International MRB Policy Board

MEETING NOTES
2024 IMRBPB ANNUAL MEETING
13TH TO 17TH MAY 2024

Time: 09:00 – 17:30 China Standard Time, UTC plus 8 hours

Location: Haikou, Hainan, China, hosted by the Civil Aviation Administration of China (CAAC)

Meeting participants:

AACM	Johnson CHEONG	
	Tammy LAI	
ANAC	Apologies received	
CAAC	Shijun XUE	
	Jin WANG	
	Xiaolei LI	
	Yi GE	
	Huanshi ZHANG	
	Yu PEI	
CAAS	Aik Tio GOH	
	Gerald Poh HOCK GUAN	
CASA	Apologies received	
EASA	Raffaele IOVINELLA	(IMRBPB Chairperson)
	Luca TOSINI	(IMRBPB Secretary)
	Dominique DUMORTIER (OSAC)	
FAA	Travis PRITCHETT	
	Rocky JOHNSON	
	Noel ARBIS	
GCAA	Omar BUMELHA	
	Marwan Mohammad KHUB	
HKCAD	Eric CHEUNG	
	Bill LAU	
JCAB	Masao YOSHIDA	
	Yuhei MIYAMA	
TCCA	Jeffrey PHIPPS	
UK CAA	Emma McCREESH	(IMRBPB Co-Chairperson)
A4A	Kevin BERGER	(MPIG Secretary)
ACAE	Nan CHEN	
	Zhichao HUANG	
AeroTechna Solutions, LLC	Leonard BEAUCHEMIN	
Airbus	Oliver WEISS	(MPIG Chairperson)
	Jan HUELSMANN	
Airbus Defense & Space	Pilar ROJAS-BARCI	
American Airlines	Avril BENSON	(MPIG Co-Chairperson)
ANA	Ryoichi HARAGUCHI	
ATR	Ana-Maria PIVNICERU	

Azul Linhas Aereas Brasileiras	Osvaldo DA SILVA	
Beihang University	Jian JIAO	
	Laifa TAO	
Boeing	Jeffrey MILLER	
CAUC	Baohui JIA	
	Chuyi TAN	
	Yuan GAO	
CHANGHE Aircraft	Binxiang LONG	
ChinaAero-Polytech	Sizhen SU	
COMAC	Zihan FENG	
	Maogen SU	
	Yiping WANG	
	Jun HUANG	
	Mingming HONG	
	Jingyang ZOU	
	Youcai YAO	
	Guie SHANG	
	Mingmin SUN	
	Rui CHEN	
	Xiao LIN	
	Sipeng CUI	
	Hao ZHU	
Collins Aerospace	Rhonda WALTHALL	
Embraer	Alan SOUZA	
Fed-Ex Express	George WEED	
General HUANAN Aircraft	Yuquiang HU	
	Yang LI	
	Chen WANG	
HARBIN Aircraft	Xin ZHENG	
	Hongjun WANG	
Helicopter Institute	Haijun LIANG	
	Quiang HU	
Leonardo Helicopters	Giacomo GIBILISCO	(acting RMPIG Chairperson)
United Airlines	Natalie SZABO	
	Daniel COULTER	
Wisk	Dither FLORES	
XAC Commercial Aircraft	Zhibin ZHANG	
	Jing WANG	
	Hong LI	

		DAY 1 (13th May 2024)
Item		**Discussion / Disposition / Action Item**
1		**Welcome and Introductions**
	i.	Introductions by Mr Shijun Xue, Deputy Director-General of the Flight Standards Department of the Civil Aviation Administration of China (CAAC) and former member of the IMRBPB.
	ii.	Introductions and Welcome by Mr Raffaele Iovinella (EASA), IMRBPB Chairperson.
	iii.	Round-the-table of Participants
	iv.	Review of Agenda and Plan for the Week
	v.	Review of MPIG Meetings and Introductory Remarks
		Airbus / (Olivier Weiss), MPIG Chairperson – There many active groups as of today, namely Structures, Lightning/HIRF, AHM, MSG-4. In October '23 took place a successful face-to face meeting in Charlotte in the U.S. state of North Carolina, with many attendees from the Industry side and a busy agenda. The MPIG area of interest is going beyond MSG-3 and IMPS: cybersecurity and data protection; Artificial Intelligence (machine learning), with the question on how far we can rely on AI to replace classic maintenance tasks and procedures. The MPIG strengthened the cooperation with SAE. The MPIG is working very actively within the IMRBPB and it is very much appreciated to continue with this close cooperation: the impact of IMRBPB decisions on operators and operations can be massive and it has to be evaluated carefully. For this reason the MPIG would like to have IMRBPB members involved at an earlier stage in the discussions, to share the Industry's position on the different topics not only at the opportunity of the planned IMRBPB meetings (i.e. IMM, IIM, IAM). A4A / (Kevin Berger), MPIG Secretary – A4A is extremely glad that MSG-3 became such a powerful tool, well known among Industry as well as Regulators worldwide. It takes great effort to keep it up-to-date.
	vi.	Review of RMPIG Meetings and Introductory Remarks
		Leonardo Helicopters / (Giacomo Gibilisco), RMPIG Co-Chairperson & acting RMPIG Chairperson for IAM'24 – few changes will happen at organizational level in the RMPIG, with leadership team elections expected to take place soon in line with the 3 years agreed cycle. Five RMPIG meetings took place between 2023 and 2024: among the topics discussed, it deserved special attention the IP44 review for rotorcrafts that will be presented later during this IAM'24.

	vii.	Status and signing of revised IMPS/MSG-3 (as applicable)
		EASA / (Raffaele Iovinella) – No updates on status for MSG-3 revision and IMPS revision: new MSG-3 Rev. 2025 is expected to come within the next year. Based on the recent experience, we need to prevent the situation that happened during the authoring phase of the MSG-3 Rev. 2023, when too many IMRBPB IPs stayed approved but not implemented yet in the final MSG-3 document thus making very complex to proceed with their implementation. The IMRBPB Leadership Team proposes to create a draft version of the MSG-3 document, to be used as a working document for approved IPs timely implementation. Same for the IMPS document. We need to improve the quality of the CIPs as well: when proposing amendments to MSG-3 in particular, it is fundamental to ensure that the latest current revision of the MSG-3 document is used as a reference: a dedicated discussion will take place tomorrow at the Regulators caucus opportunity and the IMRBPB will refer on Friday.
2		**Initial Presentation of Regulatory and Industry Candidate Issue Papers (CIPs)**
	A-G	<u>Initial Presentation of Regulatory CIPs</u>
		EASA / (Raffaele Iovinella) – briefly introduced CASA CIP on behalf of CASA, as well as all the EASA CIPs:
	A	• **CIP CASA 2024-01** – straight forward CIP, proposing the introduction of acronyms & abbreviations list in both MSG-3 Vol.1 and Vol.2 documents.
	B	• **CIP EASA 2023-04_R1** – re-presented based on the IAM'23 feedback. Applicable to MSG-3 Vol. 1 and Vol. 2. CIP goal is to add clarifications on the policy for "off-wing" restoration tasks.
	C	• **CIP EASA 2023-08_R1** – re-presented based on the IAM'23 feedback. Applicable to MSG-3 Vol. 1 and Vol. 2. MSG-3 analysis can be considered completed at Step 15 of the L/HIRF analysis flowchart. The proposal is to remove the not MSG-3 related Steps from the L/HIRF Protection Analysis Methodology and Logic Diagram.
	D	• **CIP EASA 2024-01** – applicable to IMPS. IP 44 only mentions intervals for escalation/optimization but does not discuss usage parameters. The recommendation is that the task optimization should be done independently for each utilization parameter.
	E	• **CIP EASA 2024-02** – applicable to MSG-3 Vol. 1 and Vol. 2. When answering MSG-3 analysis Systems' Level 1 Question 3 manufacturers often claim the pilot to be able to prevent an operating safety impact of the failure. The proposal is to have the information about warning/inhibit functions clearly included in analysis, to allow correct consideration when flight crew reaction is claimed in the Level 1.
	F	• **CIP EASA 2024-04** – applicable to IMPS. MSG-3 makes use of the terms "external" and "internal" but gives no information how to distinguish

	G	between them. The recommendation is that the PPH should provide a clear definition of “internal” and “external”, when required. • **CIP EASA 2024-05** – applicable to MSG-3 Vol. 1 only. Currently approved MRBRs shows lack of harmonized approach for the required maintenance of the static dischargers for fixed-wing aircraft models. CIP goal is to provide some additional details in the MSG-3 documents in order to prevent this lack of harmonization, when not justified by peculiarity of the aircraft design.
	H-R	<u>Initial Presentation of Industry CIPs</u>
	H	Airbus / (Jan Huelsmann) – briefly introduced the CIPs developed by the MPIG Structural Working Group: • **CIP IND 2018-03_R02** – applicable to MSG-3 Vol. 1 and Vol. 2. The CIP is re-presented based on the IAM’23 feedback. The flowchart for “other structure” in the MSG-3 is very old, in the meantime GVI and Zonal definitions have changed a lot.
	I	• **CIP IND 2018-04_R04** – applicable to MSG-3 Vol. 1 and Vol. 2. This CIP has a long history. Many comments have been raised at the first presentation in 2019 in Ottawa with the recommendation to develop a Rev.1. In 2021 (virtual IMRBPB Annual Meeting) it was presented again with the implementation of the comments. Mainly because there are 2 parts (A and B) it generated other comments, EASA committed to support a new revision. A Rev.2 has been presented in 2022 (virtual), generating again a series of comments (e.g. SSI selection instead of categorization, WG should be involved in the SSI selection process). EASA supported again, driving a Rev.3 discussed during IAM’23. The CIP will be re-presented this week based on the IAM’23 feedback.
	J	AeroTechna / (Leonard Beauchemin) – briefly introduced the CIPs developed by the MPIG: • **CIP MPIG 2023-01** – applicable to MSG-3 Vol. 1 and Vol. 2. The CIP aims to revise the GVI definition to formally introduce the use of “visual aids”. The technologies are already in place, we would like to give this option to the operator introducing the concept in the MSG-3 analysis.
	K	COMAC / (Yiping Wang) – briefly introduced the CIP developed by MPIG: • **CIP MPIG 2023-03** – applicable to MSG-3 Vol. 1 and Vol. 2. The CIP aims to provide a better understanding of the difference between "lubrication” and “servicing” task types in MSG-3.
	L	AeroTechna / (Leonard Beauchemin) – briefly introduced the CIPs developed by MPIG: • **CIP MPIG 2023-04** – applicable to MSG-3 Vol. 1 and Vol. 2. The CIP focusses on “off-A/C” vs. “on-A/C”: a definition is missing in MSG-3. This CIP is strictly linked to CIP EASA 2024-04, therefore there is the need to ensure proper coordination during the discussion.

