# **2014 IMRBPB Meeting Minutes**

(Rev 0 - 25 Aug 14)

**Meeting Location:** The John G. Diefenbaker Building

111 Sussex Drive Ottawa, ON Canada

**Conference Room: Bytown** 

## Monday April 28<sup>th</sup> IMRBPB Meeting – convened at 0830.

1) Welcome and Logistics

- a) Welcome by IMRBPB Chairman, Jeffrey Phipps
- b) Logistical discussion of room etc.
- c) Discussions of dinner Tuesday night.
- 2) Introduction of All Participants.
  - *i)* (See attached attendance list)
- 3) Welcome by Mr. David Turnbull, the Director of the National Aircraft Certification Branch, TCCA.
  - a) Mr Turnbull Welcome to Ottawa. Impressed by the numbers and the energy. Looking forward to the collaborative effort. Proud to carry on tradition of being an active member.
  - b) Two main themes harmonization and governance.
  - c) Harmonization: Overall objective is to see MRB report development, including associated ICA, as more integrated into the certification effort. The benefits of working together (OEM and regulatory) can be seen in a single set of ways of doing things. We need to increase the concept of validation. We note that there is a big difference between "jointly" and "concurrently". TCCA feels that the level of involvement is increasingly difficult to sustain. The ability of a validating authority to make good decisions requires time to develop trust and understanding of other's processes
  - d) Governance: The IMRBPB has not been brought into the context of the existing bilaterals. Those bilaterals influence direction and provide resources/support.
- 4) Review of Agenda.
  - a) Opening remarks from MPIG as to the full agenda this week.
  - b) Question from Airbus (Harbottle) about closed CIP (TCCA 2012-01)(on agenda for Thursday). Chair stated that it was closed in Hong Kong as it appeared that no action had been taken. After Hong Kong meeting, discovered that there was work had been accomplished, so on agenda to discuss and reopen. Will discuss as per the agenda.
- 5) Update Master List of Attendees.
  - a) Mr. Jouvard announced changes to the EASA website as well as to EASA structure. Goal is to make a world class website, then transfer data over. Over the last three weeks, it was impossible to make changes. Now, please send me comments/suggestions for the website. Will combine and then submit to web master.
- 6) Review of contacts for policy board.
  - a) Regulatory: Mr. Leung now primary for HKCAD. Mr. Guan added for Singapore CAAS.

- b) Industry add Mark Lopez for A4A. Add Jim Staggs and Sebastian Rousseau for Bell. Cessna add Steve Taylor. COMAC delete Ms. Wong. Eurocopter has changed its name to Airbus Helicopter. Gulfstream delete Mr. Maroni. AVIC delete Mr. Kai.
- 7) General Discussion Regarding the Management Teleconference, MPIG and IMRBPB Working Group meetings. "What went well?"
  - a) Chair confirmed that the policy board pre-meeting in December is very important. Telecon starts planning phase, then meetings of both groups. Plan to continue with current structure. Seems right people are on the telecon.
  - b) Working group in Hong Kong was very successful. 4 day meeting after MPIG review, went through harmonization discussion. Main accomplishment was to form basis for TCCA CIP on harmonization, which lead to the CIP presented today. Will continue on. CASA to host this coming year.
- 8) Upcoming Meetings
  - a) Main Board Meetings:
    - i) FAA will host next year (2015) in Washington DC, USA.
    - ii) ANAC will host in 2016 (tentatively) location TBD.
    - iii) EASA will host in 2017, Cologne, GER.
  - b) Regulatory working group meetings
    - i) CASA will host in 2014 in Canberra, AUS.
    - ii) JCAB will host in 2015 location TBD.
    - iii) CAAC will host in 2016 in Guangzhou, China.
  - c) Mr Jouvard to update master spreadsheet and email/web.
- 9) MPIG Update (Jose Gomez-Eligido) Not much more to say than what has already been stated
- 10) Initial presentation of new Regulatory CIPs to MPIG.
  - a) **CIP TCCA 2014-01**, Standardization of the MRB Process and Harmonization of the IMRBPB recommendations.
    - i) New template and procedure. This applies to both volumes.
    - ii) CIP read by Chair.
    - iii) Although submitter is TC, joint support of development of CIP was obtained in Hong Kong (draft not circulated).
    - iv) Regulatory documents describe MRB process. Need to look to validation process from other regulatory orgs.
    - v) Harmonized standard would be produced by Board and considered a regulatory document. Would be available to any Regulator/OEM.
    - vi) Recommend it be based on FAA's AC 121-22 and developed as needed for international needs.
    - vii) Formation of a working group recommended. Representation from charter MRBPB members and MPIG (need to ensure not too big.)
    - viii) Proposed schedule and agenda. Work this summer, review by MPIG/Regulatory WG at next year's meeting. Full review in DC next year.
    - ix) Plan would allow for harmonized standard leading to validation, vs traditional regulatory participation (coordinated process).
    - x) Evolution is long term process between authorities. This would support that process and make us more efficient.

