

Virtual “Decision Committee” Meeting 4/12/2021 (0700-0900 CST)

Minutes of Meeting

Participants: IMRBPB Raffaele Iovinella (EASA)
Bill Heliker (FAA)
Jeff Phipps (TCCA)
Sergio Henrique (ANAC)
Jin Wang (CAAC)

MPIG Kevin Berger (FedEx)
Dragos Budeanu (IATA)
Jason Onorati (United)
Jeff Miller (Boeing)
Oliver Weise (Airbus)

Meeting began on schedule and concluded 10 minutes early.

Agenda overviewed by Bill Heliker

- *IP Number: CIP IND 2020-06 (V1)- Amendment to IP180 to clarify system features to be certified by type certification staff.*
- *IP Number: CIP IND 2020-09 (V1)- Amendment to IP180 for clarification regarding the examples of level-3 Analysis (see IP 180 Rev0, Appendix 2)*

Kevin Berger volunteered to record minutes of meeting

Discussion on CIP IND 2020-06 (V1)

FAA position – proposed added text to the para (in blue)

“The references to and use of Aircraft Health Monitoring throughout this section requires the certification of associated **on-aircraft** system features by the type certification staff of the Regulatory Authority. Off aircraft components of IAHM must meet an acceptable standard. The use of AHM is limited to non-safety tasks provided the tasks are not covering CCMRs.”

EASA position – We do not disagree with the paper as written, however we do have some comments. First-off, on-ground "systems" is misleading as this term is already widely used in MSG-3. It would definitely be better to refer to on-ground "equipment". We Agree the TCH certification goal is not linked to ground equipment / processes but the TCHs should consider offering during the TC phase at least specifications regarding on-ground equipment reliability with particular reference to handling and managing of the collected data. End user (operators) could then demonstrate conformity to same. It was also acknowledged a consequence of the paper's proposed text "on-aircraft" introduced a possible gap due to no evident glossary definition for the term.

Airbus comments – TCHs would work in joint effort w/operators to define on-ground processes and procedures. Additionally, an option for operators would include a service solution suite provided by the TCH.

TCCA position – agreed with the paper as written to provide needed clarity.

Serious caution offered to avoid pursuing a protracted path associated with attempting to control /regulate off aircraft systems and ground processes. TCCA does not support expansion beyond the scope of MSG3. We also propose removal of the two (2) para following the one w/proposed text addition to avoid practitioners from taking that path (as noted below).

~~By introducing this amendment, TCHs will be responsible for demonstrating an appropriate level of reliability of AHM related on aircraft hardware, software and data sent to ground systems with the Regulatory Authorities (Certifying Authorities).~~

~~Conversely, users (Airline / MRO) of AHM on ground systems will be responsible for demonstrating an appropriate level of reliability of associated on ground systems to their National Aviation Authority.~~

FedEx (on behalf of MPIG) comments – MPIG could compromise to insert the FAA proposed blue text. However, operators must gain approval from their NAA. To gain this approval It is expected an operator would need to demonstrate (e.g. I.A.W. 8900.1 five phase process) their methods and ability to meet an acceptable standard and/or via a controlled service introduction as already noted within IP180 (Assumption 2). In that respect the added text offers limited value.

MPIG would take on the effort to introduce another CIP to add a glossary definition of “on-aircraft” to MSG3 if needed.

TCCA comment – MPIG should take paper back and delete the two (2) para noted and consider the paper would be accepted.

CAAC position – no comments but some questions associated w/on-ground systems regarding reliability.

ANAC position - in agreement with this CIP and to remove last two (2) para.

Conclusion: MPIG to amend the CIP by deleting the two (2) para, by replacing any reference to “ground systems” with “ground equipment” and re-submit the CIP to IMRBPB as an amendment as decided within this virtual “decision committee”. This would then be overviewed within the forthcoming IMRBPB meeting in May as the accepted position.

Discussion on CIP IND 2020-09 (V1)

EASA position – did not fully understand the need for the CIP and noted it should be explained in more depth. It is Understood the content would not impact MSG3 content, however the current 7 examples in IP180 Appx2 are the result of the AHM WG activity (not only industry). To change those unilaterally

need some justification and the Problem documented did not seem to substantiate the need for the IP. As a suggestion it may be better to share paper with the full AHM working group 1st to insure a good balance.

FedEx (on behalf of MPIG) comments – From a background perspective AHM working group produced these examples in attempt to illustrate the application of the level three (3) logic. Since then efforts within industry have practically evolved. The appendix examples surfaced questions / confusions in at least one case. This was the underlying motivation of the CIP.

IATA comments - The proposed revision supports documentation of industry feedback and updates as maturity of AHM evolves. IP180 also highlights the TCH will define the format and methods of publishing AHM alternatives with their respective PPH. The four examples presented by this CIP are selected out of the seven examples which were included (and adopted) in IP 180; the revised format and wording of these four example was intended to clarify the understanding of the Level 3 use cases by practitioners and no change of their already agreed Level 3 logic flow and analysis was performed (i.e. no departure from the IP180 Appendix2 ones).

Airbus comments – This revision highlights a use case misunderstanding of one TCH who was not closely involved with IP180 and approached AHM usage with an interval-based “system read out” task which was not consistent w/underlying concept.

TCCA position – TCAA has no concerns with the existing examples within IP180 and is not opposed to any updates. However, the 1st example associated with the oil change is misleading / confusing and without greater review TCCA would be unwilling to accept the CIP presently.

Boeing comments – This example was provided by Boeing to help illustrated the hybrid case within level 3. No AHM functionality existed to satisfy the oil quality degradation only the quantity. This may have contributed to confusion.

FAA position – Initially accepted and could live with it.

CAAC position – no additional comments

ANAC position - in agreement with this CIP w/the four examples. Format offers more standard and uniform presentation.

FedEx (on behalf of MPIG) comments – We could take this CIP back and consider re-casting it in the context of a report (versus a CIP) to provide IMRBPB industry feedback of the practical application and learning as a function of AHM evolution. Concurrently, MPIG could also consider convening the initial AHM working group who authored IP180 to solicit comments and gain wider understanding of its value / need. MPIG believes the format change provides useful reference to industry and it would be good to find a way to reference from the existing examples within IP180.

Conclusion: MPIG will withdraw this CIP and re-identify it (e.g. annual industry feedback report on AHM evolution) as an industry feedback report. MPIG will also initiate a scheduled forum with the initial AHM working group to share the content and solicit comments from the original IP180 team.

Committee participants requested to offer any constructive feedback on the processes associated with the meeting. Aside from the comment of consider recording the meeting – to allow more accurate capture of content, no other suggestions were noted.

Meeting was adjourned as a success for the new process.

APPROVED MOM