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RELEASE OF TECHNICAL AIRWORTHINESS MANUAL (TAM) CHANGE 10

Reference: Technical Airworthiness Manual, C-05-005-001/AG-001

- 1. The Technical Airworthiness Authority (TAA) is pleased to announce the release of Change 10 of CFTO C-05-005-001/AG-001, Technical Airworthiness Manual (TAM). This version supersedes the previous version (Change 9) dated 1 March 2022.
- 2. TAM Change 10 is available on the Technical Airworthiness Authority (TAA) internet site, at https://www.canada.ca/en/department-national-defence/services/military-airworthiness/technical-airworthiness-authority-overview/technical-airworthiness-regulatory-documents/technical-airworthiness-manual.html. In addition, organizations with access to the Defence Wide Area Network can access TAM Change 10 on the Canadian Forces Publication Depot's intranet site, at https://publications.mil.ca/, in both IETM and PDF format, as well as on the DTAES intranet.
- 3. TAM Change 10 introduces clarifications to existing TAA standards and requirements resulting from lessons learned, as well as new requirements aimed to harmonize with industry regulations and increase the efficiency of the Technical Airworthiness Program. Some of these changes, such as clarifying 'On-Type' training standards for Acceptable Technical Organizations, regulating Independent Check sign-off prior to maintenance release, requiring Aircraft Release Certification following heavy maintenance checks or introducing the requirement for an Aircraft Cybersecurity Monitoring Program, have already been communicated to affected stakeholders through the Notice of Proposed Change (NPC) process. In addition to minor and editorial changes meant to enhance format and readability, and improve the effectiveness of the Technical Airworthiness Program, there are other more substantive changes that are introduced that did not require consultation through the NPC process. A summary of the composition of TAM Change 10 is attached as Annex A.
- 4. The TAA recognizes that TAM Change 10 will affect stakeholders differently. The TAA, through the regulatory staff of the Director Technical Airworthiness and Engineering Support (DTAES), will coordinate directly with affected organizations to provide guidance and direction with regards to compliance requirements affecting organizational approvals. In the interim, if you have any questions or feedback related to the content of the new or amended provisions of TAM Change 10, you may contact the TAA Secretariat, at:

Directorate of Technical Airworthiness and Engineering Support (DTAES) National Defence Headquarters
Ottawa, Ontario K1A 0K2
Attention: LCol Gabriel Massie, DTAES 2
Email: gabriel.massie@forces.gc.ca

5. The evolution and update of the TAM is an ongoing process. My staff is continuously working to further develop and improve its content and efficacy. We will continue to use NPCs to seek your feedback regarding future changes and welcome your input in the TAM amendment process.

Sincerely,

Martin Breton
For the Technical Airworthiness Authority
Director Technical Airworthiness and Engineering Support

Annex A Summary of Changes Incorporated in TAM Change 10, 2025-06-02 Distribution List (page 2)



1/4 AEPM #2406080

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SUMMARY OF CHANGES INCORPORATED IN TAM CHANGE 10, 2025-06-02

This is a non-exhaustive summary. Please consult the TAM for the complete list of changes.

MAJOR CHANGES

Part 1 - Management Framework

Chapter 4 – Assignment of Technical Airworthiness Authority

- Clarifications on standards, requirements and evaluation responsibilities related to training within Acceptable Maintenance Organizations, to better align the Technical Airworthiness Program requirements with industry standards related to Acceptable Training Organizations.
- Addition of new paragraph to Standard 1.4.2.S1 that requires TAA-Acceptable Organizations
 (Accredited and/or Recognized) to engage with the TAA before implementing any changes that may
 impact their existing scope of authority granted by the TAA to conduct airworthiness functions, in
 alignment with the regulations of other civil and military airworthiness authorities.
- Defining a "significant maintenance event" and adding eligibility requirements for an Aircraft Release Authority responsible for executing overall maintenance release following such events (Annex C of Section 2).

