



EUROCAE Paper No.122-18/ WG79-62  
 RTCA Paper No. 118-18/SC213-111

**Minutes of Meeting**  
**EUROCAE WG-79 #28 meeting/ RTCA SC-213 Joint Plenary # 37**  
**Enhanced Vision Systems (EVS) Synthetic Vision Systems (SVS)**

<b>Date</b>	<i>April 18 - 19 2018</i>
<b>Place</b>	EASA Cologne Germany
<b>Venue</b>	EASA
<b>Host</b>	EASA
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**Attendance:** Please see attached PDF document for complete attendance list.

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## Agenda

### Wednesday, 18 Apr (0900 - 1700), Plenary

0845: Check-in  
0910: Welcome, Introductions, administrative items, agenda review  
0920: DFO Statement (5 min.)  
0925: Review/approve Oct/Dec 2017 and Jan 2018 plenary meeting minutes (5 min.)  
0930: Review TOR work product dates (10 min.)  
0940: WG1, WG2, WG3, WG4 updates (10 min.)  
0950: Break  
1000: Discussion EFVS Visual Advantage (1 hr)  
1100: TOR and future work products (1 hr)  
1200: Lunch  
1300: WG 4 FRAC comments (2 hrs)  
1500: Break  
1515: WG 2 SPR discussion (1.75 hrs)

Group Dinner

### Thursday, 19 Apr (0900 - 1700), Plenary

0900: WG 4 FRAC comments (1.5 hrs)  
1030: Break (15 min)  
1045: WG 2 SPR discussion (1.25 hrs)  
1200: Lunch  
1300: WG4 CVS Helo SA MASPS document recast (30 min) – Carlo  
1330: Revisions to 315B / Future Work Products (1 hr)  
1430: Break (15 min)  
1445: FAA use of SC-213/WG-79 Work Products (15 min)  
1500: EASA use of SC-213/WG-79 Work Products (15 min)  
1515: Discuss initiating FRAC for SPR (10 min)  
1525: Discuss finalizing FRAC for Rotorcraft CVS MASPS (10 min)  
1535: Visual Advantage follow-up discussion (55 min)  
1630: Administrative (30 min.)

- Review and approve TOR updates if needed
- Review Action Items
- Define next steps for documents
- *Establish date/place for next meetings*

1700: Adjourn

## Welcome and Introduction

Patrick Krohn, Universal Avionics, opened the meeting. Members were introduced. Trent Prange, FAA, read the DFO statement. Rebecca Morrison, RTCA, presented the RTCA Proprietary Policy and Sergiu Marzac, EUROCAE, presented the EUROCAE Proprietary Policy. Rebecca also presented the RTCA Committee Participation Membership Policy. Minutes from the October 2017 Meeting in Washington DC (35<sup>th</sup> Plenary), December 2017 Virtual Plenary (36<sup>th</sup> Plenary) and January 2018 Virtual Plenary (37<sup>th</sup> Plenary) were approved.

## Terms of Reference

The group discussed needed updates to Terms of Reference including due dates for current work products and potential future work product needs. Items discussed included a generic clean-up of 315b, SVGS100 and enhanced LPV description a CVS.

## Working Group Updates

WG1: Thea Feyereisen, Honeywell, will become the new chair. She replaces the

previous chair, Dave Domino, Mitre, who has since retired.

WG2: Work in progress. Ready for FRAC after a few minor edits.

WG3: Current work scope has been completed and document is available for sale.

WG4: FRAC comments have been received and dispositioned by the committee.

### Airbus Presentation

Fabrice Bousquet, Airbus, presented a video on the SVS flight test program at Airbus. They are working with suppliers and hopeful for a 2020 entry into service across multiple platforms.

### EFVS Visual Advantage

EFVS certification historically has been certified to the intended function, e.g., 100ft operation. A qualitative assessment would be conducted in a sample of weather and environmental conditions to determine if it works. It has been problematic to make the systems available for airline-type operations because of dispatch and approach ban. The current thinking is that operator would have to demonstrate quantitatively confidence of approach completion given the weather conditions.

There was discussion of performance based and quantitative testing for visual advantage. The FAA Flight Standards is looking at performance based demonstration of visual advantage. The FAA is also discussing of quantitative testing. The goal is consistent process and method to document each applicant's visual advantage value.

### WG4

Comments received during FRAC from the Helicopter CVS MASP were reviewed along with the disposition. Consensus was reached to close FRAC. A small group will close out remaining comments and the current document will become a white paper instead of a MASP (with name change). The longer term plan will be to include a helicopter specific module into the next update of DO-315.

### WG2

The current SPR draft was presented and discussed. Consensus was reached that the document is ready for FRAC. Randy will provide SPR to RTCA by May 1. FRAC is anticipated to be closed by June 22.

### CS-AWO

Carl Garvie, EASA, with support from Frans Van Gorkum, presented the EASA CS AWO work that has been undertaken including: Automatic Landing Systems, Head Up displays, Enhanced Flight Vision Systems, Synthetic Vision Guidance Systems and Combined Vision Systems. Next step is to publish an NPA in Q2 2018. CS-AWO amendment (ED Decision) in Q42018.

### EFVS Overview

Trent Prange, FAA, presented information on the update to AC 20-167A and AC 20-185. It is planned that AC 20-167B will contain installation guidance for EVS, EFVS and CVS. AC 20-185A is planned for SVS, SVGS and SVS-ASA.

## Actions Items

1. Coordinate white paper plan between RTCA and EUROCAE leadership.
2. Images in WG4 and WG2 papers must receive release from owners for inclusion in published document.
3. WG1, WG2 and WG4 to reconvene and look at DO-315 to identify scope of desired changes and timeframe required to complete the desired work products prior to July 15.
4. WG4 White Paper, WG2 SPR and updates to TOR are required prior to July 30.
5. RTCA leadership to confirm location of next face to face prior April 30.

## Next Meeting

Our next meeting is planned to be a Virtual Plenary to approve publication of the ETOS SPR and changes to TOR in July (or was it early August). October 23-25, 2018 is tentatively planned as the next face-to-face plenary. It may be hosted in Atlanta GA by Delta. Alternatively, the meeting will be hosted in Washington DC by RTCA.