



Transport
Canada

Transports
Canada



TP 13850E
(07/2026)

Scheduled Maintenance Instruction Development Processes Manual

Edition 2

July 2026

TC - 1001623

Canada 

© His Majesty the King in Right of Canada, as represented by the Minister of Transport, 2026.

Permission is granted by the Department of Transport, Canada, to copy and/or reproduce the contents of this publication in whole or in part provided that full acknowledgment is given to the Department of Transport, Canada, and that the material be accurately reproduced. While use of this material has been authorized, the Department of Transport, Canada, shall not be responsible for the manner in which the information is presented, nor for any interpretations thereof.

It may become obsolete in whole or in part at any time without notice.

Cette publication est aussi disponible en français sous le titre: Processus d'élaboration des instructions de maintenance planifiée

TP 13850E (RDIMS 21445581)

TP 13850F (RDIMS 21445584)

ISBN: 98-0-662-49530-7

Cat No.: T52-4/296-2026E-PDF

TC-1001623

FOREWORD

This manual has been prepared for the aviation industry and Transport Canada Civil Aviation (TCCA) personnel. It contains information regarding the policy, procedures and guidelines for developing scheduled maintenance instructions as part of the process for demonstrating compliance with the requirements associated with the Instructions for Continued Airworthiness (ICA) of an aircraft being type certified in Canada or intended to be type certified in Canada.

Original signed by Yvan Chabot for

Jamie-Lee MacDermid
Executive Director,
Standards Branch
Civil Aviation
Transport Canada

Table of contents

FOREWORD	3
1.0 Introduction	5
1.1 Purpose	5
1.2 Applicability	5
1.3 Description of changes.....	5
2.0 References and requirements.....	5
2.1 Reference documents	5
2.2 Cancelled documents.....	6
2.3 Definitions and abbreviations	6
3.0 Background	9
3.1 Development of scheduled maintenance instructions	9
3.2 International Maintenance Review Board Policy Board (IMRBPB).....	9
3.3 International MRB/MTB process Standard (IMPS)	10
4.0 Maintenance instruction development processes	10
5.0 MRB/MTB process and MRBR/MTBR.....	10
5.1 Applicability and MRB/MTB initiation	11
5.2 MRB/MTB general functions	11
5.3 Validation and verification of MRB/MTB-related maintenance tasks and associated procedures .	12
5.4 MRBR/MTBR content and format	12
5.5 Initial MRBR/MTBR approval	12
5.6 Differences from VAs	12
5.7 Publication of the MRBR/MTBR	12
5.8 MRBR/MTBR periodic review	13
5.9 MRBR/MTBR evolution/optimization.....	13
5.10 MRBR/MTBR revisions and Temporary Revisions	13
5.11 Non-approval of proposed MRB/MTB reports or MRBR/MTBR revisions	13
6.0 Aircraft Manufacturer Recommendations (AMR) Process	13
6.1 General.....	13
6.2 Process applicability.....	13
6.3 Validation and verification of maintenance procedures	14
6.4 Scheduled maintenance instruction review and approval.....	14
6.5 Scheduled maintenance instruction publication.....	14
6.6 Scheduled maintenance instructions as a dynamic document	14
7.0 Bilateral Aviation Safety Agreements/Technical Arrangements.....	15
8.0 TCCA roles and responsibilities.....	15
8.1 MRB/MTB process: responsibilities and coordination.....	15
9.0 Information management	15
10.0 Document history.....	16
11.0 Contact us.....	16

1.0 Introduction

1.1 Purpose

- (1) This Technical Publication (TP) provides policy, procedures and guidelines for developing scheduled maintenance instructions as part of a process for showing compliance with the Instructions for Continued Airworthiness (ICA) requirements of aircraft being type certified in Canada or intended to be type certified in Canada.
- (2) The scheduled maintenance instructions will be developed in accordance with either a Maintenance Review Board (MRB) process, a Maintenance Type Board (MTB) process or an aircraft manufacturer's recommendation (AMR) process.
- (3) The scheduled maintenance instructions will be published as a MRB Report (MRBR), MTB Report (MTBR) or as manufacturers' recommendations and, as such, will be included within an aircraft ICA. These scheduled maintenance instructions form the basis of an aircraft maintenance schedule, required by *Canadian Aviation Regulations* (CAR) 605.86.

