



Advisory Circular

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1.0 INTRODUCTION

This Advisory Circular (AC) describes an acceptable means, but not the only means of demonstrating compliance with regulations and standards. This AC in and of itself does not change, create, amend or permit deviations from regulatory requirements nor does it establish minimum standards. The applicant may elect to follow an alternate method, which must be acceptable to Transport Canada.

1.1 Purpose

- (1) The purpose of this Advisory Circular (AC) is to provide guidance relating to the Bilateral Aviation Safety Agreement (BASA) and accompanying Maintenance Implementation Procedures (MIP) between Canada and the United States.
- (2) This AC provides Operators, Aircraft Maintenance Organizations (AMO), and Aircraft Maintenance Engineers (AME) with recommended procedures for maintenance, preventative maintenance, alterations (excluding annual inspections) on United States aeronautical products located in Canada when performed by Canadian AMOs or AMEs, and provides recommended procedures for maintenance, preventative maintenance, alterations (excluding annual inspections) on Canadian aeronautical products located in the United States when performed by United States Federal Aviation Administration (FAA) certificated repair stations or FAA certificated airmen.

1.2 Applicability

This document is applicable to Canadian Air Operators, Approved Maintenance Organizations (AMO) and Aircraft Maintenance Engineers (AME) as well as Civil Aviation Safety Inspectors (CASI), Aircraft Maintenance and Manufacturing within Transport Canada Civil Aviation (TCCA).

1.3 Description of Changes

This is a new Advisory Circular.

2.0 REFERENCES

2.1 Reference Documents

It is intended that the following reference materials be used in conjunction with this document:

- (a) Part V Subpart 71 of the *Canadian Aviation Regulations (CAR) -- Aircraft Maintenance Requirements*;
- (b) Part V Subpart 73 of the CAR -- *Approved Maintenance Organizations*;
- (c) Standard 571 of the CAR -- *Maintenance*;
- (d) Standard 573 of the CAR -- *Approved Maintenance Organizations*;
- (e) Standard 571 Appendix J of the CAR -- *Authorized Release Certificates*;
- (f) Standard 625 Appendix A of the CAR -- *Elementary Work*
- (g) Civil Aviation Directive (CAD) 20, Revision 4, dated 2003-05-31 -- *Frequency of Inspection Policy*;
- (h) Transport Canada Maintenance and Manufacturing Staff Instruction (MSI) # 12 edition 1 May 25, 1998 -- *Regulatory Services Outside of Canada*;
- (i) Federal Aviation Administration Advisory Circular (FAA AC) 00.2-15 -- *Advisory Circular Checklist*;
- (j) FAA AC 00-44 -- *Status of Federal Aviation Regulations*;

- (k) FAA AC 00–58 -- *Voluntary Disclosure Reporting Program*;
- (l) FAA AC 20–62 -- *Eligibility, Quality, and Identification of Aeronautical Replacement Parts*;
- (m) FAA AC 21–1 -- *Production Certificates*;
- (n) FAA AC 21–29 -- *Detecting and Reporting Suspected Unapproved Parts*;
- (o) FAA AC 120–16 -- *Air Carrier Maintenance Programs*;
- (p) FAA AC 140–7 -- *FAA Certificated repair stations Directory*;
- (q) FAA AC 145–9 -- *Guide for Developing and Evaluating repair station and Quality Control Manuals*;
- (r) FAA Order WA 0000.5 -- *Washington Headquarters Directives Checklist*;
- (s) FAA Order 8000.85 -- *FAA Program for the Establishment of a MIP Under the Provisions of a BASA*;
- (t) FAA Order 8110.53 -- *Reciprocal Acceptance of Repair Design Data Approvals Between FAA and TCCA*;
- (u) FAA Order 8120.2 -- *Production Approval and Certificate Management Procedures*; and
- (v) FAA Order 8300.10 -- *Airworthiness Inspector's Handbook*.

Note:

- a) *Copies of the current FAA Advisory Circulars may be obtained from the United States Department of Transportation, Subsequent Distribution Center, SVC 121.23, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, Maryland 20785.*
- b) *Copies of the current FAA Orders may be purchased from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250 7954.*

2.2 Cancelled Documents

Not applicable.