	M	• **CIP MPIG 2023-05** – applicable to MSG-3 Vol. 1 only. The CIP aims to clarify the use of the term "overhaul" in MSG-3. As the previous one, this CIP is strictly linked to CIP EASA 2024-04, therefore there is the need to ensure proper coordination during the discussion.
	N	• **CIP MPIG 2023-06** – applicable to IMPS. The CIP analyses the interface between MSG-3 defined task and existence of additional instructions reported into CMMs. The current policy is lacking guidelines on this respect.
	O	Collins / (Rhonda Walthall) – briefly introduced the CIPs developed by MPIG: • **CIP MPIG 2023-07** – applicable to MSG-3 Vol. 1 only. The CIP aims to harmonize the AHM terminology used in MSG-3 with the concept of IAHM already in use by the Industry.
	P	• **CIP MPIG 2024-01** – applicable to MSG-3 Vol. 1 only. The CIP recommends introducing few modifications based on the previous CIP, conditional to its approval by the IMRBPB.
	Q	A4A / (Kevin Berger) – briefly introduced the CIP developed by MPIG: • **CIP MPIG 2024-03** – applicable to IMPS. The CIP aims to clarify the application of IP 44 as well for MTB process.
	R	Leonardo Helicopters / (Giacomo Gibilisco) – briefly introduced the CIP developed by RMPIG: • **CIP RMPIG 2024-02** – applicable to MSG-3 Vol. 2 only. The CIP aims to improve the MSG-3 document to cope with the rotorcraft way of working and reference materials to include the S1000D.
3		**Feedback from Active Working Groups**
	I.	<u>STR Working Group updates</u>
		Airbus / (Jan Huelsmann) – introduced the topic supported by a presentation. Based on the feedback received from the IAM'23, a series of actions have been opened under the responsibility of the STR WG. The supporting presentation summarizes in detail the work performed since then. Future activities include among the many the roadmap for SSI definition, as well as the proposal to revisit IP 105 "*Further advanced definition of Structural Health Monitoring (SHM)/Addition to MSG-3*" [AN: Approved in 2010 and never implemented in the MSG-3 document, therefore in status "active"] and to propose a new CIP.
		EASA / (Raffaele Iovinella): is it somehow related to the development of the AHM activity? Airbus / (Oliver Weiss): with the deployment of IP180, MPIG is collecting feedback and learning a lot. The whole Industry sees the opportunity to revisit IP 105 (parked "on the shelf" since long time) and put it into the IP 180 context. EASA / (Raffaele Iovinella): EASA is looking forward to seeing some of the IP 180 applications, as per today the situation is very vague.

EASA / (Luca Tosini): is the roadmap for SSI definition keeping EASA in charge, or the Industry sees the possibility to lead the SSI definition activity?
Airbus / (Jan Huelsmann): the MPIG STR WG would prefer to keep the status quo: REG CIP with the support of the STR WG.

II. L/HIRF Working Group updates

AeroTechna / (Leonard Beauchemin) – introduced the topic supported by a presentation.
There have been some misunderstandings with reference to the guidelines received by the IMRBPB following IAM'23, with reference to the level of involvement and required support to be provided by the L/HIRF WG in the development of CIP EASA 2023-08_R1.

EASA / (Raffaele Iovinella): thank you for having introduced the topic, there will be a dedicated item for discussion in the tomorrow's Regulators caucus as per the distributed agenda.
AeroTechna / (Leonard Beauchemin): the intent is always to improve the cooperation and synergies between Industry and Regulators. We need to focus on the main differences between "plan" and "programme": there is no guidance within IMPS, not enough policy detail whether should be "programme" or "plan" It must be clarified that the assurance program is not a sampling program.
FAA / (Rocky Johnson): It is not that clear the difference between the 2 terms.
EASA / (Raffaele Iovinella): Len, in your presentation you've mentioned that is not MSG-3, that is precisely the intent of CIP EASA 2023-08 to recognize the issue and to mitigate it removing the reference from MSG-3 where not appropriate. It is a certification issue, not an MSG-3 issue.
TCCA / (Jeff Phipps): the L/HIRF assurance plan/program has never been developed as certification document, but as part of the original MSG-3 analysis. Once the door has been opened to visual inspections, the assurance plan/program has been introduced as validation method and there is no need for it if functional checks are selected instead. At the beginning some certification activities have been introduced, but this was related to a "grey area". If we only have GVIs, how do we know if the system protection still intact from a functional point of view? If not controlled by MSG-3, who controls then? No idea who is in charge to follow-up the assurance program and who has the duty to take care of it. This is the issue behind that requires clarification.
AeroTechna / (Leonard Beauchemin): we need to be careful here; removing the assurance program from MSG-3 is potentially creating an issue. It is part of the maintenance planning activity in our view. We propose to keep it in the MSG-3 flow diagram.
TCCA / (Jeff Phipps): the L/HIRF WG considers that the assurance plan should be a program, therefore we believe it has to reside in the MSG-3 document and the IMPS should provide guidelines how to manage it.
AeroTechna / (Leonard Beauchemin): the PPH should be the document providing the necessary level of details.

TCCA / (Jeff Phipps): the assurance program should be mentioned in the MRBR from the Industry perspective? An operator will not have an assurance program approved by the Authority. Good move to re-arrange the way we are working. There is no hook for certification activities to require an assurance program.
EASA / (Raffaele Iovinella): thank you to the MPIG L/HIRF WG for the work performed and for the support provided. Nevertheless, CIP EASA 2023-08 is not proposing the remove the assurance plan/program from MSG-3 and proposes IMPS amendment instead. We will better clarify it on Wednesday.

III. AHM Working Group updates

Boeing / (Jeff Miller) – introduced the topic supported by a presentation. IP180 has been discussed during the IAM'18 in Shanghai the first time, here we are in China again, just 6YRs later. The AHM WG is for the time being working with MPIG only, as per RMPIG current not supportive position, therefore the 2 CIPs to be discussed during the next days are pointing to Vol.1 only. Nevertheless, the AHM WG has clear in mind the IMRBPB decision to move to MSG-4 as one volume only, so this issue must be faced sooner or later.

EASA / (Luca Tosini): lots of discussion on the meaning of the letter "M" in the acronym [AN: "management" vs. "monitoring"] but what about the letter "I", what does "integrated" mean in this context? Furthermore, AHM concept as approved in IP 180 and implemented in MSG-3 Rev. 2023 is limited to the systems analysis. Is IAHM concept instead opening the door for mixing systems and structure? Is this an MPIG shared view?
Boeing / (Jeff Miller): surely there is potential for MSG-4 to embrace the mix systems/structure concept. There is no clear view from the AHM WG. Today we stay in the systems' related analysis.
EASA / (Raffaele Iovinella): when moving from AHM to IAHM we really need to better understand the meaning of "integrated", at systems level or at aircraft level? The IP 180 has been developed having originally in mind the concept of monitoring. We will discuss better in details during the Regulators caucus of tomorrow.
Boeing / (Jeff Miller): that is precisely why the AHM WG is moving in this direction, the terminology is confusing there is a need to harmonize.

IV. MSG-4 Working Group updates

American Airlines / (Avril Benson) – introduced the topic supported by a presentation. The MSG-4 WG is actively working for 1 year and half. It is important to ensure that the new MSG-4 is not going backwards compared to what have been decided during the past 20 years of IMRBPB activity, therefore all the 211 IMRBPB IPs approved as of today must be assessed. It is proposed to update the CIP template, to include the "impact on MSG-4" field in addition to the MSG-3 ones: this just for traceability reasons, to make simpler to track the changes required before the deployment of the new MSG-4 guidelines.

Airbus / (Oliver Weiss): as A4A made evident some time ago, there is not the wish to keep 2 different MSG documents active, so we need a transition strategy and plan on how to move from MSG-3 to MSG-4. We are not here today to make any formal decision, but it is important to have a common understanding on how to move forward, eventually a step-by-step approach.
EASA / (Raffaele Iovinella): recommendation to all the participants, it is fundamental to exchange as much as possible and contribute actively to the topic.
EASA / (Dominique Dumortier): how is the white paper presented during IAM'23 driving the MSG-4 WG activity?
American Airlines / (Avril Benson): the white paper identifies the fundaments for the new MSG-4 development, together with the new IPs that will be approved in the future. The white paper is ongoing the publication process at A4A level, we are confident it will be published within 1 year.
EASA / (Dominique Dumortier): I recommend that all the issues that are going to be faced by the MSG-4 WG during the development of the new document are endorsed by the IMRBPB before proceeding with the resolution of those at Industry level.
American Airlines / (Avril Benson): good suggestion, we can make the list of changes to the original white paper available for IMRBPB comments.
A4A / (Kevin Berger): presumption is that anyone involved in the MSG-4 WG activity is familiar with the white paper and its context.
Airbus / (Oliver Weiss): we need to have the Regulators onboard; we cannot spend so much time and effort without having the IMRBPB actively involved.
EASA / (Raffaele Iovinella): the Regulatory members attending such activity have to be recognized as advisors only: the decisions are formally taken at IMRBPB level.
Airbus / (Oliver Weiss): then we have to enter the CIP process as soon as possible in order to formalize the results achieved as today.
EASA / (Luca Tosini): please explain the scope of this new proposed MSG-4 CIP field. Is it for traceability reasons only (mainly MSG-3 changes identified applicable as well to MSG-4 due to similarities), or is it as well a new approach to discuss issues that will pertain to MSG-4 only?
American Airlines / (Avril Benson): both.
EASA / (Raffaele Iovinella): if the final intent is to discontinue MSG-3, we need to ensure that the new MSG-4 is applicable to all A/C models including the ones that will still look like "traditional type of aircraft" for which the MSG-3 logic will continue to be an applicable and effective tool even in the future.
Airbus / (Oliver Weiss): MSG-3 demonstrated to be a very efficient tool. What we intend to do in the near future can be summarized as follows: first, to merge MSG-3 Vol.1 and Vol.2; second, to ease MSG-3 application compared to what happens today, with many interactions between SYS/STR/ZNL/HIRF; third, to accommodate emerging technology (e.g. IP 180, EVTOLs). Industry endorses the "think out of the box" concept and expects the IMRBPB to do the same. We need a buy-in of the main principles.
EASA / (Raffaele Iovinella): the IMRBPB is always open to new approaches/ideas. In this transition we need to be mindful and realistic.

		There is not the need to rush, we need to analyze all the implications including to find an answer to the question what will happen to the current MRBRs developed under MSG-3 if the document is not going to be maintained?
4		**Discussion Topics - Part 1**
	1	<u>MSG-3 to MSG-4 transition – Industry's proposal</u>
		A4A / (Kevin Berger) – introduced the topic supported by a presentation. The gap matrix has been created, to identify the gaps between the white paper and the MSG-3 documents. The white paper is in the publication pipeline, but if the IMRBPB prefers to comment the changes to the original version before publication, we can stop the process.
		TCCA / (Jeff Phipps): does the Industry have a definition for "next generation aircraft"? A4A / (Kevin Berger): no, it doesn't. Airbus / (Oliver Weiss): we could say, an aircraft implementing technologies that we do not see applied today, that are in contrast with the concept of a "classic aircraft". TCCA / (Jeff Phipps): it is important in many ways, to understand as well the limits of MRB process responsibilities. From a Regulator perspective, MRBR/MTBR it is scheduled maintenance developed by the Type Certificate Holder, different from the one developed by the Regulators that are named "limitations". The surveillance concept is focusing on aircraft carrying more than a couple of passengers. Small aircrafts come with a different level of safety risk. TCCA will not run an MRB process on 2 passengers aircrafts. EASA / (Raffaele Iovinella): EASA sees this scenario in a more positive way instead; today we do not have applications, but why precluding to have some in the near future? TCCA / (Jeff Phipps): normal transport-category aircrafts are where TCCA has resources for. TCCA does not believe that more Regulatory involvement is necessary for this new category of aircraft. It is very difficult to set a level of minimum requirements, understood, but we should narrow the scope. EASA / (Raffaele Iovinella): there is for sure room to discuss between the Regulators regarding roles and responsibilities. We should not lose the benefit of the today's momentum. A4A / (Kevin Berger): the current process, including the IMRBPB direct involvement, seems to go in the proper direction. American Airlines / (Avril Benson): can TCCA please better formalize the point? It is extremely important for the MSG-4 WG to deeply understand the Regulators concerns at an early stage of the MSG-4 development. TCCA / (Jeff Phipps): first to clearly identify the target of MSG-4, then to analyze the implications of the discussion. CAAC / (Jin Wang): it has been CAAC understanding that MSG-4 is intended more to ease the avionics part of the analysis. "No Task Selected" is ok

