EUR 180-24/ WG79-97
RTCA Paper No 290-23/SC213-144   22 May 2024

Minutes of Meeting SC-213 Meeting 52nd & EUROCAE WG-79 Meeting#46 **Enhanced Flight Visions Systems/Synthetic Vision Systems (EFVS/SVS)**	

Date	*June 6-8, 2023, 10h-18h CEST*
Place	*Hybrid – Virtual/In Person*
Venue	*EUROCAE* *9-23 Rue Paul La Fargue, 93200 Saint-Denis, France*
Host	*EUROCAE*
Contact Persons EUROCAE RTCA	*Esther Hoyas Vicente* esther.hoyas@eurocae.net *+33 7 62 06 18 95* *and* *Rebecca Morrison* rmorrison@rtca.org *+1 202-330-0654*

Agenda

1. Introductions and Welcome

2. EUROCAE/RTCA Policies

3. Review and approve minutes from November 2022 Plenary

4. Report on the Workshop on UAM and Vision Systems held November 8, 2022

5. FAA/EASA/TCCA Regulator Updates

6. Review work by Working Group 1, 2 and 4 Status

7. Consider a motion to initiate FRAC on the EFVS (WG-2) and SVS (WG-1) MASPS

8. Industry Updates

9. Establish WG meetings schedule *

10. Schedule for Next Plenary

11. Other Business

12. Review of Action Items

13. Adjourn

Minutes of Meeting

Wednesday, 7 June 2023
WG-1: Working Meeting
WG-1 met and worked on document, including requirements for DRIL and CVS.

Plenary Meeting
Carlo Tiana (WG-79 Chair) opened the hybrid meeting, greeting the attendees in-person and attending virtually. Attendees introduced themselves, around the room and on the phone. See attendance list.

Esther Hoyas (EUROCAE) & Rebecca Morrison (RTCA) reviewed their applicable policies, including anti-trust, proprietary information/IPR, membership/participation, and GDPR/Privacy policies.

WG Status
WG-2: Randy Bailey provided an update on WG-2. Working group continues to make progress however there remains enough work to warrant a dedicated face-to-face working meeting. Tentatively, planning a meeting in DC, either the weeks of July 17 or July 24.

WG-1: Thea Feyereisen provided an update on WG-1 status. The SVS/CVS MASPS continues to be developed. The comments received from EASA were addressed by the working group. The working group will consider providing the document for plenary wide review via a Review And Comment (RAC) cycle, potentially in July or September.

WG-4: Carlo Tiana gave an update on WG-4. Little to no Rotorcraft MASPS progress since last meeting, driven primarily by a lack of participation and interest, which is hampering progress. Plenary discussion was held around a TOR update and possible joint work with UAM/AAM community.

[ACTION 52-1]: Carlo to approach relevant EUROCAE WG UAM/AAM members and invite to contribute to working group meetings via a call for participation. Carlo, Troy, & Trent, to jointly author rationale.]

Plenary Scheduling
Plenary discussion around the schedule for the Fall Plenary meeting. Scheduling concerns about conflicts with Halloween, Veterans Day, and Voting Day were noted. No consensus date was identified.

Rebecca Morrison offered to send out a Doodle to solicit input form members, to include dates in October and early-November.

[ACTION 52-2]: Rebecca to send out Doodle] [https://forms.office.com/r/VKCZgVvzn0]

WG-2 Working Meeting
The special committee adjourned to WG-2 Working Group Meetings led by Randy Bailey, focused on comments received from EASA on EFVS Capability 3.

Meeting Minutes Review
Troy Niles resumed the plenary meeting and led a review of November 2022 plenary meeting's minutes.

Rebecca Morrison noted that the RTCA PMC approved the requested deviation from the MASPS drafting guide.

[ACTION 52-3]: Troy Niles to update prior meeting minutes with correct verbiage concerning the deviation.

Action Item Review
51-1: Daniel Chiew noted that this action is complete and closed.

51-2: Esther Hoyas reported that EUROCAE documents, dates, and TOR were aligned and approved, closing this action.

<u>51-3:</u> Trent Prange reported that Fly-by-video feasibility was discussed with FAA management (Bruce) with indeterminate interest on the topic. He recommended the committee continue to prioritize work on current MASPS and in the future consider revisiting this topic.

<u>51-4:</u> Thea Feyereisen reported that the Chair report was provided for December PMC. Action closed.

<u>51-5:</u> Daniel Chiew noted that this action was overcome by events and action is closed.