2.3 Definitions and Abbreviations

The following definitions and abbreviations are used in this document:

- (a) **ACA** means Aircraft Certification Authority, issued by an Approved Maintenance Organization (AMO).
- (b) **AC** means Advisory Circular
- (c) **Aeronautical Product** means an aircraft, aircraft engine or propeller, or a subassembly, appliance, material, part, or component to be installed thereon.
- (d) **Agreement** means Bilateral Aviation Safety Agreement (BASA)
- (e) **Airworthiness Limitation** means a limitation applicable to an aeronautical product, in the form of a life limit or a maintenance task that is mandatory as a condition of the type certificate.
- (f) **Airmen** means Federal Aviation Administration (FAA) certificated airmen. For the purpose of this document, airmen means certificated mechanics.
- (g) **Alteration** or **Modification** means making a change to the construction, configuration, performance, environmental characteristics, or operating limitations of the affected civil aeronautical product.

- (h) **AME** means Aircraft Maintenance Engineer
- (i) **AMO** means Approved Maintenance Organization
- (j) **BASA** means Bilateral Aviation Safety Agreement
- (k) **CAR** means *Canadian Aviation Regulations*
- (l) **CFR** means Code of Federal Regulations - This AC references Title 14 of the Code of Federal Regulations, Parts 1 through 199.
- (m) **Civil Aeronautical Product** means any civil aircraft, aircraft engine, or propeller or subassembly, appliance, material, part, or component to be installed thereon.
- (n) **Compliance with Title 14 of the Code of Federal Regulations (14 CFR) Part 43** means compliance with the latest issue of CAR 571 and the Federal Aviation Administration (FAA) special conditions as set forth in the maintenance implementation procedures (MIP) and associated Transport Canada Civil Aviation (TCCA) guidance material, as applicable.
- (o) **Compliance with CAR 571** means compliance with the latest issue of 14 CFR Part 43 and the TCCA special conditions as set forth in the MIP recognizing that Advisory Circulars (AC) provide additional guidance in this area.
- (p) **Compliance with 14 CFR Part 145** - In the case of a Canadian organization, compliance with the latest issue of CAR 573 and the FAA special conditions as set forth in the MIP and associated TCCA guidance material as applicable when maintenance is performed in Canada.
- (q) **Compliance with CAR 573** - In the case of a Part 145 repair station, compliance with the latest issue of 14 CFR Part 145 and the TCCA special conditions as set forth in the MIP when maintenance, preventive maintenance, or modifications are performed in the United States recognizing that ACs provide additional guidance in this area.
- (r) **Data Approved by the FAA** means data that is approved by the Administrator or the Administrator's designated representative.
- (s) **Data Approved by TCCA** means data that is approved by TCCA or by an organization approved by TCCA for that purpose.
- (t) **Elementary work** is a form of maintenance that is not subject to a maintenance release. An exhaustive list of task defined as elementary work can be found in Appendix A of Standard 625.
- (u) **FAA** means Federal Aviation Administration
- (v) **FAA Certificated Airman** means an individual issued a mechanic certificate or repairman certificate by the FAA under 14 CFR Part 65.
- (w) **FAA Acceptable data** means data that is acceptable to the Administrator, such as service information recommended by a type certificate holder or industry standard data that supports eligibility of installation of standard parts (such as bolts and nuts) conforming to established industry or U.S. specifications.
- (x) **IA** means Inspection Authorization issued by the FAA.
- (y) **Independent checks** are accomplished for work that disturbs engine or flight controls. They document that the system has been inspected for correct assembly, locking and sense of operation, by at least two persons, and the technical record contains the signatures of both persons. Generally equivalent to Required Inspection Items.

- (z) **Maintenance** means the inspection, overhaul, repair, preservation and replacement of parts, materials, appliances or components of a civil aeronautical product to ensure the continued airworthiness of that product, excluding alterations or modifications.

Note:

In this document, the definition of maintenance reflects the FAA definition, which excludes alterations and modification. For this reason in this document, where applicable, the words alteration and modification have been added when making reference to performance of work.