		because it is an analysis result. The approach how to develop MSG-4 should be driven by the experience we have today. The policy that CAAC has in place today is developed on Part 23-25-27-29 aircraft product, with no room for other aircraft type other than those. CAAC is looking for an input from the Industry on what Industry needs: the role of Regulators today is more as an observer, cannot set rules in advance. EASA / (Raffaele Iovinella): EASA as well has some EVTOL under final certification phase; for one of those EASA proposed the use of an MTB process, and the Industry response was positive. Airbus / (Oliver Weiss): the survey launched last year and presented during the IAM'23 involved all the MRB process actors, and it has been agreed to proceed. By experience, in a certain way the MRBR is treated by many NAAs at the same level as an ALS. Leonardo Helicopters / (Giacomo Gibilisco): one of the main problems from the RMPIG perspective is the "proportionality". Rotorcrafts and Airplanes have to comply with different requirements, somehow the rotorcraft ones are more relaxed compared to the fixed wing. The MSG-3 Vol.2 has been developed too much in the path of Vol.1, so it seems it does not represent a plain-levelled field due to much more rules somehow for the rotorcrafts compared to fixed wings.
		A4A / (Kevin Berger) – continue with the presentation, showing the "steps approach" proposed for the transition from MSG-3 to MSG-4. One of the very first steps is to propose a CIP to rename MSG-3 in MSG-4. The transition plan, together with timing, roles, and responsibilities, is fundamental.
		GCAA / (Marwan Khub): it is still not clear to GCAA what MSG-4 is intended to be. A4A / (Kevin Berger): we can name MSG-4 as "MSG-3 rebranded", with on top the mitigation for all the gaps identified by the white paper and tracked via the gap matrix. EASA / (Dominique Dumortier): I don't see the need to have a partial MSG-4 implemented. I wonder if it makes sense to document all the steps of the transition, I foresee confusion. We do not see a significant change between the 2 analysis methodologies at this stage of the MSG-4 development process. A4A / (Kevin Berger): what we are presenting today it is just a proposal from the industry, giving the full picture of how and when the transition is going to happen from an Industry perspective. EASA / (Dominique Dumortier): the decision to discontinue MSG-3 comes with the assumption that all the currently MRB/MTB processes running using the MSG-3 tool need to be accepted as compliant with the new MSG-4 tool as well. Airbus / (Oliver Weiss): the Industry doesn't want to kill MSG-3, MSG-3 will be the backbone for the new MSG-4. EASA / (Raffaele Iovinella): this is understood, but industry mentioned differences between MSG-3 and MSG-4 potentially major; how to cope with those differences is the issue per the current plan proposed.

		COMAC / (Zihan Feng): COMAC considers that MSG-4 should be developed independently from MSG-3, this is a great opportunity to develop a more effective tool considering the emerging technologies and the current limits of MSG-3 in analyzing them. GCAA / (Omar Bumelha): I see there are concepts very valuable here, e.g. attention to maintenance sustainability. But we need to understand the benefits. Starting from the gaps it seems a good idea. EASA / (Dominique Dumortier): please do not consider the white paper as an exhaustive source of information on what MSG-4 should look like. It identifies the list of various good reasons justifying why to move to MSG-4. I feel we have the capability at IMRBPB level to formalize the "minimum content" for the MSG-4 analysis tool and to set its target. A4A / (Kevin Berger): it seems that the IMRBPB is looking for a “revolution”; it will not be a revolution from the Industry point of view. FAA / (Rocky Johnson): is it possible to continue working on a DRAFT MSG-4 meanwhile? EASA / (Raffaele Iovinella): is it really ok from an Industry perspective to move to MSG-4? Airbus / (Oliver Weiss): for sure to integrate IP 180 into MSG-3 does not make it MSG-4, it has been already considered as not enough. Leonardo Helicopters / (Giacomo Gibilisco): RMPIG shares the intent of MSG-4 as per MPIG vision. The concept of merging the 2 volumes is justified as well by the number of IPs approved in the past years (60s MPIG vs. 6 RMPIG). In regard to the single MSG-4 volume the RMPIG direction is the same as stated in IAM 2023 where a space for specific rotorcraft topics/differences is important to be preserved. Use of an appendix to the single volume can be a workable option. GCAA / (Omar Bumelha): this process as described falls under the provision of the change management concept; it implies analysis of implications such as risk analysis including identification of appropriate mitigations. EASA / (Raffaele Iovinella): thank you all for the valuable discussion. It has been already identified a dedicated point in the tomorrow agenda for the Regulators caucus.
	2	<u>Status of FAA “AC 25-19B” & “AC 121-22D” documents</u>
		FAA / (Rocky Johnson) – updated the IMRBPB and Industry. AC 121-22D has been commented, FAA is confident it will be ready in 2-3 months period. Among the novelties introduced, the IMPS is identified as primary guidance for running an MRB process. AC 25-19B status is more complex instead: it has probably to go through another public comment phase due to the quantity and nature of comments received during the 1st phase.
	3	<u>Some Recent Thoughts on IAHM&MSG-4 - Quantitative Hypotheses of MSG Methodology</u>

COMAC / (Yiping Wang) – introduced the topic supported by a presentation.

EASA / (Raffaele Iovinella): it is really an impressive presentation. There are concepts that goes in the EASA view of what MSG-4 is expected to be, concepts such as "quantization" are surely good ideas to be considered for an optimization of the rating-based analysis modules currently in place in MSG-3.
EASA / (Dominique Dumortier): I personally like a lot the presentation; the emphasis given to the importance of data collection is in line with the basic principles of the MRB/MTB processes. Nevertheless, please keep in mind the challenges of introducing a "weighting approach" for the ratings.

4 AI 2023-07 – Placards & Markings in MSG-3

Leonardo Helicopters / (Giacomo Gibilisco) – introduced the topic supported by a presentation.

EASA / (Raffaele Iovinella): many thanks to MPIG/RMPIG for the presentation. The IMRBPB will discuss the survey results tomorrow during the Regulators caucus. We can consider the AI 2023-07 as closed.

5 Rotorcraft IP 44

Leonardo Helicopters / (Giacomo Gibilisco) – introduced the topic supported by a presentation.

EASA / (Raffaele Iovinella): IP 44 has been developed thinking of large fleet of large aircrafts. The proposal looks like a big deviation from the current IP 44 guidelines.
Leonardo Helicopters / (Giacomo Gibilisco): rotorcrafts tasks intervals were escalated/de-escalated well before IP 44 has been approved, mainly based on the TCH confidence to be able to do so.
EASA / (Raffaele Iovinella): nevertheless, the magnitude of the escalation achievable in the past is not comparable with the one made possible after IP 44 deployment in the different TCHs MRB programs. We will talk about it in the Regulators caucus of tomorrow.
EASA / (Luca Tosini): the challenge is not that much dependent on the number of rotorcrafts flying, but rather related to the number of possible aircraft configurations and the definition of a common mission scenario impacting the way the rotorcraft is used.
EASA / (Dominique Dumortier): the rotorcraft world maybe not enough mature yet. The IP 44 has been created with the main goal to make it possible to manage a situation that was not manageable at all.

Meeting adjourned.

		DAY 2 (14th May 2024)
Item		**Discussion / Disposition / Action Item**
5		**IMRBPB Regulatory Caucus**
6		**MPIG/RMPIG Industry Caucus**
		No meeting minutes produced for Day 2

		DAY 3 (15th May 2024)
Item		**Discussion / Disposition / Action Item**
7a		**Feedback from IMRBPB Regulatory Caucus - Part 1**
	i.	The result of the survey launched as per AI 2022-06 is presented.
		EASA / (Raffaele Iovinella): the IMRBPB decision is not to have a dedicated slot in the future IAMs agenda. A4A / (Kevin Berger): the Industry came to the same conclusion. EASA / (Raffaele Iovinella): then we can consider the AI 2022-06 as closed.
8		**In Depth Review of Regulatory CIPs**
	A	**CIP CASA 2024-01 – Formalizing the use of acronyms and abbreviations**
		EASA / (Raffaele Iovinella) on behalf of CASA briefed the meeting on CIP CASA 2024-01_R01. The original CIP has been revised overnight to implement some comments following the yesterday Regulators caucus.
		A4A / (Kevin Berger): Industry accept it with no comments. TCCA / (Jeff Phipps): there is a small typo in the TCCA acronym.
		The CIP is corrected live.
		EASA / (Dominique Dumortier): double acronyms are used for the same term (e.g. both "SV" and "SVC" for "servicing task"). Is this correct? EASA / (Raffaele Iovinella): topic discussed with CASA prior to the IAM'24. There are historical reasons behind, MSG-3 still lists them both so we keep them both, otherwise we need to propose a dedicated CIP to fix MSG-3 at the next opportunity. The IMRBPB can now vote for the approval of the CIP CASA 2024-01_R01.
		CIP accepted, as amended, as IP 212.
	B	**CIP EASA 2023-04_R01 – Clarifications on the policy for "off-wing" restoration tasks**
	L	**CIP MPIG 2023-04 – Definition "Off-aircraft": Clarification of the policy and meaning of "on-aircraft" and "off-aircraft" tasks in the MSG-3 document**
	M	**CIP MPIG 2023-05 – Latent use of the term "Overhaul"**
		The 3 CIPs are presented at the same time due to the very close relation and the possible recommendations overlap. Based on Industry feedback, CIP EASA is more policy focused, whereas the MPIG ones are taking more in consideration the aircraft operations.

		EASA / (Luca Tosini) briefed the meeting on CIP EASA 2023-04_R01. AeroTechna / (Leonard Beauchemin) briefed the meeting on CIP MPIG 2023-04 and highlighted the differences compared to CIP EASA 2023-04_R01.
		EASA / (Raffaele Iovinella): it seems there has been some misunderstanding, the MPIG was not tasked to perform any action in accordance with the IAM'23 minutes of meeting. We need to be careful next years to prevent duplication. That being said, one of the main points of the EASA CIP is that a RST task is not identifying “any off-aircraft task”. Therefore an off-aircraft definition is needed. I acknowledge that the proposed off/on aircraft definitions in the EASA CIP are biased by the EASA regulation, maybe not appropriate for other NAAs. From yesterday caucus: the PB proposes to split the responsibilities between the 2 CIPs, EASA to keep the RST task selection related issues, MPIG to endorse the definition of “off/on aircraft”. AeroTechna / (Leonard Beauchemin): the MPIG CIP is taking into consideration some MSG-4 thoughts. I concur that the EASA proposed definitions are not shared among different countries. Paragraph 3 of MPIG CIP is very important to understand the Industry approach. EASA / (Luca Tosini): EASA CIP highlights some issues in the application of CMMs that reports preliminary tasks to be performed prior to the MSG-3 RST task is considered, potentially preventing the approved RST task to be completed. Does the MPIG CIP cover this issue as well? AeroTechna / (Leonard Beauchemin): a different CIP, the CIP MPIG 2023-06, covers the topic you've just highlighted. So there are 3 MPIG CIPs that are interlinked and somehow cover the issue that EASA raised. Better not to check now the CIP MPIG 2023-06, it may become very confusing. Let's agree on the definition first. TCCA / (Jeff Phipps): the MRBR function is to describe “what” is required and “when”. TCCA is surprised by the way the problem has been stated in both CIPs. The IMRBPB is not responsible for the “how” (how the job is performed); that is all about using the applicable airworthiness standard to perform the job (e.g. CMM, TSO, etc.). Is it a specialized maintenance shop, a not-specialized maintenance shop, the operator must perform the task just next to the aircraft on a bench...? In the TCCA environment the performance of work, namely the “how”, is not linked to the MRBR instructions. There is value in both the EASA and MPIG CIPs: the EASA proposes good improvement of the MSG-3 document; the MPIG proposed definitions looks better to me, even if need some fine-tuning. So if we combine both CIPs we may have a good consolidated CIP. Off-aircraft simply means: the LRU goes off and then moves to a different environment compared to the one where is normally operating (the aircraft). Maybe a dedicated WG could work on that and help to solve the problem. AeroTechna / (Leonard Beauchemin): the proposed MPIG definitions cover all the possible scenarios, no need for fine-tuning. We need to keep it simple to make it work. A4A / (Kevin Berger): I rather see room for improvement. Let's find a better wording for off-aircraft starting from the MPIG proposed definition.

