

**TECHNICAL IMPLEMENTATION PROCEDURES FOR AIRWORTHINESS
AND ENVIRONMENTAL CERTIFICATION UNDER THE WORKING ARRANGEMENT
BETWEEN
TRANSPORT CANADA CIVIL AVIATION
AND
THE CIVIL AVIATION AUTHORITY
OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
FOR THE PROMOTION OF AVIATION SAFETY**

TABLE OF CONTENTS**1.0 SECTION I — GENERAL**

1.1	Purpose	1
1.2	Roles	1
1.3	Communications	1
1.4	Interpretations and Differences in Interpretation and Implementation	3
1.5	Applicable Requirements, Procedures, and Guidance Material	3
1.6	Definitions	3

2.0 SECTION II — DESIGN APPROVAL

2.1	Procedures	6
2.2	Limitations of Design or Design Change Approvals	7
2.3	General Procedures for Validation of a Design or a Design Change	8
2.4	Type Certificate (TC)	10
2.5	Restricted Type Certificate (RTC)	11
2.6	Supplemental Type Certificate (STC)	12
2.7	Supplemental Type Certificate for Special-Purpose Operations	14
2.8	Canadian Technical Standard Order (CAN-TSO) Design Approval and United Kingdom Technical Standard Order Authorization (UKTSOA)	14
2.9	Reciprocal Acceptance of Replacement Parts	15
2.10	Repair Design	17
2.11	Evaluation of Operational and Maintenance Aspects	17
2.12	Approved Manuals	19
2.13	Changes to the Approved Design	20
2.14	Coordination between Design and Production	21

3.0	SECTION III — CONTINUING AIRWORTHINESS	
3.1	General	22
3.2	Continuing Airworthiness Obligations.....	22
3.3	Failure, Malfunction and Defect Reporting	22
3.4	Unsafe Conditions and Mandatory Continuing Airworthiness Information.....	24
3.5	Alternative Means of Compliance (AMOC) to Mandatory Continuing Airworthiness Information.....	25
4.0	SECTION IV — ADMINISTRATION OF DESIGN APPROVALS	
4.1	General	26
4.2	Transfer of a TC or STC	26
4.3	Surrender of a TC or STC	27
4.4	Revocation or Suspension of a TC or STC	28
4.5	Surrender or Withdrawal of an Approval (UKTSOA, CAN-TSO Design Approval, Part Design Approval or Repair Design).....	28
5.0	SECTION V — EXPORT AIRWORTHINESS APPROVAL	
5.1	General	29
5.2	Certification for Export	29
5.3	Coordination of Exceptions on Export Airworthiness Certificate or Export Certificate of Airworthiness	31
5.4	Identification and Marking Requirements.....	31
5.5	Additional Requirements for Import.....	32
6.0	SECTION VI — PRODUCTION APPROVAL	
6.1	TCCA Production Approval.....	32

6.2	CAA Production Approval.....	32
6.3	Extensions of Production Approvals.....	32
6.4	Split State of Design and State of Manufacture	33
6.5	Supplier Surveillance Outside the Exporting Country.....	33
7.0	SECTION VII – TECHNICAL ASSISTANCE	
7.1	General	33
7.2	Witnessing of Tests during Design Approval	34
7.3	Compliance Determinations.....	35
7.4	Conformity Certifications during Design Approval.....	35
7.5	Surveillance and Other Support	36
7.6	Airworthiness Determination	36
7.7	Airworthiness Certificates.....	36
7.8	Handling of Requests for Proprietary Data and Access to Information/Public Access to Official Documents Information	37
7.9	Accident/Incident and Suspected Unapproved Parts Investigation Information Requests	37
8.0	SECTION VII — FURTHER WORKING ARRANGEMENTS	
9.0	SECTION IX — FINAL DISPOSITIONS	
	Appendix A — Contact Points and Office Addresses.....	40
	Appendix B — Reserved.....	43
	Appendix C — Procedures for Validation and Reciprocal Acceptance.....	44
	Appendix D — Acronym List.....	61
	Appendix E — Record of Revisions.....	62

1.0 SECTION I — GENERAL

1.1 PURPOSE

The purpose of these Technical Implementation Procedures is to define the interface requirements and activities between Transport Canada Civil Aviation (TCCA) and the Civil Aviation Authority (CAA) of the United Kingdom of Great Britain and Northern Ireland (United Kingdom), herein after referred to as the “Participants”, for the import, export, and continued support of civil aeronautical products. TCCA and the CAA will conduct their certification and validation activities consistent with the *Working Arrangement between Transport Canada Civil Aviation and The Civil Aviation Authority of the United Kingdom of Great Britain and Northern Ireland for the Promotion of Aviation Safety* (WA), signed at Ottawa, ON and London, England, on 5 November 2020 and these Technical Implementation Procedures.

Note: Appendix D lists all acronyms used in this document.

1.2 ROLES

1.2.1 BASIS OF AUTHORITY FOR TECHNICAL IMPLEMENTATION PROCEDURES

These Technical Implementation Procedures are established in accordance with the WA. The WA recognizes the Participants, as the Participants for Canada and the United Kingdom, respectively, and that they are authorized to perform the functions of either the Importing Participant or Exporting Participant, as applicable, for purposes of these Technical Implementation Procedures.

1.2.2 GOVERNANCE

- (1) The governance of these Technical Implementation Procedures will be carried out jointly by the following designated officers:
 - (a) For TCCA: Director of Standards (AART), and
 - (b) For CAA: Group Director Safety and Airspace Regulation Group
- (2) The designated officers will be in charge of the effective functioning, implementation, and continued validity of these Technical Implementation Procedures, including revisions and amendments thereto. The designated officers may accept to accomplish this through formation of a governance group and establish its rules of procedures, membership, and meeting schedules.

1.2.3 MAINTENANCE OF CONFIDENCE

The Participants understand that:

- (a) they need to remain capable of carrying out their roles under these Technical Implementation Procedures;
- (b) The designated officers will define and accept the activities required to promote continued understanding and compatibility of each Participant’s systems and to ensure the maintenance of confidence between the Participant’s technical competence and ability to perform regulatory functions within the scope of these Technical Implementation Procedures.

1.3 COMMUNICATIONS

1.3.1 CHANGES IN CERTIFICATION OR APPROVAL SYSTEMS

- (1) These Technical Implementation Procedures are based upon similar certification and approval systems for civil aeronautical products being in place at the time of signing. The Participants will keep each other informed of significant changes within those systems, such as changes in:
 - (a) statutory roles;
 - (b) organizational structure (e.g., key personnel, management structure, office location);
 - (c) airworthiness and environmental requirements, procedures and technical training;
 - (d) production quality system oversight, including system oversight outside their territory; and
 - (e) delegated or contracted functions, or the kinds of organizations to which functions have been granted, delegated or contracted.
- (2) Revision by either Participant of its certification or approval system may affect the basis and the scope of these Technical Implementation Procedures. Accordingly, upon notice of such changes, the other Participant may request a meeting to review the need to amend these Technical Implementation Procedures.

1.3.2 LANGUAGE OF COMMUNICATIONS

The Participants will ensure that the data and documents exchanged under these Technical Implementation Procedures are in the English language.

1.3.3 TECHNICAL CONSULTATIONS

- (1) The Participants are expected, within the framework of their regular meetings, to discuss draft advisory and guidance materials and consult on new or proposed changes to the certification standards or specifications for civil aeronautical products.
- (2) The Participants will consult as necessary to provide input when requested on technical issues and to resolve technical differences. The frequency of these exchanges will depend on the number and significance of the issues to be discussed.

1.3.4 COMMUNICATIONS REGARDING DELEGATES AND APPROVED ORGANIZATIONS

The Participants understand that there may be occasional situations where either may interact directly with a delegate or an approved organization of the other. In such cases, the Participant initiating the contact will notify the other as soon as possible. Any such direct communication will be limited to information exchange. The Participants are expected to always consult one another on significant validation program decisions.

1.4 INTERPRETATIONS AND DIFFERENCES IN INTERPRETATION AND IMPLEMENTATION

- (1) In the case of conflicting interpretations by the Participants of the national laws, airworthiness or environmental regulations, standards, specifications, requirements, or acceptable means of compliance pertaining to certifications, approvals, or acceptance under these Technical Implementation Procedures, the interpretation of the Importing Participant whose national laws, airworthiness or environmental regulations, standards, specifications, requirements, or acceptable means of compliance are being interpreted will prevail.
- (2) The Participants will:
 - (a) resolve differences in the interpretation and implementation of these Technical Implementation Procedures through consultation or any other jointly accepted means. The Participants are expected to make every effort to resolve differences at the lowest possible level;
 - (b) expeditiously raise differences that cannot be satisfactorily resolved at the working level to their respective managements, on a progressive level, until resolution is reached; and
 - (c) raise differences that cannot be satisfactorily resolved between them to the designated officers identified in section 1.2.2.

1.5 APPLICABLE REQUIREMENTS, PROCEDURES, AND GUIDANCE MATERIAL

The Participants understand that their respective national regulations, certification standards or specifications, policies, procedures, and guidance materials for airworthiness and environmental certification will guide these Technical Implementation Procedures.

1.6 DEFINITIONS

For the purpose of these Technical Implementation Procedures:

- (a) “Acoustical Change” means a change in the type design of an aircraft or aircraft engine that results in an increase in the noise emission levels of that aircraft.
- (b) “Airworthiness Requirements” mean regulations, airworthiness standards or other certification specifications governing the design and performance of civil aeronautical products.
- (c) “Appliance” means any instrument, equipment, mechanism, article, part, apparatus, appurtenance or accessory, including communications equipment that is used, or intended to be used, in operating or controlling an aircraft in flight and is installed in or attached to the aircraft.
- (d) “Approved Manuals” mean manuals, or sections of manuals, requiring approval by TCCA or CAA. These include the approved sections of the Flight Manual, the airworthiness limitation section of the Instructions for Continued Airworthiness (ICA), the structural repair manual, the engine and propeller installation and operating manuals, and the certification maintenance requirements, where applicable.

- (e) “Certificating Authority (CA)” means TCCA when fulfilling the ICAO responsibilities of a State of Design to regulate the design, production, and airworthiness approval and environmental certification of civil aeronautical products and articles that originated in Canada, and the CAA when fulfilling the ICAO responsibilities of a State of Design to regulate the design, production, and airworthiness approval and environmental certification of civil aeronautical products and articles that originated in the United Kingdom.
- (f) “Certification Basis” consists of the applicable airworthiness and environmental requirements established by a Participant as the basis by which the type design of a civil aeronautical product, or a change to that type design was approved or accepted. The certification basis may also include Special Conditions, Findings of Equivalent Level of Safety, and Exemptions or Deviations when determined by a Participant to apply to the type design approval. For the CAA, the certification basis may also include Operational Suitability Data (OSD) requirements.
- (g) “Participant” means either Transport Canada Civil Aviation for Canada, or the Civil Aviation Authority for the United Kingdom, depending on context.
- (h) “Compliance Determination” means the determination, by either TCCA’s system or CAA’s system, that the applicant has demonstrated compliance with identified requirements.
- (i) “Critical Part” means a part identified as critical by the design approval holder or the Exporting Participant during the type validation process for the civil aeronautical product. Typically, such components include parts for which a replacement time, inspection interval, or related procedure is specified in the airworthiness limitations section or certification maintenance requirements of the Instructions for Continued Airworthiness. Specific definitions for critical parts are found within the applicable airworthiness requirements.
- (j) “Deviation” is a grant of relief from the requirements of a certification specification when processed through the appropriate regulatory procedure by the CAA.
- (k) “Emissions Change” in respect of an aircraft means a change in the type design of an aircraft or aircraft engine that results in an increase in fuel venting or exhaust emissions of a turbine engine.
- (l) “Environmental Requirements” mean regulations, environmental standards, or certification specifications governing the certification of designs with regard to noise characteristics, exhaust emissions, and fuel venting of civil aeronautical products.
- (m) “Exemption” means a grant of relief from requirements of a regulation (and for TCCA, an airworthiness requirement) when processed through the appropriate regulatory procedure by TCCA or the CAA.
- (n) “Export” means the process by which a civil aeronautical product is released from one regulatory system for subsequent use in another regulatory system.
- (o) “Exporting Participant” means TCCA or the CAA as charged by the laws of the exporting State, to regulate the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products, parts, and appliances.

- (p) “Finding of Equivalent Level of Safety” means a finding by a Participant that alternative action taken provides a level of safety equal to that provided by the airworthiness requirements for which equivalency is being sought.
- (q) “Import” means the process by which an exported civil aeronautical product is accepted by TCCA or the CAA for use and is subsequently placed under that authority’s regulatory system.
- (r) “Importing Participant” means TCCA or the CAA as charged by the laws of the importing State with regulating the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products.
- (s) “Licensing Agreement” means a commercial contract between a Type Certificate (TC) or Supplemental Type Certificate (STC) holder and a production organization approval holder (or applicant) formalizing the rights and duties of both contractual parties to use the design data for the purpose of manufacturing the civil aeronautical product.
- (t) “Life-limited Part” means a part that, as a condition of the type certificate, may not exceed a specified time, or number of operating cycles, in service.
- (u) “Manufacturer” means a person who, under Canadian or United Kingdom regulations, is responsible for determining that all products, parts, or appliances produced within its production quality system conform to a TCCA or CAA approved design or established government or industry standard and are in a condition for safe operation. For the United Kingdom this includes a production organisation.
- (v) "Operational Suitability Data (OSD)" means the suite of data required to be established by aircraft manufacturers under (UK) Part 21 that is considered important for the safe operation of the aircraft type; OSD is approved by the CAA under the type certificate to be used by operators and training organizations. The data consists of 5 elements:
 - (i) Minimum Syllabus of pilot type rating training;
 - (ii) Aircraft Reference data to support the qualification of simulators;
 - (iii) Minimum Syllabus of maintenance certifying staff type rating training;
 - (iv) Type-Specific data for cabin crew training; and
 - (v) Master Minimum Equipment List (MMEL).
- (w) “Part Design Approval” for TCCA means a document issued by the Minister to record the approval of the design of a replacement part, identified by a part number or by some other means of identification unique to the part, for use on an aeronautical product that is identified by type or model.
- (x) “Production Quality System” means a systematic process, which meets the requirements of the Exporting Participant and ensures that products, parts, and appliances will conform to the approved design and will be in a condition for safe operation. For TCCA this is known as a Production Control System.
- (y) “Restricted Type Certificate” means a type certificate in the restricted category.