- (aa) **MCM** means Maintenance Control Manual
- (bb) **MIP** means Maintenance Implementation Procedures
- (cc) **MPM** means Maintenance Policy Manual
- (dd) **Preventive Maintenance** means simple or minor preservation, operations, and the replacement of small standards parts not involving complex assembly operations.
- (ee) **Required Inspection Items** means the items of maintenance and alterations, which must be inspected by a person other than the one who performed the work, and includes at least those that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft, if not performed properly or if improper parts or materials are used. Generally equivalent to independent checks.
- (ff) **Special Conditions** - These are contained in chapter 3 of the MIP. FAA special conditions are those requirements in 14 CFR Part 43, 121, and 145 that the FAA has determined are not contained in CAR 571 and 573. TCCA special conditions are those requirements in CAR 571 that the TCCA has determined are not contained in 14 CFR Part 43 or 145.
- (gg) **TCCA** means Transport Canada Civil Aviation
- (hh) **United States (US)** means in a geographical sense, (1) the States, the District of Columbia, Puerto Rico, and the possessions, including the territorial waters, and (2) the airspace of those areas.

3.0 BACKGROUND

3.1 General Information

- (1) This AC provides information and guidance on the implementation of maintenance procedures negotiated under the current revision of the BASA. This applies to Canadian AMOs, Canadian AMEs, United States certificated repair stations and certificated airmen.
- (2) Transport Canada Civil Aviation (TCCA) recommends that persons maintaining Canadian or United States aeronautical products be familiar with the BASA and the associated MIP. In particular, Canadian operators should ensure that FAA certificated repair stations comply with the requirements of any special conditions listed in the current revision of the MIP and procedures contained in the operator's Maintenance Control Manual (MCM).

Note:

Part 121 or 135 air carriers who have been authorized to perform maintenance and who do not possess a FAA Repair Station Certificate are not subject to the maintenance performance provisions of the BASA and may not perform maintenance on Canadian aircraft operated under Part IV or VII of the CARs under the agreement.

3.2 The Bilateral Aviation Safety Agreement (BASA)

- (1) Canada and the United States, to facilitate acceptance by each country of airworthiness approvals along with environmental testing and approval of civil aeronautical products, entered into the BASA. The BASA also provides for the approvals and monitoring of maintenance facilities and alteration or modification facilities, maintenance personnel, and airmen of the other party. The BASA Executive Agreement may be found at <http://www.tc.gc.ca/CivilAviation/certification/int/menu.htm>
- (2) Each contracting party designated its civil aviation authority as the executive agent to implement this agreement. For the Government of Canada, the executive agent is Transport Canada Civil Aviation (TCCA), Department of Transport. For the United States of America, the executive agent is the Federal Aviation Administration (FAA), Department of Transportation (DOT).
- (3) TCCA and the FAA have acknowledged that oversight of AMOs, AMEs, certificated repair stations and certificated airmen, is necessary to ensure quality of work performed and adherence to the regulatory requirements of each party. To facilitate this, each party has agreed to provide access on an unconditional basis to AMOs, AMEs, certificated repair stations and certificated airmen performing maintenance on a Canadian or United States aeronautical product. Notification of visits to maintenance facilities must be made to the regulatory oversight agency for the AMO or repair facility being inspected. With this notification each authority may conduct independent inspections. Also, each authority may review the other authority's surveillance records and other pertinent information for compliance to the current revision of the MIP. The inspection will be conducted to ascertain that the maintenance, preventive maintenance, and alterations are performed in accordance with the appropriate national regulatory requirements and special conditions set forth in the current revision of the MIP. The inspection is limited to the performance of work on the Canadian or United States aeronautical product. The inspection will not include determining the validity of the AMO, AME, and repair station or airman certification or rating approvals.
 - (a) The AMOs, AMEs, certificated repair stations and certificated airmen, remain subject to the regulatory requirements and enforcement procedures described in the current revision of the MIP.
 - (b) TCCA and the FAA will conduct periodic joint evaluations of each other's continued compliance with the terms of the current revision of the MIP. Such evaluations may include visits to AMOs, AMEs, certificated repair stations or certificated airmen to ensure the accurate application of the current revision of the MIP.