		FAA / (Rocky Johnson): FAA fully concur with TCCA position. The proposed definition off-aircraft looks fine. GCAA / (Omar Bumelha): agree that a definition has to be there, the MPIG proposed one looks good.
		The IMRBPB concurs to work on a consolidated CIP. It has been agreed to keep the EASA CIP as bases, incorporating the MPIG one into it. The CIP is reworked live in R02.
		Airbus / (Jan Huelsmann): I am afraid the proposed definition may jeopardize the understanding in the structural part of the program. Airbus / (Oliver Weiss): maybe is better not to mention off-aircraft in the MRBR task description. EASA / (Raffaele Iovinella): as long as it is properly addressed in the PPH it should be ok. AeroTechna / (Leonard Beauchemin): surely off-aircraft task identified automatically as RST has been a wrong assumption. EASA / (Dominique Dumortier): the CIP has to stay in the context of MSG-3, nothing to do with IMPS.
		The CIP EASA 2023-04_R02 is reworked live, with the endorsement of the Industry agreed definition, and presented to the IMRBPB. The Policy Board agrees with the new definition. The remaining EASA CIP proposed modifications at MSG-3 level are then presented.
		A4A / (Kevin Berger): it is an agreed writing convention that the statement should not be negative. EASA / (Luca Tosini): the EASA proposal is taking into consideration also sub-tasks. Maybe we can make it clearer in the reworked CIP. Airbus / (Oliver Weiss): concur. TCCA / (Jeff Phipps): EASA yellow paragraph has 2 intents; first, to state that the RST task is not just an off-wing task; second, to ensure the MSG-3 task is not lost as a sub-task into the CMM procedure. We need to ensure the CIP intent is kept here. EASA / (Dominique Dumortier): maybe IP 176 can be used to support the selection of the most appropriate verbiage. The IP 176 is recommending the identification of the basic task procedure as part of the applicability and effectiveness criteria. Airbus / (Oliver Weiss): we need to be careful when using IP 176, because MSG-3 is not visible to all operators. EASA / (Dominique Dumortier): the NOTE as proposed in the EASA CIP R01 is clearly addressing a recurrent issue we are facing at MSG-3 analysis level. Boeing / (Jeff Miller): agree with the whole note, that statement is true. Does not cause any harm to keep it.
		The new proposed verbiage is edited live into CIP EASA 2023-04_R2: the off-aircraft definition proposed by the Industry in the MPIG CIP is implemented as modified; the yellow paragraph of the EASA CIP R01 is endorsed by the R02 as

		modified; the Note of the EASA CIP R01 is endorsed by the R02 with the deletion of the reference to “off-aircraft”; the blue sentence of the EASA CIP R01 is endorsed by the R02 as modified.
		AeroTechna / (Leonard Beauchemin) briefed the meeting on CIP MPIG 2023-05. The starting point has to be aligned, following the incorporation of CIP MPIG 2023-04 into the EASA one as per the discussion above.
		TCCA / (Jeff Phipps): acceptable ICA requirements, we require a recommended overhaul period to be included. So, taking the overhaul outside the RST definition, we may generate a gap. Keeping the word in the RST definition instead, we keep the connection with the requirement in the design standard. AeroTechna / (Leonard Beauchemin): I respectfully disagree, at Industry level no one is using the word “overhaul” anymore. TCCA / (Jeff Phipps): de-facto, the MRBR with the overhaul as part of the RST definition meet the expectations of the design standard requirement. EASA / (Raffaele Iovinella): please remember that the MRBR is a mean of compliance to CS25.1529 Appendix H and CS29.1529 Appendix A. TCCA / (Jeff Phipps): maybe the MRBR does not have a clear reference to overhaul, but the MSG-3 definition as per today is covering the overhaul, therefore is better to keep that dotted line within the regulation. Leonardo Helicopters / (Giacomo Gibilisco): RMPIG disagrees with the MPIG CIP; the TCCA position is shared 100% instead. EASA Form1 (top right corner) mentions directly "overhaul" as well. EASA / (Raffaele Iovinella): the CIP MPIG 2023-05 is pointing to Vol.1 only, introducing misalignment of RST definition between MSG-3 Vol.1 and Vol.2. This seems not a good idea in the frame of the decision to have an MSG-4 consolidated document. EASA / (Dominique Dumortier): please note that the MSG-3 word “complete” used in combination with the word “overhaul” is not intended to be linked to the overhaul itself, it has to be considered in the context of the sentence. We can easily remove the word "complete". GCAA / (Omar Bumelha): the proposed definition is limiting the previous one, this may generate issues. Airbus / (Oliver Weiss): it seems we have two options here; first, to delete the word "complete"; second, to reject the CIP MPIG 2023-05, send it back for rework to be represented in 2025. AeroTechna / (Leonard Beauchemin): after having carefully read the wording from the document CS25.1529 Appendix H, the content can be summarized such as “if there is an overhaul, the period has to be identified”. So the CIP MPIG 2023-05 will be represented by the industry next year; the Issue statement will be revised, as well as the Problem statement.
		EASA / (Raffaele Iovinella): the IMRBPB can now vote for the status of the 3 CIPs presented, CIP EASA 2023-04_R02, CIP MPIG 2023-04 and CIP MPIG 2023-05.

		CIP EASA 2023-04_R02 accepted, as amended, as IP 213.
		CIP MPIG 2023-04 rejected (incorporated into IP 213).
		CIP MPIG 2023-05 returned to submitter for rework. Represent in 2025.
	C	**CIP EASA 2023-08_R01 – Removal of not MSG-3 related Steps from the L/HIRF Protection Analysis Methodology and Logic Diagram**
		EASA / (Luca Tosini) briefed the meeting on CIP EASA 2023-08_R01.
		Airbus / (Oliver Weiss): please clarify the reference to the certification process in the Issue definition. TCCA / (Jeff Phipps): originally the recommendations from the TCH to support compliance to the, at that time, “special conditions” were mainly visual inspections. The assurance program has been introduced to validate the MSG-3 derived tasks. There is no requirement coming from certification on that respect. EASA / (Raffaele Iovinella): when an assurance program exists, there is the tendency of the TCH to "adapt" the MSG-3 analysis to match the assurance program, with the final result not to have published MRBR tasks in the L/HIRF section of the MRBR. We need to analyze properly. TCCA / (Jeff Phipps): pre-determined outcome in the MSG-3 analyses is not the right thing to do, the WG should be solely responsible to identify the most applicable and effective tasks. If the system architecture is as such that cannot support other than visual inspections, then the assurance program becomes fundamental for validating the MSG-3 derived tasks. FAA / (Rocky Johnson): FAA has issues with the language proposed to be put in the IMPS. CAAC / (Jin Wang): there is clear mention in the L/HIRF related certification documents and recognized standards (e.g. SAE ARP 5583B) to the assurance program. The assurance program is there to validate the L/HIRF design. The situation looks a bit confused to CAAC, how we have to consider the interface with our maintenance tasks. TCCA / (Jeff Phipps): is the assurance program availability a requirement in the EASA world? EASA / (Raffaele Iovinella): EASA AMC 20-158A mentions it in paragraph 10. as a "may" and "should". Same words in FAA AC 20-158A paragraph 11. TCCA / (Jeff Phipps): considering the origin of the assurance program, there are Part 21 related ACs and AMCs (certification documents) but in TCCA world we do not have a corresponding document. The original intent of the assurance program has been bent. It is not clear now who is the owner of the assurance program. If we do not define the assurance program content and the process related to its creation, it is not anymore an MRB related document. TCCA proposes to table the CIP, waiting for the different authorities to clarify the current position at NAA level on the interpretation of the use of the assurance program and its ownership. Airbus / (Oliver Weiss): it is somehow similar to the sampling to validate a LG TBO.

TCCA / (Jeff Phipps): I respectfully disagree here; the intent of the sampling and the intent of the assurance program are different. TCCA proposes to open a new Action Item: NAAs, to look into guidance materials and SAE standards, to identify the regulatory requirement to have the assurance plan, and who is required to have it. We propose as well to simplify the current IMPS 4.10.4 and the new proposed IMPS 4.10.5.

Action Item 2024-04: With reference to the Assurance Plan (or equivalent validation program), each NAA to look into its own guidance materials and available SAE standards, to identify any regulatory requirement to have an assurance plan, and to clarify who in each NAA is the process owner for the control/follow-up of it.

Action Owner: IMRBPB
Due Date: IIM 2024

EASA / (Raffaele Iovinella): the IMPS 4.10.4 is evidently wrong, an assurance program is not required to support the MSG-3 analysis.
FAA / (Rocky Johnson): there is a reference in FAA AC 28.899-1.
AeroTechna / (Leonard Beauchemin): the referred FAA AC 28.899-1 is covering static electricity, just one part of the L/HIRF.
EASA / (Dominique Dumortier): the assurance program is limited to a sampling; is not there to monitor fleet condition but to validate the effectiveness of the MSG-3 derived tasks.
AeroTechna / (Leonard Beauchemin): The Industry L/HIRF WG supported the activity related to the review of the EASA CIP 2023-08 following the results of IAM'23, spent considerable amount of time, made a decision that has been disregarded by EASA proceeding with the CIP R01 to be presented to IAM'24.
EASA / (Raffaele Iovinella): the CIP is an EASA CIP and it stays as such, regardless the opinion of the L/HIRF WG. The decision to eventually reject the CIP is in the hands of the IMRBPB.
EASA / (Luca Tosini): as EASA responsible for the development of the CIP in object I can just confirm that EASA has been duly supported by the L/HIRF WG, we are grateful for it. The EASA CIP R01 is based on the valuable input from the L/HIRF.
TCCA / (Jeff Phipps): AC 33.4.3 is the L/HIRF reference ICA. In this AC is very detailed the nature of an assurance program.
CAAC / (Jin Wang): it is just limited to engines.
TCCA / (Jeff Phipps): the IMPS 4.10.4 is wrong, it should be removed. The 4.10.5 as proposed in the EASA CIP needs be reworded. The content of an assurance plan and how it has to be used are information that pertains to the IMPS. This is a very important CIP; it needs to be reworked properly.
EASA / (Raffaele Iovinella): before moving forward reworking the CIP, EASA would like to have the IMRBPB concurrence that the removal from the L/HIRF MSG-3 analysis flowchart of the identified steps is agreed.

IMRBPB agrees that the MSG-3 L/HIRF analysis flowchart must be corrected as per the CIP EASA 2023-08_R01.

EASA / (Dominique Dumortier): please pay attention to the fact that there are multiple references to the assurance program in various MSG-3 analysis steps (e.g. L/HIRF analysis step 12 and 14).
EASA / (Luca Tosini): the CIP intent is not to remove any reference to the assurance program, but just those that does not pertain to the MSG-3 analysis tool. The assurance program is mentioned as well in the IMPS paragraph 9. “Periodic Review”.
EASA / (Raffaele Iovinella): maybe a revision of IP 199 “Periodic Review – Updates” can be considered for the next year activity.
Embraer / (Alan Souza): does all this mean that we need to generate functional checks as result of the L/HIRF analysis, instead of visual inspections?
EASA / (Raffaele Iovinella): this is a misleading information resulting from the wrong interpretation of the Note currently in the analysis steps referring to the use of an assurance program.
AeroTechna / (Leonard Beauchemin): the Industry L/HIRF WG is looking for the commitment from IMRBPB side to have more coordination. Please ensure the referenced advisory material is made available post-meeting.

CIP returned to submitter for rework with Industry L/HIRF WG. Represent in 2025.

D **CIP EASA 2024-01 – Escalation of tasks with multiple usage parameters**

EASA / (Luca Tosini) briefed the meeting on CIP EASA 2024-01.

A4A / (Kevin Berger): Industry supports the paper. We have just one comment: looking to Systems MSG-3 analyses, Task Interval Parameters, the proposed last sentence in IMPS 8.1 seems a repetition, therefore can be removed from the CIP.
EASA / (Raffaele Iovinella): I respectfully disagree, they are saying different things.
Airbus / (Oliver Weiss): May happen the case that data available can support the evolution of one parameter and not of the other.
TCCA / (Jeff Phipps): the CIP mentions "significant escalation", maybe we can find better wording.
Boeing / (Jeff Miller): Boeing does not see the relation between the proposal and the evaluation for the additional calendar interval. It should be part of the normal way of working to revise the MSG-3 analysis accordingly.
COMAC / (Maogen Su): COMAC would like to propose additional wording in paragraph 3.0, some data can come also from the low-utilization fleet; we want to be sure that the proposed sentence is not closing the door for using this type of data.