Part 2 - Initial Airworthiness

Chapter 1 – Aircraft Type Certification Process

• Introduction of "Inspection" as a fourth category of means of compliance, alongside "Description", "Analysis" and "Test", to facilitate TAA acceptance/approval of proposed means of compliance during major type certification compliance programs (also affects standards in Part 3, Chapter 2).

Chapter 2 – Aircraft Registration and Marking

 Addition of primary role letter Q to the TAA-approved list of aircraft type designation letters for the Multi-role Remotely Piloted Aircraft System (RPAS), in response to the RCAF and UAS community's proposal.

Part 3 - Continuing Airworthiness

Chapter 1 – Conduct and Control of Maintenance

- Expansion of responsibility for personnel performing maintenance to conduct a Verification of Maintenance Inspection following maintenance activities, with a view to inspecting any unintentional damage in the maintenance area.
- Clarifications on the requirement for independent verifications prior to maintenance release and the eligibility criteria for persons conducting those verifications.

Chapter 2 – Design Change Certification

- Amendments to definitions for Minor and Major design changes to standardize TAA document terminology and align it with that of industry.
- Introduction of the requirement for Aircraft Release Certification (ARC) following a significant
 maintenance event (as defined in the chapter) prior to transferring the aircraft back to first line
 maintenance, in line with TAM, RCAF and civil regulatory requirements.

Chapter 4 – In-Service Monitoring Program

 Introduction of the requirement for an Aircraft System Cybersecurity Monitoring (AWSCM) program, by amending various paragraphs of Section 1 of this chapter, adding requirements to Standard 1 of Section 2, and promulgating Annex E to Section 2, which contains guidance on the detection of security vulnerabilities and the implementation of a Cybersecurity Monitoring Plan.

Part 4 - Disposal

Chapter 1 – Disposal

Replacement of the requirement for an official certificate of mutilation with the requirement to
develop a system that describes the mutilation process and provides traceability to evidentiary
mutilation documentation, thus introducing a regulatory basis for RCAF maintenance organizations
and TAA-Accredited industry maintenance organizations to develop consistent procedures for the
process of mutilation of non-conforming aviation parts.

Part 5 – Airworthiness Processes

Chapter 3 – Maintenance Program Requirements

Various updates, in Annex A of Section 2, to the maintenance requirements for DND/CAF aircraft
Emergency Locator Transmitters (ELTs), to harmonize them with applicable TCCA standards and to
reflect advancements in ELT technology, with a view to increasing operational flexibility while
maintaining an acceptable level of safety.

Chapter 7 – Flight Authority

• Amendments to Standard 4 of Section 2 to allow for an increased validity period for the Temporary Authority to Operate (TAO) to a maximum of three (3) years vs. the previous 12 months, for the operation of an aircraft performing activities relating to defence.

MINOR CHANGES

Part 1 – Management Framework

Chapter 3 – Technical Airworthiness Program Features

- Clarifications to Manufacturing Product Conformance certification requirements.
- Removal of Material Product Conformance from the Technical Airworthiness Functions (illustrated in Figure 1-3-1-3).

Chapter 4 – Assignment of Technical Airworthiness Authority

- Dissociating batch/lot items from shelf-life control systems within the airworthiness control system processes of Acceptable Materiel Support Organizations.
- Added clarification on the knowledge and experience assessment criteria for granting Shop Certification Authority (SCA) by the PRAA.
- Clarifications on the legal representation of authorities under the Aeronautics Act during the exercise
 and performance of certain powers, duties or functions relating to airworthiness, as well as of legal
 representation/accountability for TAA-Accredited Organizations and Authorized Individuals.
- Extension of duration, from four (4) to six (6) months, for Acting Senior Design Engineers (A/SDEs) and Acting Senior Maintenance Managers (A/SMMs) within Acceptable Technical Organizations (ATOs), Acceptable Maintenance Organizations (AMOs) and Acceptable Design Organizations (ADOs), to align with the requirements of CAF Maintenance Activity Authorizations and Training Standards.

