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Why MPIG exists

» MSG-3 logic is ‘owned’ by Industry. Unusually, although it represents the only practicable means to comply with the Authorities requirements, it is not published in an AC or AMC.

» The Authorities accept this situation on the understanding that Industry ensures that the methodology is kept up to date to reflect new technology and experience derived from the in-service fleet.

» The MSG-3 logic is maintained by the Air Transport Association (ATA) of America (now Airlines for America). It is contained in a document titled ‘ATA MSG-3 – Operator/Manufacturer Scheduled Maintenance Development’.

» ATA have created the ‘Maintenance Programs Industry Group’ (MPIG) to manage the technical content of Volume 1 applicable to fixed wing aircraft. This group comprises representatives from operators, airframe manufacturers and consultants. A similar group (RMPIG) exists to support Volume 2 used for rotorcraft.
MPIG charter & mission

» CHARTER –
» MPIG is a self chartered organization within the disciplines of air carrier maintenance operations and air transportation manufacturers
» It is facilitated by staff of Airlines for America (A4A) formerly Air Transport Association (ATA)
» MPIG is formed to represent air carrier operators and manufacturers in developing:
  » consensus positions on regulatory proposals
  » emerging issues
  » maintaining the integrity of the ATA’s MSG-3 document
  » proposing industry solutions

» MISSION –
» To provide the industry with a ready forum of technical personnel experienced in the development of, management of, and revision to routine scheduled aircraft maintenance programs;
» A forum to propose resolution of associated issues in the best interests of the global air carrier industry, but with an overriding commitment to safety, airworthiness, reliability, and cost efficiency
Scope of MPIG activities

» MPIG was originally set-up to:
  » - maintain ATA’s MSG-3 document, and
  » - interface with the Authorities through their IMRBPB on all matters concerning the MRB Process

» The focus was on scheduled maintenance task development. Candidate Issue Papers (CIP) track each subject through to final approval by the IMRBPB after which they are published as Issue Papers.

» In 2015, the decision was taken to extend the scope of MPIG to include any issue impacting control and implementation of scheduled maintenance. This increases the relevance of MPIG discussions to operator members.

» MPIG Agreed Positions (MAP) track each extended scope subject. After agreement within MPIG, these are published on MPIG website for use by any Industry member. The IMRBPB are not involved with MAP development.
Expectations of MPIG members

» The MPIG welcomes individuals and organizations to:

» **participate** in a forum which brings manufacturers, airlines and regulatory authorities together
» **collaborate** to resolve existing and emerging maintenance program issues
» **represent** their company and be heard
» **be part** of our industry’s commitment to safety, airworthiness, reliability and the establishment of cost efficient maintenance programs

MPIG members do not need to belong to organisations that are members of A4A
Membership is open to any individual that has the necessary skills and is prepared to participate in on-line and face-to-face meetings
Skill & knowledge requirements

» MPIG is primarily responsible for the MSG-3 logic that is used to develop a minimum set of scheduled maintenance requirements. There are four distinct processes, each of which requires specialist knowledge – Systems/Powerplant, Structure, Zonal and Lightning/HIRF

» While Manufacturers bring to the table their knowledge of aircraft design & new technologies, it is the operators who must confirm that changes introduced in the logic will result in tasks that are practicable in the field

» MPIG members should have a good knowledge of maintenance program management and experience of task selection based on applicability and effectiveness criteria. Individual members are not expected to have the same level of knowledge across all disciplines

» MPIG may create specialist Working Groups to address complex changes to MSG-3. MPIG members generally identify subject matter experts from within their organisations to staff these Groups.
## List of Active MPIG Members

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<th>Airlines:</th>
<th>TCHs:</th>
<th>Consultants &amp; Others:</th>
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<tr>
<td>United Airlines</td>
<td>328 Support Services (Dornier TCH)</td>
<td>Aeronovo</td>
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<tr>
<td>American Airlines</td>
<td>Airbus</td>
<td>Aerotechna Solutions</td>
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<td>Republic Airways</td>
<td>Airbus Defense &amp; Space</td>
<td>Go By Air LLC</td>
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<td>FedEx</td>
<td>BAE Systems</td>
<td>iAccess Technologies</td>
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<td>UPS</td>
<td>Boeing</td>
<td>Intergraph Government Solutions</td>
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<td>Southwest Airlines</td>
<td>Bombardier</td>
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<td>COMAC</td>
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<td>All Nippon Airways</td>
<td>Dassault</td>
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<td>Virgin Galactic</td>
<td>The Spaceship Company</td>
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Meeting schedule

» MPIG meets face-to-face twice a year:

  » One dedicated meeting hosted by either Airline or TCH at their facility
    » Typically held end of October each year

  » One meeting combined with the International Maintenance Review Board Policy board (IMRBPB)
    » These meetings are hosted by one of the participating regulatory authorities and are held annually in April

» MPIG holds monthly 2 hour web / telecom calls to keep the industry updated on the ongoing issues
Overview of the IMRBPB

The International MRB Policy Board was established in Nov 1994, initially involving FAA, JAA and TCCA.