		EASA / (Raffaele Iovinella): is that data still valid to support the task optimization? EASA / (Dominique Dumortier): at task by task level there may be additional factors to be considered. COMAC / (Zihan Feng): the MRBR approved is based on the utilization defined in the MRBR itself. EASA / (Raffaele Iovinella): we need not to deviate from the rules of IP44, we cannot delete the bracket. EASA / (Dominique Dumortier): the sample analyzed during an IP 44 compliant optimization exercise should be representative of the worldwide fleet.
		CIP EASA 2024-01 is reworked live in R01.
		EASA / (Raffaele Iovinella): the IMRBPB can now vote for the approval of the CIP EASA 2024-01_R01.
		CIP accepted, as amended, as IP 214.
	E	**CIP EASA 2024-02 – System analysis and relation with inhibited functions**
		EASA / (Luca Tosini) briefed the meeting on CIP EASA 2024-02.
		TCCA / (Jeff Phipps): the wording in the brackets seems confusing. We propose the following instead: *"including inhibiting functions and warning functions that may be inhibited".* EASA / (Raffaele Iovinella): the recommendation is not referring explicitly to warning functions intentionally. Especially, excluding the term warning, as it is misleading between the certification understanding and the MRB interpretation. EASA would suggest avoiding the term “warning”. In addition, We would prefer not to modify the recommendation, which is referring to “functions that may be inhibited”, beyond alerting functions. Adding the term “alerting” would reduce the scope of the intention of the CIP. TCCA / (Jeff Phipps): understood; nevertheless, we need to find better verbiage here. AeroTechna / (Leonard Beauchemin): are we talking about "automatic inhibiting functions"? EASA / (Raffaele Iovinella): indeed we are. The CIP starting point are incident/accident reports, that highlighted the need for doing something. Airbus / (Oliver Weiss): the CIP does not aim to change the definition of hidden vs. evident, does it? EASA / (Dominique Dumortier): No it doesn’t. It is a very similar issue to the one faced related to the "protective functions". Could be easier to handle it few paragraphs before. TCCA / (Jeff Phipps): having a look to the problem statement, it looks very difficult to fully understand it. Impossible to analyze unknown functions.

Leonardo Helicopters / (Giacomo Gibilisco): the examples used in the CIP do not help the RMPIG to really understand the CIP intent, because it considers a “human error action” which is not currently under MSG-3 philosophy.
Azul / (Osvaldo Da Silva): we are talking about purely software functions here; they should be covered by the certification process.
EASA / (Raffaele Iovinella): thank you all for the valuable comments. EASA has indeed to re-work the CIP to make it easier to better understand both the Issue and the Problem.

CIP EASA 2024-02 returned to submitter for re-work. Represent in 2025.

F **CIP EASA 2024-04 – Clarification of “Internal” and “External”**

EASA / (Luca Tosini) briefed the meeting on CIP EASA 2024-04_R01. The original CIP has been revised overnight to implement some comments following the yesterday Regulators caucus.

TCCA / (Jeff Phipps): do we really need “Definition and Identification” in paragraph 4.3.2 ?
Airbus / (Jan Huelsmann): at the STR WG level, we have difficulties in understanding the problem as stated in the EASA CIP with particular reference to the mentioned “not standard practice”.
Leonardo Helicopters / (Giacomo Gibilisco): we may think to simply add “if applicable” to the PPH templates.
Wisk / (Dither Flores): we at Wisk are currently creating a new PPH and we would like to follow the template if we agree today to a change. Furthermore, we can push back on things which are not applicable but have to go through the process.
Boeing / (Jeff Miller): Boeing already uses the concept, and it seems the paragraph 4.9.6 is not applicable.
EASA / (Luca Tosini): surprised by all these comments. Need for having feedback from the CIP originator regarding the reference to "rating tables".
EASA / (Raffaele Iovinella): EASA recognizes that the CIP is not mature enough; we need to work on a better definition of the Problem. EASA confirm the decision to withdraw the CIP.

EASA would like to withdraw this CIP EASA 2024-04.

G **CIP EASA 2024-05 – Consideration of static discharging function at MSI selection level**

EASA / (Luca Tosini) briefed the meeting on CIP EASA 2024-05.

AeroTechna / (Leonard Beauchemin): are the static dischargers analyzed only in the System analysis per MSG-3 guidelines?

		EASA / (Luca Tosini): no, they aren't. That is precisely the issue, typically static dischargers are not analyzed as part of the MSG-3 Systems analysis, hence the CIP that recommends considering them in the MSI selection phase. CAAS / (Gerald Hock Guan): maybe the reference to the static dischargers could appear somewhere else in the analyses. EASA / (Raffaele Iovinella): we would like to propose an easy solution to the problem. TCCA / (Jeff Phipps): can EASA confirm the proposed retroactivity of the CIP? TCCA is not sharing the proposal for a retroactive CIP. Airbus / (Jan Huelsmann): why the proposed modification is pointing to the Note related to SSI/Other Structure? Does any OEMs consider a static wick as structure? EASA / (Raffaele Iovinella): good point, we may find a better place in the MSG-3 document. Nevertheless, considering the nature of comments received by the IMRBPB, EASA recognizes that the CIP is not mature enough; we need to work on a better definition of the Problem, as well as a better formalization of the Recommendations. EASA confirm the decision to withdraw the CIP.
		EASA would like to withdraw this CIP EASA 2024-05.
		Meeting adjourned.

		DAY 4 (16th May 2023)
Item		**Discussion / Disposition / Action Item**
7b		**Feedback from IMRBPB Regulatory Caucus - Part 2**
	ii.	Discussion Topic 5 "Rotorcraft IP 44"
		EASA / (Raffaele Iovinella): the IMRBPB has no objection to the RMPIG proposal, please proceed making a proposal for additional wordings in the IMPS and it will be considered for future implementation. The Policy Board recommends improving the communication between the RMPIG and the MPIG to prevent duplication of issues submitted to the IMRBPB attention.
	iii.	Discussion Topic 1 "MSG-3 to MSG-4 transition – Industry's proposal"
		TCCA / (Jeff Phipps): we know Industry strategy is to start from what we have now (MSG-3) and "adding modules" with the final intent to produce MSG-4. The milestone is an important factor here, example: as you develop MSG-4 you need to allow its application to any of the different type-certified aircrafts, and we need for sure additional guidelines in the IMPS on how to manage the situation. There are critical factors that really need to be considered in the proper way (e.g. run MSG-4 for manufacturer recommended maintenance without an MRB/MTB process in place). The Regulators need a significant amount of time to do a though review of the MSG-4 document. Based on these comments, the roadmap shown does not account any of those implications, and it must consider them instead. We really need a realistic and comprehensive roadmap for the transition from MSG-3 to MSG-4. A4A / (Kevin Berger): we welcome Regulators and Policy Board members to identify any area of improvement for MSG-4. We understand the progressive approach is not the preferred way to go. We want to highlight it is not an Industry only exercise, we need to ensure the proper synergy between Industry and Regulators. EASA / (Raffaele Iovinella): there are already Regulatory representatives identified as members in the MSG-4 WG, we will continue to support. We may re-think the setup of the activity and the level of cooperation, as well as a better definition of the role and responsibility of the Regulatory members. You have EASA commitment that we will continue to support, we encourage the other Policy Board members to support in accordance with their possibilities. A4A / (Kevin Berger): we as Industry believe that reporting the MSG-4 WG progress to the IMRBPB community only at the opportunity of the IAMs is not enough. We request the opportunity to present updates in dedicated agenda slots also during other official IMRBPB meetings, such as the IIMs. EASA / (Raffaele Iovinella): the IMRBPB Leadership team is absolutely in favor to provide slot during IIMs and IMMs, if needed. The current "IMRBPB –

MPIG – RMPIG Activities and Communication Procedure" already considers the Industry participation to the IIM meetings.
TCCA / (Jeff Phipps): this highlights once more how a realistic and comprehensive roadmap is important. Following the closure of this IAM'24, I am going to debrief TCCA at the highest level, trying to pass the message that this MSG-4 is a very important milestone and to ensure TCCA active participation to the activity.
EASA / (Raffaele Iovinella): we are unsure how the future looks like. Things are evolving fast and we do not always have a clear picture of the regulatory framework (e.g. AI regulation), therefore the ability to compliment updates to regulations becomes necessary.

Action Item 2024-03: To complete the transition from MSG-3 to MSG-4, based on the following conditions:

1. **to keep MSG-3 alive as long as needed, i.e. until we are ready to switch to MSG-4 and to discontinue MSG-3.**
2. **MPIG/RMPIG to clearly define what is MSG-4.**
3. **to assess the impact on existing fleets whose MRBR are based on MSG-3.**
4. **to perform a risk assessment for the transition.**
5. **to represent the timeline/roadmap for implementation, maybe open-ended with milestones set in-between.**

Action Owner: MPIG/RMPIG
Due Date: TBD

9 In Depth Review of Industry CIPs

H CIP IND 2018-03_R02 – "Other Structure" procedure update

Airbus / (Jan Huelsmann) briefed the meeting on CIP IND 2018-03_R02. This CIP has been discussed the first time in IAM'21 (virtual) and it has been returned to submitter for re-work. Not discussed in IAM'22 (virtual). It has been then discussed as R01 in IAM'23 and it has been once again returned to submitter for re-work.

EASA / (Raffaele Iovinella): the Industry STR WG states that the CIP R02 content has been already agreed by EASA. When precisely did EASA agree on the CIP in subject? The EASA team never provides formal concurrence or agreement during Industry WGs mainly because we participate to such meetings as advisors only. The formal EASA position on IMRBPB matters is provided just during IMRBPB meetings.
Airbus / (Jan Huelsmann): the CIP as presented now has been shared with EASA before the official distribution to the IMRBPB. The Industry STR WG understanding is that EASA agreed on the CIP.

		EASA / (Raffaele Iovinella): to pre-agree is not what EASA is doing or required to do when participating to any of the active Industry WGs. The fact that EASA is supporting the WG does not mean that EASA is endorsing the WG decision prior to the IMRBPB meeting. We really need to make it extremely clear. A4A / (Kevin Berger): the Industry acknowledges the point raised by EASA. EASA / (Raffaele Iovinella): back to the technical evaluation of the CIP IND 2018-03_R02, EASA considers that it is an improvement compared to the R01 version. The basic idea is supported by EASA. There is still a fundamental problem: the recommendation moves the "Other Structure" responsibility from the Structural WG (where it should belong) to the Zonal WG instead. EASA recommends moving the proposed additional steps of the flowchart from the main SSI flowchart to the sub-flowchart "Other Structures analysis", in other words to amend 2.4.4.2 instead of the proposed 2.4.4.1. Furthermore, with reference to the layout of the diagram in MSG-3, we need to implement the arrows that are needed and ensure not to misunderstand the decisional flow. It is also a matter of timely analysis: for an initial MRBR, zonal MSG-3 analysis comes logically at the end of the process in order to ensure the proper traceability of the transferred tasks from systems and structure analysis. EASA / (Luca Tosini): the EASA proposal to amend 2.4.4.2 instead of 2.4.4.1 aims to make always possible from a Structure WG perspective to allow the flowchart step P5. TCCA / (Jeff Phipps): TCCA agrees with the EASA proposal, please identify the proper location in the flowchart where the modification should be placed. Boeing / (Jeff Miller): formally MSG-3 does not require to have the list of Other Structure. TCCA / (Jeff Phipps): if the OEM is not listing what is Other Structure but is analyzing Other Structure, then we can think to amend the wording in P4. EASA / (Raffaele Iovinella): Other Structures are there for a reason, so P4 should be duly completed. It is a matter of coordination between Structure WG and Zonal WG. We need to find the way to ensure the proper coordination. EASA / (Dominique Dumortier): looking at the CIP it is completely in line with the MSG-3 logic; SSI selection comes first, then select the SSIs and after that the Other Structure.
		CIP IND 2018-03_R02 returned to submitter for re-work. Represent in 2025.
	I	**CIP IND 2018-04_R04 – SSI selection and analysis organization guideline**
		Airbus / (Jan Huelsmann) briefed the meeting on CIP IND 2018-04_R04. This CIP has been discussed the first time in IAM'19 (face-to-face meeting) with the recommendation to work on a R01. The new revision has been presented in IAM'21 (virtual) and it has been returned to submitter for re-work. Then it has been re-presented as R02 during IAM'22 (virtual) with the same result, and once again as R03 in IAM'23 (face-to-face meeting) with the same result again.

