

Organised by
Maintenance & Production Department, Flight Standards Directorate
List of Participants:

Simon	Annetts	EIMG	European Independent Maintenance Group
Marc	Arendt	EAMTC	European Aviation Maintenance Training Committee
Cleomenis	Bontiotis	IATP	International Airlines Technical Pool
Kurt	Dahlmann	ECOGAS	European Council of General Aviation Support
Arne	Dedekind	ASD	AeroSpace and Defence Industries Association of Europe
Helmut	Englmaier	ASD	Aerospace and Defence Industries Association of Europe
Fabrizio	Fererra	EAMTC	European Aviation Maintenance Training Committee
Marshall	Filler	ARSA	Aeronautical Repair Station Association
Marcel	Gisel	ECOGAS	European Council of General Aviation Support
Jon	Harris	AEI	Aircraft Engineers International
Malte	Höltke	IAOPA	International Aircraft Owners and Pilots Association
Christian	Klein	ARSA	Aeronautical Repair Station Association
Koray	Kudretoglou	IATP	International Airlines Technical Pool
Jorge	Leite	A4E	Airlines for Europe
Per	Lindqvist	IATA	International Air Transport Association
Mark	Lynch	AWG	Aviation Working Group
Kyle	Martin	GAMA	General Aviation Manufacturers Association
Henrik	Nipper	ETF	European Transport Workers Federation
Ric	Peri (Chair)	AEA-E	Aircraft Electronics Association – Europe
Paulo	Pestana	EBAA	European Business Aviation Association
Prosper	Préau	ASD	AeroSpace and Defence Industries Association of Europe
Joe	Sambiase	GAMA	General Aviation Manufacturers Association
Steve	Szpunar	AIA	Aerospace Industries Association of America Inc.
Dominique	Titre	A4E	Airlines for Europe
Miguel	Vaz Pinto	ERA	European Regional Airlines Association
Eugenia	Díaz Alcázar	EASA	

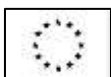
Ralf	Erckmann	EASA
Carl	Garvie	EASA
Jeremie	Neveux	EASA
Luis	Pires	EASA
Karl	Specht	EASA

Apologies:

Ulf Calsbach	EAS	Europe Air Sport
Dragos Munteanu	IATA	International Air Transport Association
Robert Alway	AEI	Aircraft Engineers International
Mark Beauregard	AIAC	Aerospace Industries Association of Canada
Liam Creaven	AWG	Aviation Working Group
Jean-Francois Deru	A4E	Airlines for Europe
Jeffrey Eagle	AIA	Aerospace Industries Association of America.Inc.
Garry Huggins	ETF	European Transport Workers Federation
Armin Knobel	EHA	European Helicopter Association
Patrice Kurdijian	ASD	Aerospace and Defence industries Association of Europe

AGENDA/CONTENT

1- Welcome, Introduction	3
2- Adoption of the agenda and minutes of the previous meeting	3
3- Overview of Rulemaking activities.	3
4- Annual MMT brief	5
5- Brexit update (BASA EU-UK to include Maintenance in the future?)	5
6- Proposal for a standard AMP template.	5
7- Reg. 2021/700: Amendments related to maintenance data	6
8- EASA policy on certificates of release to Service for Aircraft maintenance	6
9- Briefing on 5G cellular network impact on GPS and RAD Alt systems.	7
10- Part MG to Part-CAMO transition: Access by CAMOs to EASA checklist distributed to NCAs	7
11- Installation of AED on board	7
12- Review of status of open actions:	8
13- AOB:	9
13.1 – New EM.TEC members	9
13.2 – Safety Issue Assessment and Best Intervention Strategy : SI-3011 Training Effectiveness and Competence	9
14 - Closing	9



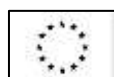
Attachments:		
Attachment 1 -	Agenda EM TEC 02.12.2021 Final	
Attachment 2 -	Minutes of the previous meeting	
Attachment 3 -	Overview of CAW rulemaking activities	
Attachment 3 -	Part-21 Light EM.TEC	
Attachment 4 -	EU-US BASA MAG Change 8 – ARSA update	
Attachment 6 -	AMP Standardisation Working group rev 2	
Attachment 7 -	Reg EU 2021-700 update - maintenance data (EASA)	
Attachment 8 -	Aircraft maintenance CRS (EASA)	
Attachment 11 -	AED Installation Miguel Vaz Pinto	
Attachment 12 -	Remote ARC Physical Inspections	
Attachment 12 -	GA Part-145 Taskforce (Part CAO and MAG) V2 Marcel Gisel	
Attachment 12 -	WP06 US-BASA-GA-combined-2021-11Jyrki Paajanen	
Attachment 12 -	Preservation (2021-11-05) Per Lindqvist	
Attachment 13 -	extra ToR-SIA-TrgEffecComp-V2-2021-1013	
Attachment 13 -	SIA-TrainingEffectivenessCompetence-EMTEC Hans Mayer	