- (z) “Special Condition” means:
 - (i) For TCCA: an additional airworthiness requirement prescribed by TCCA when the airworthiness standard for the category of civil aeronautical product does not contain adequate or appropriate safety standards due to novel or unusual design features of the product design. Special Conditions contain such safety requirements as TCCA finds necessary to establish a level of safety equivalent to that intended by the applicable airworthiness standards.
 - (ii) For the CAA: an additional detailed technical specification prescribed by the CAA when the airworthiness code for the category of civil aeronautical product does not contain adequate or appropriate safety standards due to novel or unusual design features, unconventional use of the product, or experience in service with similar products showing that unsafe conditions may develop. Special Conditions contain such safety standards as the CAA finds necessary to establish a level of safety equivalent to that intended in the applicable airworthiness code.
- (aa) “Standard Part” means a part that is manufactured in accordance with an established government or industry-accepted specification, which includes design, manufacturing, and uniform identification requirements. The specification must include all information necessary to produce and conform the part, and must be published so that any person or organization may manufacture it.
- (bb) “Validating Authority (VA)” means either TCCA or the CAA as charged by the laws of the importing State, with regulating the design, production, and airworthiness approval and environmental certification of civil aeronautical products and articles.
- (cc) “Validation” means the VA’s own process for compliance determination of a design, or a design change, as approved or certified by Exporting Participant.

SECTION II — DESIGN APPROVAL

2.1 PROCEDURES

- (1) The Participants understand that the procedures in this Section will apply to the initial design approval of each other’s civil aeronautical products, the approval of subsequent design changes, and approval of design data used in support of repairs.
- (2) The Participants understand that:
 - (a) Design approvals and data already certified or validated by TCCA and the European Union Aviation Safety Agency (EASA) under the Bilateral Aviation safety agreement between Canada and the European Union (EU) before the date of the UK’s exit from the EU will continue to remain valid for TCCA and the CAA under these Technical Implementation Procedures. For the EU these design approvals include those that were deemed valid by EASA under Regulation (EU) No. 748/ 2012 (as originally enacted) and for TCCA, those issued by TCCA before the introduction of the CARs in 1996.
 - (b) When validating each other’s products, they will follow the validation process described in Appendix C.
 - (c) These procedures are based on the high degree of mutual confidence and trust between them on their technical competence, regulatory capabilities and similarities of each other’s certification and approval systems. These procedures

establish the process for implementing the reciprocal acceptance of each other's compliance determinations and approvals on civil aeronautical products.

(d) Canada and the United Kingdom recognize that they have sovereign authority over the certification and approval processes and compliance determinations within their respective jurisdictions.

(e) The procedures in this Section are not intended to diminish their roles or their authority to type design information. Rather, each of them has determined that its national requirements, standards, practices, procedures, and systems for the certification, approval and production of civil aeronautical products are sufficiently similar to enable the Importing Participant to rely on and accept, to the maximum extent practicable, the compliance determination by the Exporting Participant with the Importing Participant's requirements. They understand that if there are overwhelming reasons to go outside this defined principle, such reasons will be discussed between them.

(f) The Participants recognize each other's systems of individual and organizational delegation and authorization as part of their overall certification and approval systems. Compliance determinations and approvals made pursuant to these Technical Implementation Procedures through these systems are given the same validity as those made directly by them.

2.2 LIMITATIONS OF DESIGN OR DESIGN CHANGE APPROVALS

(1) The Participants understand that:

(a) A certificate or an approval issued by either Participant is intended for civil aeronautical products, which have a civilian application. Civil aeronautical products that are engaged strictly in military, customs, police, search and rescue, coastguard or similar activities or services will not be eligible for certification or approval under these Technical Implementation Procedures. A Participant may accept an application for these products under these Technical Implementation Procedures where they perform a dual role and the product has a civil certification basis.

(b) An applicant under the jurisdiction of a Participant who submits an application directly to the other Participant will not be eligible for certification, approval or validation under these Technical Implementation Procedures. An applicant will submit an application through its Participant to the other Participant.

2.3 GENERAL PROCEDURES FOR VALIDATION OF A DESIGN OR A DESIGN CHANGE

2.3.1 SUBMISSION OF AN APPLICATION

The Participants understand that when specified by these Technical Implementation Procedures, an application for approval of a design or a design change will:

- (a) be made using the forms required by the VA, duly completed by the applicant. The forms are available from the following websites:

For the CAA: <https://www.caa.co.uk/Commercial-Industry/Aircraft/Airworthiness/>

For TCCA: <http://www.wapps.tc.gc.ca/Corp-Serv-Gen/5/Forms-Formulaire/English.aspx>

Note: It may be necessary for the applicant to complete a declaration or acknowledge its commitment to the appropriate financial requirements before the application can be processed.

- (b) be accompanied by the applicable technical data package necessary for the VA to conduct preliminary administrative and technical assessments of the application;
- (c) be forwarded by the CA to the VA along with a cover letter stating that the application is within the scope of these Technical Implementation Procedures; and
- (d) be acknowledged formally by the VA and give notice to the CA of the contact points for purpose of further communication on the application.

2.3.2 JOINT OR CONCURRENT CERTIFICATION

- (1) The Participants understand that when they, and the applicant seeking approval, accept a joint or concurrent certification/validation process, the VA will conduct its activities using the validation procedures contained in Appendix C.
- (2) The Participants will document their joint decision under Section VII of these Technical Implementation Procedures. This documentation will include the details of their work-sharing program necessary to cover both type certification and post-type certification activities and will include those elements that would be documented as part of the Validation Plan of Appendix C.

2.3.3 PROJECTS INVOLVING A SEPARATE STATE OF DESIGN AND STATE OF MANUFACTURE

The Participants understand that some of their aviation industries projects may involve products designed under one Participant's jurisdiction and manufactured under the other Authority's jurisdiction. In such cases, the Participants will work together to develop and document a working arrangement in accordance with Section VII of these Technical Implementation Procedures. The working arrangement will define their respective roles to ensure that the relevant functions assigned to the State of Design and the State of Manufacture under Annex 8 to the Convention on International Civil Aviation ("Chicago Convention") are carried out. Such a working arrangement will address the continued airworthiness roles assigned to the State of Design and the State of Manufacture.

2.3.4 COMMUNICATIONS DURING A CERTIFICATION, APPROVAL OR VALIDATION PROJECT

The Participants will establish a communications protocol at a level considered appropriate for the scope of the certification, approval or validation activity under this Section. The communications protocol will, as a minimum, identify primary contact offices or persons, accommodate for an early exchange of information and discussion between the Participants, and promote continued communications throughout the certification, approval or validation project. The contact points for the Participants for the purpose of this Technical Implementation Procedures are provided in Appendix A.

2.3.5 THE PARTICIPANTS VALIDATION PROCESS

- (1) The Participants understand that their acceptance of compliance determinations and/or approvals on products under the WA will be respected on their validation projects.
- (2) The Participants will conduct validation activities using the validation procedures contained in Appendix C. The expectation is that the CA's certification activities will allow the VA to make a compliance determination that the type design of a civil aeronautical product complies with its requirements.
- (3) The Participants understand that this Section is intended to reduce the number of compliance determinations retained by the VA as much as practicable while respecting regulatory requirements. The validation process is intended to allow:
 - (a) the VA to issue its design approval based on the CA's design approval and declaration that the type design has been examined and found to comply with the VA's certification basis; and
 - (b) the VA to review selected aspects of a type design presented for design approval, due to the origin and nature of the civil aeronautical product and the validation criteria defined in Appendix C.

2.3.6 COMPLETION OF VALIDATION

The Participants understand that:

- (a) except when these Technical Implementation Procedures provide for the automatic acceptance of an approval issued by the CA, the completion of the validation process by the VA, which includes the resolution of all issues raised during the validation activity, will result in the issuance of a corresponding approval, or an indication of its acceptance of the CA's approval as equivalent to its own; and
- (b) in the case where the VA issues an approval, the approval will be forwarded directly to the holder, and at the same time, a copy provided to the CA.

2.4 TYPE CERTIFICATE (TC)

The Participants understand that the VA will use the following procedures for its validation and approval of an aircraft, aircraft engine or propeller for which TCCA or CAA is the CA.

Notes:

- (i) *Before the implementation of Subpart 521 of the CARs in December of 2009, TCCA used the type certification system as the means to record the design approval of an appliance. Appliances that were issued an appliance TC have a certification basis consisting of either a FAA Technical Standard Order (TSO) or a Special Condition in the case where no standards existed.*
- (ii) *The appliance TC process is considered equivalent to that of the TSO, however the production approval is granted under Subpart 561 of the CARs. The appliance TC does not confer installation approval. Appliances approved under an appliance TC process is expected to be evaluated using the criteria in respect of the CAN-TSO design approval.*

2.4.1 APPLICATION FOR A TYPE CERTIFICATE

- (1) An application for a TC will be submitted for an aircraft, aircraft engine or propeller that has been issued a TC by, or where an application for certification has been made to, the CA.
- (2) The CA should ensure that the application contains the following information:
 - (a) the data required in accordance with, for TCCA, Division II and XI of Subpart 521 of the Canadian Aviation Regulations (CAR), and for the CAA, Part 21.A.15;
 - (b) a copy of the CA's TC and TC data sheet, if available, that identifies the certification basis upon which the design approval was based. In the absence of a TC data sheet, the CA should submit the document that defines the certification basis;
 - (c) the date of application for a TC to the CA;
 - (d) the applicant's requested date for completion of type certification;
 - (e) the applicant's proposed certification basis, which includes the amendment level of the applicable airworthiness and environmental requirements of the VA; and
 - (f) any other technical data requested by the VA in order to proceed with the application, as described in Appendix C2.1.2.
- (3) If known at the time of application, the application should also contain the following:
 - (a) a description of all novel or unusual design features known to the applicant or the CA, which might necessitate issuance of Special Conditions or may require a review of the acceptable means of compliance;
 - (b) all known or expected exemptions or deviations, or Findings of Equivalent Level of Safety relative to the CA's standards for design approval that

might affect compliance with the VA's airworthiness and environmental standards; and

- (c) available information on Canadian or United Kingdom customers and delivery schedules.
- (4) The VA will acknowledge receipt of the application and notify the CA of the subsequent procedures for the validation and its proposed certification basis.
- (5) The Participants may accept applications for concurrent or joint type certification/validation in accordance with 2.3.2 above.
- (6) The Participants and the applicant may accept that the additional technical data be submitted directly by the applicant to the VA.

2.4.2 ESTABLISHING THE CERTIFICATION BASIS FOR THE TYPE CERTIFICATE

For the purpose of validation by the VA, the certification basis will be developed using:

- (a) the applicable airworthiness requirements of the VA in effect on the date of application for a TC to the CA;
- (b) the applicable environmental requirements of the VA in effect on the date of application for a TC to the CA; and
- (c) for the CAA, the OSD requirements of Part 21 and the related Certification Specifications in effect on the date of application for an aircraft TC to TCCA.

2.4.3 TYPE CERTIFICATE VALIDATION

The VA will conduct its validation of a TC for an aircraft, aircraft engine or propeller in accordance with the applicable procedures of Appendix C.

2.4.4 ISSUANCE OF A TYPE CERTIFICATE

The VA will issue a TC for an aircraft, aircraft engine or propeller when:

- (a) the applicant has demonstrated and declared compliance to the VA's certification basis;
- (b) the CA has issued a statement of compliance to the VA's certification basis;
- (c) the CA has issued its own TC for the aircraft, aircraft engine or propeller; and
- (d) the VA has completed its validation procedures for a TC.

2.5 RESTRICTED TYPE CERTIFICATE (RTC)

For aircraft that have been, or will be, granted a Restricted TC, a Participant may choose to validate such aircraft designs on a case-by-case basis. In such a case, the Participants will follow the procedures outlined in paragraph 2.4 above.

2.6 SUPPLEMENTAL TYPE CERTIFICATE (STC)

The Participants understand that the VA will use the following procedures for its approval of a design change to a civil aeronautical product that is type certified in both Canada and the United Kingdom.

Note: For CAA STCs associated with replacement part designs, the procedures of section 2.9 of this document are expected to be used.

2.6.1 APPLICATION FOR A SUPPLEMENTAL TYPE CERTIFICATE

- (1) An application for an STC will be submitted for a civil aeronautical product:
 - (a) that has been issued a TC by both Participants, regardless of the State of Design of the product;
 - (b) for which one of the Participants is the State of Design for the design change; and
 - (c) for which one of the Participants has approved the design change through the issuance of an STC.

Note: TCCA, the CAA, and the applicant may accept a joint or concurrent certification/validation process as per section 2.3.2.

- (2) The CA is expected to ensure that each application contains the following information
 - (a) the data required and a description of the design change, in accordance with Divisions V and XI of Subpart 521 of the CARs for TCCA, and in accordance with Part 21.A.113(a) for CAA, including the information to fulfill Part 21.113(b) regarding a link to the TC holder or adequacy of the applicant's own resources;
 - (b) a copy of the CA's STC that identifies the certification basis upon which the design approval was based. In the absence of the STC, the CA should submit the document that defines the certification basis;
 - (c) the date of application for an STC to the CA;
 - (d) the applicant's requested date for completion of the STC;
 - (e) the applicant's proposed certification basis, which includes the amendment level of the applicable airworthiness, environmental and where applicable OSD requirements of the VA; and
 - (f) any additional technical data that may be requested by the VA in order to proceed with the application, as described in Appendix C2.1.2.
 - (g) The Participants and the applicant may accept that the additional technical data be submitted directly by the applicant to the VA.
- (3) If known at the time of application, the application is expected to also contain the following:
 - (a) a description of all novel or unusual design features known to the applicant or the CA, which might necessitate issuance of Special Conditions or may require a review of the acceptable means of compliance;
 - (b) all known or expected exemptions or deviations, or equivalent level of safety findings relative to the CA's standards for design approval that

might affect compliance with the applicable VA's airworthiness and environmental standards; and

- (c) available information on Canadian or United Kingdom based customers and delivery schedules.
- (4) In the case of applications from Canada where an STC applicant has not entered into an arrangement with the TC holder as set out in (UK) Part 21.A.113, TCCA will review and confirm the applicant's justification that such an arrangement is not necessary as the information on which the application is based is adequate from the applicant's own resources. The applicant's justification and the TCCA concurrence statement will be provided to CAA.
- (5) The VA will acknowledge receipt of the application and notify the CA of the subsequent procedures for the validation and its proposed certification basis.
- (6) The Participants may accept applications for concurrent or joint supplemental type certification/validation in accordance with 2.3.2 above.

2.6.2 ESTABLISHING THE CERTIFICATION BASIS FOR THE SUPPLEMENTAL TYPE CERTIFICATE

For the purpose of supplemental type certification by the VA, the certification basis will be developed:

- (a) using the VA's procedures and its applicable requirements as determined in a manner that is consistent with the criteria that is used to establish the certification basis for a domestic STC of similar design and service history. These requirements are defined, for TCCA in section 521.157 of the CARs and for the CAA in Part 21.A.101;
- (b) using the date of application to the CA for the STC, as the date that is to be used for the purpose of determining the VA's certification basis;
- (c) using in the case of a design change involving an acoustical or emissions change, the applicable environmental requirements of the VA in effect on the date of application to the CA for the STC; and
- (d) for the CAA, using the OSD requirements of Part 21 and the related Certification Specifications in effect on the date of application for an aircraft STC to TCCA when the application for a change includes changes to the aircraft operational suitability data.