A4A / (Kevin Berger): the Part A of the CIP is very much linked to the ongoing activity related to SSI definition and its roadmap, whereas the Part B has been somehow already agreed by the IMRBPB during IAM'23. Therefore, the Industry proposes to split the CIP in 2 parts, one related to Part A and the other one related to Part B. So it is proposed to delete from the CIP 2018-04 any reference to Part A, keeping just the Part B into it.
EASA / (Raffaele Iovinella): The Appendix of the IMPS has to be created (ref. to the AI 2023-06). EASA has still one comment to the Part B: we suggest ensuring that the terminology used as "CIC" (Corrosion Inhibiting Compound) it is a generic term (e.g. "TPIS") , well understood by the Industry in general and it is not identified as peculiar to some TCHs only.
Airbus / (Jan Huelsmann): in Airbus, the TPIS is a subset of CIC, so no problem from Airbus side.

CIP IND 2018-04 is reworked live in R05: title is revised; any reference to Part A is deleted; a Note is added in the "Problem" field to track the history of changes to the CIP.

EASA / (Raffaele Iovinella): the IMRBPB can now vote for the approval of the CIP IND 2018-04_R05.

CIP accepted, as amended, as IP 215.

K **CIP MPIG 2023-03 – Clarifying the definition of Lubrication and Servicing**

COMAC / (Yiping WANG) briefed the meeting on CIP MPIG 2023-03.

EASA / (Raffaele Iovinella): very welcome CIP, supported by EASA. We have problems anyway: the proposed Note is mixing SVC and VCK, that are 2 different task types in MSG-3; furthermore, the VCK is applicable only for hidden failure effect category route 8 and 9. Then, VCK comes after the selection of SVC per the MSG-3 analysis Level 2 logic.
AeroTechna / (Leonard Beauchemin): the proposed Note is there just to provide better understanding and clarification.
EASA / (Dominique Dumortier): the Note is proposed for a paragraph pertinent to all failure effect categories, but VCK is applicable for hidden categories only. MSG-3 philosophy is clear, LUB and SVC are there to reduce at least the rate of degradation; the recommendation is always to have a look to the purpose of the task per MSG-3 logic, not stay focused on the task description only: e.g. VCK of the fluid level is properly selected if it is intended to be a failure finding task; if it is selected to ensure that there is still enough fluid to perform the function, then a SVC should be selected instead.
EASA / (Raffaele Iovinella): that being said, EASA supports the segregation of the two definitions.
A4A / (Kevin Berger): so is it ok if we remove the Note?
EASA / (Raffaele Iovinella): we can refine the proposed definitions a bit.

EASA / (Dominique Dumortier): SVC per MSG-3 logic is not covering every type of servicing, but only those meant to prevent high increase of degradation. I suggest to delete the brackets in the SVC proposed definition. In addition, we can use the applicability & effectiveness criteria table to better word the definition.
EASA / (Raffaele Iovinella): that table is not a good reference from my point of view, it should be reviewed as well before considering it as a reference.
Boeing / (Jeff Miller): agree, e.g. the applicability & effectiveness criteria table refers only to "replenishment" in the LUB task, that is an example that there is room for improvement in that table.
EASA / (Luca Tosini): I suggest keeping segregation between the MSG-3 Glossary and the Applicability & effectiveness criteria table. We should prevent to have definitions in multiple locations of the MSG-3 document.
AeroTechna / (Leonard Beauchemin): we need to be aware not to select a DIS task for a fluid because the fluid is not an “item”.
Airbus / (Jan Huelsmann): with reference to the lubrication definition, I propose to remove the reference to the contact surface: some LUB are made on surfaces/items that are not in contact to something else.
Fed-Ex / (George Weed): why not to apply the same logic as before, so not to specify the purpose of the task in the definition?

CIP MPIG 2023-03 is reworked live in R01.

EASA / (Raffaele Iovinella): the IMRBPB can now vote for the approval of the CIP MPIG 2023-03_R01.

CIP accepted, as amended, as IP 216.

Action Item 2024-05: Following the approval of IP 216, to review the Applicability & Effectiveness Criteria table in MSG-3 Systems analysis:

1. **to segregate "Lubrication" task from "Servicing" task.**
2. **to identify potential room for improvement of the current Applicability & Effectiveness guidelines.**

Action Owner: MPIG/RMPIG
Due Date: IAM 2025

J **CIP MPIG 2023-01 – Enhanced definition of General Visual Inspection (GVI) in the MSG-3 glossary**

AeroTechna / (Leonard Beauchemin) briefed the meeting on CIP MPIG 2023-01.

EASA / (Luca Tosini): please clarify if it is a revision of the one presented last year in IAM’23, or if it is a new CIP.

A4A / (Kevin Berger): it is a new one. Last year it has been presented the CIP IND 2023-01 “Include the use of Remote Visual Inspection” with different title and recommendations. In addition, FAA AC 43.13-1B is the proper reference to the regulatory guidelines mentioned in the presentation.
TCCA / (Jeff Phipps): allow me to summarize the discussions that the Regulators had during our caucus on Tuesday. It is difficult to manage the mixing between MSG-3 and the performance of the work, that is managed at local authority level and always will be. The definition in MSG-3 is there to ensure we are selecting the proper level of inspection. We do not want to bias the working groups passing the message that an SDI has to be selected anytime the use of a drone is envisaged: borescope inspection is a lot different, different inspection criteria to meet. Our definition of GVI should not be adjusted to accommodate means to perform tasks maybe not applicable to any NAA worldwide. We feel the current GVI definition is not set at the proper level. A better question is: are there inspection tools other than a mirror that we need to consider when performing a GVI? Policy vs. definitions: instead of expanding the GVI definition, maybe there is an easier path we can follow, assessment at WG level. We acknowledge the drone can be used as a GVI: in this case we would like the OEM to support that that specific GVI can be performed using the proper tool, not living just at local NAA level the authorization to do so.
AeroTechna / (Leonard Beauchemin): there is no language in the MSG-3 that will enable the use of the remote inspection. Without having the words in MSG-3, we do not have the hook to start the conversation both at local authority level and at MSG-3 WG level.
EASA / (Raffaele Iovinella): the GVI definition is applicable not only for zonal, but for systems as well.
EASA / (Dominique Dumortier): we want to take advantage of the new technology, but the proposal as formulated seems not correct. The WG needs to be able to assess if the proposed tool/method is applicable and effective to perform the task with the intent as set by the MSG-3. In MSG-3 we have different level of inspections, and the drone can provide access to a different level of inspections.
AeroTechna / (Leonard Beauchemin): equivalency between the use of a drone and the mechanic sight has been proven.
EASA / (Raffaele Iovinella): I wonder how this could be proven. Proven by who? Based on what? If we want to use it in MSG-3, we need to have the same discussion at WG level as well. When today we select a GVI we know perfectly what it means, we do not need a task data sheet for the task. The new tool comes with implications at MSG-3 level, those implications have not been properly reviewed in the CIP.
AeroTechna / (Leonard Beauchemin): there are operators that already have received the approval by their NAA to use drones while performing their scheduled maintenance.
EASA / (Raffaele Iovinella): it seems the drones are used mainly for unscheduled inspections and for zonal scheduled inspections. Maybe we can think to start from the "Inspection - zonal" definition in the MSG-3 glossary.
A4A / (Kevin Berger): it seems a reasonable proposal.

Airbus / (Oliver Weiss): Airbus uses drones for unscheduled maintenance, we try to find the way to go for scheduled inspections too. The tool selection should not pertain to the perimeter of MSG-3 analysis.
GCAA / (Omar Bumelha): we want to simply update the GVI definition or we should rather think to add a new type of inspection? In order to understand the proper path to follow we need to understand the origin of the GVI first: to touch (hand before eye) to understand if it is a damage or only dirt; then the need for cleaning is a factor too. Maybe it would be better to start working on a new Remote GVI definition.
EASA / (Raffaele Iovinella): we had precisely this conversation last year in IAM'23. That was the initial strategy presented by the Industry in the CIP IND 2023-01.
AeroTechna / (Leonard Beauchemin): following the feedback received by the IAM'23, the decision for the RGVI is really not the way we would like to go.
EASA / (Raffaele Iovinella): then EASA proposes to start from the "Inspection - zonal" definition in the MSG-3 glossary first, then to collect feedback and see if there is room for improvement.
TCCA / (Jeff Phipps): to be able to use of something other than a mirror to perform the GVI is the originating point of the CIP. TCCA agree with the intent of the CIP. In the CIP is missing the supporting methodology to be added in the MSG-3 document, namely the guidelines for the WG on how to consider a drone as an applicable and effective tool to perform the GVI with the intent of the GVI selected; just providing a definition it seems not enough. We should rework the paper, starting from the today discussion, and try to identify the instructions how to improve the guidelines available in MSG-3. The methodology has to be in MSG-3, I do not see any link to the IMPS: policy cannot run MSG-3 analysis.
AeroTechna / (Leonard Beauchemin): the PPH is the document that will encompass the methodology we are looking for. We need a statement of work very clear here, so the WG knows we are pointing to the right direction.
TCCA / (Jeff Phipps): I respectfully disagree: the methodology for such an issue cannot be left at single program level. It needs to be in place in MSG-3 and to be detailed enough.
A4A / (Kevin Berger): summarizing the input received here, we need to ensure that discussion takes place at single WG level; we can start with zonal inspections, as suggested by EASA. I still have a question regarding the reference to the "methodology", can you please clarify?
TCCA / (Jeff Phipps): at zonal analysis level, depending on access, the WG can discuss the most appropriate tooling.
AeroTechna / (Leonard Beauchemin): how the WG will start the conversation without having the policy in PPH?
EASA / (Dominique Dumortier): fundamental element for the WG is to know the tool first, in order to assess the effectiveness of the proposed tool.
A4A / (Kevin Berger): methodology and starting with zonal, giving the WG the possibility to discuss about the tool. Point taken.
TCCA / (Jeff Phipps): as part of the CIP development, if not just for zonal, please consider that there should be some details regarding the impact on MSG-3 and/or IMPS.

		EASA / (Raffaele Iovinella): the original proposal was on drones only, now the proposal is very different, encompassing "visual aids" being drones just only one of those. That was a good starting point. A4A / (Kevin Berger): we do not want to go for a new task type, that should be clear. EASA / (Dominique Dumortier): GVI is used for multiple purposes, including interface with certification (e.g. EZAP): changing the definition may have important implications and we should think about it proactively. TCCA / (Jeff Phipps): we acknowledge the difficulties faced by the Industry trying to introduce the concept. IAM'23 gave good direction, we see good progress in this IAM'24, we are confident we will be able to have a mature CIP ready to discuss in IAM'25.
		CIP MPIG 2023-01 returned to submitter for re-work. Represent in 2025.
O		**CIP MPIG 2023-07 – Harmonization of AHM Terminology in MSG-3 Volume 1**
P		**CIP MPIG 2024-01 – AHM Application Harmonization in MSG-3 Volume 1**
		Collins / (Rhonda Walthall) briefed the meeting on CIP MPIG 2023-07.
		EASA / (Raffaele Iovinella): saying "industry has adopted IAHM as preferred terminology", is it really the case? Collins / (Rhonda Walthall): the only official groups active on the topic are referring to IAHM. EASA / (Raffaele Iovinella): it seems there are not many published documents/standards referring to IAHM today (only 2, SAE and FAA AC). Furthermore, there is a fundamental difference between AHM and IAHM. What we currently do with MSG-3 analysis Level 3 is AHM, not IAHM. TCCA / (Jeff Phipps): the only purpose of this CIP is to mitigate the “explosion” of the acronyms. This is just the first step to have a unified name. EASA / (Raffaele Iovinella): maybe you need to point to an higher level than MSG-3/MRBR. We contribute with AHM to the concept of IAHM, it is just a part of it. EASA / (Luca Tosini): is the intent of the MPIG to analyze to complete IAHM? A4A / (Kevin Berger): indeed, it is. GCAA / (Omar Bumelha): the “integrating management” concept (reactive and proactive) is completely different from “aircraft monitoring” (solely reactive). EASA / (Luca Tosini): is AHM limited to Sensing, Acquisition, Transfer (SAT)? EASA / (Raffaele Iovinella): in the AHM definition in MSG-3 glossary, AHM is Sensing, Acquisition, Transfer, Analysis and Action (SATAA). TCCA / (Jeff Phipps): we already consider the transfer to ground station; data analysis and action is also taken into consideration. FAA / (Rocky Johnson): it seems the IP 180 as approved does support the CIP. EASA / (Raffaele Iovinella): the MSG-3 2022.1 (implementing the IP 180) does not support this interpretation.