- xi) Airbus do you anticipate MPIG participation? Chair hope to confirm that this week. One or two representatives, but no more (with 9 regulatories, group will get too big.)
- xii)Boeing what if regulatories do not accept? Does that provide them leverage? Chair not really, as regulatories still have responsibility to implement IP's into national guidance. Policy Board will stay true to MRB process, but may affect agreements outside that.
- xiii) Aeronovo think one step further, and think about people who would represent regulatories. Ensuring that people may be fully qualified. Chair good comment, but applies today as well. Always going to be a next generation. Transfer of knowledge is always important. Certainly the application of the document will need to be understood by everyone, but that's the same as IP changes now. The onus for that would fall on the organization.
- **b) CIP TCCA 2014-02**, Analysis of Aircraft Data Networks and Associated Security Systems.
  - i) Read by chair.
  - ii) Chair Saw references to OEM documents in MRB possibly seen as outside of MSG-3. Discussed in Hong Kong – general consensus was that OEM's were developing this process as technology improves.
  - **iii)** Key is to develop appropriate scheduled maintenance tasks. Have been generally deferred to the regional/PMI level to approve no national guidance. Determination needs to be made if MSG-3 can be applied to these systems or a new sort of analysis needs to be developed.
  - iv) Airbus was this paper discussed in HK? Chair no, not at this level just the concept. Open for general discussion. Airbus is there a similar position from regulatory community? Before MPIG approaches, nice to get consensus. FAA TAD papers out, would be good to step up here. We need to determine if there is a way to approach. Chair no comments formally. Would like from MPIG general feedback on this paper and where do you see us going with this? This may depend on EUROCAE paper.
  - v) TCCA this may be similar to ETOPS start outside MSG-3 and then get brought in later.
  - vi) AeroTechna What is the primary concern here? TCCA This is mainly to do with ongoing airworthiness. Not necessarily the "pipes" (hardware), but more the in service design and the software. AeroTechna what type(s) of failure could we anticipate here? TCCA This also needs to be looked at on the operator's side (COS).
- c) CIP FAA 2014-01, Discard Task Interval Incorporation by Reference.
  - i) FAA read.
  - ii) FAA we need policy clarification on referencing safe life limits in MRBR. What happens if (when) these limits change, maintaining 1-to-1 link is difficult.
  - iii) FAA Recommendation such changes would require MRB review to ensure remain applicable and effective.
  - iv) Showed example.
  - v) TCCA we're grappling with this, too. Our suggestion lately has been not publishing those limits, as those tasks in MRBR are not effective (as they are already published.)

- vi) Airbus then you run into 5s and 8s with no task selected. TCCA We may need to modify MSG-3.
- vii) EASA MRB control is also an issue.
- d) CIP FAA 2014-02, Analysis of Highly Integrated Electronic Devices (HIED).
  - i) Read by FAA
  - ii) FAA Concern here is functional integration. How do we address multiple functions and multiple MSI's that are handled within one component?
  - iii) Recommendation is to charter a working group.
  - iv) Chair possible crossover with e-enabling.
  - v) Airbus again, this is complex issue that needs regulatory coherence prior to MPIG discussion. In this case, two examples provided by MPIG members. Is it today policy board position that something needs to be done in MSG-3? Output is generally simple tasks. How many resources do industry have to accomplish this when result is simple?
  - vi) Chair good/valid question. FAA– several OEM's have done this, can be concerning due to complexity, needs to address somehow (how slice up? Or treat as one device and move on?)
  - vii) Chair sometimes these are long term process this is the first step of resolving these issues (e-enabling, as well).
  - viii) Airbus a dedicated working group, will it be chaired by Policy Board? FAA need to discuss best route to take. Chair would like to generally think MPIG might chair for technical subjects, Policy Board for MRB process items.
  - ix) MPIG agreed to discuss during breakout.
  - x) Chair in Dec, we discussed amending charter to support working groups.
- e) CIP FAA 2014-03, MRB Process Harmonization.
  - i) Read by FAA. Discussed the three issues of standardization seen recently and FAA recommendation(s).
  - ii) Chair At the end of this week, I expect one CIP combined with TCCA Harmonization paper. These are concrete examples of the problem. A policy board standard would avoid these issues and points out how the guidance may be interpreted differently.
  - iii) FAA Additionally, time will be required for review by appropriate parties and discussion with technical experts in certification.
  - iv) Chair we need in this CIP to address these three issues this week, but then position can then be associated with the harmonization effort in a longer term sense.
  - v) MPIG we note that this is primarily about regulatory agreement. PPH guidance should be clearer. Chair do you generally agree with the recommendations? MPIG yes. Chair primarily the first two. Boeing this is the issue we were talking about earlier. If (for example) the general guidance didn't have a 30 day PPH requirement, but one regulatory does, which do we follow?
  - vi) Chair –If we agree, then an IP would say that, then the standardization document would include that guidance. But if not, then there is an expectation to include it in national guidance, but no requirement.
- f) **CIP EASA 2014-01.** Definition of Visual Check.
  - i) Read by EASA version dated March 26<sup>th</sup> now current. Discussed generally in Hong Kong. Taking that discussion and others into consideration resulted in this draft.

- ii) EASA Key is "does the item fulfill intended purpose", not just "is the item present". Propose better separating the operational check vs visual check categories. We tried to not change anything, but just clarify.
- iii) TCCA this chart will also be affected by other CIPs and will require coordination.
- iv) Boeing we're concerned about examples, as they wouldn't be transferred to zonal may need clarification. EASA better example might be available where transfer is possible.
- g) **CIP EASA 2014-02**, Updating of Rating Tables- Surface Protection Systems and Material Rating.
  - i) EASA read (24 Feb current). Discussed in HK, this version adds additional examples etc.
  - ii) Recommendation is to re-add wording from original revision of MSG-3. Not sure why removed.
  - iii) Airbus can we confirm red bold text is only difference? EASA will double check.
- h) CIP EASA 2014-03, Protective Functions (not safety/emergency related).
  - i) Read by EASA.
  - ii) Boeing we have concerns around the failure being an event (which might be multiple failures of components). May lose credit for redundancy. EASA will review and come back.
- 11) Presentation of MPIG CIPs to the IMRBPB.
  - a) CIP IND 2013-01, MSG-3 Logic Diagrams-Title Consistency.
    - i) Read by MPIG (Boeing).
    - ii) Noted several comments from Airbus and EASA. These will be addressed later.
  - **b) CIP IND 2013-02,** Consistency between current Zonal Analysis and 2013 L/HIF Analysis procedures.
    - i) Read by MPIG (Embraer).
    - ii) Recommendation to delete 2-5-1 (i) from MSG-3 as no longer possible.
  - c) **CIP IND 2013-06**, Clarification of MSG-3 Applicability & Effectiveness Criteria.
    - i) Read by MPIG (Airbus). Includes multiple proposals/standalone changes. Proposes various changes to the 2-3-7.1 table.
    - ii) Some comments have been previously provided by EASA, but not yet incorporated.
    - iii) Later in week can discuss specific problem statements and table arrangement.
    - iv) We will also will need to evaluate MSG-3 text as well.
    - v) TCCA can you explain "cost effectiveness for a fleet"? Airbus the statistical chance of double failures for larger fleets is more.
    - vi) CAAC Different statements for second and third columns with Op/VCK but both apply to Route 9. Airbus Will take on board and discuss. Mainly this way to reduce to one page.
    - vii) Airbus more discussion obviously needed after the caucuses.
  - d) CIP IND 2014-01, L/HIRF Terminology.
    - i) Read by MPIG (Embraer).
    - ii) Embraer two things. First, here we recommend rather than accept, and secondly we look to combine "component" with "system" to make one definition.
    - iii) No questions.
- 12) Presentation of RMPIG CIPs to the IMRBPB.
  - a) **CIP RIND 2013-01**, HUMS for Credit.