2.6.3 SUPPLEMENTAL TYPE CERTIFICATE VALIDATION

The VA will conduct its validation of an STC for a civil aeronautical product in accordance with the applicable procedures of Appendix C.

2.6.4 ISSUANCE OF THE SUPPLEMENTAL TYPE CERTIFICATE

The VA will issue an STC for a civil aeronautical product when:

- (a) the applicant has demonstrated and declared compliance to the VA's certification basis;
- (b) the CA has issued a statement of compliance to the VA's certification basis;
- (c) the CA has issued its own STC for the product; and
- (d) the VA has completed its validation procedures for an STC.

2.7 SUPPLEMENTAL TYPE CERTIFICATE FOR SPECIAL-PURPOSE OPERATIONS

The Participants understand that when an STC intended for an aircraft to be reconfigured for use in a special-purpose operation, and the proposed configuration is not eligible for a standard Certificate of Airworthiness, the VA may validate such a design change on a case-by-case basis. In such a case, the Participants will follow the procedures outlined in paragraph 2.6 above.

2.8 CANADIAN TECHNICAL STANDARD ORDER (CAN-TSO) DESIGN APPROVAL AND UNITED KINGDOM TECHNICAL STANDARD ORDER AUTHORIZATION (UKTSOA)

Notes:

- (i) *TCCA issues Canadian Technical Standard Order (CAN-TSO) design approvals under Division III of Subpart 521 of the CARs, to record the approval of the design of an appliance. The authority to produce the appliance requires that a manufacturer certificate be granted under Subpart 561 of the CARs.*
- (ii) *Prior to Dec 2009, TCCA approved the design of an appliance through the issuance of an appliance TC where the certification basis was based on adopted FAA Technical Standard Orders or standards defined through the issuance of a Special Condition. The authority to manufacture the appliance requires that a manufacturer certificate be granted under Subpart 561 of the CARs. These appliance TCs do not confer installation approval.*
- (iii) *Where the certification basis of a TCCA appliance TC consists of a TSO standards discussed in 2.8.1, that appliance will be automatically accepted as set out in 2.8.2 and 2.8.3.*
- (iv) *CAN-TSO-C148 fasteners, CAN-TSO-C149 bearings, and CAN-TSO-C150 seals are not eligible for approval through an UKTSOA. The CAA considers such parts to be standard parts and as such they do not require approval under an UKTSOA.*

2.8.1 TECHNICAL STANDARD ORDERS

- (1) Except as stated in (3) below, the Participants have established that their respective Technical Standard Orders (TSO) have sufficient technical equivalencies to enable reciprocal acceptance under these Technical Implementation Procedures. With such equivalencies there is merit in automatically accepting each other's TSO approvals without the need for an application or validation activity by the VA.
- (2) The Participants understand that they have unique Technical Standard Orders that have no technical equivalence in the other's regulatory system. Given the level of confidence in each other's design approval system, and acknowledging that TSOs are not installation approvals in themselves, the level of risk of accepting unique TSOs are no different to common TSOs. As such, the Participants will extend acceptance of each other's unique TSOs under these Technical Implementation Procedures.
- (3) The Participants understand that TSO approvals for Auxiliary Power Units (APU) will be an exception to reciprocal acceptance and require the preparation of an application to the VA as detailed in Appendix C4.0.

2.8.2 ACCEPTANCE OF NON-TSO FUNCTIONS

- (1) The Participants understand that the VA will accept, without further validation, data related to non-TSO functions that are integrated into an appliance approved to a TSO when:
 - (a) the non-TSO functions included in the appliance do not interfere with the functionality of the appliance and/or its ability to comply with the TSO;
 - (b) the data provided with the appliance relative to non-TSO functions is valid data as processed by the CA; and
 - (c) the non-TSO functions are covered under the TSO design approval holder's quality system.
- (2) The Participants understand that the acceptance of this additional data does not constitute installation approval.

2.8.3 RECIPROCAL ACCEPTANCE

- (1) When either Participant grants its UKTSOA or CAN-TSO design approval, the other Participant will automatically accept that approval and an application for validation will not be required.
- (2) The Participants understand that the reciprocal acceptance of a UKTSOA or a CAN-TSO design approval under these Technical Implementation Procedures will be based on the following conditions:
 - (a) the appliance meets the CA's TSO, as evidenced by a statement or declaration of conformity by the UKTSOA or the CAN-TSO design approval holder;
 - (b) if applicable, deviations or exemptions from a TSO are substantiated and have been approved by the CA in conformity with the requirements of its regulatory system;
 - (c) the CA has determined compliance and as a result issued its own UKTSOA or CAN-TSO approval, in accordance with its regulations; and
 - (d) the CA issuing the UKTSOA or CAN-TSO approval, exercises continued safety oversight functions for those TSO products.

2.9 RECIPROCAL ACCEPTANCE OF REPLACEMENT PARTS

2.9.1 REPLACEMENT PARTS

- (1) The Participants understand that the term replacement part, as used in these Technical Implementation Procedures, means a part intended to be installed in place of a part specified in the type design of a civil aeronautical product. The references to a replacement part approval in these Technical Implementation Procedures are:
 - (a) For the CAA, a replacement part design approved using a Supplemental Type Certificate (STC); and
 - (b) For TCCA, a replacement part design approved using a Part Design Approval (PDA).
- (2) The Participants will not approve a replacement part where that part is a critical part or a life-limited part. These parts will be approved using an STC as set out in 2.6.

2.9.2 RECIPROCAL ACCEPTANCE

- (1) Except as stated in (2) below, the Participants understand that when they issue their own approval for a replacement part as set out in 2.9.1 above, any such approval will be automatically accepted by the other Participant as being equivalent to the issuing of its own replacement part approval. In such a case, an application and a validation will not be required. The reciprocal acceptance of replacement parts under these Technical Implementation Procedures is based on the following underlying conditions:
 - (a) One of the Participants is the CA of the replacement part;
 - (b) the replacement part applies to a civil aeronautical product that has been certified or validated by both Participants, regardless of the State of Design of the product;
 - (c) the replacement part has been approved in accordance with the approval procedures of the CA of the replacement part;
 - (d) the CA that issued the approval will exercise continued safety oversight functions for those replacement parts; and
 - (e) any additional conditions defined in Appendix C5.1 are, or have been, adhered to.
- (2) Each Participant will apply, without further investigation, the reciprocal acceptance of replacement parts under these Technical Implementation Procedures, unless the conditions for reciprocal acceptance are no longer met.

Notes:

- (i) *At the time of signing of the WA, the CAA had no standalone design approval for a replacement part. CAA approves replacement parts through the issuance of an STC.*
- (ii) *TCCA will automatically accept those STCs issued by CAA where it can be clearly established that the approval is for a replacement part, which meets the conditions of (1) above.*
- (iii) *TCCA does not issue PDA for life-limited parts.*

2.10 REPAIR DESIGN

- (1) Except as stated in (2) below, when one Participant issues its approval for a repair design, the other Participant will automatically accept such approval as being equivalent to its own approval. In this case, an application and a validation will not be required. The reciprocal acceptance of repair design approvals under these Technical Implementation Procedures is based on the following underlying conditions:
 - (a) One of the Participants is the CA for the repair design;
 - (b) the repair data applies to a civil aeronautical product that has been certified or validated by both Participants, regardless of the State of Design of the product;
 - (c) the repair design has been approved in accordance with the approval procedures of the CA for the repair;
 - (d) the Participant that granted or issued the approval exercises continued safety oversight functions for that repair design; and
 - (e) any additional conditions defined in Appendix C6.0 are adhered to.
- (2) The Participants understand that the VA will require the submission of an application for a repair design for its direct approval when the repair design is for:
 - (a) a critical part or a life-limited part, if the repair design was developed by a person other than the holder of the TC, STC or other equivalent approval for the affected civil aeronautical product; or
 - (b) an area that is the subject of an airworthiness directive by the VA, unless such airworthiness directive allows for the acceptance of a repair design approved by the CA.
- (3) Each Participant will apply, without further investigation, the reciprocal acceptance of repair design approvals under these Technical Implementation Procedures, unless the conditions for reciprocal acceptance are no longer met.
- (4) The Participants will notify each other of changes to their repair design approval processes or procedures that affect the validity of a repair design accepted under these Technical Implementation Procedures.

2.11 EVALUATION OF OPERATIONAL AND MAINTENANCE ASPECTS

- (1) The Participants will evaluate the operational and maintenance aspects of the TC, STC, and repair design using their own respective internal procedures, or using a common procedure that provides for a single assessment acceptable to both Participants.
- (2) The Participants understand that for an initial issue or a revision of a Maintenance Review Board (MRB) / Maintenance Type Board (MTB) Report (Report), the CA approved Report will be accepted by the VA. Where the conditions of (3) are not satisfied, (4) provides a means for validation of MRB/MTB Reports to be completed.

- (3) The Participants understand that the acceptance of Reports under this section is applicable to all initial issue or revision to current Reports issued by them will be based on the following conditions:
- (a) They both are members of the International MRB Policy Board (IMRBPB);
 - (b) they commit to implement the latest revision of the International MRB/MTB Process Standards (IMPS) developed and approved by the IMRBPB;
 - (c) one or the other is the CA for the State of Design for the product;
 - (d) The product has been issued a Type Certificate (TC) or validated TC by them or the TC application is being processed by either TCCA or the CAA;
 - (e) they will inform one another of any application to develop changes to a current Report to start the development of an initial Report.
 - (f) For Initial Reports:
 - (i) The CA will approve the Report in accordance with their approval procedures.
 - (ii) The VA will conduct their validation of the Type Design in accordance with the applicable procedures contained in Appendix C of this TIP.
 - (iii) Once the type validation is complete and the VA is ready to issue a TC, the VA will accept the Report through the issuance of a TC and referencing the Report in the VA TCDS.
 - (iv) When participation for existing initial Reports has been established prior to entry into effect of these conditions, participation by both Participants can be maintained until the initial Report is approved.
 - (g) Revised Reports:
 - (i) The CA will approve the Report revision in accordance with their approval procedures.
 - (ii) If specific VA requirements were addressed in Appendices/Annexes to the Report, the CA approval of these specific requirements will be coordinated with the VA for acceptance, including changes thereof.
 - (iii) The VA will accept the Report revision based on the CA approval and reference the accepted revised Report in the VA TCDS.
 - (iv) When participation for existing Report revisions has been established prior to entry into effect of these conditions, participation by both Participants can be maintained until the Report revision is approved.
 - (h) The changes to the Report approval processes or procedures will be communicated in accordance with the provisions outlined in Technical Implementation Procedures paragraph 1.3;
 - (i) The VA may review or sample the CA approval process to ensure continued confidence that the MRB/MTB process is being implemented in accordance with these procedures and that the Report achieves its intended goals. This type of review may be part of a continued maintenance of confidence process

acceptable to both Participants. The CA will make available any data supporting the Report to the VA on request when appropriate;

- (j) Any potential conflict derived from this process will be resolved in accordance with the provisions outlined in paragraph 1.4 of this TIP.
- (4) The Participants understand that if processes different from MRB/MTB processes are used to develop scheduled maintenance interval / tasking requirements, those processes may be subject to validation activities by the VA in accordance with the procedures contained in Appendix C of this TIP.
- (5) The Participants understand that acceptance of Instructions for Continued Airworthiness (ICA) will be performed by the CA in accordance with their own internal procedures. The review and acceptance of ICAs by the VA will be in accordance with the applicable procedures contained in Appendix C of this TIP.
- (6) The Participants will identify all technical information submitted by the applicant used to identify the applicable ICAs. The Participants will communicate and resolve differences in the required ICA, if any. The list of acceptable ICAs will be identified on the applicable TCDS by the CA and VA.

2.12 APPROVED MANUALS

2.12.1 INITIAL APPROVAL OF MANUALS

The Participants understand that the CA will submit to the VA for review and acceptance all Approved Manuals. Following a review of the submitted Approved Manuals and notification by the VA of its acceptance, the CA will approve the Approved Manual(s) on behalf of the VA.

2.12.2 CHANGES TO APPROVED MANUALS

The Participants may authorize the review and approval of revisions to Flight Manuals and other Approved Manuals, supplements, and appendices on behalf of each other in order to facilitate their timely approval. If the Participants accept such an arrangement, they understand that the CA will:

- (a) notify the VA of changes to the existing approved limitations, performance, weight and balance, or procedures of Approved Manuals, and changes to any parts of the Approved Manuals for which the VA retained the compliance determination during its validation. For these changes, the VA will review the changes and notify the CA of its acceptance. Following the notification of acceptance, the CA will approve the changes on behalf of the VA; and
- (b) review editorial, administrative, and other minor changes on behalf of the VA, and ensure that those changes meet the VA requirements. For these changes, the VA may authorize the CA to approve such revisions on its behalf without prior notification. Such revisions will be submitted to the VA promptly for the VA's record.

2.12.3 AUTHORIZATION TO APPROVE

The authorization of a Participant to sign on behalf of the other will be required to be documented clearly between the appropriate persons or offices in charge of the Approved Manuals.

2.13 CHANGES TO THE APPROVED DESIGN

The Participants understand that the VA will use the following procedures for its approval of a design change to a civil aeronautical product that is type certified in both Canada and the United Kingdom.

2.13.1 CHANGES TO THE TYPE DESIGN BY THE TC OR STC HOLDER

- (1) The CA will define the proposed design changes relative to the VA's current definition of the approved type design.
- (2) Design changes are classified into two categories. The criteria and procedures for the classifications are contained in Appendix C.
 - (a) For the category of design changes that require the involvement of the VA, the VA will approve the design changes following receipt of a written statement by the CA that the design changes comply with the certification basis. In order to fulfill its obligations under this subparagraph, the VA may provide individual statements for each design change or collective statements for lists of approved design changes.
 - (b) For all other design changes the approval of the CA constitutes a valid approval for the VA without the need for any additional action.
- (3) For purposes of validation, the VA's certification basis will be developed:
 - (a) using the applicable airworthiness requirements of the VA as determined, for TCCA, in accordance with Division IV and XI of Subpart 521 of the CARs, and for the CAA, in accordance with Part 21.A.101;
 - (b) using the date of application to the CA for the design change, as the date that is to be used for the purpose of determining the VA's certification basis, which is consistent with that for a similar domestic design change;
 - (c) in the case of a design change involving an acoustical or emissions change; the applicable environmental requirements of the VA in effect on the date of application to the CA for the design change; and
 - (d) for the CAA, using the OSD requirements of Part 21 and the related Certification Specifications in effect on the date of application for a change to TCCA when this change includes changes to the aircraft operational suitability data.
- (4) The Participants will address relevant changes to the ICAs during their design change approval. If changes to the ICA are required, these changes must be communicated to the VA.

2.13.2 DESIGN CHANGES BY A PERSON OTHER THAN THE TC OR STC HOLDER

- (1) For major changes to a type design by a person other than the TC or STC Holder, the Participants will follow the design change approval procedures in paragraph 2.6 above.
- (2) For minor changes to a type design by a person other than the TC or STC Holder, such changes will be accepted or approved in accordance with their respective procedures. Once a minor change is approved under the system of either Participant, it is considered approved by the other.