		TCCA / (Jeff Phipps): TCCA does not have any standard available either for AHM and IAHM, we rely on our partners EASA and FAA. TCCA does not have any objection to this CIP. FAA / (Rocky Johnson): the FAA AC 43-218 has been developed on the bases of IP 180 as approved. EASA / (Raffaele Iovinella): I suggest to proceed voting.
		Around the table, to collect feedback from all the other IMRBPB members attending the meeting before proceeding:
		GCAA / (Omar Bumelha): we need to understand that this change of acronym does have a big impact on the future way to make maintenance. The result is the introduction of new "actions" that are far from being similar to classic tasks. We need to be aware of the implications as Regulators. If we have assurance from the applicant that there will be no impact, we are ok. Just in case the CIP is approved, will the AHM acronym disappear? TCCA / (Jeff Phipps): not, it will stay in the industry world. HK CAD / (Eric Cheung): as TCCA, in Hong Kong we are following our partners EASA and FAA. If the intent of AHM and IAHM are exactly the same we have no problem, but up to now we are not sure. Just renaming AHM into IAHM as proposed by the CIP does not seem enough. The question that we have is: are the 2 concepts of AHM and IAHM the same? Collins / (Rhonda Walthall): no, they are not the same. IAHM is integration of many things, including e.g. SHM. JCAB / (Masao Yoshida): need to take the topic back home to better understand it, we do not have enough elements to make a decision today. CAAS / (Gerald Poh): the paper can be improved; we see the need to highlight at least the differences between monitoring and management. CAAC / (Jin Wang): I remember we talked about AHM several times. We cannot decide here the definition of the term. The proposal needs to be coordinated with other Regulatory colleagues outside this MRB forum, there are potential implications that have to be understood. UK CAA / (Emma McCreesh): our position is in line with the EASA one. AHM and IAHM are not interchangeable concepts.
		The Policy Board decided to discuss the second CIP related to the topic, CIP MPIG 2024-01, to have additional input prior to proceed with a vote on the CIP 2023-07. Collins / (Rhonda Walthall) briefed the meeting on CIP MPIG 2024-01.
		TCCA / (Jeff Phipps): has Mr. Dragos Budeanu from IATA been involved in the development of the concept? Collins / (Rhonda Walthall): yes, he has been involved. Boeing / (Jeff Miller): the specific term "application" should solve the issue, as described. TCCA / (Jeff Phipps): is the change from IAHM to the AHM in the proposed CIP having any implications? EASA / (Dominique Dumortier): task and intervals appear nowhere in the existing MSG-3. I am not against to add but I do not see the need to add.

EASA / (Raffaele Iovinella): AHM is not a "task", it is an "action".
TCCA / (Jeff Phipps): the recommendation does not solve the issue as described. Some rewording is needed here. CIP belongs to the MPIG, so is the MPIG decision to proceed with the CIP?
A4A / (Kevin Berger): the MPIG would like to withdraw the CIP MPIG 2024-01.

MPIG would like to withdraw this CIP MPIG 2024-01.

Following the presentation of both the MPIG CIPs related to IAHM, the Policy Board decided to caucus to decide how to proceed.

The final position of the IMRBPB is the following:

- not to proceed with a formal vote among the IMRBPB members;
- to keep the current acronym "AHM" and its MSG-3 definition;
- in the future, if there will be the need to change the MSG-3 analysis methodology, the IMRBPB will consider the re-definition of AHM in IAHM;
- the Policy Board considers the scope of the proposed CIP MPIG 2023-07 more pertinent to the MSG-4 development context.

CIP MPIG 2023-07 rejected.

N **CIP MPIG 2023-06 – Establish Policy related to the TCH MRBR ICA's and Vendor/Supplier CMM's**

AeroTechna / (Leonard Beauchemin) briefed the meeting on CIP MPIG 2023-06.

EASA / (Raffaele Iovinella): EASA supports the CIP. We have few comments though: first, we think the modification in paragraph 9.2 is not necessary, it has been introduced by IP 192; second, we suggest changing the location of the proposal, we think it would be better to introduce a new paragraph 3.8.#
AeroTechna / (Leonard Beauchemin): the IP 192 purpose is different from the current one proposed: IP 192 focus on intervals only, this CIP focus on the remaining part.
EASA / (Dominique Dumortier): personally speaking, I am not sure that the proposal pertains to the scope of the MRB process.

CIP MPIG 2023-06 is reworked live in R01.

EASA / (Raffaele Iovinella): the IMRBPB can now vote for the approval of the CIP MPIG 2023-06_R01.

CIP accepted, as amended, as IP 217.

	Q	**CIP MPIG 2024-03 – Use of IP44 Evolution process for MTB based Maintenance programs**
		A4A / (Kevin Berger) briefed the meeting on CIP MPIG 2024-03.
		EASA / (Raffaele Iovinella): the only EASA objection is related to the dynamics of optimization review/approval meetings, as they run in the MRBR. The input from operators is extremely valuable, and we know that an MTB process run without operators participation per definition. Maybe some details can be added in the PPH, to open the door to have operators attending the meetings, even if stays an MTB. It is just a minor comment, not requiring further action. EASA / (Dominique Dumortier): I do not envisage any need to have any update in the IMPS, the current IMPS is clear with reference to MTB perspective.
		EASA / (Raffaele Iovinella): the IMRBPB can now vote for the approval of the CIP MPIG 2024-03.
		CIP accepted, as IP 218.
	R	**CIP RMPIG 2024-02 – AC Zones, include S1000D as option to iSpec2200**
		Leonardo Helicopters / (Giacomo Gibilisco) briefed the meeting on CIP RMPIG 2024-02.
		EASA / (Raffaele Iovinella): I suggest elaborating the proposal for the addition of the new reference document in "Annex 1. References".
		CIP RMPIG 2024-02 is reworked live in R01.
		EASA / (Raffaele Iovinella): the IMRBPB can now vote for the approval of the CIP RMPIG 2024-02_R01.
		CIP accepted, as amended, as IP 219.
		Meeting adjourned.

		DAY 5 (17th May 2024)
Item		**Discussion / Disposition / Action Item**
10		**Discussion Topics - Part 2**
	10	AI 2023-03 - Tasks to maintain integrity of systems such as FDR/CVR, ULB and ELT
		TCCA / (Jeff Phipps) – introduced the topic supported by a presentation.
		EASA / (Raffaele Iovinella): EASA supports the Option 1. EASA asks the EU operators to have those requirements into their AMP, together with other requirements. The guidance material is published, available in the EASA website. This approach is valid for all the EU NAAs. AeroTechna / (Leonard Beauchemin): Option 1 is as well the preferred one. There are multiple sources outside the MRB report (but including it already). A4A / (Kevin Berger): on behalf of A4A members, A4A recommends acknowledging the ICAO contact from the dedicated ICAO working group before making any choice. TCCA / (Jeff Phipps): it is all a matter of compliance. The Policy Board does not need to wait for updating to ICAO SARPs. If amended and/or updated, that will follow under the NAA compliance. The Options 2 and 3 in the presentation have been proposed as possible solutions in case Option 1 would not have been selected. A4A / (Kevin Berger): the NAA must have the correct understanding about the bullet 2 under Option 1. TCCA / (Jeff Phipps): NAA can be either compliant or filed with differences. We need to have a documented position, that we are not going to change the analysis to accommodate ICAO requirements. EASA / (Raffaele Iovinella): in the EASA regulatory framework, those are operational requirements (controlled by operations regulation). Boeing / (Jeff Miller): Boeing prefers Option 2. It seems those systems are analyzed normally; we need to consider them under the provisions for safety systems or equipment. TCCA / (Jeff Phipps): Option 2 objective is just ensuring that the MSI selection and the MSG-3 analysis provide proper guidelines to the WG how to approach such systems. EASA / (Dominique Dumortier): MSG-3 today definition is a bit limited. Those features have to be properly analyzed and maintained. MSG-3 would require enlarging the bases of the definition of "safety". TCCA / (Jeff Phipps): MSG-4 should definitely put an eye on that, it is a tremendous opportunity. Maybe an IMPS point? GCAA / (Omar Bumelha): at NAA level, we have to be ICAO compliant. However, the AMPs are going under optimization, therefore the operations have to ask for a waiver. In addition, from the Policy Board point of view, it is a good opportunity to improve taking the opportunity of MSG-4 development. From GCAA point of view it is a good idea to have a

		communication channel open with ICAO, it is our obligation as NAAs members of the IMRBPB to take care of the situation. Therefore Option 3 is the most preferred one for GCAA. FAA / (Rocky Johnson): we had the same identical discussion back in 2019. Operations requirements are in place, as well as normal consolidated practices in operations. FAA has guidelines in place. If we have an opportunity to do something we cannot miss it. A4A / (Kevin Berger): the outcome of Option 3 may not be in line with the NAA requirement. TCCA / (Jeff Phipps): the Option 3 is just there to ensure consistent output, is not to force ICAO compliance. Leonardo Helicopters / (Giacomo Gibilisco): FEC 9 is not systematically chosen for such systems/equipment, I have examples of FEC 8 selected instead (at least for ELTs). Option 3 asks for applying the logic. Option 1 is more an NAA-only related topic. Airbus / (Oliver Weiss): Option 1 doesn't look really like an option to me, is rather a "must". TCCA / (Jeff Phipps): TCCA has evidence of many ELTs not working; CVRs not so many in faulty condition, rather not operative. Option 1 will take care by itself. It should not be the driver not to have an improvement. Option 3 is too much work in the frame of the development of future MSG-4. So let's MSG-4 revising the definition of safety. We can go for Option 2 as an interim solution. TCCA can draft a CIP to provide policy functional directions in IMPS. No retroactive impact.
		Action Item 2024-02: To draft a new regulatory CIP, on the bases of the TCCA presentation Option 2 (ref. to AI 2023-03). **Action Owner: TCCA** **Due Date: IAM 2025**
	9	<u>NAA's participation in the MRB, ISC, and/or WG activities</u>
		EASA / (Luca Tosini) – introduced the topic supported by a presentation.
		EASA / (Raffaele Iovinella): NAA participation can be even from remote. Airbus / (Oliver Weiss): Airbus has other NAAs than EASA at the MRB meetings, shows improved efficiency of the process. EASA / (Raffaele Iovinella): NAAs not Policy Board members are always welcome to contact the IMRBPB Leadership Team to attend as observers. On that respect, on behalf of the IMRBPB I would like to thank AACM to be here with us this week to support the IAM'24.
	11	<u>Video links in procedures</u>

		A4A / (Kevin Berger) – introduced the topic supported by a presentation. The topic is not directly linked to the IMRBPB activity, but it is useful to raise awareness. The FAA REG analysis 5300 asked which is the other Regulators position on this.
		FAA / (Rocky Johnson): most of the FAA regulation is aligned with both TCCA and EASA regulation.
	8	<u>SSI definition update – Roadmap</u>
		EASA / (Luca Tosini) – introduced the topic supported by a presentation.
		Leonardo Helicopters / (Giacomo Gibilisco): we surely need to be actively involved as RMPIG in the discussion. There is now a formal involvement of at least one RMPIG member. It can be feasible, not easy, we will work together to make it happen. The original intent of IP 147 has to be preserved. Human occupants for rotorcraft have a different meaning, we know that, and we need to consider it in the frame of the analysis logic. Airbus / (Jan Huelsmann): The STR WG had 3 meetings already. We will ensure RMPIG members are invited and actively involved.
		Action Item 2024-01: EASA to present a CIP related to a new SSI definition, on the bases of the presentation "SSI Definition update-Roadmap" discussed during IAM '24. **Action Owner: EASA** **Due Date: IAM 2025**
	7	<u>Limits of the current L/HIRF methodology with reference to the existence of a zonal task</u>
		EASA / (Luca Tosini) – introduced the topic supported by a presentation.
		EASA / (Raffaele Iovinella): there is an exit ramp that does not consider the important factor of "timely detection of degradation". TCCA / (Jeff Phipps): I agree a formal transfer from L/HIRF to Zonal should be in place. I think there is room for an EASA CIP. AeroTechna / (Leonard Beauchemin): the issue is complex, deserve to be properly managed. The L/HIRF WG is ready to support if necessary. EASA / (Raffaele Iovinella): L/HIRF WG involvement will be very much appreciated. Airbus / (Oliver Weiss): Airbus concurs and looks forward to contribute. FAA / (Rocky Johnson): FAA concurs as well to proceed in the way presented.