- i) Presentation for information only plan to officially present for next year's cycle.
- ii) Read by RMPIG (Airbus Helicopters).
- iii) Chair delivering CIP day of the meeting is difficult. Does this apply to Vol 2 or both? P Conn MPIG will discuss.
- iv) Chair will look at tomorrow. Even without a position this week, can address next year and still get in next revision of MSG-3.
- v) Airbus Helicopters not planning for 2015.1 we have time.

#### 13) Additional Matters

- a) Discussion of CIP TCCA 2012-01 version of 21 Feb 14
  - i) Chair who has redrafted this? Airbus AI was for Airbus (Tony Harbottle) and TCCA (Cliff Neudorf). MPIG was not in agreement. We worked together to generate this draft.
  - ii) Chair AI 13/08 was to jointly develop. We discussed during the Hong Kong RWG meeting. Because the CIP was several years old, we closed the action item.
  - iii) Tony Harbottle Cliff worked it, then turned over to Bruce Hawes upon his retirement. Was discussed in Seattle and then included Brent Bringle.
  - iv) Chair for our purposes today, Mr. Harbottle will take us through it.
  - v) Airbus (Harbottle) read paper.
  - vi) Harbottle There seems to be a misunderstanding of the term "combination" vs "consolidated." Process may currently combine tasks in an inappropriate way. Also, paper discusses off-aircraft tasks and how to combine them properly into one task.
  - vii) During Cologne, discussion highlighted interaction with IP 77. Need to take in to account the decisions taken at that time. This IP would supercede IP 77, which allowed for task consolidation with a system to control it. We propose that existing consolidated tasks are kept, but no further consolidation would be allowed.
  - viii) Propose adding new 2-3-7.8 on consolidation and other related changes.
  - ix) Additional changes proposed by MPIG will be addressed later (when presented by regulatory later in the week.)
  - x) FAA generally agree, but perhaps need tighter controls.
  - xi) Chair agree that consolidation needs better guidance.
  - xii) EASA you said this would be applicable to on-aircraft tasks. What about IP 106 (consolidating tasks at the LRU level.) Chair we need to be sure we don't contradict that. EASA when creating Level 2, if you reach restoration, there may be different requirements.
  - xiii) Chair thank you for the discussion.

Meeting Adjourned at 1500 – moved to regulatory/MPIG breakout for rest of afternoon.

# Tuesday April 29<sup>th</sup>

IMRBPB Regulatory Working Group and MPIG breakout meetings all day.

# Wednesday April 30<sup>th</sup> IMRBPB Meeting – Convened at 0830

- 14) Introduction by Chair & logistics for tomorrow's pictures.
- 15) Review 2014 Revision to the IMRBPB Charter.

- a) Made change to paragraph on regulatory working group (now plural. TOR Clause 1, paragraph 2).
- b) Changes to names in signatories section. Will be posted on the website.

### 16) Action Item Review:

- a) AI 13/01, IMRBPB Charter to include IMRBPB WG and CIP management.
  - i) In reference to industry/MPIG technical working groups. (see Cologne minutes Page 5). Amendment should follow regulatory WG paragraph. Remains open.
- b) AI 13/02, Amend IP Template and Procedure.
  - i) IP template and procedures revision complete. Added additional statement about retroactivity as per previous agreement. Closed.
- c) AI 13/03, NAA Implementation Reference.
  - i) Chair will remain open until can confirm direction of PB on harmonization.
  - ii) Vice Chair update to this list made by Mr. Harbottle to include MSG-3 revision. Also, FAA input received and will be incorporated.
- d) AI 13/04, CIP Distribution and 60 day Submission Requirement.
  - i) Looking to provide more detail on CIP submission. Current plan to post CIP's on receipt by chair to website seems to help.
  - ii) Paul Conn -60 days for the agenda is helpful for MPIG meetings.
  - iii) Made addition to IP management procedure to reflect current procedure (posting upon receipt). Created Rev 5 acceptable to PB. AI Closed.
- e) AI 13/05, RMIG Assessment of CIPs from 2011 onwards.
  - i) RMPIG –all IP's found to be acceptable by RMPIG. C Chazot to send to chair. AI closed.
  - ii) Discussion of applicability of items to Volume 1 and/or 2. Added a column to IP index table to address.
  - iii) Discussion of ATA revision to Volume 1 and 2. PC stated ATA's plan was to retain both volumes on the same 2 year cycle, and that it was highly improbable that one volume would be revised without the other.
- f) AI 13/06, Coordination of CIP IND 2008-04 with Certification.
  - i) Action was for PB members to coordinate approach with various certification branches. CIP 2008-03 is still open.
  - ii) MPIG we are awaiting PB collective response.
  - iii) Chair asked that all signatories obtain comments and send to chair.
  - iv) Action remains open. Now due 1 July for Chair to provide comments back to MPIG chair/co-chair.
- g) AI 13/07, IP 127 and Letter of Confirmation.
  - i) Seen as complete. Discussed this year at MPIG and RWG. Letters of confirmation provided in package.
  - ii) TH confirmed that MPIG comments have been incorporated.
  - iii) AI Closed.
- h) AI 13/10, Revise IP 44 as per IP 134 recommendation.
  - i) Chair to add a new paragraph to move IP 44 to rev 4 and sent out to members/MPIG. Not yet complete. Will remain open. Due 1 June.
- i) **AI 13/11**, Further develop CIP EASA-2013-01. "Tolerances/Windows" in MRBR's.
  - i) Update from EASA takes into account the comments raised in Cologne (last year). Not proposing to close right away. Is a good starting point, but discussion not yet

