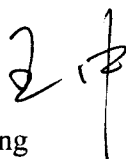


**TECHNICAL ARRANGEMENT  
BETWEEN  
THE GENERAL ADMINISTRATION OF CIVIL AVIATION OF  
CHINA  
AND  
TRANSPORT CANADA CIVIL AVIATION  
FOR THE CAAC TYPE VALIDATION  
OF THE BOMBARDIER AEROSPACE AIRCRAFT MODEL  
CL-600-2C10 (REGIONAL JET SERIES 700 AND 701)**

**Issue 1, dated Oct.13, 2003**

**General Administration of  
Civil Aviation of China**  
Aircraft Airworthiness Certification Department

By:



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**Transport Canada Civil Aviation**  
Aircraft Certification Branch

By:



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Chief, Regulatory Standards

**TECHNICAL ARRANGEMENT BETWEEN**  
**GENERAL ADMINISTRATION OF CIVIL AVIATION OF CHINA**  
**AND TRANSPORT CANADA CIVIL AVIATION**  
**FOR THE CAAC TYPE VALIDATION OF THE BOMBARDIER**  
**AEROSPACE AIRCRAFT MODEL CL-600-2C10 (REGIONAL JET**  
**SERIES 700 AND 701)**

**1. PURPOSE**

This Technical Arrangement (TA) defines the working relationships between Transport Canada Civil Aviation (TCCA) and the Civil Aviation Authority of China (CAAC), hereafter the “Authorities”, to facilitate and accomplish the CAAC type validation of the Bombardier Aerospace (BA) Aircraft model CL-600-2C10 (Regional Jet Series 700 and 701), and of subsequent type design changes, as well as to define Certificate of Airworthiness for Export and continued airworthiness activities.

**2. OBJECTIVES**

This TA is intended to accomplish the following objectives:

2.1 To define the working procedures under the respective responsibilities of each Authority

- a) for the type validation process; and
- b) for subsequent post type validation activities.

2.2 To minimize redundant inspections, tests, demonstration, evaluations, and approvals.

**3. REQUIREMENTS AND BASIS**

The requirement for this TA stems from paragraphs 2.1.4 and 2.4.1 of CAAC AP 21-01R1 dated 1 January 2000 (English version), Validation Procedures for Import Civil Aviation Products and Parts.

**4. DURATION**

This TA shall become effective upon signature by both Authorities. It shall remain in effect for the duration of the type validation activities and as long as post type validation activities are taking place.

## **5. COMMUNICATION**

- 5.1 The Aircraft Airworthiness Certification Department of CAAC (CAAC-AAD) and Aircraft Certification Branch of TCCA (AARD) will be responsible for the administration of this Technical Arrangement.
- 5.2 A project manager will be assigned by each Authority to facilitate the implementation of this TA. All routine communications related to the activities of this TA will formally take place between these two project managers.(See Appendix 1 for contact listing).
- 5.3 BA will be the primary source for providing the technical support to CAAC-AAD. When requested, TCCA will provide the necessary assistance and support within its regulatory functions, which will be initiated through and coordinated by the designated project managers of the respective authority.
- 5.4 All communications 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.
- 5.5 Unless otherwise specified, TCCA shall be copied of all correspondence between BA and CAAC related to the activities of this TA, in order to enable TCCA support to BA and CAAC in the future.

## **6. TYPE VALIDATION ACTIVITIES**

### **6.1 General**

- a) BA is responsible for showing and verifying the compliance with the CAAC certification basis and for demonstrating this compliance to both Authorities. Subject to paragraph 6.2(c)(ii), any compliance documents provided to CAAC must have been approved by TCCA.
- b) The CAAC type validation of the Bombardier aircraft model CL-600-2C10 (Regional Jet Series 700 and 701) must be accomplished in respect of all laws and regulations governing both Authorities.

### **6.2 Certification basis**

- a) The certification bases for Aircraft model CL-600-2C10 (Regional Jet Series 700 and 701) are the following:
  - (i) For TCCA;  
As defined in Transport Canada Type Certificate Data Sheet (TCDS) A131 at the latest applicable issue, and

- (ii) For CAAC;  
The CAAC have accepted the Transport Canada certification basis for the Aircraft model CL-600-2C10 (Regional Jet Series 700 and 701), with additional requirements as established by comparison with CCAR 25 R3. These additional requirements to the TCCA certification basis are referred to as “Additional Technical Conditions (ATC)”.
- b) CAAC will notify in writing both TCCA and BA of any ATC necessary for the CAAC type validation.
- c) TCCA will review the ATC to ensure its understanding thereof. As necessary, CAAC will provide TCCA in writing with any interpretative material or any data regarding the means of compliance pertaining to those ATC.
  - (i) TCCA, upon request from CAAC, will initiate the process of finding compliance referred to in paragraph 6.4 only once it feels it has acquired the necessary understanding of the particular CAAC ATC.
  - (ii) CAAC will perform its own findings of compliance on ATC for which TCCA did not acquire sufficient understanding to make its findings efficient.

