Technical Arrangement

Between

Civil Aviation Administration Of China

And

Transport Canada Civil Aviation

For

The Type Validation

Of

Bombardier Aerospace

Aeroplane Models BD-500-1A10 and BD-500-1A11

Issue 1: March 21, 2011

Civil Aviation Administration of China

Aircraft Airworthiness Certification Department

Transport Canada Civil Aviation

Standards Branch (AART)

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1.0 PURPOSE

This Technical Arrangement (TA) defines the working relationship between Transport Canada Civil Aviation (TCCA) and the Civil Aviation Administration of China (CAAC) in order to; facilitate the type validation by CAAC of Bombardier Aerospace (BA) aeroplane Models BD-500-1A10 and BD-500-1A11, the validation of subsequent type design changes, and address continued airworthiness activities.

2.0 OBJECTIVES

This TA is intended to accomplish the following objectives:

- (a) to define the working procedures under the responsibilities of each respective Authority:
 - (i) that allow CAAC to issue its validated type certificate for aeroplane Models BD-500-1A10 and BD-500-1A11 through type validation activities held concurrently with TCCA's type certification activities for the same aeroplane models;
 - (ii) that minimize, avoid, or eliminate independent or separate inspections, tests, demonstrations, evaluations, and approvals by TCCA and CAAC on their respective type certification and type validation activities where their corresponding requirements are deemed to be equivalent or the same; and
 - (iii) that respect the timely completions of TCCA's type certification and CAAC's type validation activities according to their respective established schedules.
- (b) to define the working procedures between TCCA and CAAC on post-type certification activities.

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3.0 REQUIREMENT AND BASIS

The requirement for this TA stems from paragraph 2.2 of CAAC Document AP-21-01R2 dated 13 October 2006 (English version)—*Validation Procedures for Import of Civil Aviation Products and Parts*.

4.0 DURATION

This TA shall become effective once signed by the appropriate CAAC and TCCA representatives. It will remain in effect for the duration of the type certification activities and as long as post type certification activities are taking place.

5.0 COMMUNICATION

5.1 General

- (1) All communication between CAAC and TCCA related to the activities of this TA will be made in the English language or Chinese language accompanied by an English translation.
- (2) Any disagreement regarding the interpretation or application of this TA will be resolved by consultation between the CAAC and TCCA.
- (3) Unless otherwise specified, TCCA will be copied on all correspondence between Bombardier Aerospace (BA) and CAAC related to the activities of this TA which may affect the intended concurrent certification activities by TCCA and CAAC, or where it may have impact on the objectives of this TA.

5.2 Administration

- (1) The Aircraft Airworthiness Certification Department of CAAC (CAAC-AAD) and the Standards Branch (AART) of TCCA are responsible for the administration of this Technical Arrangement.
- (2) A focal point will be assigned by each Authority to facilitate the communication between the CAAC-AAD and the Standards Branch (AART) of TCCA. The contact points for the administration of this TA between CAAC-AAD and TCCA are provided in Appendix 1.

5.3 Implementation of Certification Procedures

(1) The National Aircraft Certification (NAC) Branch has responsibility for the type certification of the BA aeroplane Models BD-500-1A10 and BD-500-1A11 in

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- Canada. The contact points for type certification under this TA between TCCA and CAAC-AAD are provided in Appendix 1.
- (2) The NAC will work in collaboration with the CAAC-AAD on matters related to the objective of achieving CAAC type validation of the aeroplane models covered by this TA.
- (3) A working-level Project Manager will be assigned by each Authority to coordinate their respective certification and validation activities and schedules. Each Authority will notify the other of their designated Project Manager. Subsequently, all routine communication related to the activities of this TA will take place between the two Project Managers. The Project Managers will keep each other informed on a mutually-agreed regular basis.
- (4) The Project Managers will agree on their working procedures that fulfill the objectives identified in Section 2.0 (a). Every effort should be made to resolve differences or issues at the Project Manager's level. Issues that cannot be satisfactorily resolved between Project Managers should be expeditiously raised to the attention of the responsible contact points of TCCA and CAAC (Appendix 1) on a progressive level until an agreement or resolution is reached.

6.0 CONCURRENT CERTIFICATION ACTIVITIES

6.1 General

TCCA and CAAC recognize that Bombardier Aerospace (BA):

- (a) is the primary source for providing the technical support to CAAC-AAD for purposes of this TA. When requested, TCCA will provide the necessary assistance and support within its regulatory functions and resource capacity.
- (b) is responsible for demonstrating compliance with the CAAC-AAD certification basis.

6.2 Certification Basis

- (1) For the purpose of this TA, the certification basis will be recorded as follow:
 - (a) for TCCA, as defined in the G1 issue Paper; and
 - (b) for CAAC-AAD, the TCCA type certification basis and any additional technical conditions specified by CAAC.
- (2) CAAC-AAD will notify in writing to both the NAC and BA of any Additional Technical Conditions (ATC) necessary for the CAAC type certification.

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- (3) NAC and CAAC-AAD will identify and inform each other of any Exemption, Findings of Equivalent Level of Safety, or Special Conditions that they are considering or are prepared to accept as part of their respective certification basis.
- (4) NAC and CAAC-AAD will finalize their respective certification basis in a timely manner and confirm these to BA prior to start of the type certification activities.