2.13.3 CHANGES TO AN APPLIANCE APPROVED TO A UKTSOA OR A CAN-TSO DESIGN APPROVAL

- (1) Major design changes to an appliance approved to a TSO that is accepted under section 2.8 will require substantiation of the new design and issuance of a new approval under the respective approval systems of the appropriate Participant.
- (2) For Minor design changes approved by the UKTSOA or CAN-TSO design approval holder that remain within the scope of the appliance approval, the Participants will rely on each other's system of compliance determination. The Participants will not require notification of these minor changes, except in the case of an APU where such changes result in a new APU model designation.

2.13.4 CHANGES TO A REPAIR DESIGN

Design changes to an approved repair require approval by the Participant that originally approved the repair design. The approving Participant will ensure that the approval continues to be valid and eligible for recognition under 2.10. The Participants will not require notification of these changes, except where the repair is no longer eligible for reciprocal acceptance.

2.14 COORDINATION BETWEEN DESIGN AND PRODUCTION

When a Participant grants a production approval for a civil aeronautical product in its jurisdiction based on design data obtained from a design approval holder in the other Participant's jurisdiction, the Participant will ensure that the design approval holder collaborates with the production organisation as required under Part 21A.4 or Subpart 561 of the CARs, to ensure:

- (a) satisfactory coordination of design and production as appropriate:
 - (i) to ensure correct and timely transfer of up-to-date applicable design data (e.g., drawings, material specifications, dimensional data, processes, surface treatments, shipping conditions, quality requirements, etc.) to the production organization;
 - (ii) to provide visible statement(s) of approved design data;
 - (iii) to deal adequately with production deviations and non-conforming parts in accordance with the applicable procedures of the design organisation and the production organisation approval holder; and
 - (iv) to achieve adequate configuration control of manufactured parts, to enable the production organisation to make the final determination and identification for conformity or airworthiness release; and
- (b) the proper support of the continued airworthiness of the civil aeronautical product.

3.0 SECTION III — CONTINUING AIRWORTHINESS

3.1 GENERAL

The Participants will each fulfill the applicable continuing airworthiness obligations assigned to ICAO Contracting States under Annex 8 to the Convention on International Civil Aviation. The functions of the State of Design, and where appropriate, State of Manufacture or State of Registry will be carried out by the appropriate Participant. These procedures are intended to facilitate the fulfillment of those obligations and for the timely resolution of in-service safety issues arising from time to time on civil aeronautical products in their respective jurisdictions.

3.2 CONTINUING AIRWORTHINESS OBLIGATIONS

- (1) Under International Civil Aviation Organization (ICAO) Annex 8, the State of Design is responsible for resolving in-service safety issues related to a civil aeronautical product's design or production. The Participants understand that the State of Design will provide applicable information, which it has found to be necessary for mandatory modifications, required limitations and/or inspections to the VA to ensure continued operational safety of the civil aeronautical product. The VA will review and normally accept the corrective actions taken by the State of Design in the issuance of, or as part of, its own mandatory corrective actions.
- (2) The Participants understand that the State of Design will, upon request, assist in determining any actions considered necessary by the VA for the continued safety of civil aeronautical products operating under its jurisdiction. The VA decides the final action to be taken with respect to these civil aeronautical products.

3.3 FAILURE, MALFUNCTION AND DEFECT REPORTING

Note: For the purposes of 3.3, the reporting of failures, malfunctions and defects to the Participants is in respect of those failures, malfunctions and defects that have resulted in or may result in an unsafe condition for flight. For TCCA this is known as a reportable service difficulty. For the CAA this is contained within occurrence reporting.

- (1) The Participants will perform the following functions for those civil aeronautical products for which they are the State of Design:
 - (a) tracking of reports on failures, malfunctions and defects, other service difficulty reports, and accident/incidents;
 - (b) evaluating failures, malfunctions and defects, and the results and/or conclusions drawn from accident or incident investigations;
 - (c) investigating and resolving unsafe conditions;
 - (d) advising the VA of known unsafe conditions and the necessary corrective actions (see 3.4);

Notes:

- (i) *For TCCA, this information is provided through the Continuing Airworthiness Web Information System (CAWIS), which provides access to the Web Service Difficulty Reporting System (WSDRS) for reports of failures, malfunctions and defects, and to the Airworthiness Directives database. Both systems can be accessed at: <https://wwwapps.tc.gc.ca/saf-sec-sur/2/cawis-swimn/>*
- (ii) *For the CAA, this information is provided through the Airworthiness Directive publishing tool, which can be accessed at: <https://www.caa.co.uk/Commercial->*

[industry/Aircraft/Airworthiness/Continuing-airworthiness/Airworthiness-Directives/](#)

- (e) providing the VA, upon request, with the following:
 - (i) reports of failures, malfunctions and defects;
 - (ii) status of investigations into failures, malfunctions and defects and accidents/incidents
 - (iii) copies of final reports reached in its investigation into failures, malfunctions and defects, if available; and
 - (f) making reasonable efforts to resolve issues raised by the VA concerning matters of safety for civil aeronautical products operated or used in its jurisdiction.
- (2) The Participants, when acting as the VA, will perform the following functions:
- (a) beyond the normal reporting requirements of ICAO Annex 8 4.2.3 (f) for the State of Registry, provide upon request to the CA information on failures, malfunctions, defects and occurrences relating to civil aeronautical products for which the Exporting Participant is the State of Design;
 - (b) support the CA in investigations of unsafe conditions and their occurrences on the imported aircraft; and
 - (c) advise the CA, if as a result of investigations made by the VA into failures, malfunctions and defects and accidents/incidents, it has determined that it will implement its own mandatory corrective action(s).
- (3) The Participants understand that failure, malfunction and defect reports will be transmitted in the manner required by the State of Design, as follows:
- (a) for TCCA, through the TCCA web-based Web Service Difficulty Reporting System, which will forward the failures, malfunctions and defects (known as Service Difficulty Reports) to the TC holder; and
 - (b) for the CAA, directly to the TC holders, who then are in charge of reporting to the CAA PCM as per the applicable CAA procedures.

3.4 UNSAFE CONDITIONS AND MANDATORY CONTINUING AIRWORTHINESS INFORMATION

- (1) The Participants will perform the following activities for the civil aeronautical products for which they function as the State of Design:
- (a) issue mandatory continuing airworthiness information (such as an airworthiness directive) whenever the Participant determines that an unsafe condition exists in a civil aeronautical product, or is likely to exist or develop in a product of the same type design. This may include a civil aeronautical product that has another product installed on it and the installation causes the unsafe condition. The contents of such a mandatory continuing airworthiness information are expected to include, but are not limited to, the following:
 - (i) make, model, and serial numbers of affected civil aeronautical products;
 - (ii) description of the unsafe condition, reasons for the mandatory action, and its impact on the overall aircraft and continued operation;
 - (iii) description of the cause of the unsafe condition (e.g., stress corrosion, fatigue, design problem, quality control, suspected unapproved part);
 - (iv) the means by which the unsafe condition was detected and, if resulting from in-service experience, the number of occurrences may be provided; and
 - (v) corrective actions and corresponding compliance times, with a list of the relevant manufacturer's service information including reference number, revision number and date.

Note: TCCA does not necessarily automatically issue an airworthiness directive. It may allow the manufacturer to campaign the replacement of defective parts. Where that campaign is not successful, then TCCA will issue an airworthiness directive.

- (b) issue a revised or superseding mandatory continuing airworthiness information whenever the CA finds any previously issued mandatory continuing airworthiness information was incomplete or inadequate to fully correct the unsafe condition;
- (c) notify the VA of the unsafe condition and the necessary corrective actions by transmitting by e-mail or other mutually accepted means a copy of the mandatory continuing airworthiness information at the time of publication;

Note: The Participants are encouraged to provide an advance copy of the mandatory continuing airworthiness information to each other.

- (d) notify the VA of any emergency airworthiness information;
- (e) assist the VA in defining the appropriate actions to take in the issuance of its own mandatory continuing airworthiness information; and
- (f) provide the VA with a summary index list of mandatory continuing airworthiness information issued by the State of Design for civil aeronautical products operated or used by the VA.

Notes:

- (i) *For TCCA, this information is provided through the Continuing Airworthiness Web Information System (CAWIS), which provides access to the Web Service Difficulty Reporting System (WSDRS) for reports of failures, malfunctions and defects, and to the Airworthiness Directives database. Both can be accessed at: <https://wwwapps.tc.gc.ca/saf-sec-sur/2/cawis-swimn/>*
- (ii) *For the CAA, this information is provided through the Airworthiness Directive publishing tool, which can be accessed at: <https://www.caa.co.uk/Commercial-industry/Aircraft/Airworthiness/Continuing-airworthiness/Airworthiness-Directives/>*
- (2) The Participants understand that they may differ as to the finding of an unsafe condition. If such a difference arises, the VA will normally consult with the CA prior to issuing its own airworthiness directive. The CA will work with the TC holder to provide sufficient information, e.g. service bulletins, to the VA in a timely manner for its use in issuing this unilateral airworthiness directive.
- (3) The Participants understand that the VA may issue its own mandatory continuing airworthiness information to address all unsafe conditions on affected products that have been certified, approved or otherwise accepted by the VA. The VA will respond quickly when the CA issues a mandatory continuing airworthiness information.

Note: For an appliance or part where the VA automatically accepts the approval under 2.8.3 or 2.9.2 as equivalent to having granted and issued its own approval, any mandatory continuing airworthiness information issued by the CA for the appliance or part will be automatically accepted by the VA.

3.5 ALTERNATIVE MEANS OF COMPLIANCE (AMOC) TO MANDATORY CONTINUING AIRWORTHINESS INFORMATION

- (1) The Participants will automatically accept an AMOC of general applicability that is issued by the other Participant for its own State of Design civil aeronautical products.
- (2) The Participants understand that the CA will, upon request, assist in determining the acceptability of a specific AMOC request submitted by the VA on an airworthiness directive that has been issued by the State of Design for its own civil aeronautical products.

4.0 SECTION IV — ADMINISTRATION OF DESIGN APPROVALS

4.1 GENERAL

The Participants understand that this Section addresses the procedures for the transfer, surrender, withdrawal, revocation or suspension of certificates or approvals on civil aeronautical products that have been validated or accepted by a Participant under these Technical Implementation Procedures.

4.2 TRANSFER OF A TC OR STC

4.2.1 TRANSFER GENERAL

- (1) The Participants understand that the transfer of a certificate will comply with their respective requirements:
 - (a) For Canada, the requirements of Subpart 521 of the CARs do not permit the transfer of a certificate without the written approval of TCCA. Additionally, before accepting the State of Design responsibilities, it is TCCA's policy to review the certificate held by a non-Canadian person that is being transferred to a Canadian person, the products included in the transfer, and the eligibility and ability of the new Canadian holder to fulfill the responsibilities of a certificate holder; and
 - (b) For the United Kingdom, CAA will transfer a certificate only when it has been satisfied that the applicant is able to take the responsibilities in CAA Part 21 and that the TCCA certificate has been transferred to the same applicant.
- (2) The Participants understand that the responsibilities of the State of Design referred to in this Section are those contained in Annex 8 to the Convention on International Civil Aviation, Airworthiness of Aircraft. Any other responsibilities on civil aeronautical products assigned to the Participants are derived from their respective regulations.
- (3) The Participants understand that they need to jointly accept the transfer of the State of Design responsibilities. If acceptance cannot be reached, then the affected certificate may be revoked by the incumbent State of Design and the affected ICAO Contracting States notified of such an action.
- (4) Each Participant will administer the procedures for the transfer of certificates only where an applicant, who is to become the holder, accepts to fulfill responsibilities for both the Participants certificates, and the affected operating fleet. Otherwise paragraph (3) above applies.
- (5) The Participants understand that the design data are the property of the certificate holder.

4.2.2 TRANSFER WITHOUT A CHANGE IN STATE OF DESIGN FUNCTIONS

The Participants understand that the transfer of a certificate between persons located in Canada or within the United Kingdom, which does not involve a change in the State of Design functions for the Participants, will be administered according to the requirements of the incumbent State of Design. The Participants will notify each other of any formally completed transfer of a certificate, so that the corresponding certificate issued by the other can be re-issued to reflect the change. The Participants will provide assistance where necessary so that either is satisfied that the new certificate holder is able to fulfill the roles of a certificate holder under the requirements of the other Participant.

4.2.3 TRANSFER WITH A CHANGE IN STATE OF DESIGN FUNCTIONS

The Participants understand that the transfer of a certificate between persons of different jurisdictions, which involves a transfer of the State of Design functions from one Participant to the other Participant, will be administered according to a transfer plan acceptable to both of them. The purpose of the transfer plan is to describe the process that will be used by the Participants to satisfactorily complete the transfer of a certificate and its associated roles to the new certificate holder and the new State of Design. The transfer plan will be:

- (a) specific to the certificate being transferred;
- (b) initiated by the incumbent State of Design; and
- (c) terminated upon issuance of a certificate by the new State of Design.

4.2.4 TRANSFER PLAN AND NOTIFICATION

- (1) The transfer plan referred to in 4.2.3 above is expected to be drafted at the beginning of the process and will cater to the size and scope of the certificate being transferred. The plan is expected to establish, but is not limited to:
 - (a) points of contact for the transfer;
 - (b) the transfer of design data to the new holder;
 - (c) the roles of each Participant during the transfer process;
 - (d) the roles of the holder and applicant during the transfer process;
 - (e) the civil aeronautical products or type design being transferred;
 - (f) transfer of knowledge on continuing airworthiness issues;
 - (g) production issues;
 - (h) the needed resources and project timelines;
 - (i) the transfer schedule;
 - (j) how a request between the Participants for assistance in making additional compliance determinations on the other's behalf will be accomplished;
 - (k) how to enhance a Participant's understanding of the design;
 - (l) how procedural differences will be resolved, and how those resolutions will be recorded;
 - (m) how differences between the original certification basis and the one under consideration may be minimized; and
 - (n) details about the manufacturing of parts related to the type design.
- (2) Upon transfer of a certificate, the Participant of the new State of Design will notify all affected ICAO Contracting States of the transfer, the new certificate, the new person in charge of the type design, and the mailing address for submitting reports of failures, malfunctions and defects and other service difficulties.

4.3 SURRENDER OF A TC OR STC

If a certificate holder voluntarily surrenders a TC or STC issued by either Participant, that Participant will immediately notify the other in writing. This notification is required to

include information on the known civil aeronautical products operating in Canada or the United Kingdom, as applicable. The Participant will continue to exercise its continuing airworthiness roles as the State of Design for the surrendered certificate, and inform the other of any identified unsafe conditions until such time as they:

- (a) reissue the TC or STC to a new holder after the new holder demonstrates competence to fulfill the necessary obligations; or
- (b) revoke the TC or STC. Prior to termination, the CA will notify the VA of the pending revocation.