It has a goal to develop policies, procedures and guidance for the use of personnel operating under the purview of various MRBs.

In addition to promoting harmonization with other authorities, the IMRBPB advocates the standardization of MRB policy and procedures. To this end, an International MRB Process Standard (IMPS) was finalized in April 2016

The IMRBPB provides a structured forum for discussions leading to the development of national and international policy regarding all MRB activities

The current IMRBPB comprises 9 Authorities:

Federal Aviation Administration (FAA), European Aviation Safety Agency (EASA),
National Civil Aviation Agency – Brazil (ANAC),
Civil Aviation Authority of Singapore (CAAS),
Civil Aviation Administration of China (CAAC)

Transport Canada Civil Aviation (TCCA),
Hong Kong Civil Aviation Department (HKCAD),
Japan Civil Aviation Bureau (JCAB),
Civil Aviation Safety Authority Australia (CASA)
Examples of issues already discussed

IP092: Introduction of Structure Health Monitoring (SHM) into MSG-3
IP093: Scheduled Maintenance Data Standard
IP119: Corrosion Level definitions
IP129: Revised methodology for analysis of L/HIRF protection
IP143: Definition of Visual Check
IP131: Failure Effect Condition (FEC) 8 without tasks
IP150: Consideration of non-MSG-3 tasks in the MRB Report
IP152: Applicability & Effectiveness Criteria
IP153: Approval status of MRB Report Appendices
Examples of issues under discussion

CIP (impacting MSG-3 or IMPS documents)
- Scope of Fatigue Damage analysis in MSG-3
- Harmonised approach to handling of loose equipment required only to meet operational regulations
- Taking credit within MSG-3 for Aircraft Health Monitoring capabilities
- Harmonise approach to defining MRBR content of Workshop tasks
- CCMR appendix to MRB Reports

MPIG Agreed Positions (MAP)
- Terminology conflict between off-aircraft MSG-3 tasks and Form 1 / 8130-3
- Calendar tasks due date after maintenance
Issue Paper format

» Candidate Issue Papers (CIP) may be submitted either through a regulatory agency or through MPIG
  » The template is provided on the EASA web site and must be used for the CIP submission
  » Any MPIG member can submit a CIP for discussion within MPIG
  » An IP Number will be allocated when the CIP is first discussed during the IMRBPB meeting

» In order to close an IP, all IMRBPB members must agree on the IMRBPB position mentioned on the IP

» MSG-3 and IMPS will in future be revised every 3 years. Industry will be permitted to comply with IPs agreed by the IMRBPB prior to their introduction in these documents.

All closed Issue Papers are located on the PB website:

Who to contact?

**Mark Lopez**  
Secretary, Maintenance Programs Industry Group  
*Director, Technical Operations*  
Airlines for America  
Office: 1 202-626-4213  
Email: mlopez@airlines.org

» Website: [http://www.airlines.org](http://www.airlines.org)

**Tony Harbottle**  
Chair, Maintenance Programs Industry Group  
*Manager – Industry Interface*  
Airbus Maintenance Programs Engineering  
Office: 0044 1179 367496  
Email: tony.harbottle@airbus.com

**Mark Coile**  
Vice-Chair, Maintenance Programs Industry Group  
*Manager, Maintenance Programs*  
UPS Airlines  
Office: +1 502-329-6026  
Email: mcoile@ups.com
Concluding message

What works well today:

» MPIG has good participation from manufacturers and consultants at both face-to-face and net meetings
» Though challenging, most manufacturers and consultants also attend the International Policy Board meetings despite their distant venues
» MPIG reviews, seeks consensus and dispositions Industry & Regulatory Issue Papers that lead to changes to the MSG-3 document and / or MRB Process. Note: Each Issue Paper and/or change to the MSG-3 document may have an effect on an operator’s Maintenance Program, even if it is not immediate

What we would like to do better:

» Improve our effectiveness around Operator related issues, such as reliability, environmental and cost efficiency of aircraft maintenance
» Increase Operator participation at our forums – both MPIG & MPIG WG – particularly from outside North America