Technical Arrangement
Between
Civil Aviation Administration Of China
And
Transport Canada Civil Aviation
For
The Type Validation
Of
Pratt and Whitney Canada Engines

Original Issue

Civil Aviation Administration of China
Aircraft Airworthiness Department

By:

Deputy Director General

Transport Canada Civil Aviation

By:

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Director, Standards (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) to facilitate the CAAC validation of TCCA type certificates issued to Pratt and Whitney Canada Engine Models as recorded in Appendix 2 of this document, and all appendices added hereafter.

2.0 OBJECTIVES

This TA is intended to accomplish the following objectives:

(a) to define the working procedures under the respective responsibilities of each Authority:

(i) for the type certification validation process including issuance of a validated type certificate b the CAAC; and
(ii) for subsequent post-validation activities; and

(b) to minimize redundant inspections, tests, demonstrations, evaluations and approvals.

3.0 CAAC REQUIREMENT

The requirement for this TA stems from paragraph 21.29 of CCAR 21-R3—***Certification Requirements of Civil Aviation Products and Parts***, and paragraph 2.2 of CAAC Document AP-21-01R2 dated 12 October 2006 (English version) —***Validation Procedures for Import of Civil Aviation Products and Part.***,

4.0 DURATION

This TA becomes effective upon signature by both CAAC and TCCA. It will remain in effect for the duration of the validation activities and as long as post validation activities are taking place.

5.0 COMMUNICATION

(1) The Aircraft Airworthiness Certification Department of CAAC (CAAC-AAD) and the Standards Branch (AART) of TCCA are responsible for the administration of this TA. The TCCA Standards Branch (AART) will work in conjunction with the National Aircraft Certification Branch (AARD) identified in Appendix 1, which has certification jurisdiction over the type certificate holder, Pratt and Whitney Canada.

(2) All communications between CAAC-AAD and TCCA related to the activities of this TA will be made in the English language or Chinese language accompanied by an English translation. The contact

points for CAAC-AAD and TCCA are provided in Appendix 1 of this TA. Unless otherwise specified, TCCA shall be copied of all correspondence between Pratt and Whitney Canada and CAAC related to the activities of this TA.

(3) Any disagreement regarding the interpretation or application of this TA will be resolved by consultation between the CAAC-AAD and TCCA. Every effort should be made to resolve differences at the technical level. Issues that cannot be satisfactorily resolved at the technical level should be expeditiously raised to the attention of the responsible contact points of TCCA and CAAC-AAD on a progressive level until an agreement or resolution is reached.

6.0 VALIDATION ACTIVITIES

6.1 General

(1) TCCA and CAAC recognize that Pratt and Whitney Canada:

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

6.2 Certification Basis

(1) The subject of the CAAC validation is the TCCA type certificates as recorded in Appendix 2 of this document, and all appendices added hereafter.

(2) The TCCA certification basis for the type certificates is defined in the applicable TCCA Type Certificate Data Sheet (TCDS) as recorded in Appendix 2 of this document, and all appendices added hereafter.

(3) The CAAC certification basis for purposes of the validation of a TCCA type certificate and issuance of a CAAC validated type certificate (VTC) is the same as that of the TCCA type certificate, plus any Additional Technical Conditions (ATCs) notified. CAAC-AAD will notify in writing both TCCA and Pratt and Whitney Canada of any ATCs necessary for the CAAC validation.

6.3 Findings of Compliance

(1) CAAC-AAD will perform its own findings of compliance for the purpose of its validation activity. However, CAAC may elect to recognize or accept findings of compliance by TCCA for those requirements for which they have a similar or common interpretation.

(2) CAAC-AAD may request assistance from TCCA in findings of compliance for those ATCs identified under paragraph 6.2(3), except those requirements or airworthiness standards where TCCA has not acquired sufficient understanding to make a finding of compliance on behalf of CAAC.

6.4 Issuance of Validated Type Certificate

CAAC will issue its own corresponding VTC once it has determined that the type design complies with the CAAC certification basis established under section 6.2(3).

7.0 POST VALIDATION ACTIVITIES

7.1 Design change approval:

(1) Design changes that result in the re-issuance of the TCCA type certificate, which will constitute the basis for the issuance of the CAAC VTC under this TA, will have to be validated by CAAC by applying a certification procedure similar to that described in Section 6.0.