MoM Distribution:		
To the participants, EM.TEC Members and Alternates.		
Minutes sent to the Chairman	EASA, EM.TEC Secretariat	Date: 04/03/2022
MoM approved by	Ric Peri, Chair	Date: 14/03/2022
Distribution to the EM.TEC	EASA, EM.TEC Secretariat	Date: 14/03/2022

1- Welcome, Introduction
<i>Presented by:</i> Ric Peri, Eugenia Díaz Alcázar (EDIA) and Ralf Erckmann (RER)
<p>Ric Peri, as chairperson of the meeting, welcomed the attendees to the second meeting of the year expressing his disappointment that the CoVid-19 crisis precluded a face-to-face meeting.</p> <p>RER welcomed the attendees on behalf of the Agency and addressed the attendees hoping for a good meeting and underlining an agenda meeting with very good points.</p>

2- Adoption of the agenda and minutes of the previous meeting
<i>Presented by:</i> Ric Peri
<p>The agenda was adopted as proposed.</p> <p>Following some clarifications, the minutes from the previous meeting held in May 2021 were adopted.</p>

3- Overview of Rulemaking activities.
<i>Presented by:</i> Eugenia Díaz Alcázar (EDIA), EASA
Attachment 3
<p>EDIA provided a presentation giving an overall picture of where we are in terms of deliverables during the year and what is coming during next year 2022. More detailed discussions were taking place on topics defined as more interesting by the EM.TEC members.</p> <p>Questions</p> <p>EASA Form 1:</p>



Alberto Fernandez Lopez (**AFL**) provided an overview of the different categories with regards to parts or appliances not requiring an EASA Form 1 to be eligible for installation in a TC product as per new text of 21.A.307 applicable as of 18 May 2022. A presentation on the concept is available on EASA website. The impact on CS-STAN was also highlighted.

It was also identified that the new concept will have an impact on parts produced in EU and the need to export them using an EASA Form 1 will remain. Discussions with bilateral parties (FAA, ANAC and TCCA) will take place on this subject.

SMS in Part-145

EASA informed about the adoption of the regulation introducing SMS in Part-145 (2 December 2021) which will enter into force within one year (2 December 2022). Availability of AMC / GM is foreseen for Q1 2022. In the case of existing Part-145 approvals, closing findings on new aspects of the regulation is extended until 2 December 2024. It will have an impact in the BASA Agreement with US and will lead to an additional EASA Special Condition for FAA approved organisations willing to have an EASA Part-145 approval.

Digitalisation

RER provided an overview on digitalisation starting by saying that EASA is aware of the very different streams under the big umbrella of digitalisation: paperless workflows, internal workflows in the NCAs, e-governance. Going for communication with stakeholders in a fully digital manner means taking approvals, certificates, personnel licenses into a digital format which raises the issue of its acceptability not only in EU system but also globally. EASA is establishing a digitalisation programme with the objective of first get a very clear understanding of the different problem statements related to the different streams and then to identify where EASA can have added value. Digitalisation is high in EASA's agenda. Good coordination between different domains is also essential.

AML

EDIA provided an overview of the discussions related to AML for non-conventional aircraft, and the novelties of non-conventional designs. There were two main options: enlarge the current privileges of the existing license or a mixed solution by creating a new category for electric propulsion, including the extra knowledge that is needed, and for non-conventional designs, the required knowledge to be delivered during the type training, instead of creating a new basic knowledge with a new category. No clear advice was provided from those discussions which direction to take. The final decision was to adopt the mixed solution. In view of the impact that it might have in the EU AML system, as a first step we need to consider having comprehensive data to allow a robust mapping of EU AML system. To this end a survey will be launched during 2022. This survey will also include collecting data with regards to the candidate issue proposed by the industry on components maintenance certifying staff.

A discussion, with the participation of several members, followed on the reasons why EASA need to collect more data and the urgent need for components maintenance license at EU level to ensure level playing field.

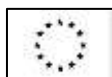
EDIA clarified that the discussion on components maintenance license is on-going and final decision making has to be supported by additional data such as number of national licenses.