- complete. FAA Policy Memo now in place. Determined that the need was specific to business aircraft and rotorcraft.
- ii) FAA Will Dassault try to start a "MSG-3 Vol 3" for business aircraft? Paul Conn not officially discussed yet. MPIG Chair will discuss within MPIG and open to CIP on this subject. EASA can confirm that Dassault had specific concerns about business jet operations. AeroTechna NBAA not aware of this yet but will work as well. EASA also in receipt of request to remove FAA policy memo.
- iii) Chair who is supporting CIP? Francis Jouvard EASA is. The development of a "Vol 3" is a separate issue that grew out of this discussion.
- iv) Chair concern that this goes back in time. From a philosophical point of view, tolerances/windows doesn't really extend to that point. If MPIG wants to develop a CIP on that, regulators should not be involved.
- v) AeroTechna application of tolerances is typically at the MPD level. We don't need to move back. FAA after Cologne, these appeared to be available at the local regulatory level. AeroTechna there were PPH's that had them, but need(ed) to move to the MPD. We need to be very cautious about this.
- vi) Gulfstream the FAA Memo was retroactive, and this was a problem for our operators. Was a tremendous amount of work. EASA we want to avoid current situation where we are not harmonized.
- vii) Chair never going to resolve this at the policy board, as national authorities have differing opinion. For today, leave action item open.
- viii) Airbus there is support for this paper, but there are still some improvements to be made. EASA agreed.
- ix) TCCA see biggest concern as people confusing MRBR with maintenance schedule. We need to differentiate this.
- x) FAA have reviewed, agree needs more work. AeroTechna would be interested in that, but still see education as biggest concern.
- xi) Chair AI to be to MRBPB/MPIG to provide comments to review CIP and represent next year. Airbus European OEM have reviewed, MPIG has not. Our proposal is to withdraw for moment and represent. Chair will expect CIP to be revised by EASA and represented for consultation. AI will remain open pending that. Due 1 November for presentation at RWG.
- j) AI 13/12, IP 115 comments to be incorporated in IP 129.
  - i) MPIG action. Close out letter sent. Chair to check and look to close this item (possibly this week)
- 17) Review CIP TCCA 2014-01 and CIP FAA 2014-03.
  - a) CIP TCCA 2014-01, Standardization of the MRB Process and Harmonization of the IMRBPB recommendations.
    - Restated by Chair. Rev 1 now in effect changes recommendations/next steps.
       Discussed that Dec meeting may need to be extended to accommodate that and MPIG involvement in that process. Will finalize in October.
    - ii) Discussion of logo development.
    - iii) Objective remains to create a joint policy document that can be used by regulatories to develop MRB guidance.
    - iv) A4A we have made comments to AC 121-22C, what is FAA's path forward given those?

- v) FAA Have draft "D" that includes integration of newer IP's and your comments. If we adopt this (as a joint document) we would start from there for the AC and for bilateral/TIP changes.
- vi) Chair MPIG will have the ability to provide further comment(s) in Dec.
- vii) Paul Conn What is your expectation of the review in Dec? Representation that we would need might not be the same for this process as for the normal presentations made in Dec.
- viii) Chair will need to discuss our invitation will identify needs. Hard to judge until the analysis is complete.
- ix) A4A No TOR? Chair decided this process was better (PB WG following charter vs sub working group.)
- x) Airbus could you clarify what you mean by "common document."
- xi) Chair in the CIP, we didn't get specific. Plan to take 121-22 Draft D and start from there.
- xii) A4A please specify MPIG representation? Chair maximum of three. (Agreed.)
- xiii) MPIG concerns about timeline being too aggressive. Conn it appears that representatives will need to make decisions in December without a chance to get back.
- xiv) Chair we can't direct MPIG process, you'll have as much time to review as everyone else.
- xv) Chair Close as IP 136, Rev 0 Dated 30APR14. Agreed.
- b) CIP FAA 2014-03, MRB Process Harmonization.
  - i) FAA will address these as part of the harmonization discussion (see above). Added note.
  - ii) Will remain open, MRBPB will formally respond after later discussion under IP 136 in December 2015.
  - iii) Boeing -
    - (1) First item PPH completeness (areas, vs total.)
    - (2) Second item hard number of days not so relevant with electronic collaboration. More interested in "timely fashion".
      - (a) Chair discussion was that reality numerous times packages were at the last minute. TP 13850 / AC 121-22 is starting point. Up to discretion of the chairperson, but we need a standard, and the most reasonable seemed to be 30 days.
      - (b) FAA at the same time, we understand that updates when the meeting starts happen as well we need to find an equilibrium.
      - (c) Chair we need to have MPIG to come to the meeting to an open mind looking for an open mind to create harmonized standard.
    - (3) Third Item MPIG discussed internally and decided that setting a number is difficult (sometimes may only have 1 or even no customers), recommend being vague here.
      - (a) FAA– it is important to recognize that MSG-3 is developed to be used when operator representation is present. Without, should reconsider use.
      - (b) Airbus perhaps consideration of an MTB in that case would be appropriate.
      - (c) EASA in at least one case, operators were invited, but never showed.
      - (d) FAA- if you have a document that says a number, it may help.