Consider a Motion to Initiate FRAC
Thea Feyereisen reported the working group MASPS were not yet ready for FRAC. No objections noted.

Industry Updates
Chris Martin and Daniel Chiew mentioned that a Bombardier/Collins video will be available tomorrow.

Regulator Updates
FAA
Trent Prange updated the plenary on the status of the EFVS AC, AC 20-167B. The AC is closer to release however in May it was determined it need to return to FAA legal. This is expected to be a short approval process once returned from legal review.

Trent Prange and Ron Hrabak provided an update on SAE Headworn standards. SAE ARP 6377 should be published as early as next month. SAE Committee continues to make process on AS7377 document, too.

Ski Wisniewski mentioned the continued use and issuance of EFVS Issue Papers while AC 20-167B was pending FAA approval and publication.

EASA
Chris MISIAK was present and noted no new updates from EASA.

Transport Canada
No attendees were present to provide an update.

UAM/AAM Workshop Report
Thea Feyereisen summarized the joint UAM/AAM workshop from November 2022.

Trent Prange shared a follow-on engagement he had with the UAM/AAM community with more engagement. Topics covered a condensed version of what SC-213/WG-79 committee had presented at the November UAM workshop and resulted in a varied amount of interest from the community. Trent described the current FAA (stopgap) policy of Part 21 type approval for UAM/AAM applicants.

WG Meeting Schedule
The plenary discussed the remaining work on the MASPS and the need for continued weekly virtual Working Groups meetings for both WG-1 and WG-2. WG-4 schedule to be established by WG-4 leadership.

[ACTION 52-4]: Rebecca Morrison to continue schedule starting next week.

Thursday, 8 June 2023

WG-1 Working Meeting
WG-1 continued review and disposition of comments and content, including SVGS.

WG-2 Working Meeting
WG-2 continued deliberation of EASA comments around EFVS Capability 3.

Plenary Meeting
Troy Niles re-opened plenary meeting

Industry Updates
Daniel Chiew / Chris Martin presented video from recently certified HUD and HDD Combined Vision System (CVS) on the Bombardier Global and answered questions.

Fall Plenary Meeting Minutes
Daniel Chiew presented the revised meeting minutes, closing action 52-3.

Troy Niles made a motion to approve the minutes, Glenn Connor seconded. No objections noted. Motion Passed.

Plenary Scheduling
Chairs decided to defer selection of next plenary dates until July, to allow receipt of input from committee via Doodle Poll.

Other Business
Plenary discussion around the WG-4 MASPS title being too restrictive for UAM/AAM community. Consideration was raised for a possible future title revision from "Rotorcraft" to "Powered Lift" via TOR update.

Review of Action Items
Daniel Chiew reviewed the 4 captured Actions Items.

Adjourn
Troy Niles and Carlo Tiana closed out the meeting, thanking all for their participation.

Troy motioned to close out the plenary. This was seconded by Trent Prange.
Motion Passed, Meeting adjourned.

	Attendee (V = Virtual)	Affiliation	
1	Randy BAILEY (V)	NASA	WG-2 Lead
2	Alain BOUCHER	Dassault Aviation	
3	Sherwin CHEN	Boeing	
4	Daniel CHIEW	Collins	SC-213 Secretary
5	Glenn CONNOR (V)	Discover Technology	
6	Paul DAMSCHEN (V)	UASC	
7	Thea FEYEREISEN	Honeywell	SC-213 Co-Chair / WG-1 Lead
8	Sean FLACK (V)	FAA/SAIC	
9	David HAN	Collins	
10	Esther HOYAS	EUROCAE	WG-79 TPM
11	Ron HRABAK (V)	FEDEX	
12	Paul KENWARD (V)	LM	
13	Chris MARTIN (V)	Bombardier	
14	Scott MCLELLAN	FAA	
15	Christopher MISIAK (V)	EASA	
16	Rebecca MORRISON (V)	RTCA	SC-213 Program Director
17	Troy NILES	UASC	SC-213 Co-Chair
18	Vincenzo PENNETTA (V)	EASA	
19	Larry PINE	Boeing	
20	Trent PRANGE	FAA	SC-213 GAR
21	Philippe SALMON	Collins	
22	Chris SCHERER (V)	Collins	
23	Mark SCHLEGEL (V)	TXTAV	
24	Carlo TIANA	Collins	WG-79 Chair
25	Mariusz 'Ski' WISNIEWSKI	FAA	