Ric Peri mentioned his concern that the components maintenance license will keep dragging out due to the need for EASA also to address non-conventional designs (electric aircraft, hybrid aircraft, etc).

Part-21 Light **(Attachment 3)**

Carl Garvie (**CGA**) delivered a presentation on Part-21 Light.

It was clarified the extension of the declared designs to third party (STCs) and the impact of the new system with regards to BASA agreements. Estimated date for adoption would be Q4 2022 with an applicability 12 months after that (2023).



4- Annual MMT brief

Presented by: Marshall Filler (ARSA), Karl Specht (EASA)

Attachment 4

Marshall Filler (ARSA), and **Karl Specht (EASA)** provided an overview of the last Maintenance Management Team (MMT) and covering the main topics being discussed within the different bilateral agreements. Of particular relevance was the confirmation of mutual acceptance of components release between EU and Canada, the exchange of diplomatic notes with regards the amendment of EU / Brazil Agreement and the need to add a new EASA Special Condition in Annex 2 (Maintenance) to EU / US Agreement to cover the difference between the two systems with the introduction of SMS in EU Part-145.

Several questions were posed by some EM.TEC members and answered by Marshall Filler covering the document SM-0001 Rev.2, status of SMS in US and the status of UK in relation to MMT.

5- Brexit update (BASA EU-UK to include Maintenance in the future?)

Presented by: Ric Peri (EM.TEC Chairman)

A very brief discussion on Brexit and possible EU-UK Agreement to include Maintenance in the future. **The main conclusions:**

- **Organisations supporting UK registered aircraft need to apply to UK-CAA for an approval certificate.**
- **No inclusion of maintenance in the EU-UK agreement is envisaged for the time being mainly due to lack of political will.**

6- Proposal for a standard AMP template.

Presented by: Paulo Pestana (EBAA) and Kyle Martin (GAMA)

Attachment 6

Paulo Pestana (EBAA) and **Kyle Martin (GAMA)** delivered a presentation with a proposal for a standard AMP template to be developed by June 2022. The goals and details of the proposal are included in attachment 6.

Discussion:

Following the presentation, a discussion took place where several EM.TEC members provided their input with regards several aspects of the proposal and how it could benefit the industry. The discussion centred around three main aspects: AMP becoming a more living and useful document, more efficient transfers between operators across EU and harmonisation / standardisation of AMPs.

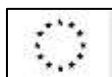
RER draw the attention to the dilemma between maximum flexibility and need for clarity in the case of a template.

EDIA recalled some aspects to take into consideration and suggested that the NCAs should be consulted as well.

Ric Peri raised the issue of new ICA requirements and the need to investigate it.

Main conclusions of the discussion can be summarised as follows:

- **The initiative aims to have a more standardised approach to AMP to facilitate more efficient transfers between operators across EU.**
- **New ICA requirements should be taken into consideration.**
- **NCAs should also be consulted in the process of developing the concept.**



7- Reg. 2021/700: Amendments related to maintenance data

Presented by: Jeremie Neveux (JNE) - EASA

Attachment 7

JNE delivered a presentation on the amendments related to maintenance data in Reg. 2021/700 to raise the awareness on the issue.

Discussion:

Several EM.TEC members intervened in the discussion. They expressed concerns with regards to ensuring the TCH is approving data from outside EU, consistency between initial and continuing airworthiness, ambiguity with regards to list of tasks and procedures on how to perform these tasks. One of the concerns raised related to pre-flight inspection as CS-25 Appendix H do not refer to them thus TCH might not develop them.

Concern was also expressed with regards to the proliferation of non-standard procedures, if CMMs are not made available to the maintainers

EDIA informed that ICA discussions took into consideration the outcome of previous meetings between FAA, TCCA and EASA.

Main conclusions of the discussion can be summarised as follows:

- ICA, being a subset of maintenance data, does not cover everything needed to ensure continuing airworthiness.
- Part-21 21.A.7 definition is crucial because it gives the scope of ICA.
- Certain CMM will be declared as ICA, other will need to be acceptable to the DAH to continue using them as maintenance data

8- EASA policy on certificates of release to service for aircraft maintenance

Presented by: Jeremie Neveux (JNE) - EASA

Attachment 8

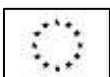
JNE delivered a presentation covering the subject of EASA policy on aircraft maintenance certificates of release to service.

