Maintenance Review Board Process (MRB) And Instructions for Continued Airworthiness

Scheduled Maintenance Instructions

EASA - Certification Directorate/Flight Standards
The Maintenance Review Board (MRB) process (with MSG-3 as a tool) is an acceptable means of compliance for developing a maintenance program/ scheduled maintenance instructions as part of the compliance with the ICA.

MSG-3 is an analytical methodology, officially recognized (FAA/TCCA/EASA) based on Reliability Centred Maintenance (RCM).

The MSG-3 logic is owned by ATA. MSG-3 is reviewed and updated by a Maintenance Programs Industry Group (MPIG) and approved through the International MRB Policy Board (IMRBPB), AAs.
European Aviation Safety Agency

Composition and Process

Authorities -> Manufacturer -> MRBR

Manufacturer -> Suppliers

Suppliers -> Engine manufacturer

Output

MRB process

Operators

Accepted as AMC for Certification Specification*

*part of ICA

Starting Basis for OMP PART-M
European Aviation Safety Agency

Composition and Process

MRBR must be approved for EIS

Certification Process

MRB process

At TC, compliance is demonstrated through MRB Process
Not necessarily through MRB- Report
Any new inspection requirements which necessitate quick implementation, can use a **Temporary Revision process**, allowing TR publication in a very short delay.
The Maintenance Review Board Report contains the Minimum Initial Scheduled Maintenance Requirement. The MRB process is a standardized process used as an acceptable means of compliance to develop scheduled maintenance instructions ensuring the objectives of an efficient aircraft maintenance program.
## Requirements

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|                  | Part M.A. 302 |
|                  | => Operator’s OMP |
|                  | (EC 2042/2003 and AMC MA.302) |
European Aviation Safety Agency

NAA approved OMP

Airworthiness Directives
- AD
- MRBR
- ISB/SIL
- ALS
- CatIII/RVSM/ETOPS
- Operator Requirements
- Reliability Program

Inspection Service Bulletins/Service Information Letters
- VR
- NR

Maintenance Review Board Report
- Vendor/OEM Requirements/Recommendations

Special OPS Requirements
- Operator Requirements

Airworthiness Limitation Section
- Competent (National) Airworthiness Authorities Requirements

NAA Approved Operator’s Maintenance Program

CatIII/RVSM/ETOPS

NAA approved OMP
What does the MRB process cover in the ICA requirements 1529?
MRB Conclusions

- How to demonstrate equivalent minimum maintenance requirement and reach similar safety level of a maintenance program without structured and recognized method (e.g. MSG-3)?

- How to support operational requirements and ensure an efficient /cost effective maintenance program without specific tool such as MSG-3?

- On which rationale AA can accept initial maintenance program without structured process and recognized methodology?
Our understanding is that standardized procedures/processes/guidelines should be developed and implemented in order to develop, validate and accept documents ensuring continued airworthiness and safety (1529 requirements).
How does the MRB process fit in the approval/acceptance of ICA?

- How and what parts of the MRB report are integrated in the ICA?
- How do we coordinate the approval/acceptance processes?
- Case of the engine/propellers manufacturers/suppliers in the MRB process
- How can a modification impacting the MRB be approved whereas MRB process is not completed thus does not allow to assess the impact?
Appendix
ICAO 9760 Volume 1 “Airworthiness Manual, Organization and Procedures”

“6.4.3 Content of the maintenance programme

“6.4.3.4 Annex 6, Part I, 11.3 also contains a recommendation that the maintenance programme be based on maintenance programme information made available by the State of Design or by the organization responsible for the type design. For large aeroplanes, this information is normally issued in the form of a maintenance review board report for the particular aircraft type (refer to Volume II of this manual, Part A, Appendix B to Chapter 2 for details of the maintenance review board process). ...”

(c) The maintenance programme **must establish compliance with:**

1. instructions for continuing airworthiness issued by type certificate and supplementary type certificate holders and any other organisation that publishes such data in accordance with Part-21, or

2. instructions issued by the competent authority, if they differ from subparagraph 1 or in the absence of specific recommendations, or

3. instructions defined by the owner or the operator and approved by the competent authority if they differ from subparagraphs 1 and 2.
As a result, and in accordance with AMC M.A.302 (ED 2008/013/R of 12/12/2008):

1. An owner or operator’s maintenance programme should normally be based upon the maintenance review board (MRB) report where applicable, the maintenance planning document (MPD), the relevant chapters of the maintenance manual or any other maintenance data containing information on scheduling. Furthermore, an owner or operator’s maintenance programme should also take into account any maintenance data containing information on scheduling for components.

2. Instructions issued by the competent authority can encompass all types of instructions from a specific task for a particular aircraft to complete recommended maintenance schedules for certain aircraft types that can be used by the owner/operator directly. These instructions may be issued by the competent authority in the following cases:
   - in the absence of specific recommendations of the Type Certificate Holder.
   - to provide alternate instructions to those described in the subparagraph 1 above, with the objective of providing flexibility to the operator.