1.2 Applicability

- (1) This TP has been prepared for use by the aviation industry and Transport Canada Civil Aviation (TCCA) personnel.
- (2) This document is referenced in Standard 625 Appendix E – Maintenance Instruction Development Process, pursuant to Standard 625.86 and CAR 605.86.

1.3 Description of changes

- (1) This document has been extensively edited and reformatted since the issuance of the original issue – June 26, 2003; changes occur throughout this new Edition.

2.0 References and requirements

2.1 Reference documents

- (1) It is intended that the following reference materials be used in conjunction with this document:
 - (a) Part I, Subpart 1 of the *Canadian Aviation Regulations* (CARs) — Interpretation;
 - (b) Subpart 521 of the CARs — Approval of the Type Design or Changes to the Type Design of an Aeronautical Product;
 - (c) Subpart 605 of the CARs — Aircraft Requirements;
 - (d) Standard 625 of the CARs — Aircraft Equipment and Maintenance;
 - (e) Chapter 523 of the AWM — Normal, Utility, Aerobatic and Commuter Category Aeroplanes;
 - (f) Chapter 525 of the AWM — Transport Category Aeroplanes;
 - (g) Chapter 527 of the AWM — Normal Category Rotorcraft;
 - (h) Chapter 529 of the AWM — Transport Category Rotorcraft;
 - (i) Advisory Circular (AC) 500-016 — Establishing the Certification Basis of Changed Aeronautical Products;
 - (j) AC 500-015 — Certification Plans;

- (k) AC 521-002 — Type Certification Requirements of Aircraft, Engines and Propellers;
- (l) AC 521-004 — Changes to the type design of an aeronautical product;
- (m) AC 521-005 — Supplemental Type Certificates;
- (n) AC 521-011 — Foreign Aeronautical Products;
- (o) Staff Instruction (SI) 521-002 — Type Certification of Aeronautical Products;
- (p) SI 521-004 — Changes to the Type Design of an Aeronautical Product;
- (q) SI 521-005 — Supplemental Type Certificate;
- (r) SI 521-011 — Foreign Aeronautical Products;
- (s) TP 14331— Enhanced Zonal Analysis Procedures;
- (t) [International Agreements and Arrangements](#);
- (u) European Union Aviation Safety Agency EASA - [International Maintenance Review Board Policy Board \(IMRBPB\)](#);
- (v) EASA CM-MRB-001 — [Maintenance Review Board Report / Maintenance Type Board Report Development process](#);
- (w) Federal Aviation Administration (FAA) AC 121-22() — Maintenance Review Boards, Maintenance Type Boards, and Original Equipment Manufacturer/Type Certificate Holder Recommended Maintenance Procedures;
- (x) [Airlines for America](#) (A4A) (formerly Air Transport Association of America (ATA)) MSG-3: Operator/Manufacturer Scheduled Maintenance Development,
 - (i) Volume 1 – Fixed Wing Aircraft;
 - (ii) Volume 2 – Rotorcraft.

2.2 Cancelled documents

- (1) As of the effective date of this document, the following documents are cancelled:
 - (a) Airworthiness Notice (AN) B069 Edition 1, 2003-07-18 — Scheduled Maintenance Instruction Development Processes;
 - (b) Maintenance Staff Instruction (MSI) 23 Revision 1, 2006-05-09 — Maintenance Review Board Procedures, and Manufacturers Recommendations (Reference: TP 13850 – Scheduled Maintenance Instruction Development Process Manual and TP 14331 – Enhanced Zonal Analysis Procedures)
- (2) By default, it is understood that the publication of a new issue of a document automatically renders any earlier issues of the same document null and void.

2.3 Definitions and abbreviations

- (1) The following **definitions** are used in this document:
 - (a) **Aeronautical Product:** an aircraft, aircraft engine, aircraft propeller or aircraft appliance or part, or a component part of any of those things.
 - (b) **Applicant:** means an individual or organization responsible for the design of an aeronautical product, or a representative of such an individual or organization that makes an application for the issuance of or a change to a design approval document in respect of an aeronautical product.