- (e) Boeing that's why we recommend that it be dealt with in the PPH.
- iv) Remains open pending IP 136 discussions in December 2014.
- 18) MPIG CIP Review:
  - a) **CIP IND 2013-01**, MSG-3 Logic Diagrams Title Consistency.
    - i) Restated by MPIG
    - ii) MRBPB comments
      - (1) The current titles no longer match 2013.1 and should be rewritten.
      - (2) Add "protection" to L/HIRF in bottom row.
      - (3) EASA comment that logic diagram may not be the same as flow chart. Chair call all the same thing, either logic diagram or flow chart.
      - (4) MPIG decided to use "logic diagram" consistent through MSG-3.
    - iii) Will accept revised paper and probably close tomorrow.
  - b) **CIP IND 2013-02**, Consistency between current Zonal Analysis and 2013 L/HIRF Analysis procedures.
    - i) Chair when examining the logic diagram, the concern becomes traceability are we losing traceability of the critical components here?
    - ii) Greg this calls out for creation of specific tasks (stand-alone GVI) or determination that the zonal is adequate. Bombardier the sheer numbers of transfers would be a burden.
    - iii) EASA there could still be areas where zonal could not generate an inspection. This still may be a concern. Bombardier flowchart assumes that a zonal exists, if a zonal inspection does not, the answer to that question will be no. This may also be covered in EZAP. EASA perhaps wording in step 11 could be improved. TCCA perhaps "existing" used before zonal. Agreement that this was a different topic obtained.
    - iv) Chair we can move forward, as there are no longer GVI's that can be transferred to zonals under the current wording and that's the focus of the CIP.
    - v) Closed as IP 137 R0, 30APR14, Implement into next revision of MSG-3.
- 19) Logistics etc. for Mr. Elev's visit on Friday.
- 20) MPIG CIP Review continued.
  - a) **CIP IND 2013-06**, Clarification of MSG-3 Applicability & Effectiveness Criteria.
    - i) Airbus we see 5 distinct issues. The table needs work both from comments and EASA issue paper, but would like to see comments from PB on specific areas stated.
    - ii) The most significant comment was possibly moving to a new route. This was proposed in the past (2000 2001 or so?) and completely rejected at the time. Wish to just clarify criteria under Route 9.
    - iii) If impact on the infrastructure is eliminated, this CIP might need to be eliminated. It was our (Airbus) understanding that there was pressure on FAA AEG to determine that, but we will work with your recommendation.
    - iv) TCCA if you affect the airport, you obviously have affected the aircraft as well. FAA it appears that this would take a huge investment in time and effort to determine. How could a WG come up with a figure? Chair how many variables do you consider?
    - v) Airbus concern for operators can be wider as well. Chair this is part of operator's program.
    - vi) FAA again, not bad idea, but still very hard to determine.

- vii) TCCA this seems to be on the right track, as some automatically assume "no task" for all route 9's. EASA seems to be a little bit too far. Chair agreed. Too far. Mainly concerned with incidents on the aircraft that could be prevented.
- viii) Airbus understood. MPIG will discuss. First point is effectively withdrawn.
- ix) Airbus "effect" came out of propulsion working group due to discussion of seal failure (low cost of failure, high cost of failure effect.)
- x) EASA the same discussion here just different level.
- xi) FAA and Boeing where do you determine the correct level? Boeing seems that this would tend to create more scheduled tasks.
- xii) Airbus this text obviously doesn't give enough guidance. What level is correct/sense of the Board? Trying to make this a robust discussion that clarifies what we mean (in MSG-3). Prepared to limit as needed, but prefer to go further than the cost of the part/repair.
- xiii) FAA— what about environmental impact? Airbus hard to judge/specific to various countries and operators. FAA similar discussion of airport availability. Airbus this is part of the working group process.
- xiv) EASA to add, a discussion of special operational aspects of business jet concerns might complain here.
- xv) EASA we can support change to failure effect now.
- xvi) FAA the glossary doesn't match (economic effect/operational effect.)
- xvii) Airbus the operational impact is limited (as of now) the effect is on the mission of the aircraft. Quite often now, it is cheaper to let the part fail than maintain/inspect.
- xviii) Paul Conn will need to look at glossary definitions as well.
- xix) Chair already some work to rewrite and change columns. Board agrees with "effect". Please redraft and represent.
- xx) FAA/EASA Final discussion of repetitive task performances over time. Clear guidance on meaning of "cost effectiveness" will be needed here.
- xxi) Airbus Will revise given these comments and represent next year.
- b) **CIP IND 2014-01**, L/HIRF Terminology
  - i) FAA Removed "protection systems" (was added in 2007). Why add then and remove now?
  - ii) Chair noted relationship to CIP IND-2013-01 will discuss on Friday. Weren't sure here if this was impacted. Boeing it is not impacted, now all references are "components".
  - iii) EASA what was the result of the EASA proposal (Rafale) 8 April to avoid, eliminate consequences. Boeing Rafaele agreed, and we will discuss in the working group.
  - iv) MPIG in review yesterday, reviewed EASA comments. What we documented was the addition of "avoid, eliminate..." after "to" In L/HIRF Protection Components. Has not been added yet. (Meeting was within the 60 day window.)
  - v) Chair prefer original definition as per submission. Cleaner. Board agreed.
  - vi) Closed as IP 138 R0 30APR14. Applies to both Vol 1 and 2.
- 21) Continuation of TCCA CIP Review
  - a) **CIP TCCA 2014-02**, Analysis of Aircraft Data Networks and Associated Security Systems.