### 6.3 Process of finding compliance

For the CAAC type validation activities, CAAC will define its involvement taking into account paragraph 2.2 of this TA.

### 6.4 Process of finding compliance to the ATC

Provided that CAAC has not already made findings of compliance with its own ATC according to paragraph 6.2(c)(ii), TCCA, upon request, will make the findings of compliance with the ATC on behalf of CAAC. TCCA will make the findings of compliance in accordance with the interpretative material and the means of compliance provided by CAAC. In the absence of such interpretative material, TCCA will use its own interpretation for the specific ATC.

### 6.5 Formalization of the findings of compliance

- a) For the purpose of finding compliance with the CAAC certification basis, CAAC may raise Issue Papers (IP) and Action Items (AI).
- b) An IP is normally opened:
  - (i) to document the ATC (one IP per ATC);
  - (ii) to document any controversial technical issue; and,
  - (iii) to document differences in interpretative material or the means of compliance.

- c) AI are normally opened to record any non-controversial action to be performed by BA.
- d) CAAC will notify TCCA and BA of the status of each IP and AI. CAAC will request formal TCCA position on the IP. All IP and AI must be closed before the issuance of the CAAC type certificate.

## 6.6 Final statement

TCCA, upon request, will provide at the end of the process a formal statement attesting that TCCA has found compliance with CAAC certification basis. The CAAC-approved type design will be identified in a CAAC TCDS to be produced by BA and to be approved by TCCA.

## 7. POST TYPE VALIDATION ACTIVITIES

### 7.1 Design change approval

- a) TCCA, upon request, will verify that design changes affecting the TCCA type design which have been introduced after CAAC type validation, and embodied on aircraft to be delivered to China, comply with the CAAC certification basis using the information gained during the type validation activities (see paragraph 6 above). If the change is approved via a Supplemental Type Certificate (STC), it will be validated by CAAC who will notify its approval.
- b) Prior to each aircraft delivery, a formal statement of compliance with CAAC certification basis will be provided by TCCA to CAAC for those design changes, which significantly affect the CAAC approved type design. These type design changes will normally be approved by CAAC on the basis of the TCCA statement of compliance without technical validation. However, CAAC reserves the right to make a technical validation on those design changes that affect the CAAC Validation Data Sheet and will inform BA and TCCA accordingly. For these changes, CAAC will notify TCCA and BA of their approval.
- c) The statement of compliance made by TCCA on the Export Certificate of Airworthiness provided to CAAC is considered sufficient to cover other changes, which are not considered as significantly affecting the approved type design.

## 8. AIRWORTHINESS SUPPORT ACTIVITIES

### 8.1 Individual aircraft deliveries

- a) For each aircraft to be delivered to China, TCCA will issue an individual Certificate of Airworthiness for Export (TCCA form 24-0049) stating that the aircraft complies with the CAAC approved type design and is in a condition for safe operation.

- b) An Airplane Flight Manual (AFM) will be provided for each aircraft to be delivered to China. The AFM will be in accordance to the CAAC approved type design, and will be approved by Transport Canada on behalf of the CAAC-AAD

## 8.2 Continued Airworthiness

- a) In accordance with ICAO Annex 8, TCCA will promptly inform CAAC-AAD of all mandatory airworthiness modifications, special inspections, special operating limitations or other actions necessary for maintaining the continuing airworthiness of aircraft model CL-600-2C10.
- b) CAAC will promptly notify TCCA and BA of any unsafe condition associated with the design, manufacturing or maintenance of the aircraft model CL-600-2C10 that are in service in China.
- c) TCCA will notify CAAC, where appropriate, of any action it deems necessary to correct any unsafe condition in the type design that may be discovered after the type validation, including any actions in respect of components designed or manufactured by a supplier under contract to BA.
- d) TCCA, upon request, will assist CAAC in establishing procedures deemed necessary by CAAC for maintaining the continuing airworthiness of aircraft model CL-600-2C10.

APPENDIX 1

POINTS OF CONTACT

FOR TCCA	FOR CAAC
<p><u>Aircraft Certification Branch</u></p> <p>Director Aircraft Certification (AARD) 330 Sparks St., 3rd Floor Place de Ville Tower C Ottawa, Ont. K1A 0N5 Canada</p>	<p><u>Aircraft Airworthiness Certification Department</u></p> <p>155 Dongsu Street West Beijing 100710 Peoples Republic of China</p>
<p><u>Regulatory Standards</u></p> <p>Chief, Regulatory Standards (AARDH) Phone: (613) 990-2738 Fax: (613) 996-9178</p>	<p><u>Airworthiness Certification Div.</u></p> <p>Director of Airworthiness Certification Div. Phone: 0086-10-64034516 Fax: 0086-10-64034516</p>
<p><u>Project Management</u></p> <p>Chief, Project Management (AARDE) Phone: (613) 952-4339 Fax: (613) 996-9178</p> <p><u>Project Manager:</u> Phone: (613) 952-4345 Fax: (613) 996-9178</p>	