- (c) **Certification Basis:** refers to the applicable standards as established in section 521.157 of the CARs, as appropriate, including any special conditions—airworthiness, findings of equivalent level of safety, and exemptions applicable to the product to be certified.
- (d) **Certification Plan:** a document that clearly identifies the means and methods by which an aeronautical product will be shown to comply with the applicable airworthiness requirements where the airworthiness requirements are identified in the certification basis of the aeronautical product. It is a mandatory document requirement of Sections 521.28 and 521.155 of the CARs. Additional information on certification plans can be found in AC 500-015.
- (e) **Certifying Authority** means the regulatory authority when fulfilling State of Design functions for design approvals in their State.
- (f) **Instructions for Continued Airworthiness (ICA):** instructions and information necessary for the continued airworthiness of the aeronautical product, which must be developed and/or referenced by the design approval document holder in accordance with the applicable certification basis or standard.
- (g) **International MRB/MTB Process Standard (IMPS):** means the international standard developed by the IMRBPB outlining the policies and procedures used during the MRB and MTB processes.
- (h) **Large aircraft:** means an aeroplane having a maximum permissible take-off weight in excess of 5 700 kg (12,566 pounds) or a rotorcraft having a maximum permissible take-off weight in excess of 2 730 kg (6,018 pounds);
- (i) **Maintenance Review Board (MRB) Chairperson:** a certifying authority airworthiness inspector competent in the MRB process who has system/structures training on particular aircraft and has completed Maintenance Steering Group—3rd Task Force (MSG-3) formal training, who is responsible for running the MRB process and approving the MRBR.
- (j) **Maintenance Review Board Report (MRBR):** Contains the initial minimum scheduled maintenance/inspection requirements for a particular aircraft and on-wing engine program but does not establish off-wing engine maintenance programs required by the regulations. The recommendations of a program development group, which is submitted to the aviation regulatory authority's MRB chairperson for approval and thereafter forms the basis on which an operator may establish an aircraft maintenance schedule.
- (k) **Maintenance Schedule:** means a schedule required pursuant to section 605.86 of the CARs for the performance of inspections and other maintenance required by the CARs.
- (l) **Maintenance Steering Group (MSG) 3 Logic:** A logic process published by the maintenance steering group of Airlines for America (A4A) for developing initial scheduled maintenance instructions. This logic process is used by working groups in the analysis of an aircraft's maintenance requirements for the development and publication of a MRB or MTB report.
- (m) **Maintenance Type Board Report (MTBR):** Contains the initial minimum scheduled maintenance/inspection requirements for a particular aircraft and on-wing engine program but does not establish off-wing engine maintenance programs required by the regulations. The recommendations of a program development group, which is submitted to the aviation regulatory authority's MTB chairperson for approval and thereafter forms the basis on which an operator may establish an aircraft maintenance schedule.
- (n) **Scheduled Maintenance Instructions:** means those maintenance actions and inspections performed at set frequencies which are required by the Instructions for Continued Airworthiness (ICA).