- i) MPIG response is not clear what the maintenance aspects of A/C data networks and systems are. Request further examples.
- ii) Additionally there are other organizations working on specific standards. Recommend holding this paper until the publication of those documents by the end of the year.
- iii) Chair it appears that you need better definition of what we're trying to analyse before you determine if it can be analysed.
- iv) Chair we will take the CIP back and monitor the EUROCAE document and examine the operation and design aspects, then rewrite accordingly (or if needed) with better examples.
- v) FAA the only concern is what checks really need to be done how does that get into MSG-3? Airbus may need to work together with airworthiness certification offices on this (where do these checks fall?)
- 22) Continuation of FAA CIP Review
  - i) **CIP FAA 2014-01**, Discard Task Interval Incorporation by Reference
    - (1) FAA to withdraw and rewrite.
    - (2) MPIG will send comments directly to the FAA (Kersner and Perry).
- 23) Admin/logistics adjourn for day at 1545.

# Thursday May 1<sup>st</sup>, IMRBPB Meeting – Convened at 0830

- 24) Pictures Taken
- 25) Continuation of FAA CIP Review
  - a) **CIP FAA 2014-02**, Analysis of Highly Integrated Electronic Devices (HIED)
    - i) Restated by FAA (Problem statement and recommendation). Recommending MPIG charter a subgroup.
    - ii) Chair also, this subgroup might consider other similar topics (for example, e-enabling/data security, CIP TCCA-2014-02)
    - iii) MPIG we feel that we have been dealing with the subject successfully using current analysis, don't see a huge need for group.
    - iv) FAA This was mainly a concern brought to us by industry.
    - v) Chair last paragraph consistency.
    - vi) Boeing we found that trying to treat the software as a replaceable component, it works. Perhaps best practices are appropriate here.
    - vii) Bombardier our discussion here appears that the approach is relatively common existing MSG-3 analysis procedure has been applied with adequate methodology.
    - viii) Boeing didn't come up on 787. Greg had to clarify transfers a bit but otherwise OK.
    - ix) Bombardier not sure presenting examples would make sense.
    - x) EASA Then perhaps what you're saying is that there are different approaches. WG's appears to be looking for an adaptation.
    - xi) FAA These are external stakeholder concerns, we can dismiss if there's not a problem.
    - xii) MPIG appears that the paper is more about creating a standard way to deal with these issues.
    - xiii) Chair that is the role of the board, standardization.

- xiv) Airbus Are you confirming that this is not an FAA concern. FAA- As of yet, we have not had rejections in this area. Airbus previously understood this would be chaired by a regulatory. In this case, there would need to be a neutral party. With MPIG, this is not realistic.
- xv) FAA We see this as a growing issue now and in the future, the question is do we want to "get our arms around it" now.
- xvi) A4A perhaps this is something for the common process document
- xvii) Chair no that would be more about technical analysis.
- xviii) Chair just not there yet may have to readdress this at a future time. FAA withdraws the CIP.

#### 26) EASA CIP Review:

- a) CIP EASA 2014-01, Definition of Visual Check.
  - i) Restated by EASA new draft sent on Monday.
  - ii) MPIG we reviewed the March version.
  - iii) MPIG we generally support this CIP. A few comments/recommendations.
  - iv) In 2.1 "Identification must be possible" The original copy had a statement saying ID of failure must be possible. Are you indenting to delete this?
  - v) EASA the intent is to replace that phrase with the two new phrases.
  - vi) Airbus wanted to make sure we were tracing the deleted text.
  - vii) EASA yes. Similarly in the table. We will add strike outs to make clear.
  - viii) MPIG Similarly, the "Note" box should it be retained?
  - ix) EASA yes.
  - x) MPIG also, in the glossary entry, needs to strike "an" before "obvious". Also in text (section 2). EASA agreed.
  - xi) MPIG section 2.1 change to "visual identification of pass/fail state". EASA Agreed.
  - xii) MPIG- typo in 2.2 change reduce to reduces. EASA agreed.
  - xiii) MPIG- 2.3 , detection of one hidden failure to "the" hidden failure.
  - xiv) MPIG/EASA not quite ready to give feedback on the table due to the overlapping issue papers. Will have to revisit and revise. Can't say if we can accept the exact wording until then. We will take this into account. Otherwise agreed.
  - xv) Agreement in principle on the change.
  - xvi) Chair FJ to add text and represent tomorrow. Plan to close then.
  - xvii) EASA practical question if a CIP affects MSG-3, can we get word versions of MSG-3 to support that? A4A that seems reasonable, will supply.
  - xviii) Airbus will note that this CIP means that there might be changes to the templates/forms used in analysis. We will be looking for a bit of flexibility from MRB chairs to address this.
  - xix) EASA– As long as the interpretation is clear, we would not have a concern.
  - xx) EASA Are you talking about new or existing programs? Airbus new programs would address, but existing would not. EASA understand this is not proposed to be retroactive, but for ongoing programs should be ok.
  - xxi) EASA faced similar questions in the past as well.
  - xxii) Airbus understood what the concern is. Difficult before, but we managed to get through it. Using the same software for "derivative models" is preferred.