Discussion:

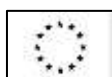
During the discussions that followed the presentation EM.TEC members provide their input on the topic. The topic was considered important. Concerns with sign-off of critical tasks and independent inspection were expressed. Level of involvement (LoI) of certifying staff (CS) towards mechanic was also discussed: different levels of inspection were suggested, and the experience of the mechanic should be considered in the determination of the CS LoI. For GA, clarification would be helpful. Webinar was seen as a good and effective way to pass the message included in the presentation. It was also mentioned as a possible action to clarify the existing AMC / GM material towards what was presented. RMT.0097 was mentioned as an opportunity to tackle it.

Main conclusions of the discussion can be summarised as follows:

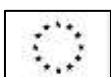
- The topic was most welcomed.
- The current regulation is seen as suitable. Only clarification with AMC/GM and RMT.0097.
- Concern expressed with the sign-off of critical tasks and its verification.
- Important for CS to define the level of involvement (LoI).
- Organising a webinar to convey the message and recording it for future reference.



9- Briefing on 5G cellular network impact on GPS and RAD Alt systems. <i>Presented by:</i> Ric Peri (EM.TEC Chairman)) and Kyle Martin (GAMA)	
<p>Kyle Martin (GAMA) provided a general briefing on the issue of 5G cellular network impact on GPS and Radar Altimetric Systems. The issue was discussed at SAB and DM.TEC. The main issue is the concern in the US with the interference with the new frequency spectrum for the 5G network. In terms of EU the issue doesn't seem to have same impact due to the fact the overlapping of frequencies is not the same. Additionally, some MS also deployed restrictions on installation of 5G transmitters in certain zones. The issue appears to affect more rotary wings aircraft.</p> <p>Ric Peri mentioned that the reason to bring up this subject (intensively reported in the US media) was to make awareness from maintenance perspective with regards to reported altimeter systems discrepancies. Discussions on the subject are being take in other countries as well (Canada, Australia).</p>	
10- Part MG to Part-CAMO transition: Access by CAMOs to EASA checklist distributed to NCAs <i>Presented by:</i> Paulo Pestana (EBAA)	
<p>Paulo Pestana (EBAA) raised an issue with regards to access to a checklist supposedly distributed to NCAs covering the transition from Part-M subpart G approval to Part-CAMO approval. He was questioning why the industry did not have access to such checklist.</p> <p>EDIA confirmed all guidance was shared via EASA website in a very transparent way. It is not clear what document is the one mentioned by Paulo Pestana.</p> <p>Marcel Gisel (ECOGAS) confirmed that all documents (checklists) issued by EASA were available. EDIA also confirmed that EASA didn't issue any CAME checklist.</p> <p>In conclusion Paulo Pestana (EBAA) will follow-up the issue with ANAC (PT NCA).</p>	
11- Installation of AED on board <i>Presented by:</i> Miguel Vaz Pinto (ERA)	
<p>Attachment 11</p> <p>Miguel Vaz Pinto (ERA) delivered a presentation with regards to mandatory installation of Automatic External Defibrillator (AED) stemming from CAT.IDE change which includes AED in the FAK for all aircraft required to carry at least one cabin crew in line with SIB 2018-03 issued by EASA.</p> <p>Discussion:</p> <p>Following the presentation, the issue was discussed. Possible solutions were put forward comprising an immediate solution by providing guidance on possible exemptions issued by the NCAs followed by a review of EASA position by reviewing the requirement. It was commented that the new requirement was not sufficiently scrutinised from Airworthiness perspective.</p> <p>EDIA underlined that being an OPS requirement it should be discussed in the relevant TEC (OPS.TEC). It was confirmed that the issue was brought to the attention of OPS.TEC but there was not much interest on the Airworthiness aspects.</p> <p>Need for improvement of coordination between AIR and OPS was also highlighted by some of EM.TEC members.</p> <p>Main conclusions of the discussion can be summarised as follows:</p> <ul style="list-style-type: none"> - The issue needs to be discussed in OPS.TEC. - Opportunity to improve coordination between OPS and AIR (CAW and IAW). - If something is becoming immediately applicable coordination and tolerance is needed. - Installation of AED in the context of emergency / first aid kit needs to be investigated. 	
Action #2021 2.1	EASA to check with OPS colleagues the status of AED mandatory installation.