- (o) **State of Design:** means the State having jurisdiction over the organization responsible for the type design.
 - (p) **Transport Category Aeroplane:** means an aeroplane certified pursuant to Chapter 525 of the *Airworthiness Manual* or an equivalent foreign airworthiness standard.
 - (q) **Transport Category Helicopter (rotorcraft):** means a helicopter certified pursuant to Chapter 529 of the *Airworthiness Manual* or an equivalent foreign airworthiness standard.
 - (r) **Type Certificate:** means
 - (i) a document, including a type approval issued before October 10, 1996 under section 214 of the Air Regulations, issued by the Minister to certify that the type design of an aircraft, aircraft engine or propeller identified in the document meets the applicable standards for that aeronautical product recorded in the type certificate data sheets, or
 - (ii) a document issued by the foreign airworthiness authority having jurisdiction over the type design of an aeronautical product that is equivalent to a document referred to in paragraph (a) and that has been accepted by the Minister for the purpose of issuing a certificate of airworthiness.
 - (s) **Validating Authority:** means the regulatory authority when fulfilling State of Registry functions for design approvals in their State.
- (2) The following **abbreviations** are used in this document:
- (a) **AC:** Advisory Circular
 - (b) **AEG:** Aircraft Evaluation Group
 - (c) **AMR:** Aircraft Manufacturer's Recommendation
 - (d) **AWM:** Airworthiness Manual
 - (e) **A4A:** Airlines for America
 - (f) **BASA:** Bilateral Aviation Safety Agreement
 - (g) **CA:** Certifying Authority
 - (h) **CAR:** *Canadian Aviation Regulations*
 - (i) **EASA:** European Union Aviation Safety Agency
 - (j) **ICA:** Instructions for Continued Airworthiness
 - (k) **ICAO:** International Civil Aviation Organisation
 - (l) **IMPS:** International MRB/MTB Process Standard
 - (m) **IMRBPB:** International Maintenance Review Board Policy Board
 - (n) **IP:** Issue Paper
 - (o) **ISC:** Industry Steering Committee
 - (p) **MPIG:** Maintenance Program Industry Group
 - (q) **MRB:** Maintenance Review Board
 - (r) **MRBR:** Maintenance Review Board Report
 - (s) **MSG-3:** Maintenance Steering Group - 3rd Task Force
 - (t) **MTB:** Maintenance Type Board
 - (u) **MTBR:** Maintenance Type Board Report
 - (v) **NAA:** National Aviation Authority

- (w) **NAC:** National Aircraft Certification Branch
- (x) **RMPIG:** Rotorcraft Maintenance Program Industry Group
- (y) **SI:** Staff Instruction
- (z) **TCCA:** Transport Canada Civil Aviation
- (aa) **TC:** Type Certificate
- (bb) **TCH:** Type Certificate Holder
- (cc) **TP:** Transport Canada Technical Publication
- (dd) **VA:** Validating Authority

3.0 Background

3.1 Development of scheduled maintenance instructions

- (1) The scheduled maintenance instructions, including maintenance intervals and associated tasks, form part of the ICA requirements for an aircraft that is required as part of the certification basis and are developed by the applicant for or holder of the aircraft Type Certificate (TC) issued pursuant CAR 521.
- (2) The resulting development of scheduled maintenance instructions is either through a MRBR, a MTBR or as aircraft manufacturer recommendations (AMR). The scheduled maintenance instructions form the basis of an approved aircraft maintenance schedule required by CAR 605.86.

3.2 International Maintenance Review Board Policy Board (IMRBPB)

- (1) The IMRBPB is a group formed by National Aviation Authorities (NAAs) for the continuing development of policies, procedures and guidance used in the performance of MRB or MTB processes. In addition to promoting harmonization with other regulatory authorities, the IMRBPB advocates the standardization of MRB policy and procedures by the issuance and/or amendment of the Maintenance Steering Group 3 (MSG-3) logic process and the International MRB/MTB Process Standard (IMPS) document.
- (2) There are currently eleven member NAAs who have signed the IMRBPB charter, for which TCCA is a member: Australia; Brazil; Canada; China; the European Union; Hong Kong (China); Japan; Singapore; the United Arab Emirates, the United Kingdom and the United States of America. TCCA members are from Operational Airworthiness Division, Standards Branch, and also have advisors from the Aircraft Evaluation Group (AEG), National Aircraft Certification (NAC) Branch.
- (3) Industry stakeholders such as aircraft manufacturers and operators participate in the IMRBPB and are represented by the following bodies: Airlines for America (A4A), specifically by the Maintenance Programs Industry Group (MPIG) under the A4A's Airworthiness Committee; the Rotorcraft Maintenance Programs Industry Group (RMPIG) under the Helicopter Association International. Together, the IMRBPB, MPIG and RMPIG discuss issues relating to the MRB/MTB processes and the interpretation/application the MSG-3 logic analysis.
- (4) As part of their standardization and harmonization commitments, the IMRBPB has developed and published an international standard for the MRB/MTB process titled the International MRB/MTB Process Standard (IMPS) document.