4.4 REVOCATION OR SUSPENSION OF A TC OR STC

- (1) The Participants understand that if a State of Design takes action to revoke or suspend a TC or STC, it will immediately notify the VA of its action. Upon such notification, the VA will determine for itself if a corresponding action is warranted.
- (2) The Participants understand that the State of Design in revoking or suspending a certificate will provide the VA information on the known civil aeronautical products operated or used in the State of the VA.

4.5 SURRENDER OR WITHDRAWAL OF AN APPROVAL (UKTSOA, CAN-TSO DESIGN APPROVAL, PART DESIGN APPROVAL OR REPAIR DESIGN)

Note: The CAA approves replacement parts through the issuance of an STC.

4.5.1 SURRENDER

If the holder of a UKTSOA, CAN-TSO Design Approval, part design approval or repair design approval surrenders such an approval, the responsible Participant will immediately notify each other of the action. The Participant that issued the approval will inform the other when an unsafe condition has been identified, until such time as the issuing Participant formally withdraws the surrendered approval.

4.5.2 WITHDRAWAL

If a UKTSOA, CAN-TSO Design Approval, part design approval or repair design approval is withdrawn, the Participants will immediately notify each other of the action. The Participant that issued the approval will inform the other when an unsafe condition or a non-compliance situation has been identified. The issuing Participant will investigate the unsafe condition or non-compliance situation for corrective action and notify the other of the corrective action.

4.5.3 SURRENDER OR WITHDRAWAL

In the case of either a surrender or withdrawal of a UKTSOA, CAN-TSO Design Approval, part design approval or repair design approval, the Participant that granted the approval will still be in charge of the continued airworthiness of the repair design and those parts and appliances manufactured under its authority.

5.0 SECTION V — EXPORT AIRWORTHINESS APPROVAL

5.1 GENERAL

- (1) This Participants understand that this Section addresses the procedures by which a civil aeronautical product being exported from Canada or the United Kingdom to the other will be accepted on the basis of an export airworthiness approval issued by the Exporting Participant. The Importing Participant will recognize and accept the export airworthiness approval of the Exporting Participant when issued in accordance with these Technical Implementation Procedures.
- (2) The Participants understand that for civil aeronautical products exported from Canada or the United Kingdom, the following export airworthiness approvals are recognized and accepted when issued by an authorized natural or legal person in a form and manner they've jointly prescribed, as follows:
 - (a) for complete aircraft only, an Export Airworthiness Certificate (for TCCA) or an Export Certificate of Airworthiness (for the CAA); and
 - (b) for aircraft engines, propellers, appliances, and parts other than Standard Parts, an Authorized Release Certificate.

5.2 CERTIFICATION FOR EXPORT

5.2.1 EXPORT OF NEW AIRCRAFT

- (1) The Exporting Participant will certify that a new aircraft being exported to Canada or the United Kingdom:
 - (a) conforms to the type design approved by the Importing Participant, as specified in the Importing Participant's type certificate data sheet and any additional STCs approved by the Importing Participant;
 - (b) is in a condition for safe operation; and
 - (c) complies with the applicable airworthiness directives and additional import requirements of the Importing Participant, where notified.
- (2) The Exporting Participant will provide a statement or declaration on either the Export Airworthiness Certificate or the Export Certificate of Airworthiness of it certification in respect of (1) above, and will include the identification of any exception from the identified approved type design of the Importing Participant. The exception from the identified type design will be coordinated in accordance with 5.3 below.
- (3) The Exporting Participant will also provide information on the acoustical configuration of the new aircraft and its noise and emission characteristics necessary for the Importing Participant to establish compliance with its environmental requirements and to complete the certificate of noise compliance or equivalent record.

5.2.2 EXPORT OF NEW AIRCRAFT ENGINE, PROPELLER, APPLIANCE, AND PART OTHER THAN A STANDARD PART

- (1) The Participants understand that a new aircraft engine, propeller, appliance, and any part other than a Standard Part being exported to Canada or the United Kingdom will need to be certified that it:
 - (a) conforms to the applicable approved design data;
 - (b) is in a condition for safe operation; and

- (c) complies with the applicable airworthiness directives and additional import requirements of the Importing Participant, where notified.
- (2) The Participants understand that the approved manufacturer of a new aircraft engine, propeller, appliance, and part other than a Standard Part being exported will provide a statement or declaration on the Authorized Release Certificate of its certification in respect of (1) above, including the identification of any exception from the identified approved type design of the Importing Participant.

5.2.3 EXPORT OF USED AIRCRAFT

- (1) The Participants understand that a used aircraft under the jurisdiction of Canada or the United Kingdom is eligible for export to the other only where the used aircraft, regardless of State of Design, has a design approval granted by the Importing Participant.
- (2) The Exporting Participant will certify that a used aircraft eligible under (1) above being exported to Canada or the United Kingdom:
- (a) conforms to the type design approved by the Importing Participant, as specified in the Importing Participant's type certificate data sheet and any additional STCs approved by the Importing Participant;
 - (b) is in a condition for safe operation; and
 - (c) is properly maintained using approved procedures and methods (evidenced by logbooks and maintenance records); and
 - (d) complies with the applicable airworthiness directives and additional import requirements of the Importing Participant, where notified.
- (3) The Exporting Participant will also provide information on the acoustical configuration of the used aircraft and its noise and emission characteristics necessary for the Importing Participant to establish compliance with its environmental requirements and to complete the certificate of noise compliance or equivalent record.
- (4) The Exporting Participant will provide a statement or declaration on the Export Airworthiness Certificate or Export Certificate of Airworthiness of its certification in respect of (3) above, including the identification of any or all exceptions from the identified approved type design of the Importing Participant. The exception from the identified type design will be coordinated in accordance with 5.3 below.

- (5) In the case of (2)(c) above, the Importing Participant may request inspection and maintenance records, which include but are not limited to:
- (a) the original or certified true copy of the Export Airworthiness Certificate or Export Certificate of Airworthiness, issued by the Exporting Participant;
 - (b) records, which verify that all overhauls, major changes, and major repairs were accomplished in accordance with data approved in accordance with Section II of these Technical Implementation Procedures;
 - (c) maintenance records and logbook entries which substantiate that the used aircraft is properly maintained by fulfilling the requirements of an approved maintenance program by an authorized person or organization; and
 - (d) where major design changes or STCs are embodied in a used aircraft, all necessary data for subsequent maintenance are expected to be provided, such as the data describing the installation, the materials and parts used, wiring diagrams for installation on avionic and electrical systems, drawings or floor plans for installations in the cabin, fuel or hydraulic systems, structural changes.
- (6) In the case where Canada or the United Kingdom is the State of Design of the used aircraft, and such aircraft is being imported from a third country, the Participants will, upon request, assist each other in obtaining information regarding the configuration of the aircraft at the time it left the manufacturer. In addition, they will provide assistance in obtaining information regarding subsequent installations on the used aircraft that have been approved by the State of Design.

5.3 COORDINATION OF EXCEPTIONS ON EXPORT AIRWORTHINESS CERTIFICATE OR EXPORT CERTIFICATE OF AIRWORTHINESS

- (1) Where the Exporting Participant identifies a non-compliance to the approved type design of the Importing Participant and intends to identify these as exceptions to its export certification, the Exporting Participant will, prior to issuing its Export Airworthiness Certificate or Export Certificate of Airworthiness, notify the Importing Participant of such non-compliance. This notification by the Exporting Participant is expected to help resolve all issues concerning the aircraft's eligibility for an airworthiness certificate. This notification is expected to be sent to the appropriate office of TCCA or the appropriate office of the CAA.
- (2) In all cases, the Importing Participant will provide a written confirmation of its acceptance of the non-compliance notified under (1) before the Exporting Participant issues its Export Certificate of Airworthiness.

5.4 IDENTIFICATION AND MARKING REQUIREMENTS

The Participants jointly accept each other's identification and marking of civil aeronautical products as being compliant with their own regulatory requirements, when such identification and marking are accomplished in accordance with the regulations of the Exporting Participant.

5.5 ADDITIONAL REQUIREMENTS FOR IMPORT

The Importing Participant may have additional requirements, which must be complied with as a condition of acceptance of the civil aeronautical product being imported. The following are required, but not limited to those in 5.5.1 to 5.5.3 below.

5.5.1 INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA)

Instructions for continued airworthiness (ICA) and maintenance manuals having airworthiness limitation sections are required to be provided by the TC or STC holder.

5.5.2 AIRCRAFT FLIGHT MANUAL, OPERATING PLACARDS AND MARKINGS, WEIGHT AND BALANCE REPORT, AND EQUIPMENT LIST

An approved Aircraft Flight Manual, including all applicable supplements, is required to accompany each aircraft. The aircraft are required to have the appropriate operating placards and markings, a current weight and balance report, and a list of installed equipment.

5.5.3 LOGBOOKS AND MAINTENANCE RECORDS

Logbooks and maintenance records are required to accompany each aircraft (including the aircraft engine, propeller, rotor, or appliance).

6.0 SECTION VI — PRODUCTION APPROVAL

6.1 TCCA PRODUCTION APPROVAL

The Participants understand that:

- (1) All new civil aeronautical products exported to the United Kingdom under the provisions of this TIP are expected to be produced in accordance with a TCCA CAR 561 production approval.
- (2) TCCA production approval is identified by the issuance of a Manufacturer Certificate that contains an approval number and approved limitation record.

6.2 CAA PRODUCTION APPROVAL

The Participants understand that:

- (1) All new civil aeronautical products exported to Canada under the provisions of this TIP are expected to be produced in accordance with a (UK) Part 21 production approval.
- (2) A CAA production approval is identified by the issuance of a:
 - (a) production approval with approval number and any appropriate limitations; or
 - (b) production approval portion of a TSO Authorization.

6.3 EXTENSIONS OF PRODUCTION APPROVALS

- (1) As the Authority of the State of Manufacture, the Participants may authorize production approval extensions. This includes manufacturing sites and facilities in each other's countries or in a third country. The authority of the State of Manufacture remains in charge of the surveillance and oversight of these manufacturing sites and facilities.
- (2) TCCA will be in charge of the surveillance and oversight of TCCA production approval holders with a facility located in the United Kingdom. Surveillance and

oversight may be performed by the CAA on behalf of TCCA through technical assistance between the Participants. The CAA will be in charge of surveillance and oversight of CAA production approval holders with a facility located in Canada. Surveillance and oversight may be performed by the TCCA on behalf of the CAA through technical assistance between the Participants. The Participants will define such technical assistance in a Special ARRANGEMENT.

6.4 SPLIT State of Design and State of Manufacture

The Participants understand that:

- (1) For split State of Design and State of Manufacture projects between Canada and the United Kingdom, a Special Arrangement will be required to delineate State of Design and State of Manufacture roles of the Participants.
- (2) For split State of Design and State of Manufacture projects, for which a third country is the State of Design, the Importing Participant will accept new aeronautical products in accordance with the provisions of this arrangement. If the third country is the State of Manufacture, the Importing Participant, will conclude an arrangement with that third country in order to accept the certification for that product.

Note: For the above mentioned situations listed in section 6.4, a Licensing Agreement is needed between the design approval holder and the production applicant/approval holder.

6.5 SUPPLIER SURVEILLANCE OUTSIDE THE EXPORTING COUNTRY

The Participants understand that:

- (1) TCCA will be in charge of surveillance and oversight of TCCA production approval holders' suppliers located in the United Kingdom. Surveillance and oversight may be performed by the CAA on behalf of TCCA through technical assistance by the Participants.
- (2) The CAA will be in charge of surveillance and oversight of CAA production approval holders' suppliers located in the Canada. Surveillance and oversight may be performed by the TCCA on behalf of the CAA through technical assistance by the Participants.

7.0 SECTION VII – TECHNICAL ASSISTANCE

7.1 GENERAL

- (1) A Participant may request assistance from the other when significant activities are conducted in either Canada or the United Kingdom. The request will be subject to mutual consent and resource availability of the assisting Participant.

- (2) The Participants are expected to make every effort to have these certification and validation tasks performed locally on each other's behalf. Technical assistance activities will help with regulatory surveillance and oversight functions at locations outside of the requestor's territory. These supporting technical assistance activities will in no way relieve the requestor's roles for regulatory control and environmental and airworthiness certification of civil aeronautical products manufactured at facilities located outside of the requestor's territory.
- (3) The Participants will use their own policies and procedures when providing such technical assistance to the other, unless other working arrangements are defined and accepted. Types of assistance may include, but are not limited to, the following:
 - (a) Certification and Validation Support:
 - (i) approving test plans;
 - (ii) witnessing tests;
 - (iii) performing compliance inspections;
 - (iv) reviewing reports;
 - (v) obtaining data;
 - (vi) verifying/determining compliance;
 - (vii) monitoring the activities and functions of delegates or approved organizations; and
 - (viii) conducting investigations of service difficulties.
 - (b) Conformity and Monitoring Support:
 - (i) conformity inspections;
 - (ii) monitoring the controls of special processes;
 - (iii) witnessing the first article inspection of parts;
 - (iv) conducting sample inspections on production parts;
 - (v) monitoring the activities and functions of delegates or approved organizations;
 - (vi) conducting investigations of service difficulties; and
 - (vii) auditing production quality systems.
 - (c) Airworthiness Certification Support:
 - (i) assistance in the delivery of airworthiness certificates for aircraft; and
 - (ii) determining the original export configuration of a used aircraft.

7.2 WITNESSING OF TESTS DURING DESIGN APPROVAL

- (1) A Participant may request assistance from the other for the witnessing of tests that are performed in the other's jurisdiction.

- (2) Only requests between Participants are permissible and the Participants will not respond to a test-witnessing request made directly from the manufacturer or supplier. Witnessing of tests will be conducted only after consultations between the Participants on the specific work to be performed and consent has been obtained from the other Participant. The Participants, as appropriate for the country in which the design approval applicant is located, will make the written request for witnessing of tests.
- (3) Unless otherwise delegated, the Participants remain in charge of the approval of the applicant's test plans, test procedures, test specimens, and hardware configuration, as appropriate for the country in which the design approval applicant is located. The applicant will be in charge of establishing the conformity of each test article prior to the conduct of the test.
- (4) Test witnessing activities may require the development of a working arrangement based on the complexity and frequency of the requested certifications. At the discretion of the Participants in receipt of such requests, these activities may be delegated to authorized persons or approved organizations.
- (5) When there is no working arrangement, requests for witnessing of individual tests will be required to be specific enough to provide for identification of the location, timing, and nature of the test to be witnessed. An approved test plan will be required to be provided by a Participant, as appropriate, at least two weeks prior to each scheduled test.
- (6) The Participants' requests for conformity of the test set-up and/or witnessing of tests will be sent electronically to the appropriate office, which is in charge of the location of the test. The Participants' offices are listed in Appendix A.
- (7) Upon completion of test witnessing, the Participants will send a report stating that the test was conducted in accordance with approved test plans, including the identification of any variations from those test plans, and confirming the test results, as well as any other documentation as notified in the request.