Part 2 - Initial Airworthiness

Chapter 1 – Aeronautical Product Type Certification Process

• Elimination of annexes B, C and D that contained templates for various Type Certificates to avoid duplication of content with AEPM Form 312, available internally on the AF9000+ SharePoint site.

Chapter 2 – Aircraft Registration and Marking

- Added clarification on the correct writing convention for aircraft type designations (without hyphenation), as reflected in the DND/CAF military aircraft register, on type certificates and throughout TAA documentation.
- Elimination of an outdated and inaccurate advisory note that allowed for a seven-digit registration number for UAS, instead of the current six-digit one.

Part 4 - Disposal

Chapter 1 – Disposal

Amendment of advisory note related to the coordination of disposal and subsequent sale of DND
aeronautical products to shift the focus from the role of the Director of Disposal, Sales, Artefacts and
Loans (DDSAL) to the responsibilities of the Type Certificate Holder.

Part 5 – Airworthiness Processes

Chapter 4 – Manufacture of Aeronautical Products and Aviation Replacement Parts

Cross-referencing Part 5, Chapter 2, in so far as it applies to the procurement, receipt and control of
parts and materials used in the manufacturing process, for coordinated guidance.

Chapter 6 – TAA Airworthiness Directives

Removal of outdated Advisory Material from Section 3 as no longer relevant.

Chapter 9 – Exemptions and Deviations

Removal of Advisory Material from Section 3 with a view to relocating relevant content to TAA
 Advisory 2018-02 – Exemptions and Deviations from Certification Requirements.

VARIOUS TAM-WIDE MINOR/EDITORIAL CORRECTIONS

- A TAM-wide replacement of the term "Incoming Inspection" with "Receiving Inspection" to align with the terminology used by industry organizations.
- A TAM-wide standardization of the term "Instructions for Continued Airworthiness (ICA)" (versus "Instructions for Continuing Airworthiness").
- A TAM-wide standardization of the term "Original Certification Authority (OCA)" (versus "Original Certifying Organization" or "Original Certifying Authority").
- A TAM-wide change of terminology from "Stores Clearance" to "Armament and Stores Integration" to align the TAM with MIL-HDBK-516 and the main armament and stores certification references.

- Updates to the list of Findings of Compliance normally retained by TAA staff, notably by amending the Flight Sciences specialty, and adding Armament and Stores Integration and Aircraft Cybersecurity.
- A TAM-wide replacement of references to P-series publications with the consolidated Change 1 of C-05-005-P01/AM-002 – Aircraft Weapon Systems Maintenance Policy and Procedures CFTO released by 1 Cdn Air Div /A4 Maintenance in May 2024.
- Various updates to document references (e.g., references to the old structure of the ADSM, correction of reference to an AF9000+ Work Instruction for the Contingency Aircraft Maintenance Program (CAMP), deletion of reference to a rescinded AF9000+ procedure (TAA04.011) in Part 5, Chapter 5).
- Various typographical error corrections to improve the quality and readability of the manual.

LIST OF ABBREVIATIONS AND GLOSSARY AMENDMENTS

- Deletion of the following definitions:
 - Certificate of Mutilation
- Amendments to the following definitions:
 - o Approved Type Design
 - o Certificate of Conformance
- the addition of the following new definitions:
 - o Airworthiness Release Certificate
 - o Cybersecurity Event
 - Cybersecurity Incident
 - Cybersecurity Posture
 - Intentional Unauthorized Electronic Interaction
 - Mission Equipment
 - Security Risk Assessment (SRA)
 - Vulnerability
- the addition of the following new abbreviations:
 - o A-ISAC
 - ASCMP
 - o AWS
 - AWSCM
 - o CMA
 - o CSMP
 - o CVE
 - o EPS
 - o IDS
 - o IUEI
 - o NVD
 - o OCA
 - o SRA