3.3 International MRB/MTB process Standard (IMPS)

- (1) The IMPS document was developed and accepted by the IMRBPB members as a standardized approach to be used during the MRB/MTB process and to standardize the development of scheduled maintenance requirements. Certifying Authorities (CA) who are members of the IMRBPB should adopt or reference this standard as part of their documentation framework in order to establish their National Standard. The IMPS document recognizes MSG-3, latest revision valid at the time of TC application, as the minimum standard to be used for the development of an MRBR/MTBR for an applicable new aircraft type. Also, this document has been developed in compliance with the International Civil Aviation Organization (ICAO) MRB requirements, as detailed in the ICAO Airworthiness Manual, Document 9760.
- (2) The IMPS document is normally revised every three years in order to implement new interpretations, processes, and procedures, while not overloading the revision cycle of the NAAs' regulatory framework or creating a burden on aircraft manufacturers. The IMRBPB maintains an Issue Paper (IP) list (affecting the IMPS and MSG-3) and associated documents such as the IMRBPB Charter, meeting information, IMRBPB contact list and communication procedures.
- (3) The IMPS document, IPs and associated documents can be found on the [EASA IMRBPB website](#).

4.0 Maintenance instruction development processes

- (1) Applicants for or holder of a TC in Canada have traditionally developed their scheduled maintenance instructions in accordance with either a MRB process, a MTB process or their own internal analytical processes known as aircraft manufacturer's recommendations (AMR).
- (2) The methods described herein will form part of the certification plan required by CAR 521 to demonstrate compliance to the ICA requirement in AWM 52X.1529 for the aircraft as part of the application for the issuance of or amendment to a TC. Please refer to AC 500-015 for more information on Certification Plans.
- (3) The following methods may be utilized to develop scheduled maintenance instructions:
 - (a) MRB Process;
 - (b) MTB Process; or
 - (c) AMR Process.
- (4) The MRB and MTB processes utilizes the IMPS and MSG-3 analysis to develop scheduled maintenance instructions. The processes have some differences, but both will have participation of TCCA personnel. The end result will be either a MRBR or MTBR approved by TCCA as part of the ICAs for the aircraft being type certified. Further information is found in section 5.0 and 7.0.
- (5) The AMR process utilizes an internal process to the applicant without the involvement of TCCA personnel. The result will be recommended scheduled maintenance instructions which will be reviewed by TCCA and, if found in compliance, will be accepted as part of the ICAs for the aircraft being type certified. Further information on the process is in section 6.0.
- (6) The MRBR, MTBR or AMR will form the basis of an initial aircraft maintenance schedule approval.

5.0 MRB/MTB process and MRBR/MTBR

- (1) As a member of the IMRBPB, TCCA has accepted the IMPS document as its National Standard for the MRB/MTB process, utilizing the MSG-3 logic process, and approving the associated

MTBR/MRBRs. The policies and procedures described in this TP shall be read in conjunction with the IMPS document.

- (2) An applicant for an aircraft TC who chooses the MRB/MTB process to develop scheduled maintenance for their product, must follow the latest version of the IMPS document and the policies and procedures in this TP.
- (3) An applicant should always use the latest revision of the MSG-3 published at the date of the application for a new TC. Deviations may be agreed at the program level in order to maintain a consistent set of requirements. E.g. when a new series or model is added to an existing TC, changes to existing MSG-3 analysis and MRBR/MTBR requirements may be permitted to follow earlier MSG-3 revisions.

5.1 Applicability and MRB/MTB initiation

- (1) The MRB process is applicable for transport category aeroplanes having a maximum weight of 15,000 KGs (33,000 lbs) or more, and for transport category helicopters certified to carry 10 or more passengers or having a maximum weight of 9,000 KGs (20,000 lbs).
- (2) The MTB process is applicable for all other transport category aeroplanes less than 15,000 KGs (33,000 lbs) or for transport category helicopters certified to carry less than 10 people or less than 9,000 KGs (20,000lbs).