7.3 COMPLIANCE DETERMINATIONS

- (1) A Participant may request that specific compliance determinations be made, which are associated with the witnessing of tests or other activities. Such statements of compliance will be made to the airworthiness or environmental standards of the requesting Participant.
- (2) The Participants' statement of conformity will be sent in a formal letter, transmitted electronically, to the requesting CAA or TCCA office.

7.4 CONFORMITY CERTIFICATIONS DURING DESIGN APPROVAL

- (1) A Participant, depending upon the country in which a supplier is located, may request prototype part conformity certifications from the other as appropriate.

- (2) Only direct requests from a Participant are permissible and the Participants will not respond to a conformity certification request made directly by the manufacturer or supplier. Conformity certifications will be conducted only after consultations and a joint decision to perform the work have taken place. Requests for conformity certifications are expected to be limited to test specimens or prototype parts that are of such complexity that they cannot be inspected by the manufacturer or its regulatory authority prior to installation in the final civil aeronautical product. Conformity certifications may require the development of a working arrangement based on the complexity of the requested certifications. Conformity certifications may be delegated to authorized delegates or approved organizations.
- (3) The Participants requests for conformity certifications will be sent to their offices listed in Appendix A of these Technical Implementation Procedures.
- (4) Upon completion of each conformity certification conducted on each other's behalf, the Participants will complete and return all documentation as notified. The Participants, depending upon the country in which the supplier is located, will note all deviations from the requirements notified by them on the conformity certification for the particular part. Any non-conformity described as a deviation is expected to be brought to the attention of the Participants for evaluation and disposition as to its effect on safety and the validity of the test under consideration. The Participants are expected to receive a report stating the disposition of each deviation before the appropriate TCCA or CAA form is issued.

7.5 SURVEILLANCE AND OTHER SUPPORT

A Participant may request other types of technical assistance outlined in 7.1(3) above. Each request will be handled on a case-by-case basis, as resources permit between the PCM. Each request will include sufficient information for the task to be performed and reported back to the requestor. Where the technical assistance is repetitive or long-term, a working arrangement may be needed.

7.6 AIRWORTHINESS DETERMINATION

Neither conformity certification on prototype parts as per 7.4 above, nor inspections on production parts (per paragraph 7.1) are expected to be construed as being an export airworthiness approval, since a conformity certification does not constitute a determination of airworthiness. Airworthiness determinations remain the responsibility of the design holder and/or manufacturer and the exporting authority.

7.7 AIRWORTHINESS CERTIFICATES

There may be certain programs and conditions that warrant technical assistance for the issuance of airworthiness certificates so that aircraft may be placed directly into operation from the site of manufacture. The Importing Participant may seek assistance from the Exporting Participant in the final processing and delivery of an airworthiness certificate when the aircraft has completed its manufacturing cycle, has been entered on the importing country's registry, and has subsequently been granted an Export Airworthiness Certificate or Export Certificate of Airworthiness by the Exporting Participant. This will require the development of a working arrangement between the Participants.

7.8 HANDLING OF REQUESTS FOR PROPRIETARY DATA AND ACCESS TO INFORMATION/PUBLIC ACCESS TO OFFICIAL DOCUMENTS INFORMATION

7.8.1 PROTECTION OF PROPRIETARY DATA

Unless required by law, the Participants will not copy, release, or show data identified as proprietary or otherwise restricted that is obtained from each other to anyone other than their employee, without written consent of the design approval holder or other data submitter. The Participant is expected to obtain this written consent from the design approval holder through its authority. To the extent that the Participants share such data with relevant accident investigation or other statutory bodies, they will ensure that these persons treat such restricted information in accordance with paragraph 9.8 of the WA.

7.8.2 ACCESS TO INFORMATION REQUESTS

When TCCA receives a request for access to information related to a civil aeronautical product of a Canadian approval holder or an applicant who is located in the United Kingdom, TCCA may request the CAA's assistance in contacting the approval holder or applicant. Similarly, TCCA will advise the CAA of the potential release of any information received from the CAA and submitted to TCCA. If the CAA, where applicable, or the approval holder or applicant consents to the release of the information, a written consent will be required to be provided to TCCA. If release is objected to, a statement of the reasons will be required to be furnished by the CAA to TCCA. If there is an objection, TCCA will only release the information that it determines is required to do so under the Access to Information Request.

7.8.3 FREEDOM ON INFORMATION REQUESTS (FOIA)

- (1) When the CAA receives UK FOIA requests to release information, the data is expected to be shared with the applicant unless one of the exemptions apply. These exemptions are either qualified or absolute. A qualified exemption means if the data is covered by such an exemption, for the exemption to operate disclosure is required to cause prejudice and it is required not to be in the public interest to disclose it – an example of this type of exemption is commercial interests (in the present context this is proprietary information). An absolute exemption does not require a prejudice or public interest test.
- (2) When the CAA receives a request based upon the UK FOIA process, related to a product or article of a CAA approval holder or applicant who is located in Canada, the CAA will request the TCCA's assistance in contacting the CAA approval holder or applicant to obtain justification for a determination of what may qualify for exemption under FOIA.

7.9 ACCIDENT/INCIDENT AND SUSPECTED UNAPPROVED PARTS INVESTIGATION INFORMATION REQUESTS

- (1) When investigating in-service incidents, accidents, or suspected unapproved parts involving a civil aeronautical product imported under these Technical Implementation Procedures, the Participant may request information from the appropriate contact points (see listing in Appendix A).

- (2) In case of a major incident or accident, the Participants will cooperate to address urgent information needs. Following a major accident or incident, upon receipt of a request for urgent information the Participants will provide the requested information. The Participants will establish individual contact points to respond to each other's questions and ensure that timely communication occurs. Information may be requested directly from a manufacturer when immediate contact with the appropriate contact points cannot be made. In such cases, notification of this action will be made as soon as possible. Either Participant, as applicable, will assist in ensuring that its manufacturer provides requested information expeditiously.

8.0 SECTION VIII — FURTHER WORKING ARRANGEMENTS

- (1) The Participants understand that future situations may arise requiring additional procedures that are not specifically addressed in these Technical Implementation Procedures but are within the scope of the WA. When such a situation arises, the Participants will review it, and will develop a working arrangement to address the situation. If it is apparent that the situation is unique, with little possibility of repetition, then the working arrangement will be of limited duration. However, if the situation has anticipated new technology or management developments, which may lead to further repetitions, the Participants will revise these Technical Implementation Procedures accordingly.
- (2) The Participants understand that when a unique situation falls within the jurisdiction of TCCA, the Director, Standards will be in charge of developing the necessary working arrangement with CAA.
- (3) The Participants will ensure that any working arrangements is kept and controlled by their contact points for these Technical Implementation Procedures listed in Appendix A.

9.0 SECTION IX — FINAL DISPOSITIONS

- (1) These Technical Implementation Procedures will become effective on 01 Jan 2021, and will replace the earlier version Technical Implementation Procedures dated 26 March 2019.
- (2) The Participants understand that:
 - (a) These Technical Implementation Procedures may be amended by the designated officers (Section 1.2.2, Governance) upon their mutual consent; and
 - (b) Administrative and editorial changes may be made by the contact points after mutual consultation.

- (3) Either Participant may terminate these Technical Implementation Procedures by giving sixty days written notice to the other Participant. Termination will not affect the validity of activities conducted under these procedures prior to termination.

SIGNED ELECTRONICALLY, in duplicate, at Ottawa and London on this, the 5th day of November 2020 in English and French languages, each version being equally valid. The Participants understand that the electronic signatures are equivalent to paper signatures.

**FOR THE CIVIL AVIATION AUTHORITY
OF THE UNITED KINGDOM OF GREAT
BRITAIN AND NORTHERN IRELAND**



By: David Malins
Head of Airworthiness
Safety and Airspace Regulation Group
Civil Aviation Authority

FOR TRANSPORT CANADA CIVIL AVIATION



By: Nicholas Robinson
Director General, Civil Aviation

APPENDIX A — CONTACT POINTS AND OFFICE ADDRESSES

A1. CONTACT POINTS FOR IMPLEMENTATION

The designated contact point offices for implementation of these Technical Implementation Procedures are:

For TCCA:
 Director, Standards (AART)
 Transport Canada Civil Aviation
 330 Sparks Street
 Place de Ville, Tower C (2nd floor)
 Ottawa, ON, K1A 0N5
 Canada

Tel: 613 991 2738
 Fax: 613 952 3298

For CAA:
 Director of Safety and Airspace Regulation Group
 Civil Aviation Authority
 Safety and Airspace Regulation Group
 Aviation House
 Beehive Ring Road
 Crawley
 West Sussex
 RH6 0YR
 United Kingdom
 Tel: + 44 330 1383196
 email: BilateralSafetyArrangements@caa.co.uk

A2. CONTACT POINTS FOR COORDINATION OF AMENDMENTS

The designated contact point offices for coordination of amendments to these Technical Implementation Procedures are:

For TCCA:
 Director, Standards (AART)
 Transport Canada Civil Aviation
 330 Sparks Street
 Place de Ville, Tower C (2nd floor)
 Ottawa, ON, K1A 0N5
 Canada

Tel: 613 991 2738
 Fax: 613 952 3298

For CAA:
 Head of Future Safety
 Civil Aviation Authority
 Safety and Airspace Regulation Group
 Aviation House
 Beehive Ring Road
 Crawley
 West Sussex
 RH6 0YR
 United Kingdom

Tel: + 44 330 1383196
 email: BilateralSafetyArrangements@caa.co.uk

A3. CAA OFFICES

Mailing Address
 Civil Aviation Authority
 Safety and Airspace Regulation Group
 Aviation House
 Gatwick Airport South
 West Sussex
 RH6 0YR
 United Kingdom

Physical Location
 Civil Aviation Authority
 Safety and Airspace Regulation Group
 Aviation House
 Beehive Ring Road
 Crawley
 West Sussex
 RH6 0YR
 United Kingdom

A4. CAA E-MAIL ADDRESSES

Contact Point for applications and application management, email may be sent to:

certification.airworthiness@caa.co.uk or certification.gau@caa.co.uk

CAA ADs: For information on existence or applicability of any AD, e-mail may be sent to:
adunit@caa.co.uk

For General Inquiries related to these procedures, e-mail:
BilateralSafetyArrangements@caa.co.uk

A5. TCCA OFFICES

National Capital Region

Director, National Aircraft Certification
(AARD)

159 Cleopatra Drive
Ottawa, ON, K1A 0N5
Canada

Tel: 613 773 8281

Fax: 613 996 9178

Director, Standards (AART)

Place de Ville, Tower C
330 Sparks Street, 2nd Floor
Ottawa, ON, K1A 0N5
Canada

Canada

Tel: 613 991-2738

Fax: 613 952 3298

Chief, Project Management (AARDE)

Tel: 613 773 8303

Chief, Aircraft Certification Standards
(AARTC)

Tel: 613 773 8273

Chief, Continuing Airworthiness (AARDG)

Tel: 613 773 8291

Chief, Operational Airworthiness (AARTM)

Tel: 613 952 4386

A6. TCCA E-MAIL AND WEB ADDRESSES

TCCA ADs: For information on existence or applicability of any AD, e-mail may be sent to:
cawwebfeedback@tc.gc.ca

For General Inquiries related to these procedures, e-mail: TC.InternationalArrangements-Ententesinternationales.TC@tc.gc.ca

For STC Applications without an identified Canadian Customer email:
TC.CivAv.STC.CTS.AvCiv.TC@tc.gc.ca

A7. TCCA REGIONAL OFFICES

Atlantic Region

Associate Director, Operations (MAH)

Moncton Regional Office

Heritage Court Building

95 Foundry Street

Moncton, NB E1C 5H7

Tel: 1-800-305-2059

Fax: 1-855-726-7495

Quebec Region

Associate Director, Operations (NAH)

Dorval Regional Office

700, Leigh Capr  ol Place

Dorval, QC H4Y 1G7

Tel: 514-633-3316

Fax: 514-633-3958

Ontario Region

Associate Director, Operations (PAH)
Ontario Regional Office
Joseph Shepard Building
4900 Yonge Street, 4th Floor
Toronto, ON M2N 6A5
Tel: 416-952-0090
Fax: 416-952-0050

Associate Director, Operations (PAH)
Ontario Regional Office
Joseph Shepard Building
4900 Yonge Street, 4th Floor
Toronto, ON M2N 6A5
Tel: 416-954-2058
Fax: 1-877-822-2129

Prairie and Northern Region
Associate Director, Operations (RAR)
Calgary
Airport Corporate Centre
1601 Airport Road NE, 8th Floor
Calgary, AB T2E 6Z8
Tel: 403-292-5226
Fax: 403-512-3722

Associate Director, Operations (RAX)
Edmonton
Canada Place
1100-9700 Jasper Avenue
Edmonton, AB T5J 4E6
Tel: 780-495-2316

Associate Director, Operations (RAW)
Winnipeg
McDonald Building
344 Edmonton Street, 2nd Floor
Winnipeg, MB R3B 2L4
Tel: 204-983-7411
Fax: 204-984-8125

Pacific Region
Associate Director, Operations (TAH)
Vancouver Regional Office
800 Burrard Street
Vancouver, BC, V6Z 2J8
Canada
Tel: 604-666-5599
Fax: 1-855-618-6288

Associate Director, Operations (TAX)
Vancouver Regional Office
800 Burrard Street, 9th Floor
Vancouver, BC, V6Z 2J8
Canada
Tel: 604-666-5555
Fax: 1-855-618-6288

APPENDIX B — RESERVED

APPENDIX C — PROCEDURES FOR VALIDATION AND RECIPROCAL ACCEPTANCE**TABLE OF CONTENTS**

C1.0	PART I: INTRODUCTION	45
C1.1	General	45
C1.2	Guiding Principles	45
C2.0	PART II: VALIDATION OF A TC AND STC	47
C2.1	Initiation of Validation	47
C2.2	Technical Familiarisation	47
C2.3	Establish the Certification Basis for the Validation Project	47
C2.4	Level of the Validating Authority's Technical Involvement	47
C2.5	Completion of a TC/STC Validation	48
C2.6	Approval of OSD or Equivalent Requirements.....	51
C3.0	PART III: VALIDATION OR RECIPROCAL ACCEPTANCE OF CHANGES TO A TC OR STC	53
C3.1	Major Changes to a TC or STC by Persons Other than the Holder	53
C3.2	Major Changes to a TC or STC (Including Revisions to Approved Manuals) by the Holder	53
C4.0	PART IV: VALIDATION OF APU APPLIANCE APPROVALS	55
C4.1	Appliance Approval	55
C4.2	Validation of APU Appliance Approvals.....	55
C5.0	PART V: RECIPROCAL ACCEPTANCE OF REPLACEMENT PARTS	56
C5.1	Reciprocal Acceptance	56
C5.2	Marking Requirements	56
C6.0	PART VI RECIPROCAL ACCEPTANCE OR VALIDATION OF REPAIR DESIGN APPROVALS	57
C6.1	Repair Design Approval	57
C6.2	Reciprocal Acceptance	57
C6.3	Exclusion	57
C6.4	Validation of Other Repair Design Approvals.....	57

C1.0 PART I: INTRODUCTION

C1.1 GENERAL

- (1) The technical procedures contained in this Appendix supplement the administrative procedures contained in Section I and Section II of these Technical Implementation Procedures. These combined administrative and technical procedures provide the manner by which the Participants will conduct the validation and reciprocal acceptance of civil aeronautical product approvals. PCMs are expected to be thoroughly familiar with both procedures.
- (2) The Participants will adhere to these procedures. The Participants accept that if there are overwhelming reasons to deviate from this Appendix, such reason(s) will be technically explained by the VA to the CA in every instance. The procedures in this Appendix are not intended in any manner to diminish the responsibilities or rights of TCCA or the CAA to the type design information, as provided for by Annex 8 to the Chicago Convention.

