemaking activities

ECSCG coordination around the standards group. Coordination required to reduce overlap.

The AMC can complement the standards if required.

A request was made to post the slides

PM we have many standards but they do not have the same objectives and there needs to be care.

PM Will the EASA associated action plan for the strategy will it be published. CR will check on the status

DP We had some discussions on scope, beyond the documents we are talking about, is there guidance we have not covered. CR At some point we have to take what is available, so we can take and complement and if we need to develop a new version that can come later. SS This should be done in the regulatory work stream. The mapping exercise is outstanding and has been pushed back. PM would like to know which part of the AMC will not be covered by existing standards documents. SS this is down to us, and we need to say what can be delivered. PD can see one topic –supply chain

Any other comments

## **SG4 Update led by Peter Davis**

Major sections of shut down

Section on why the activities is required is the next development

We were expecting major contributions from STORM group but want them to test and validate what we have included. There is still time for STORM to do this but needs to be before public comment

There is a further activity to align the 201 text with ED204 and ISEM, this activity depends on the other documents being sufficiently mature. At the moment assuming they are not mature

So we will not achieve the current publication date, shortage of resources, and waiting on STORM and to allow SG-216 to contribute

PM should we synchronise ED201A with the ED-XX

Subgroup needs a new timeline for publication at the end of 2020, so open consultation would be second quarter of next year. At the moment no risk on the timeline from SG3 perspective

Looking to get an updated draft in time for the DC meeting in November

We will need a new chair for 2020, SS to transition to new chair.

DP One related topic ER-13 – it must poll definitions from other documents that have been publically reviewed. RTCA release would be a white paper

TAC to be advised that ER13 will need to be included in the TOR

For RTCA only comment on ED201A Section 3 and the appendices for the version 0.4 as section 2 will be completely restructured

## **SG3 Report led by Frederic and Judicael**

Comments received on ED204A and ED-XX and the documents will be updated, and thank you for your contribution.

We have some open points is

Existing ER-13, what will be the road to publish ER-13 and we need a process and timeline. Process proposal to be made. RTCA have Oct 2020 as an equivalent ER13 release

Open points on the ED204A the rationale Airworthiness is essential to separate what is in ED204 and ED-XX

Proposed Action Established as of today SW & Tools referenced by the airworthiness (aircraft ground / board scope) [ @Ted Patmore based on his experience in ARINC SDL group

CR – Could you elaborate what you mean about Software and tools - field loadable and shop loadable. V – The issues is where you should stop. CR I agree where you stop. PM is these tools you use to do the aircraft its in 203. So this should be using the tools that are used for aircraft. SS In terms of the Arinc discussion around data loaders how to we align. TP – This discussion centers around field loadable software and aircraft controlled software. TP to put some slides together for the next meeting to help clarify this

Continuity of security and “vulnerability management” will be detailed in ED-XXX scope and section 2.2.

Do we consider the loadable FPGA and should be covered by ED202A if not should be 204A. If it is a one time writing you have to provide security guidance to the development phase.

JD We need to establish the border, because if we put a measure on the ground, it is not part of air worthiness. How would the regulator deal with that as one regulator may say yes and another no. SP It should be part of the environment. SB we can only take credit for what the FAA accepts. DP DAH should provide that as part of the guidance. SS If you issue an ICA you can take credit, assuming it is in the limitation areas of the ICA. This is a paradigm shift in the way we currently operate.

### **ED-XXX Led by Judicael Gros-Desirs**

Thank you for all the contributions, there is now two industrial editors to support the document. Proposed actions

Take into account the remarks received

Review we are proposing guidance in ISEM which can be used by all. So the scope needs to be worked on and harmonised. DP The ED-XX leadership should get together in a telecom to agree the scope and timelines so everybody is on the same page. DP saw XX as primarily management of events but there are different opinions. So need inputs from people that have different positions so we can get agreement on the scope.

CR the ISEMS needs to go beyond not just aircraft to support Part-AISS. So you can have generic on the main body and then have the domains if they are different in the appendices.

The other question is how deep and wide do you take vulnerability management. VK saw the document as primarily event management. CR Understood and gave an example. DP is it really necessary to improve what is in 203 and 204, but should we be dealing with Airports for vulnerability management. SC-216 TOR does not cover. SS if we want to be consistent and argue that Vulnerability management is covered in ED-203A objective, then why do we need to cover event management. JD we need to identify properly where the scope of ED-XX stops. PD it could be useful to bear in mind, one is fixing the vulnerability and one is finding a vulnerability. Finding a vulnerability is a whole new topic and that should be out of scope.

SG3 Way forward. One WebEx meeting every month and each WebEx dedicated to one document or topic. In addition to the Face to Face meetings. . In addition to the 90 minute WebEx. Need a list of topics to see if that will be practical. VK has an action for how the 21.3 works. SS maybe more around the differences between the EASA and FAA processes.

Face to face should be between all the groups

### **Meeting Schedule for Joint RTCA216/WG-72 Meetings Plenary, SG4 and SG3**

- November 19-22 2019
  - RTCA DC
- March 2 to 5, 2020
  - EASA Brussels but to be confirmed
  - Post meeting date – meeting likely to be rescheduled due to clash with EASA High Level Conference
- June 1-5, 2020
  - RTCA DC
- September 14-18,
  - EUROCAE Paris
- Potentially December 7-11, 2020
  - RTCA DC

FRAC and open consultation of the documents need to be aligned:

- ED201A
  - Publication Dec 2020
  - Ready for FRAC and open consultation in June 2020
  - Unknowns
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- ED204A
  - Publication March 2020
  - Open Consultation November 2019
- ED-XX
  - Publication March 2021
  - Open Consultation

Close of meeting, a separation discussion continued around the comments on ED204 post lunch