Note: The MTB and MRB processes are similar, except that with the MTB process, one or more of the following conditions exists:

- (a) There is no (or very limited) operator participation; or
- (b) Operator participation is deemed to be inconsistent.
- (3) It is a process consisting of a number of specialists in working groups utilizing the IMPS document to develop and propose initial minimum maintenance / inspection tasks instructions for a specific aircraft type. This process is a joint exercise involving the TC applicant, the certifying authority, air operators, equipment manufacturers and other participating validating authorities.
- (4) For domestic MRB/MTB activities where Canada is the CA, the applicant will send their request to the TCCA Manager of AEG, NAC Branch, at TC.AircraftEvaluationGroup-GroupeEvaluationAeronefs.TC@tc.gc.ca and the manager will convene a Maintenance Review Board and appoint an MRB/MTB chairperson within AEG to manage the MRB/MTB process in accordance with the IMPS document. MRB/MTB members are to be selected by the MRB/MTB Chairperson with the concurrence of the Manager of AEG, NAC Branch.
- (5) For foreign MRB/MTB activities where Canada is the Validating Authority (VA), TCCA AEG will assign a person responsible for the validation. Their involvement will depend on the Bilateral Aviation Safety Agreements (BASA)/Technical Arrangement signed between Canada and the CA as defined in the associated Technical Implementation Procedures (TIP) or Implementation Procedures for Airworthiness (IPA). See section 7.0 of this TP for further details on BASA/Technical Arrangements.
- (6) Where no BASA/Technical Arrangement exists addressing the MRBR/MTBR, a foreign applicant who is seeking, or who is intending to seek a Canadian TC for a new or a derivative aircraft, should inquire as to the TCCA AEG's intention to participate in their MRB/MTB process.
- (7) CA and VA coordination and communication details are covered in the IMPS document.

5.2 MRB/MTB general functions

- (1) Organizational rules (MRB, MTB, Type Certificate Holder (TCH), Industry Steering Committee (ISC), Working Groups) and Policy and Procedures Handbook (PPH) rules are covered in the IMPS document in section 4.0, including the required training for participating MRB members.

5.3 Validation and verification of MRB/MTB-related maintenance tasks and associated procedures

- (1) Task validation is the responsibility of the applicant. The applicant will develop internal instructions and guidelines to enable the validation of all maintenance procedures written to support MRBR/MTBR tasks, and then the applicant must validate those procedures. The objective of the validation is to ensure that the procedure can be performed as written and that the procedure meets the intent of the MRBR/MTBR task.
- (2) Where and when requested by TCCA, the applicant will make available a completed aircraft and the necessary qualified maintenance personnel to demonstrate to TCCA that any particular maintenance procedure can be adequately performed and that the procedure meets the intent of the MRB/MTB task.
- (3) All TCHs for which an MRBR/MTBR has been developed shall maintain records of the analysis performed, in a manner such that TCCA may conduct an audit of the complete initial analytical process, and any subsequent analytical processes, that may lead to an amendment of the initial MRBR/MTBR.
- (4) Where covered under a BASA/Technical Arrangement, refer to its pertinent section for the applicable procedures on validation and verification of MRB/MTB-related maintenance tasks where TCCA is the VA.

5.4 MRBR/MTBR content and format

- (1) Refer to the IMPS document, section 5.0.

5.5 Initial MRBR/MTBR approval

- (1) When the proposed MRBR/MTBR is complete, the ISC Chairperson will forward it to the TC applicant's representative(s) and may invite the TC applicant to discuss the proposal. The TC applicant will then present the proposed MRBR/MTBR to TCCA for approval. Normally, TCCA approval process will be completed within ninety days. Approval by other regulatory authorities will occur concurrently with that of TCCA.
- (2) The MRBR/MTBR must be approved by TCCA prior to becoming available for use by Canadian operators, as must all subsequent revisions, unless done in accordance with a BASA/Technical Arrangement. See section 7.0 of this TP for further details on BASA/Technical Arrangements.
- (3) The MRBR/MTBR is a means of complying in part with the scheduled maintenance instruction requirements of AWM 525 Appendix H, and AWM 529 Appendix A for developing the ICAs, as required by AWM 525.1529 and 529.1529.

5.6 Differences from VAs

- (1) There may be a need to identify differences that are not compatible, acceptable, or applicable to all VAs. When this condition exists, an appendix to the MRBR/MTBR may be used to list these differences, with each appendix being approved by the respective VA.