C1.2 GUIDING PRINCIPLES

- (1) The Participants understand that validation is the VA's own process for determining compliance of a design or design change, as approved or certified by the CA. Through these Technical Implementation Procedures, it makes it possible for either Participant to grant approval of a foreign civil aeronautical product, without conducting its own exclusive, full and in-depth examination of the design or design change. Validation, in this context, puts emphasis on reliance between Participants to fulfil their own import requirements.
- (2) These Technical Implementation Procedures also establish the reciprocal acceptance by the Participants of each other's approvals, without further showing, on appliances, replacement parts, and repair designs. By reciprocal acceptance, the Participants will recognize and accept an approval granted by each other. As such, civil aeronautical product approvals that are eligible for reciprocal acceptance are automatically accepted. These accepted products do not require a formal application nor is a validation process required. The approval document issued by the CA is sufficient, and the VA is not required to issue a corresponding approval document. Reciprocal acceptance, as with validation, also puts emphasis on reliance and full confidence in each other's approval system.
- (3) Designs or design changes differ in many ways, but both Participants understand that certain designs and design changes are either non-complex or common, or both, in the sense of their general/widespread application or time-proven use in civil aviation. These common designs and design changes, involving their principles and technology, are well understood today and can be regarded to be standard designs or standard design changes, based on the technical knowledge and regulatory experiences accumulated over the years in the repeated application of the certification process. Furthermore, the total actual in-service experiences from these standard designs or design changes provide a good basis or reinforcement for treating the certification or approval of these standard designs or design changes as less risky than others. The primary benefit, therefore, is that such standard designs and design changes do not necessarily require as much certification resources from the State of Design, and consequently an even lesser degree of validation by the VA.
- (4) The Participants understand that as with any civil aeronautical product operating in service, any unsafe condition that manifests over time is continuously monitored by the designer, operator and maintenance provider under a service difficulty reporting system that forms part of the continuing airworthiness program. The continuing airworthiness program is a regulated requirement and an

international obligation for Canada and the United Kingdom under Annex 8 to the Chicago Convention, which provides another layer of safeguard for the protection of the approved design or design change in the actual operating environment. As such, ensuring overall safety is not exclusive or confined at all to the certification or approval of a product, but rather a collective process that also includes the monitoring of the product's performance in-service, the accomplishment of both maintenance and preventive maintenance on the product, and the certificate or approval holder's role in the continued safety of its own products. Either Participant may immediately address any unsafe condition, potential or real, either jointly or unilaterally, through issuance of a mandatory continuing airworthiness information against the affected product.

- (5) The Participants understand that the basic tenets of the WA are the high level of confidence placed on each other's regulatory and technical capabilities, their abilities to fulfil their international obligations as States of Design under the Chicago Convention, and the mutual trust that the Participants can rely on each other to uphold their shared interests in the safety of civil aeronautical products. The validation and reciprocal acceptance procedures contained in this Appendix respect and implement these tenets to the fullest extent.
- (6) The Participants understand that the main objective of this Appendix is to enable them, when acting as the VA, to satisfy their respective import requirements by placing greater reliance on the approval or findings of compliance by the CA. To achieve this objective and without prejudice to their own obligations under their respective regulations and policies, the Participants will:
 - (a) work to eliminate redundant reviews of reports, duplication of inspections, tests and test demonstrations, evaluations and approvals; and
 - (b) directly accept or give full credit to enable maximum acceptance of the compliance determinations made by the other.

C2.0 PART II: VALIDATION OF A TC AND STC

C2.1 INITIATION OF VALIDATION

C2.1.1 SUBMISSION OF APPLICATION

The Participants understand that the validation process begins with the acknowledgement by the VA of a formal application submitted by the CA. Communication will be initiated between the appropriate Participant offices identified in Appendix A. Communication will include the identification and notification of the PCM and PM in charge of processing the application.

C2.1.2 REVIEW OF INITIAL DOCUMENTATION

The Participants understand that the PCM of the VA will review the application package for completeness, and consult with the CA and applicant for additional information as necessary. The submission to the VA is expected to, as a minimum, include the documents specified in these Technical Implementation Procedures. Where none are specified, the required data will be those as notified by the VA. The following is a summary of the data submission requirements under these Technical Implementation Procedures:

for an initial Type Certificate, Section 2.4.1; and

for an initial Supplemental Type Certificate, Section 2.6.1.

any other technical data requested by the VA in order to proceed with the application, including but not limited to the following:

- (i) Compliance Checklist;
- (ii) Airplane/Rotorcraft Flight Manual Supplement;
- (iii) Master Documentation List/Master Drawing List;
- (iv) Manufacturing and Installation Instruction Drawings;
- (v) Weight and Balance data; and
- (vi) Instructions for Continued Airworthiness.

C2.2 TECHNICAL FAMILIARISATION

The Participants understand that the applicant will present suitable and satisfactory information to the VA in order for it to fully understand the design. This presentation may take the form of a meeting or submitted documentation. The choice is that of the VA's. The presentation on the civil aeronautical product will include information on the following:

- (a) new technologies and any unique or unconventional features;
- (b) intended unconventional usage, and
- (c) unsafe conditions that may have developed in similar products in service or products having similar design features.

C2.3 ESTABLISH THE CERTIFICATION BASIS FOR THE VALIDATION PROJECT

The Participants understand that the VA will establish a certification basis as detailed in section 2.4.2 or 2.6.2 of these procedures. The VA may elect to include Special Conditions in the certification basis based on its knowledge of new technologies and any unique or unconventional features or intended unconventional usage of the civil

aeronautical product as presented by the applicant. The certification basis may need to be changed during the validation process as the VA's knowledge of the design increases.

C2.4 LEVEL OF THE VALIDATING AUTHORITY'S TECHNICAL INVOLVEMENT

The Participants understand that:

the Level of Technical Involvement means the process used to manage the participation of, and the activities carried out by, the VA's technical specialists in the validation and compliance determination activities leading to the approval of a civil aeronautical product that has been approved by the other. When determining the level of technical involvement, the principles set out in section C1.2 (6) will apply.

the Level of Technical Involvement by technical specialists of the VA in conducting the technical review is usually predicated on the sensitivity placed by the VA on the demonstration of compliance with its requirements. While it is ultimately the VA's decision, the Participants are required to exercise good judgment in defining the Level of Technical Involvement by considering a non-obtrusive approach and being respectful of the guiding principles mentioned in Section C1.2 of this Appendix.

C2.5 COMPLETION OF A TC/STC VALIDATION

The Participants understand that a TC/STC validation may be accomplished either on-site or off-site, and the exact nature may not be determined until additional information is gathered from the applicant and the CA. The PCM of the VA will proceed with the following activities to complete its validation.

C2.5.1 FAMILIARIZATION MEETING

A TC/STC validation requires that the VA familiarize itself with the civil aeronautical product in detail, the applicant, and the certification activity of the CA.

(a) Purpose

A familiarization briefing is required to obtain initial detailed information regarding the characteristics of the design, the type certification conducted or proposed, and the certification basis by the CA. One of the key purposes of this additional information is to determine whether an on-site review will be required (i.e. applicant's site will be visited) or an off-site review will be sufficient. The familiarization briefing may then be used to identify the technical areas of interest to the VA, and specify what the applicant will provide to the respective specialists to allow them to conduct their review. Another purpose of the familiarization meeting is to provide an opportunity for the VA's aircraft certification personnel to brief the applicant and the CA with respect to the VA's airworthiness and environmental requirements applicable to the given civil aeronautical product, its type certification and validation procedures and policies. The PCM of the VA, in consultation with the CA, will draw up an agenda for the familiarization meeting, and coordinate the necessary arrangements for conducting the familiarization meeting.

(b) Duration

A briefing may be conducted by either the submission of suitable descriptive material or by a physical meeting (or any other alternative acceptable to the VA). Typically, a familiarization meeting may require 2 days, but may be adapted to particular situations. The first day (or part thereof) is a general presentation by the applicant. The remainder may be

used for technical discussions between the specialists of the applicant and the VA.

Note:

The familiarization meeting is expected to also consider the use of modern communication means (e.g. teleconference, videoconference) to achieve its purpose, especially in a case where the resources to assemble a technical audience may be economically disproportionate to the scale and complexity of the design or design change being validated.

(c) Required Attendance

The PCM of the CA and VA will ensure that the briefing is scheduled at a date suitable to all parties involved and that sufficiently knowledgeable representatives from the applicant are participating.

(d) Involvement of the CA

The CA is expected to attend the familiarization meeting, given that they have a thorough knowledge of the certification of the design or design change. It is, therefore, appropriate that the CA assist the VA in its validation of the design or design change for the purpose of establishing either a full credit or partial credit to the findings of compliance by the CA. The CA's involvement will be identified and coordinated through the respective PCMs of the CA and VA.

C2.5.2 ESTABLISH A VALIDATION PLAN

Following the completion of the Familiarization meeting, the PCM of the VA will prepare a plan that identifies the subsequent and necessary activities of its validation. At this point, the VA will have already decided if the validation will be conducted on site or off-site. The validation plan will at least identify the validation schedule or milestones, technical areas of interest to the VA, i.e. the VA's Level of Technical Involvement, the manner or method by which the VA will conduct its review (e.g. document-only review, document review and engineering inspection, etc.), the accountable technical specialists of the VA and CA and the applicant, the required interfaces, and any necessary ground and/or flight tests. A finalized validation plan will be provided to the PCM of the CA, who in turn will coordinate with the applicant the necessary activities to accommodate the validation by the VA, regardless of whether on-site or off-site. A Validation Plan is expected to address, as a minimum, the following:

- (a) the adequacy of the proposed certification basis (airworthiness, environmental, and OSD requirements as applicable);
- (b) the environmental testing and approval;
- (c) any Special Conditions, issued or proposed, and understand the means of compliance;
- (d) any Findings of Equivalent Level of Safety, issued or proposed, and determine acceptability;
- (e) any Exemptions or Deviations, issued or proposed, and determine acceptability;
- (f) compliance determinations with unique import requirements(e.g. OSD requirements);
- (g) the acceptability of the civil aeronautical product against any applicable advisory material;

- (h) compliance determinations, when requested, with the design-related operating requirements;
- (i) the Flight Manual for acceptability;
- (j) the Instructions for Continued Airworthiness for acceptability;
- (k) any Airworthiness Limitations for acceptability;
- (l) the Master Minimum Equipment List, as applicable for acceptance;
- (m) the Airworthiness Directives and service history, as applicable;
- (n) any unique features of the product;
- (o) the identified areas of interest; and
- (p) the Structural Repair Manual, as applicable.

C2.5.3 ENVIRONMENTAL TESTING AND APPROVAL

- (1) The VA will review compliance demonstration plans and reports necessary to make a determination of compliance with its environmental requirements, giving due consideration to any compliance determination that the CA already made, or is able to make, on its behalf. The VA may delegate to the CA any or all of its functions related to environmental testing and approval, subject to mutual agreement.
- (2) In the absence of any delegation of its functions related to environmental testing and approval to the CA, the VA will:
 - (a) review and approve environmental certification compliance demonstration plans for noise, fuel venting and exhaust emissions;
 - (b) evaluate the measurement and analysis methods and practices, and data correction procedures of the applicant for aircraft noise and emission certification;
 - (c) review and approve any equivalent procedures to be used by the applicant during testing, data processing, data reduction, and data analysis;
 - (d) verify the conformity of the test article;
 - (e) witness the compliance demonstration test; and
 - (f) review and approve compliance demonstration reports.

C2.5.4 DOCUMENTATION FROM APPLICANT

- (1) The PCM of the VA will request from the applicant documentation required for those areas of technical interest identified by the relevant specialists during the familiarisation meeting or in the Validation Plan.
- (2) All requests for documents from the applicant are expected to be routed through the PCM of the VA, who would verify that the documentation requests are reasonable and appropriate. However, the VA, CA and the applicant may accept that the additional technical data be submitted directly by the applicant to the VA.
- (3) The amount of document requests will vary between an off-site and on-site review. An off-site review will be conducted remotely from the applicant and the CA, and will rely completely on the availability of sufficient documents to allow the technical specialists to complete the review of its identified areas of interest.

However, for an on-site review, the documentation request are expected to be kept to a level sufficient to prepare the technical specialists in advance, as the intent is to conduct the technical review while on-site. An on-site, in contrast to an off-site, review offers more opportunity for direct specialist-to-specialist interaction.

C2.5.5 OFF-SITE REVIEW

- (1) If an off-site review was decided as being sufficient, the technical specialists of the VA will review from its business location(s) the technical documentation supplied by the applicant, and communicate, as necessary, with its counterpart specialists from the CA and the applicant through its PCM.
- (2) Items of concern or requiring further clarification on the applicant's substantiation or the conduct of the certification activity by the CA will be documented and notified by the VA to the CA through the PCM.
- (3) The PCMs of the Participants will coordinate the resolution of these items to the satisfaction of the VA, and document the decision reached between them. Differences on technical issues are expected to be resolved at the technical level as much as possible, but are expected to be raised promptly to the Participants' management on a progressive level to avoid potential delays in the validation schedule.
- (4) When the PCM of the VA finds that significant technical or documentation concerns still persist and is proving very difficult to resolve under an off-site review, the PCM may consider amending the validation plan to include an on-site review of the specific area of concern. A revision to the validation plan to include an on-site review of the specific area of concern will be required to be coordinated with the CA and receive approval by the management of the VA.

C2.5.6 ON-SITE REVIEW

- (1) An on-site review requires a visit to the applicant's facility by a team of technical specialists from the VA. The intent is for the VA to conduct its activities during a single comprehensive visit, if possible. In some cases, specialists may require more than one visit.
- (2) The PCM of the VA will coordinate the initial visit with the applicant and the CA, and advise on the team composition, the schedule of the on-site visit, and the schedules for each of the technical specialists review sessions (on the technical areas of interest identified in the Validation Plan. The counterpart specialists from both the CA and the applicant will be made available to the visiting validation team for the duration of the on-site review. Where it is determined by the VA after the initial visit that additional visits by the technical specialists are required, these meetings are expected to be held as early as possible in the validation schedule in order to permit timely design changes, if required. All technical meetings subsequent to the initial on-site visit will be required to be arranged through the respective PCMs of the CA and VA.
- (3) Items of concern or requiring further clarification on the applicant's substantiation or the conduct of the certification activity by the CA will be documented and notified by the VA to the CA through the PCM. The notification of findings are expected to be provided by the end of the visit through a formal debrief, or if not possible communicated shortly following the visit. The PCMs of the Participants will coordinate the resolution of these items to the satisfaction of the VA, and finally documenting the decision reached between them. Differences on technical issues are expected to be resolved at the technical level as much as possible, but are expected to be raised promptly to the Participants' management on a progressive level to avoid potential delays in the validation schedule.