- xxiii) When applying the latest revision of MSG-3 to an existing program, the OEM will not be required to change existing analysis templates to accommodate any potential changes to MSG-3. However, in order to accommodate potential changes between MSG-3 revisions, a PPH revision/appendix may be required. (or something to that effect.)
- xxiv) Airbus this statement seems acceptable.
- xxv) Chair do we need to put this statement in this CIP or address in broader sense in new CIP? Airbus here.
- xxvi) Chair we will take a regulatory action item to review the implementation of this CIP in a broader sense as part of our MRB generic guidance document (now AI 14/01).
- b) CIP EASA 2014-02, Updating of Rating Tables- Surface Protection Systems and Material Rating
  - i) EASA restated and explained change ("design" from "family of aircraft")
  - ii) MPIG SWG analysed, and we do support. Recommended change in the last sentence, to change "is customized" to "may be customized". EASA have we eliminated concern with "design"? Boeing perhaps also major parts may change as well.
  - iii) Chair perhaps remove the last sentence? Shouldn't the system handle this?
  - iv) EASA we consider this is needed as it was not accomplished in the past.
  - v) Airbus I think the word "may" is important in a later aircraft model, improved protections may allow for increased intervals, we shouldn't be forced to upgrade the table.
  - vi) EASA that is not in line with the MSG-3 process. Maybe we can reword.
  - vii) Chair perhaps we should say that "each rating system is to adequately cover all different SSI."
  - viii) Boeing expressed that they didn't see the first no findings vs second inspection large amount of findings scenario as a risk.
  - ix) Airbus small mistake on table. EASA corrected.
  - x) Boeing applicability should be added to ensure not retroactive. EASA agreed, added.
  - xi) Agreed to, closed as IP 139 R0, 1 May 14. Applies to both Vol 1 and Vol 2.
  - xii) Discussion of retroactivity having been added to the IP template.
- c) **CIP EASA 2014-03**, Protective Functions (not safety/emergency related)
  - i) EASA Restated
  - ii) MPIG acceptable with change explained on Monday (4/29).
  - iii) Agreed to, closed as IP 140 R0, 1 May 14. No retroactive, applies to both Vol 1 and 2.
- 27) Review EASA CIPs that were not accepted during the 2013 IMRBPB Meeting.
  - a) CIP EASA 2013-03, sensibility to relative size of damage in ED analysis
    - i) Was awaiting for other organizations to discuss this.
    - ii) Airbus lots of controversy about this issue in SWG.
    - iii) MPIG no feedback from AAWG on this issue. Only discussed within MPIG members.

- iv) SWG had two teleconferences about this subject last year, there was a belief that AAWG would make definitions that would help with the SWG position. Received less from AAWG than we expected.
- v) EASA frustrated with AAWG inaction on this issue, and perhaps we should move forward without them.
- vi) MPIG the MPIG position is then that they do not support this issue paper.
- vii) Airbus it was expected that EASA was going to be on that call.
- viii) EASA request that the position be forwarded to the PB and we will react.
- ix) Further discussion is required, MPIG to submit formal comments and position will be adjusted based on that input.
- b) CIP EASA 2013-04, CPCP for safe life item.
  - i) Was awaiting MPIG input.
  - ii) MPIG does support this paper. SWG requested a change in paragraph 6 last word "age" to "limit".
  - iii) EASA made small changes to support new template.
  - iv) Agreed Closed as IP 141 R0, 1 May 14, Not retroactive, applies to both Vol 1 and Vol 2.

## 28) Review withdrawn CIP TCCA 2012-01 and closed AI 13/08.

- a) Now been redrafted.
- b) Airbus History drafted by FAA in 2012. In Cologne, significant discussion AI was for Airbus and TCCA to redraft for this year. Redrafted in summer by MPIG, comments received from TC, redrafted again. Looked at in Seattle (MPIG) and redrafted since. Available in Feb.
- c) Restated by Airbus. Regulatory comments requested.
- d) FAA the numbers quoted in the CIP now don't line up in the 2013 revision.
- e) Airbus think they're OK now.
- f) Airbus where we did have a significant change was to have a clause to allow. Much easier to state as a note. Chair that addresses regulatory concern of traceability.
- g) MPIG MPIG official position is to support position. Disagree that it should be applied retroactively. Three recommendations:
  - i) In 2-3-7.8 propose the addition in "task of different types" "If, for technical reasons, tasks of different types…" to ensure that consolidation occurs not for planning reasons. Additionally, add "linked by a note against the tasks to this effect…" later.
  - ii) Proposed definition of combination add "stand alone".
  - iii) Delete paragraph 2 of the recommendation. Concern is that consolidation policy didn't really exist and now tracking these items down would be difficult.
    - (1) FAA want something in the PPH showing that consolidation may have be accomplished in the past, but will not occur in the future. Bombardier MPIG was concerned that someone would have to do this work.
    - (2) Airbus propose text change to paragraph 2 to state that task consolidation will not be carried out after this date. MPIG making change.
    - (3) Chair we're talking about a paragraph in the recommendation that puts into context the change in MSG-3 this paragraph is strictly guidance. Should these recommendations go into MSG-3?
    - (4) Airbus Implementation statement? Chair this is a unique situation where applicability is different than the planned change to MSG-3.

- (5) Chair So ultimately, this is a retroactive decision. FAA how about a present amendment to existing PPH's to stop further action?
- (6) Aeronovo this was started because people did not understand consolidation and/or combination.
- (7) Chair let's take paragraph 2 as redrafted and pull out and put in recommendation for implementation section (new template).
- (8) Airbus to take and put into new template, then can close tomorrow.
- (9) EASA with the consolidation definition, perhaps second sentence should be in core discussion. Also, this highlights IP 106, but didn't seem to address this aspect. Is this only applicable for on-aircraft tasks? Chair Are these two separate issues? Airbus will propose a sentence for that as well. EASA will need to be careful, it may be confusing to mention here.
- 29) Logistical discussion for tomorrow. Goal tomorrow will be to finish by lunch. Meeting adjourned at 1500.