Action Item 2024-06: To draft a new L/HIRF regulatory CIP, on the bases of the EASA presentation (ref. to dedicated presentation on IAM '24 DAY 5, agenda item #7).

Action Owner: EASA
Due Date: IAM 2025

6 Presence of decals and their impact on structural inspections

EASA / (Luca Tosini) – introduced the topic supported by a presentation.

AeroTechna / (Leonard Beauchemin): there must be somewhere the tracking of such applications. There are procedures provided by the TCH, but it is a protective coating. It has an impact on the accessibility requirement for the inspections.
GCAA / (Omar Bumelha): when operators request to apply patches, a formal request is submitted to GCAA and an approved Design Organization will run the activity. Not sure if the implications at maintenance level has been properly considered. Things such as weight & balance are surely taken into consideration at Design Organization level instead.
EASA / (Dominique Dumortier): the Design Organization in charge is focusing on the satisfaction of design criteria but seems overlooking the ICAs implications.
GCAA / (Omar Bumelha): we have to ensure that this point is not overlooked.
EASA / (Raffaele Iovinella): EASA have done some research, not always the impact on maintenance is properly evaluated. There is no clear guidance on that respect.
EASA / (Dominique Dumortier): I expect the impact mainly to be at structural degradation level.
AeroTechna / (Leonard Beauchemin): there are paint thickness limitations for exposed surfaces, to ensure visibility of degradation of the structure underneath the paint. I believe that should exist something similar for decals too.
EASA / (Raffaele Iovinella): in some cases decals are applied on the top of the paint.
Airbus / (Jan Huelsmann): I can confirm that is the usual procedure.
AeroTechna / (Leonard Beauchemin): nevertheless, I consider it as out of scope of MRB.
Boeing / (Jeff Miller): in Boeing MRBRs we've recently added an access note in the task. I assume some input has been received from FAA on that respect. It is limited to Zonal Inspection program only.
Airbus / (Jan Huelsmann): Airbus does not apply decals on unprotected structure, but just on the normal protected one. We define maximum thickness of the decals, we apply clear coat on top of them, we limit the size, and we exclude their application on areas prone to fatigue (only where accidental damage can occur, but in this case the damage will be evident).

AeroTechna / (Leonard Beauchemin): we have to segregate decals from wraps. Wrap is a different protective coating with its own protection characteristics that are well defined. Wrap replaces the paint, cannot be put on top of it.
EASA / (Dominique Dumortier): if TCHs have data with reference to investigations related to the topic, it would be very much appreciated if shared with the IMRBPB.
GCAA / (Omar Bumelha): with reference to the EASA proposal for a sentence to put in the MRBR, is GCAA opinion that the proposed statement does not pertain to the MRBR.
EASA / (Raffaele Iovinella): EASA intent with this presentation is just to collect information and acknowledge the IMRBPB; thank you all for the valuable input.

11 **Disposition of CIPs into IPs, IMPS, requests for rework, etc.**

CIP number	CIP title	Disposition
CASA 2024-01_R01	Formalizing the use of acronyms and abbreviations	Accepted, as amended, as **IP 212**
EASA 2023-04_R02	Clarifications on the policy for "off-wing" restoration tasks	Accepted, as amended, as **IP 213**
EASA 2023-08_R01	Removal of not MSG-3 related Steps from the L/HIRF Protection Analysis Methodology and Logic Diagram	Returned to submitter for re-work with the support of the Industry L/HIRF WG. Represent in 2025.
EASA 2024-01_R01	Escalation of tasks with multiple usage parameters	Accepted, as amended, as **IP 214**
EASA 2024-02	System analysis and relation with inhibited functions	Returned to submitter for re-work. Represent in 2025.
EASA 2024-04	Clarification of "Internal" and "External"	Withdrawn by EASA.
EASA 2024-05	Consideration of static discharging function at MSI selection level	Withdrawn by EASA.
IND 2018-03_R02	"Other Structure" procedure update	Returned to submitter for re-work by the Industry Structures WG. Represent in 2025.
IND 2018-04_R05	SSI analysis organization guideline	Accepted, as amended, as **IP 215**

MPIG 2023-01	Enhanced definition of General Visual Inspection (GVI) in the MSG-3 glossary (Overhaul) & Discard Intervals	Returned to submitter for re-work. Represent in 2025.
MPIG 2023-03_R01	Clarifying the definition of Lubrication and Servicing	Accepted, as amended, as **IP 216**
MPIG 2023-04	Definition "Off-aircraft": Clarification of the policy and meaning of "on-aircraft" and "off-aircraft" tasks in the MSG-3 document	Rejected. Incorporated in IP 213.
MPIG 2023-05	Latent use of the term "Overhaul"	Returned to submitter for re-work. Represent in 2025.
MPIG 2023-06_R01	Establish Policy related to the TCH MRBR ICA's and Vendor/Supplier CMM's	Accepted, as amended, as **IP 217**
MPIG 2023-07	Harmonization of AHM Terminology in MSG-3 Volume 1	Rejected.
MPIG 2024-01	AHM Application Harmonization in MSG-3 Volume 1	Withdrawn by MPIG.
MPIG 2024-03	Use of IP44 Evolution process for MTB based Maintenance programs	Accepted as **IP 218**
RMPIG 2024-02_R01	AC Zones, include S1000D as option to iSpec2200	Accepted, as amended, as **IP 219**

12 Final Provisions

i. IMRBPB documentation status and review

- Action Items

6 (six) new action items have been opened during the IAM 2024:

AI number	AI content	AI assigned to	Target Closure Date
AI 2024-01	EASA to present a CIP related to a new SSI definition, on the bases of the presentation "SSI Definition update-Roadmap" discussed during IAM '24.	EASA	IAM 2025

AI 2024-02	To draft a new regulatory CIP, on the bases of the TCCA presentation Option 2 (ref. To AI 2023-03)	TCCA	IAM 2025
AI 2024-03	To complete the transition from MSG-3 to MSG-4, based on the following conditions: 1. To keep MSG-3 alive as long as needed, i.e. until we are ready to switch to MSG-4 and to discontinue MSG-3. 2. MPIG/RMPIG to clearly DEFINE what is MSG-4. 3. To assess the impact on existing fleets whose MRBR are based on MSG-3. 4. To perform a risk assessment for the transition. 5. To represent the timeline/roadmap for implementation, maybe open-ended with milestones set in-between.	MPIG / RMPIG	TBD
AI 2024-04	With reference to the Assurance Plan (or equivalent validation program), each NAA to look into its own guidance materials and available SAE standards, to identify any regulatory requirement to have an assurance plan, and to clarify who in each NAA is the process owner for the control/follow-up of it.	IMRBPB	IIM 2024
AI 2024-05	Following the approval of IP 216, to review the Applicability & Effectiveness Criteria table in MSG-3 Systems analysis: 1. to segregate "Lubrication" task from "Servicing" task. 2. to identify potential room for improvement of the current Applicability & Effectiveness guidelines.	MPIG / RMPIG	IAM 2025
AI 2024-06	To draft a new L/HIRF regulatory CIP, on the bases of the EASA presentation (ref. to dedicated presentation on IAM '24 DAY 5, agenda item #7).	EASA	IAM 2025

The complete list of action items will be made available on the EASA website at the following link:
https://www.easa.europa.eu/en/domains/aircraft-products/international-maintenance-review-board-policy-board-IMRBPB

- Issue Papers Index

EASA / (Luca Tosini) – showed the Issue Paper Index (Rev. May 2024_DRAFT) to the Policy Board. Inclusion of the 8 (eight) new approved IMRBPB IPs.

The approved Issue Paper Index will be made available on the EASA website at the following link:
https://www.easa.europa.eu/en/domains/aircraft-products/international-maintenance-review-board-policy-board-IMRBPB

- Focal Points List

The approved Focal Points List will be made available on the EASA website at the following link:
https://www.easa.europa.eu/en/domains/aircraft-products/international-maintenance-review-board-policy-board-IMRBPB

- Meetings Calendar

EASA / (Raffaele Iovinella) – showed the IMRBPB Meetings Calendar (Rev.17 dated May 2024) to the Policy Board.

The IMRBPB find an agreement, as follows:

- IIM 2024 (virtual) will be hosted by EASA, tentatively the week of December 16-20;
- IAM 2025 will be hosted by GCAA, tentatively the second half of April, proposed location Dubai (UAE), to be confirmed.

The IMRBPB Meetings Calendar updated will be made available on the EASA website at the following link:
https://www.easa.europa.eu/en/domains/aircraft-products/international-maintenance-review-board-policy-board-IMRBPB

ii. Final Remarks – “How did it go?”

MPIG Chairperson - Airbus / (Oliver Weiss):
thank you all for the support on the MSG-4. Good work for the RST topic CIPs. Thanks to COMAC for the work on the LUB-SVC topic CIP. The “overhaul” is definitely a complex issue. L/HIRF had partial agreement having concurred on a step on the right direction: we need to prepare the future. The MPIG need

		more time to understand the background on the Regulators CIPs that are formally submitted to the IMRBPB. The non approval of CIP MPIG 2023-01 (improvement of GVI definition) is our big disappointment, MPIG will work better for IAM'25 to come with a more mature CIP. Very much appreciated the coordination with the Policy Board. We encourage IMRBPB members other than EASA to contribute more actively to the development. It could be discussed the possibility to introduce in the future a statement such as "CIP supported by the Policy Board" for some Industry CIPs.
		Acting RMPIG Chairperson – Leonardo Helicopters / (Giacomo Gibilisco): thank you all. The word "revolution" has been recurrently used during the week: I am glad that we do not forget where we come from, we walk on a well-controlled path.
		MPIG Secretary – A4A / (Kevin Berger): the ability to navigate through disagreements it is an important characteristic of this dynamic group. I encourage anyone participating in this IMRBPB activity to take the opportunity to lead beyond their individual responsibilities.
		IAM 2025 Host – CAAC/ (Jin Wang): thank you all. It has been a pleasure for CAAC to host the IMRBPB meeting this year. It is very important for our Industry to understand the MSG-3 logic, we are glad that many representatives joined the meeting and participated to the discussion.
		IMRBPB Chairperson – EASA / (Raffaele Iovinella): thanks to CAAC for the perfect organization of the meeting and for the very nice atmosphere. Thank you all for the contributions, for the friendship, for the positive spirit. I fully support Kevin's statement, as well as Giacomo's one: more than “a revolution” it is rather “an evolution”. See you all in 2025.
		Meeting Closed