C2.5.7 CONCLUDING THE VALIDATION

- (1) TCCA or CAA will notify the other upon completion of its validation exercise, and indicate its readiness to issue a corresponding approval of the design or design change. The VA will issue its corresponding approval for the TC/STC in accordance with the applicable provisions of Section II, of these Technical Implementation Procedures.
- (2) The PCMs of both CA and VA, including the applicant, may accept to have a final meeting at the conclusion of the validation if there are areas of further discussion, or if the sharing of information would be beneficial.

C2.6 APPROVAL OF OSD OR EQUIVALENT REQUIREMENTS

The Participants understand that:

- (a) (UK) Part 21 identifies the OSD as consisting of the following constituents:
 - (i) the minimum syllabus of pilot type rating training, including determination of type rating;
 - (ii) the definition of scope of the aircraft validation source data to support the objective qualification of simulator(s) associated to the pilot type rating training, or provisional data to support their interim qualification;
 - (iii) the minimum syllabus of maintenance certifying staff type rating training, including determination of type rating;
 - (iv) determination of type or variant for cabin crew and type specific data for cabin crew;
 - (v) the master minimum equipment list; and
 - (vi) other type-related operational suitability elements.
- (b) Part 21 requires the CAA TC and STC to include OSD requirements, as applicable. Therefore, compliance with OSD requirements is required in order to receive CAA approval for a type certificate for an aircraft, and for any subsequent change to that type certificate, either through an amended TC or STC, which affects compliance with OSD constituents. TCCA does not have OSD regulations, but have operational elements required by the CAR that are similar or equivalent to OSD constituents. Although TCCA does not approve their operational elements as part of the type certification process, TCCA evaluates and approves these operational elements separately.
- (c) As an interim measure and until such time the Participants have gained enough experience in approving OSD requirements, or TCCA operational elements, the following procedures apply:
 - (i) Where the approval standards of the CAA OSD constituents and TCCA operational elements are deemed sufficiently similar or equivalent,
 - (A) TCCA may, upon request by the CAA, make a finding of compliance with those OSD constituents that are applicable to, or affected by, a TCCA approval granted to a product. CAA will accept the finding of compliance as a basis for their approval of the affected OSD constituents.
 - (B) The CAA may, upon request by TCCA, make a finding of compliance with those operational elements that are applicable to, or affected by, a CAA approval granted to a product. TCCA will

accept the finding of compliance as a basis for their approval of the affected operational element.

- (ii) Where the approval standards are deemed not equivalent, or in the absence of a request, the finding of compliance with their respective requirements will be retained by the VA.
 - (iii) The VA remains in charge of determining compliance with their approval standards.
- (3) The Participants may further accept to establish constituent or element-specific procedures for the purpose of describing the work sharing arrangement leading to the approval of the affected OSD constituents and/or operational elements.

C3.0 PART III: VALIDATION OR RECIPROCAL ACCEPTANCE OF CHANGES TO A TC OR STC**C3.1 MAJOR CHANGES TO A TC OR STC BY PERSONS OTHER THAN THE HOLDER**

The Participants understand that the CA will issue an STC for these changes and the VA will follow the validation process of Part II to complete its validation of the change.

C3.2 MAJOR CHANGES TO A TC OR STC (INCLUDING REVISIONS TO APPROVED MANUALS) BY THE HOLDER

The Participants understand that:

- (1) Changes to the type design covered by these procedures include those necessary for customer unique design features, product improvements and any other design changes, including revisions to approved manuals, made by the TCH/STCH, for whatever reason.
- (2) Where design changes are declared by the TCH/STCH they will be defined relative to the current definition of the approved type design as validated by the VA.
- (3) Design changes will be classified by the TCH/STCH as either Major or Minor in accordance with the criteria and procedures of the CA and these classifications will be accepted by the VA without further investigation.
- (4) Design changes classified as Major will be further categorized by the TCH/STCH as Level 1 Major or Level 2 Major as defined in C3.2.1 and C3.2.2 below.
- (5) Design changes classified as Minor or Level 2 Major will be approved by the CA in accordance with its procedures, against the certification bases of the CA and VA. The VA will not receive notification of such changes, but all such changes will be reciprocally accepted and included in the TCH/STCH Type Design definition which defines the VA's approved build standard and provided to the VA on a periodic basis.
- (6) The VA will receive notification of all Level 1 Major design changes. The VA's acceptance of the change will be requested at the same time by the CA. The CA, on behalf of the VA, will determine compliance with the certification basis of the VA for all Level 1 Major design changes.
- (7) The extent of any VA Technical Involvement will be discussed and decided between the Exporting and Importing Participants in line with the principles stated in Part II above.
- (8) The CA will provide the VA with a Statement of Compliance with the certification basis of the VA for all Level 2 Major design changes approved on behalf of the VA. This may be achieved through the provision of individual statements for each design change or by providing collective statements for lists of approved changes (e.g. Revisions to a Type Design definition for the type as validated by the VA). For validated products, the CA's and VA's TC data sheets are expected to be consistent in the information they include to the degree practicable.
- (9) All Level 2 Major design changes approved by the CA on behalf of the VA or approved by the VA on the basis of compliance determinations made by the CA will be recorded in the Type Design definition specifying the VA's current type design and provided to the VA.
- (10) For changes affecting the CAA-approved operational suitability data, the Participants will establish mutually-accepted procedures for the classification of changes, the notification to CAA, and the means of approval of such changes.

This procedure will be incorporated as part of the OSD constituent or element-specific procedure of paragraph C2.6.

C3.2.1 LEVEL 1 MAJOR DESIGN CHANGES

The Participants understand that Level 1 major design changes are any of the following:

- (a) Design changes that introduce a new model designation (derivative model, variant etc.);
- (b) Design changes having an effect on the certification basis that involve new interpretations of the requirements, new Special Conditions, new Findings of Equivalent Level of Safety, new deviations, new exemptions, new elect to comply with later standards or novel methods of compliance;
- (c) Design changes determined to be significant in accordance with the changed product rule principles as set out in section 521.158 of the CARs or CAA Part 21.A.101;
- (d) Design changes that involve the use of a method of compliance that is different from that of the VA's guidance materials, and differs from that used by the TC/STC holder during the initial Type Validation programme, unless otherwise accepted by both Participants that the design change may be considered a Level 2 Major;
- (e) Design changes involving Approved Manual revisions covering
 - (i) Initial issues of new manuals, appendices or supplements,
 - (ii) Introduction of configurations not previously approved by the VA,
 - (iii) Existing differences between CA and VA approved manual content,
- (f) Any design change classified as an Acoustical Change or Emissions Change; or
- (g) Any other design changes categorised as Level 1 Major by the CA or the TCH/STCH.

C3.2.2 LEVEL 2 MAJOR DESIGN CHANGES

The Participants understand that Level 2 Major design changes are all other major design changes not categorized as Level 1 Major. The VA will reciprocally accept these design changes without review.

C4.0 PART IV: VALIDATION OF APU APPLIANCE APPROVALS

C4.1 APPLIANCE APPROVAL

The Participants will interpret the definition of appliance in these Technical Implementation Procedures will be interpreted to include an auxiliary power unit (APU). The references to an approved appliance under these Technical Implementation Procedures are:

for CAA, an approval granted under CAA Part 21A, Subpart O, United Kingdom Technical Standard Order Authorizations (UKTSOA); and

for TCCA, an approval granted under Division III, Canadian Technical Standard Order (CAN-TSO) Design Approvals, of Subpart 521 of the CARs.

C4.2 VALIDATION OF APU APPLIANCE APPROVALS

- (1) The Participants will make formal submission to each other for the validation of APUs and the following considerations will apply:
 - (a) in all cases, an application will be set out as in (2) below and submitted through the CA to the VA for validation and issuance of an approval; and
 - (b) the Participants will give full credit to, or enable maximum acceptance of the compliance determinations made by the CA to the VA's UKTSO or CAN-TSO, provided the CA certifies that:
 - (i) the appliance meets the VA's UKTSO or CAN-TSO, and
 - (ii) they will exercise continued operational safety functions for that appliance.
- (2) The Participants understand that the CA will ensure that the application package includes:
 - (a) The application form required by the VA, a Declaration of Design and Performance (DDP) and all the required data/documentation as specified in the UKTSO or CAN-TSO;
 - (b) If applicable, request to deviate from the UKTSO or CAN-TSO and substantiation data, or identification of the deviation and evidence of approval;
 - (c) Statement of conformance to the UKTSO or CAN-TSO;
 - (d) Certifying statement from the CA indicating that the appliance has been examined, tested, and found to meet the identified UKTSO or CAN-TSO; and
 - (e) Copy of the applicable approval.

Note: A UKTSOA is not required for an APU for which no previous individual UK approval has been granted if the APU was grandfathered under EU 748/2012 as a part of the configuration of one aircraft type design or STC, and the APU is now proposed for installation on another aircraft type. Such installation can be approved under a CAA STC or TCCA TC or STC.

C5.0 PART V: RECIPROCAL ACCEPTANCE OF REPLACEMENT PARTS**C5.1 RECIPROCAL ACCEPTANCE**

The Participants understand that their reciprocal acceptance of replacement parts under this Technical Implementation Procedures will be based solely on the basis of each other's approval, without the need for submission of an application or the completion of a validation by the other. An approval of a replacement part originally granted by the CA will be automatically accepted by the other as being equivalent to having granted and issued its own approval, provided the replacement part is:

- (a) not a critical part or a life-limited part as defined in 1.8;
- (b) approved under the procedures identified under 2.9; and
- (c) marked in accordance with the regulatory requirements of the CA.

C5.2 MARKING REQUIREMENTS

The Participants understand that the identification and marking of replacement parts may differ between their respective requirements. The Participants accept each other's identification and marking requirements as being compliant with its own regulatory requirements provided such marking is accomplished in accordance with the regulations of the CA. Therefore, no additional identification or marking requirements will be imposed or required by either Participant on a replacement part when recognizing and accepting the approval by the other.

C6.0 PART VI: RECIPROCAL ACCEPTANCE OR VALIDATION OF REPAIR DESIGN APPROVALS**C6.1 REPAIR DESIGN APPROVAL**

The Participants understand that a repair design is intended for the restoration of a civil aeronautical product to an airworthy condition. The references to an approved repair design under these Technical Implementation Procedures are:

- (a) for CAA, a repair design approval issued by CAA or a repair design approval granted by a holder of a Design Organization Approval; and
- (b) for TCCA, an approval issued under Division VI, Repair Design Approvals, of Subpart 521 of the CARs by either TCCA or an appropriately authorized delegate.

C6.2 RECIPROCAL ACCEPTANCE

Except where required in C6.4, the Participants understand that the reciprocal acceptance of repair designs by them under these Technical Implementation Procedures will be based solely on the basis of each other's approval, without the need for submission of an application or the completion of a validation by the other. A repair design approval originally granted by the CA will be automatically accepted by the other as being equivalent to having granted and issued its own approval, provided the repair design is:

- (a) not subject to the exclusions of C6.3;
- (b) developed, in the case of a critical part or a life-limited part, by the holder of the applicable TC, STC, or equivalent approval, of the affected civil aeronautical product;
- (c) for a civil aeronautical product for which both Participants have issued type certificates, or equivalent approvals; and
- (d) approved in the manner set out in C6.1 by one of the Participants.

C6.3 EXCLUSION

The Participants understand that these Technical Implementation Procedures do not allow the automatic acceptance of the following repair designs, and will be subject to the procedures of C6.4:

- (a) critical part or a life-limited part (see definition in Section 1.8, Terminology) if the repair design was developed by a person other than the holder of the TC, STC, or other equivalent approval for the affected civil aeronautical product; and
- (b) an area that is the subject of an airworthiness directive by the VA, unless such airworthiness directive allows for the acceptance of a repair design approved by the CA.

C6.4 VALIDATION OF OTHER REPAIR DESIGN APPROVALS

The Participants understand that repair designs that are not eligible for automatic acceptance under these Technical Implementation Procedures will be validated and approved by the VA, as follows:

- (a) The CA will submit an application on behalf of the applicant to the VA, using the addresses listed in Appendix A. The application will be made in the manner prescribed on the VA's website.
- (b) In cases where the applicant has entered into an arrangement with the TC or STC holder, the CA will confirm this to the VA. The repair design approval may be issued based on this confirmation without further technical review.
- (c) In cases where the applicant has not entered into an arrangement with the TC or STC holder, the application will contain:
 - (i) drawings, specifications and other data necessary to define the configuration and design features of the repair;
 - (ii) a compliance summary that identifies the applicable airworthiness standards, methods of compliance, and compliance results;
 - (iii) substantiation for continued applicability of existing ICAs, or supplemental ICAs, if any;
 - (iv) in the case of applications from Canada, the applicant's justification, and TCCA's concurrence, that an arrangement is not necessary as the

information on which the application is based is adequate from the applicant's own resources; and

- (v) a copy of the repair design issued by the CA.
- (d) The VA will issue a repair design approval based on the declaration from the CA that the applicant has met the VA's requirements.

APPENDIX D — ACRONYM LIST

AD	Airworthiness Directive
AMOC	Alternative Means of Compliance
APU	Auxiliary Power Unit
AWM	Airworthiness Manual (For TCCA)
CA	Certificating Authority
CAN-TSO	Canadian Technical Standard Order
CAR	Canadian Aviation Regulations
CS	Certification Specification (For CAA)
EASA	European Union Aviation Safety Agency
EU	European Union
ICA	Instructions for Continued Airworthiness
ICAO	International Civil Aviation Organization
MRB	Maintenance Review Board
MTB	Maintenance Type Board
OSD	Operational Suitability Data
PCM	Project Certification Manager
PDA	Part Design Approval (for TCCA)
POA	Production Organisation Approval
RTC	Restricted Type Certificate
STC	Supplemental Type Certificate
STCH	Supplemental Type Certificate Holder
TC	Type Certificate
TCH	Type Certificate Holder
TIP	Technical Implementation Procedures
UKTSOA	United Kingdom Technical Standard Order Authorization
VA	Validating Authority

APPENDIX E — RECORD OF REVISIONS

Revision	Revision Date	Section or Paragraph	Change	Reason
Original	26 March 2019	All Pages	Initial Issue	
Rev1	Fall 2020	All Pages	Document formatting	
Rev 1	Fall 2020	7.5 SURVEILLANCE AND OTHER SUPPORT	Correction of reference	6.1 to 7.1
Rev1	Fall 2020	7.6 AIRWORTHINESS DETERMINATION	Correction of reference	7.4 and 7.1