5.7 Publication of the MRBR/MTBR

- (1) The TC applicant is responsible for publishing and distributing the initial and revised MRBRs as well as any supporting documents.
- (2) When an MRBR/MTBR has been approved, the TCH publishes it as a separate document. The MRBR belongs to the TCH but is approved by an MRB/MTB Chairperson depending on the State of Design of the aircraft.

- (3) Where Canada is the State of Design, no changes may be made to an approved MRBR/MTBR without TCCA permission.

5.8 MRBR/MTBR periodic review

- (1) The MRBR/MTBR is intended to be an up-to-date document. Refer to IMPS document section 9.0 for further information on the periodic review.

5.9 MRBR/MTBR evolution/optimization

- (1) Refer to the IMPS document, Appendix 3, IP44 Evolution.

5.10 MRBR/MTBR revisions and Temporary Revisions

- (1) Revisions to an MRBR/MTBR are a result of the MRBR/MTBR periodic review, and follow the necessary procedures in the IMPS document, including coordination with other participating regulatory authorities.
- (2) Temporary Revisions may be used provided it follows the IMPS document section 4.6.6.1 Temporary Revision Usage. For MRBRs/MTBRs where Canada is the VA, prior TCCA approval is not required, however TCCA shall be notified by the CA or TCH of any Temporary Revisions issued.
- (3) Where covered under BASA/Technical Arrangement, refer to the pertinent section of the applicable for procedures on addressing MRBR/MTBR revisions where TCCA is the VA.

5.11 Non-approval of proposed MRB/MTB reports or MRBR/MTBR revisions

- (1) The TCCA MRB/MTB Chairperson shall notify the TC applicant/holder in writing of the non-approval of the MRBR/MTBR or of any subsequent revision. The letter shall include the specific reason(s) for the non-approval. The TC applicant/holder will notify the ISC Chairperson in writing of such action.

6.0 Aircraft Manufacturer Recommendations (AMR) Process

6.1 General

- (1) Applicants seeking, or intending to seek, Canadian TC of aeroplanes which are less than 5,700 KGs (12,500 Lbs) or helicopters that are to be type certified in the normal category (less than 2,720 KGs (6,000 LBs)) will develop their scheduled maintenance instructions in accordance with the applicant's own internal processes. The internal processes must, however, include a maintenance instruction development process, which meets the criteria as identified below.

6.2 Process applicability

- (1) Where Canada is the State of Design:
 - (a) TCCA is the primary type certification authority. The applicant for a TC for a new or a derivative aircraft for which this paragraph is applicable must develop their scheduled maintenance instructions in accordance with an analytical process that is acceptable to and auditable by TCCA. TCCA AEG, NAC Branch will invite other regulatory authorities, in coordination with the applicant, to discuss the proposed AMR process, and how those regulatory authorities may accept it.
- (2) Where Canada is not the State of Design:

- (a) TCCA is not the primary type certification authority. The foreign applicant for a TC for a new or derivative aircraft for which this paragraph is applicable will invite TCCA AEG, NAC Branch to discuss the process by which the scheduled maintenance instructions will be developed and how acceptance of that process may be made by TCCA.

6.3 Validation and verification of maintenance procedures

- (1) The applicant develops internal instructions and guidelines to enable the validation of all maintenance procedures written to support scheduled maintenance instruction tasks.
- (2) The applicant validates those maintenance procedures. The objective of the validation is to ensure that it is possible to perform the procedure and that the procedure meets the intent of the scheduled maintenance instructions.
- (3) Where and when requested by TCCA, the applicant should make available a completed aircraft and the necessary qualified maintenance personnel to demonstrate to TCCA that any particular maintenance procedure can be adequately performed and that the procedure meets the intent of the scheduled maintenance task.
- (4) TCHs shall maintain records of the analysis performed to develop their scheduled maintenance instructions. The records shall be kept in such a manner that TCCA may readily conduct an audit of the initial analytical process and any subsequent analytical processes that may lead to an amendment of the initial scheduled maintenance instructions.
- (5) Where covered under BASA/Technical Arrangement, refer to the pertinent section of the applicable for procedures on validation and verification of maintenance procedures where TCCA is the VA.