3.3 Maintenance Implementation Procedures (MIP)

- (1) This section describes the procedures for implementing the maintenance and alteration or modification provisions of the Bilateral Aviation Safety Agreement (BASA) between the Government of Canada and the Government of the United States, signed 12 June 2000. The objective of the MIP is to outline the terms and conditions under which TCCA and the FAA can accept each other's inspections and evaluations of Canadian AMOs and United States certificated repair stations along with AMEs and certificated airmen.
- (2) The authorization for the MIP is Article III of the BASA. TCCA and the FAA have assessed each other's standards and systems relating to the approval of AMOs, FAA certificated repair stations, AMEs and FAA certificated airmen that perform maintenance and alterations or modifications on civil aeronautical products, and as a result, have established an understanding of such standards and systems.
- (3) The MIP may be amended by mutual consent of TCCA and the FAA. Significant revision by either authority to its organization, regulations, procedures, or standards may affect the basis on which the MIP is executed. Accordingly, each authority has agreed to promptly advise the other of plans for such changes, and to give an opportunity for comment. Upon notice of such changes

by one authority, the other authority may request consultation to review the need for amendment to the MIP.

- (4) The legal standards for safety regulation by TCCA are contained in *Canadian Aviation Regulations* (CAR) and are explained in ancillary documents. The legal standards for safety regulation by the FAA are contained in Title 14 of the Code of Federal Regulations (14 CFR) and are explained in ancillary documents and procedures.

3.4 Canadian Aircraft Maintenance Organizations

- (1) An AMO certificate will specify any ratings that have been issued and list the aeronautical products that the AMO is authorized to maintain or the maintenance services that the AMO is authorized to perform. The scope of the work that may be performed under each rating specified on the AMO certificate is determined by limitations that are set out in the certificate. The AMO must have or have access to the facilities and equipment to maintain articles on its certificate. An AMO will use the standards equivalent to those of the manufacturer of an aeronautical product for the performance of work. Those standards are identified in the CARs.
- (2) To perform maintenance, modification or elementary work on U. S. aeronautical products, an AMO must meet the applicable requirements of CARs 571 and 573. In addition, the AMO must comply with any special conditions contained in the current revision of the MIP. This may require revision of the AMO's Maintenance Policy Manual (MPM) to incorporate a supplement to accommodate these requirements. The supplement may contain procedures unique to the United States aeronautical products. This supplement must be approved by TCCA.
- (3) The AMO will establish procedures to audit contractors and ensure that they comply with operators' manuals, manufacturers' manuals, and Instructions for Continued Airworthiness (ICA). The AMO also must provide technical training for receiving inspection personnel who inspect contracted out functions.
- (4) A person, working for an AMO, is authorized to sign a maintenance release in accordance with policies established in the AMO's MPM. The AMO must have a rating appropriate to the work performed. The person must have successfully completed a course of maintenance training that has been approved or is acceptable by TCCA and that is applicable to the type of aircraft, engine, or system on which the maintenance is performed.

3.5 US Repair Stations

- (1) A person who holds a repair station certificate must meet the requirements of 14 CFR Part 145. These requirements include the manner of application, facility requirements, personnel requirements, quality control, and training requirements.
- (2) To perform maintenance, preventive maintenance, and alterations on Canadian aeronautical products, certificated repair stations must meet the applicable requirements contained in 14 CFR Part 145. The special conditions in the current revision of the MIP may specify additional requirements. This may require revision to a repair station manual to incorporate a supplement to accommodate these requirements. The supplement may contain procedures unique to the Canadian aeronautical products, specific training requirements, and reporting requirements. This supplement must be approved by the FAA.

3.6 Canadian Aircraft Maintenance Engineers (AME)

- (1) Persons exercising the privileges of an AME Licence or a Restricted Certification Authority in relation to the maintenance or modification of a US aeronautical product must do so in accordance with the ratings, limitations and conditions endorsed on the license or authority, the requirements of the applicable CARs, and any special conditions contained in the current revision of the MIP.
- (2) Specialized maintenance may only be performed under the control of an appropriately rated AMO.

3.7 FAA Certificated Airmen

- (1) The requirements for a mechanic certificate and ratings, and the privileges, limitations, and general operating rules for certificated mechanics (airmen), are prescribed in 14 CFR Part 65. When performing maintenance, preventive maintenance, or alterations on Canadian aeronautical products, certificated airman must comply with the applicable sections of 14 CFR Part 43 and any special conditions contained in the current revision of the MIP.
- (2) Certificated airmen can perform major repairs or major modifications, however the return to service for the work must be accomplished by an FAA certificated airman with Inspection Authorization (IA).
- (3) Part 65 prescribes recency of experience requirements for FAA certificated airmen. These requirements state that the FAA certificated airman must have performed or supervised the work within the last 24 months. The FAA certificated airman may have supervised in an executive capacity the performance of work on an aircraft. In lieu of these requirements, the FAA certificated airman must be found able to perform the work by the FAA.