12- Review of status of open actions:	
#2019-2.2	EM.TEC to develop a white paper on mobile maintenance services.
Open	Still working on it. Investigating the wording in different languages.
#2020-2.2	Documental and physical survey by different ARC team members. Remote inspections.
Open	<p>Presentation drafted by Paulo Pestana (EBAA) and Proper Préau (ASD) describing a proposal. Discussions took place highlighting the limitations of remote inspections. The proposal is for EASA and EM.TEC to work on a new FAQ as first step and subsequently convert it into AMC & GM.</p> <p>EDIA mentioned some points to take into consideration:</p> <ul style="list-style-type: none"> - EASA supports the evolution. - What we have due to CoViD-19 will not stay once the pandemic finishes. - Remote maintenance is not there yet. - Production and maintenance are two different environments. - Opinion on AR is coming next year with changes in the process which might address the concerns expressed here. <p>In general, it was agreed that using remote tools to accomplish an AR might be a huge step.</p> <p>Conclusion: Good start. Need to continue to mature the proposal and discuss it at the next meeting.</p>
#2020 2.3	PART CAMO - FAQ: EM.TEC to feedback EASA the outcome of EM.TEC internal discussions with regards developing FAQs on the issues presented
Closed	<p>EASA provided feedback on the four FAQs developed by EM.TEC as follows:</p> <ul style="list-style-type: none"> - Two FAQs were considered to go further and EASA is already working on them based on the proposal – non-mandatory modifications and inspections and training syllabus. - The remaining two FAQs: Number 4 has been addressed with the review of AMC & GM and number 1 referring to CAME details was declined on the basis that we don't have similar approach in other areas. <p>New action: EASA to develop two FAQs covering Non-mandatory inspections and modifications and training syllabus for initial safety training referred in GM2 CAMO.A.305(g).</p>
Action #2021 2.2	EASA to develop a FAQ covering the assess of non-mandatory modifications and / or inspections based on the EM.TEC proposal.
Open	
Action #2021 2.3	EASA to develop a FAQ covering training syllabus for initial safety training referred in GM2 CAMO.A.305(g) based on the EM.TEC proposal.
Open	
#2020 2.4	Cumulative effect of defects
Open	Proposal from Proper Préau (ASD) to be circulated within EM.TEC and then forward it to EASA.
#2020 2.5	Usage of Prototype Parts
Open	Dominique Titre to develop a proposal in AMC format to be submitted to EASA for evaluation. Still in process. Prepare a draft for the next meeting.
#2021 1.1	EU- US Agreement: to draft a document proposing the inclusion of Part-CAO approvals in the Agreement to be discussed at next MMT meeting.
Closed	All Part-145 which have a dual approval have no change to cope with. The request to include Part-CAO was taken back.
#2021 1.2	Aircraft under long term storage:
Open	<p>Per Lindqvist to meet with Prosper Préau and the Boeing representative to draft a short paper to be sent to DM.TEC explaining the situation and obtain its input if needed.</p> <p>A presentation was delivered to cover this item.</p>



	Discussions took place around several concepts related to the issue of extension of the ARC during long term storage. Parking and storage is used but there is no definition of long-term storage, short term storage, etc. Conclusion: The proposal should be reviewed taking into account the comments provided, and then should be circulated it and discussed at the next meeting.
#2021 1.3 Open	EU repairman concept Robert Alway and Paulo Pestana to develop and issue a concept paper on EU Repairman concept. Conclusion: To have a look to what Australia is doing there.
#2021 1.4	Part-T further guidance from EASA To be discussed during the next meeting.

13- AOB:	
13.1 – New EM.TEC members	
13.2 – Safety Issue Assessment and Best Intervention Strategy : SI-3011 Training Effectiveness and Competence	
<i>Presented by:</i> Ric Peri (EM.TEC Chairman)	
13.1 – New EM.TEC members	
<p>Ric Peri took the opportunity to introduce the new faces in the EM.TEC:</p> <p>Christian Klein – new ARSA representative. Malte Höltnen – IAOPA Europe. Hans F. Mayer - EMTC</p>	
13.2 - Safety Issue Assessment and Best Intervention Strategy: SI-3011 Training Effectiveness and Competence	
Attachment 13	
<p>Hans Mayer (EMTC) provided a presentation on SI-3011 Training Effectiveness and Competence. Hans will circulate the presentation and the main document.</p>	

14 - Closing
Next meeting dates: 08.06.2022 and 01.12.2022.
EDIA and RER underlined the fruitful and good discussions during the meeting and thanked everybody for their participation.
Ric Peri thanked everybody for the productive meeting and for the help from EASA with a special thanking to Marianne.
The meeting finished on time.

Annex: List of Actions