6.4 Scheduled maintenance instruction review and approval

- (1) The ICAs, as published by the TCH, must contain a statement from the most senior manager responsible for the scheduled maintenance instruction development, which states that the scheduled maintenance instructions and their associated procedures have been reviewed and approved for use by operators, and identify any limitations applicable when implementing the instructions.

6.5 Scheduled maintenance instruction publication

- (1) The TCH publishes the scheduled maintenance instructions as part of the aircraft's ICAs. It is the responsibility of the TCH to issue amendments to the ICAs as required.

6.6 Scheduled maintenance instructions as a dynamic document

- (1) Prior to TCCA's acceptance of the scheduled maintenance instructions as part of the aircraft's type certification process, the TC applicant must develop an auditable system for the continuing analysis of all tasks included within the maintenance instructions. As part of the continuing analysis system, the TC applicant must address the following:
 - (a) A system for acquiring from operators reports related to adequacy of tasks, failures, failure frequencies and the consequences of each failure;
 - (b) An age exploration system for the continuous evaluation of age condition information, for the substantiation of current task intervals and for the adjustment of task intervals;
 - (c) A system for controlling the addition of new scheduled tasks to ensure that they are applicable and effective;

- (d) A system for the periodic evaluation of all tasks in the program to eliminate those which are no longer applicable and effective;
- (e) A system for evaluating unanticipated problems and determining the appropriate action.

7.0 Bilateral Aviation Safety Agreements/Technical Arrangements

- (1) Where identified in a BASA or technical arrangement, the CA approved MRBR/MTBR will be accepted by the VA in accordance with the procedures therein. TCCA involvement including the need for a specific TCCA letter for the approval of a MRBR/MTBR (initial and revisions) will be defined as per the Technical Implementation Procedures (TIP) for Airworthiness or Implementation Procedures for Airworthiness (IPA) with the CA. Where no TCCA letter of approval is issued, TCCA considers the MRBR/MTBR as approved by TCCA for the purposes of utilizing the MRBR/MTBR as the basis of an aircraft maintenance schedule under CAR 605.86.
- (2) The general aspects of a BASA or technical arrangement will include, at a minimum, the following:
 - (a) The CA and VA are members of the IMRBPB;
 - (b) The CA and VA have implemented the IMPS document;
 - (c) The CA is the State of Design of the product;
 - (d) VA specific requirements;
 - (e) Communication procedures between the CA and VA.
- (3) Where no BASA or technical arrangement is in place, normal validation principles shall apply.

8.0 TCCA roles and responsibilities

8.1 MRB/MTB process: responsibilities and coordination

- (1) Operational Airworthiness Division, Standards Branch is responsible for the policy and guidance on the MRB/MTB process, including ICAs. They participate as members of the IMRBPB discussing matters related to the IMPS and MSG-3 logic documents. They are also responsible to coordinate with AEG, NAC Branch on MRB/MTB process (IMPS and MSG-3) and bilateral agreement/technical arrangement matters.
- (2) AEG, NAC Branch is responsible for applying the applicable ICA regulatory framework, which includes MRB/MTB process and applying the policy and guidance set by Operational Airworthiness Division, Standards Branch in this TP. They participate in IMRBPB meetings as advisors to Operational Airworthiness Division when it comes to applying the MRB/MTB process. They coordinate with Operational Airworthiness Division on MRB/MTB process (IMPS and MSG-3 documents) and bilateral related matters, and where applicable, with the appropriate engineering division in NAC Branch when it comes to all issues of concern related to aircraft design.

9.0 Information management

- (1) Not applicable.

10.0 Document history

- (1) TP 13850, Edition 1, RDIMS 21438080 (E), 21438081 (F), dated 2003-06-26 – Civil Aviation Scheduled Maintenance Instruction Development Processes Manual.

11.0 Contact us

For more information, please contact:

Chief, Operational Airworthiness Division, Standards Branch (AARTM)

E-mail: jeff.phipps@tc.gc.ca

We invite suggestions for amendment to this document. Submit your comments to:
Standards Branch Documentation Services

E-mail: AARTDocServices-ServicesdocAART@tc.gc.ca