(2) Design changes include all repair design changes.

(3) TCCA will verify, upon request, that design changes affecting the CAAC type design that are introduced after issuance of the CAAC VTC, and embodied on engines to be delivered to China, comply with the CAAC certification basis.

(4) If a type design change affects the CAAC VTC, CAAC reserves the right to perform a technical validation of the design change. Where CAAC decides to perform a validation, it will notify the approval holder and TCCA accordingly of its decision, and subsequently provide its approval by issuing a revision to its VTC.

(5) If a type design change has little or no effect on the CAAC VTC, CAAC will accept the design change without technical validation on the basis of a TCCA statement of compliance. CAAC-AAD will notify TCCA and the holder of its acceptance of the approval.

(6) Except where notified under paragraph 7.1(4) above, all other design changes approved by TCCA or its appropriately-authorized delegate will be considered approved by CAAC.

7.2 Documentation Approval

Subject to paragraph 7.1(1) information or instructions such as Service Bulletins or Technical Instructions, and 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 Engine Deliveries

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

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 engines 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 affected engine.

(3) TCCA, upon request, will assist CAAC in establishing procedures deemed necessary by CAAC for maintaining the continuing airworthiness of aircraft equipped with Pratt and Whitney Canada engine models covered by this TA.

9.0 AMENDMENT OF TA TO INTRODUCE A NEW ENGINE MODEL

This TA may be amended by mutual consent of the CAAC and TCCA to add subsequent appendices to this document, which will define new engine models covered by this TA. Such amendments shall be made effective by the signature of the persons responsible for the administration of this TA, as identified in Appendix 1 of this TA, or their duly authorized representative.

10.0 Entry into Force and Termination

Upon signature, this TA replaces the Technical Arrangement titled "Technical Arrangement Between Civil Aviation Administration Of China And Transport Canada Civil Aviation For the Type Validation of Pratt and Whitney Canada Engines" dated June 17th, 2010 and does not affect any actions taken in accordance with the previous version.

APPENDIX 1 – POINTS OF CONTACT: CAAC and TCCA

CAAC	TCCA
Aircraft Airworthiness Certification Department **Director, *Engine and Propeller Division*** 155 Dongsi Street West Beijing 100710 Peoples Republic of China **Phone:** 86 10 64091308 **Fax:** 86 10 64048820	**Administration-related:** **National Headquarters** Director, Standards (AART) 330 Sparks Street, 2nd Floor Place de Ville, Tower C Ottawa, Ontario, KIA 0N5 Canada **Phone:** +1 613 952 4371 **Fax:** +1 613 952 3298 **Certification-related:** Director, National Aircraft Certification (AARD) 330 Sparks Street, 2nd Floor Place de Ville, Tower C, Ottawa, Ontario, KIA 0N5 Canada **Phone:** + 1 613 952 4338 **Fax:** + 1 613 996 9178

APPENDIX 2 – Engines covered by this TA

This appendix lists the Pratt and Whitney Canada engines covered by this TA:

#	Model	TCCA TCDS and Issue Number	Issue Date
1	PW207C	E-23 TCDS Issue 24	Jan/09
2	PT6B-67A and PT6C-67C	E-32 TCDS Issue 6	Dec/07
3	PT6A-52	E-12 TCDS Issue 20	May/07
4	PW306C	E-22 TCDS Issue 11	Sept/06
5	PW615F-A	E-34 TCDS Issue 5	Dec/06
6	PT6A-66, -66B,-67B, -67P	E-21 TCDS Issue 15	Sep/07
7	PW307A	E-33 TCDS Issue 4	April/07
8	PT6A-65B	E-12 TCDS Issue 20	May/07
9	PW535B	E-27 TCDS Issue 10	Nov/09
10	PW207D	E-23 TCDS Issue 26	June/10
11	PW207D1, -D2	E-23 TCDS Issue 26	June/10
12	PT6A-34	E-6 TCDS Issue 26	Feb/05
13	PW535E	E-27 TCDS Issue 10	Nov/09
14	PW617F-E	E-37 TCDS Issue 3	April/09