### Friday May 2nd IMRBPB Meeting - Convened at 0900

- 30) Remarks by Martin J Eley, Director General, Civil Aviation (TCCA).
  - a) Mr. Eley spoke about international cooperation to the Board and the importance of harmonized standards. How risk is managed, in an environment of reduced budgets, is critically important. He encouraged the board to both build and then maintain the consensus standard over time.
  - b) Mr. Eley took questions. Mr Gdalevitch (Aeronovo) commented that hands-on training will be important to ensure that knowledge is passed forward. Mr. Eley mentioned that training together (both regulator and industry) can be helpful as well (as it fosters a common perspective.)
  - c) Chair Dedication of the board members is impressive. This board is a unique thing we all want to continually improve and optimize the MSG-3 process and our moves forward have been significant.
  - d) Mr. Harbottle thanks very much for your thoughts on the future. You mentioned 1309 concerns. You gave the impression that all was well now but industry still feels that there is room for improvement in this area. I would continue to encourage coordination here. We tend to meet in this group with our AEG/AFS counterparts and have grown our relationship there. How do we get the same relationship with our certification/1309 regulators?
  - e) Eley we acknowledge that there has been some unequal application in this area. Perhaps the EASA conference in June might be a good place to talk about this. Mr Howell (TCCA) one of our IP's (evolution) has caught some interest as we were exceeding safety caps.
  - f) Eley how are we working with the third party arena with this process? Chair –depends on the operators some may extend the program. Always a challenge to coordinate the baseline program for all operators. Eley true as industry and aircraft change roles over time, it's important to adjust. Mr Howell STC's have been a major problem (ICA acceptance.)

- g) Mr Xue (CAAC) thanks to Mr. Eley and TC for the input and support. Budget is always a challenge how do we plan to continue to support this meeting? Eley there's no easy answer, but we always look at the value of the activity.
- h) Chair as a closing comment on 1309, the integration of MRB tasks provides a level of confidence. Having a standardized process will help with that level of confidence, and tighter level of integration with the certification world will be on the agenda moving forward.
- 31) Review and closure of remaining CIP's.
  - a) CIP IND 2013-01, MSG-3 Logic Diagrams Title Consistency
    - i) Now version dated 2 May (header 1 May).
    - ii) Reviewed markup/changes from the previous session.
    - iii) Removed proposed change to paragraph numbers (in table).
    - iv) Accepted Closed as IP 142 R0 2 May 14 Applies to both volumes and is not retroactive.
  - b) **CIP EASA 2014-01**, Definition of Visual Check.
    - i) As discussed, added note. Also added text to paragraph 2.
    - ii) Also, as discussed moved "text to the recommendation for implementation.
    - iii) Concern about the table (due to the overlapping industry paper). Airbus MPIG has now agreed with the paper and table. This (table) text will further be modified by the industry paper in the same area.
    - iv) More corrections were applied. New draft adds highlight to question box to note change. Adds plural to failures in 2.2 and corrected a typo in implementation.
    - v) Accepted Closed as IP 143 R0 2 May 14 Applies to both volumes and is retroactive as noted in the implementation section.
    - vi) AI 14/01 IMRBPB process standard to address revision status and implementation of MSG-3, refer to IP 143 recommendation for reference.
  - c) **CIP TCCA 2012-01**, Clarification of Policy for Consolidation of tasks.
    - i) Changes made last night
      - (1) 2-3-7.6 Task consolidation, added sentence from definition.
      - (2) Added sentence about applicability "on aircraft tasks only".
      - (3) Simplified definitions (see 1 above).
      - (4) Removed "2 and 3" paragraphs from recommendations into retroactivity statement.
      - (5) Included statement to show that this supersedes IP 77.
    - ii) Accepted Closed as IP 144 R0 2 May 14 Applies to both volumes and is retroactive as noted in the implementation section.

#### 32) Other items of business

- a) **IP 44 revisions** need to still revise the CMCC process statement. Chair to revise over the next several weeks and will send to PB and MPIG for review, 30 day comment period, with concurrence, will create as Rev 4. Agreed.
  - i) Airbus email from 2 Dec 2011 document may be missing text in one paragraph. Chair will research and potentially incorporate as well.
- b) RMPIG CIP RIND 2013-01 "HUMS for credit" discussion initial comments
  - Chair to send comments to MPIG/RMPIG (from Mark Trainer TCCA Rotocraft).
     Quick précis provided by the Chair. Initial feedback only. Perhaps details of HUMS could be improved.

# 33) Meeting summary

- a) One action item
- b) 9 IP's closed
- c) Minutes soon will circulate for comment, plan to finalize in 30 days +/-

## 34) Next meeting dates and locations

- a) Leadership teleconference October 28<sup>th</sup>. Agenda by mid-October.
- b) MPIG meeting Nov 4-6, Hosted by Airbus in Toulouse, FR.
- c) Regulatory WG Dec 1-5, Canberra, AUS. May be more (up to 9 Dec) depending on process standard document development (will decide in October.) Agenda
- d) Next main meeting April 20-24, 2015 in Washington DC, USA (FAA host) May run into the end of the cherry blossom festival (book early).

### 35) Closing Remarks

- a) Members/MPIG thanks for hosting this week. Also appreciate regulatory IP's (more prolific) Bombardier thanks for making meeting so smooth.
- b) Regulatory FAA great meeting, agree with Bombardier the two year cycle helps as well. The guidance document is really important and will set a high standard, look forward to that.
- c) Chair to add to that, maintenance can take a back door at times. Everyone here understands the importance. This will solidify our existence and raise our profile, and then feed into international agreements. The value/efficiency and safety aspects of maintenance are important. Many challenges to come, but they will be overcome through common understanding and acceptance. Thanks all for coming and all the extra work that comes before and during the meeting. Look forward to the meeting in Australia. Minutes to come soon.
- d) Adjourned 1130.