 NAC and CAAC-AAD will keep each other informed of changes to their certification basis.

6.3 Findings of Compliance

- (1) CAAC-AAD is responsible for making its own findings of compliance for the purpose of its type validation activity. However, CAAC may elect to recognize or accept findings of compliance by NAC for those requirements that they have a similar or common interpretation.
- (2) CAAC-AAD may request NAC for assistance in making findings of compliance for those ATCs identified under paragraph 6.2(2). When making such a request, CAAC-AAD will provide NAC with its written interpretative material or data and an explanation of how NAC can make a finding of compliance on its behalf. NAC will review the ATC submission to ensure it has sufficient understanding of the request.
- (3) NAC will confirm to CAAC-AAD of its willingness to perform findings of compliance on those ATCs where it has acquired sufficient understanding of the requirements. Where a request under paragraph 6.3(2) is accepted, NAC will provide a formal statement to CAAC-AAD attesting that NAC found compliance with the ATC. For those ATCs that NAC is not able to acquire sufficient understanding, CAAC-AAD will make its own findings of compliance.
- (4) NAC and CAAC-AAD shall endeavor to complete their findings of compliance on or before the certification periods established in Section 2.0 (a)(iii).

6.4 Issuance of Type Certificate

- (1) NAC will issue a TCCA type certificate following successful demonstration of compliance by BA and upon determination by NAC that the type designs comply with the established certification basis. NAC will formally notify CAAC-AAD of the issuance of a TCCA type certificate.
- (2) Following the issuance of a TCCA type certificate, CAAC will issue a validated type certificate when BA successfully demonstrates, and CAAC-AAD has determined, that the type designs comply with the CAAC certification basis established under paragraph 6.2(1). CAAC-AAD will formally notify NAC of its issuance of a CAAC validated type certificate.

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7.0 POST VALIDATION ACTIVITIES

7.1 Design Change Approval

- (1) TCCA will verify, upon request, that design changes affecting the CAAC type design that are introduced after issuance of the CAAC validated type certificate, and embodied on aeroplanes to be delivered to China, comply with the CAAC certification basis.
- (2) If a type design change affects the CAAC validated type certificate data sheet, CAAC reserves the right to perform a technical validation of the design change. Where CAAC decides to perform a validation, it will notify BA and TCCA accordingly of its decision, and subsequently provide its approval by issuing a revision to its validated type certificate data sheet.
- (3) If a type design change has little or no effect on the CAAC validated type certificate data sheet, CAAC will accept the design change without technical validation on the basis of a TCCA statement of compliance. CAAC-AAD will notify NAC and BA of its acceptance of the approval.
- (4) Prior to the delivery of each aeroplane to China, a formal statement of compliance with the CAAC certification basis will be provided by TCCA to CAAC, taking into account the design changes validated under paragraphs 7.1(2) and (3).
- (5) Except where notified under paragraph 7.1 (2) above, all other design changes approved by TCCA or its appropriately-authorized delegate will be considered approved by CAAC.

7.2 Documentation Approval

Except where specifically notified by CAAC, manuals, instructions or limitations such as Service Bulletins or Technical Instructions, including any subsequent changes or revisions thereto, that are approved by TCCA or its appropriately authorized delegate will be considered approved by the CAAC.

7.3 Individual Aeroplane Deliveries

For each aeroplane to be delivered to China, the holder of a Transport Canada approved manufacturer certificate will issue, in accordance with CAR 561.10 Statement of Conformity, an Authorized Release Certificate – Form One, for a new aeroplane produced under a manufacturing certificate, which states that the aeroplane conforms to the CAAC approved type design and is in a condition for safe operation.

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8.0 CONTINUED AIRWORTHINESS SUPPORT ACTIVITIES

- (1) CAAC will promptly notify TCCA of the existence of any unsafe condition associated with the design, manufacture, operation or maintenance of aeroplanes covered by this TA.
- (2) In accordance with ICAO Annex 8–Airworthiness of Aircraft, TCCA will promptly notify CAAC of any mandatory continuing airworthiness information that TCCA has found necessary for the continuing airworthiness and safe operation of the aeroplanes.
- (3) TCCA, upon request, will assist CAAC in establishing procedures deemed necessary by CAAC for maintaining the continuing airworthiness of its aeroplanes.

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APPENDIX 1 – POINTS OF CONTACT: CAAC and TCCA

CAAC	TCCA
Aircraft Airworthiness Certification Department	Administration-related:
Director, Aircraft Certification Division 155 Dongsi Street West Beijing 100710 Peoples Republic of China Phone: 86 10 64092331 Fax: 86 10 64033087	Director, Standards (AART) Transport Canada Civil Aviation 330 Sparks Street, Place de Ville Tower C (2 nd Floor) Ottawa, Ontario KIA 0N5 Canada Phone: 1 (613)-952-7974 Fax: 1 (613)-952-3298
	Certification-related: Director, National Aircraft Certification Transport Canada Civil Aviation 330 Sparks Street, Place de Ville Tower C (2 nd Floor) Ottawa, Ontario KIA 0N5 Canada Phone: 1 (613)-952-4338 Fax: 1 (613)-996-9178

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