4.0 SPECIAL CONDITIONS

4.1 General Information

This section provides information and guidance on the special conditions that must be complied with when performing maintenance, including preventive maintenance, or alterations on aeronautical products from Canada or the United States. These special conditions apply to Canadian AMOs and AMEs as well as United States FAA certificated repair stations and certificated airmen. Only TCCA or FAA approved or acceptable parts or components as applicable are to be used to perform maintenance, including preventive maintenance, or alterations to Canadian or United States aeronautical products.

4.2 Special Conditions for Canadian Aeronautical Products

- (1) FAA certificated repair stations or FAA certificated airmen may perform maintenance, preventive maintenance, or alterations (with exception of annual inspections) on a civil aeronautical product under the regulatory control of TCCA. To retain TCCA acceptance, the FAA certificated repair station shall not exceed the scope of the ratings and limitations contained in the 14 CFR Part 145 certificate. Authorized functions will be listed on the FAA certificated repair station capabilities list. Procedures must be included in the repair station manual that describes the process for meeting the requirements of the special conditions in the current revision of the MIP.
- (2) A FAA certificated repair station that performs maintenance on Canadian aircraft operating in commercial air service under Part IV or Part VII of the CARs, must include in its manual a FAA approved supplement that describes the special conditions specified in the current revision of the MIP, or explains where, in the FAA certificated repair station manual, those procedures are described, and which procedures are approved by the FAA.
- (3) For a certificated repair station to retain a FAA authorization to maintain Canadian aeronautical products, repair stations must permit TCCA, or the FAA on behalf of TCCA, to inspect its organization for continued compliance with the requirements of 14 CFR Part 145 and the special conditions identified in the MIP. Investigations and enforcement by TCCA may be undertaken in accordance with TCCA regulations and directives and to retain authorization, the repair station must cooperate with any investigation or enforcement action.
- (4) For FAA certificated airmen to perform maintenance, preventive maintenance, and alterations (with the exception of annual inspections) on Canadian aeronautical products, the certificated airman must comply with the special conditions identified in the MIP, ensure that only TCCA approved parts or components are used and ensure the current manufacturer's recommendations or instructions for continued airworthiness are used. Certificated airmen must cooperate with any investigation or enforcement action taken by TCCA or the FAA.

4.3 Special Conditions for U.S. Aeronautical Products

- (1) FAA special conditions are applicable to Canadian based AMOs and AMEs. These special conditions are to be complied with to meet the requirements of 14 CFR Part 43, and are in addition to any requirements of CARs 571 and 573. To perform maintenance on U.S. aeronautical products, the AMO must hold a valid AMO certificate issued per CAR 573. An AMO that is authorized to work on an aeronautical product under the regulatory control of the FAA may perform maintenance, preventive maintenance, and alterations (with exception of annual inspections) on that product.
- (2) AMOs that perform maintenance, preventive maintenance, and alterations for 14 CFR Part 121 or 135 air carriers in commercial operations must have additional items that include procedures to ensure compliance with Part 121 or 135 air carriers' manuals. The AMO will have a TCCA approved FAA Supplement to its MPM that will specify how maintenance, preventive maintenance, and alterations are to be performed on United States aeronautical products. This supplement will include procedures to show separation of quality control functions from other maintenance functions, including the separation of maintenance from inspection on those items identified as required inspection items, as defined by the Part 121 or 135 air carrier manuals.
- (3) To continue to hold an AMO authorization to maintain United States aeronautical products, the AMO must permit the FAA, or TCCA on behalf of the FAA, to inspect its organization for continued compliance with CARs 571, 573 and the special conditions identified in the MIP. Investigations and enforcement by the FAA may be undertaken in accordance with FAA rules and directives and to retain authorization, the AMO must cooperate with any investigation or enforcement action.
- (4) To perform maintenance, preventive maintenance, and alterations (with exception of annual inspections) on United States aeronautical products, Canadian AMEs must comply with the FAA special conditions identified in the MIP. The AME must also ensure that only FAA approved or acceptable parts or components are used. In addition, the AME must use the current manufacturer's recommendations or instructions for continued airworthiness in the performance of work.

5.0 CONTACT OFFICE

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