Technical arrangement on Avtech Pty Ltd product certification

between

The Civil Aviation Administration of China (CAAC)

and

The Civil Aviation Safety Authority of Australia (CASA)

1. PURPOSE

This Technical Arrangement defines the working relationship between CASA and the Civil Aviation Administration of China (CAAC) hereafter called the "Authorities", to facilitate and accomplish the CAAC type validation of the Avtech Pty Ltd aircraft model Jabiru J160-C, the aircraft engines and propellers installed in the aircraft, and of subsequent type design changes as well as to define the declaration of compliance for export and continued airworthiness activities.

2. OBJECTIVES

This Technical Arrangement 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;
 - b) for subsequent post type validation activities;
 - c) for the acceptance of new and used products produced by the manufacturer as mentioned in the CAAC validation data sheet and for which the CAAC has issued the Validation of Type Certificate;
 - d) validation of Supplemental Type Certificates approved by CASA; and
 - e) for parts and appliances for these products.
- 2.2 To minimize redundant inspections, tests, demonstration, evaluations, and approvals.

3. SCOPE

This Technical Arrangement covers under the provisions set forth in the following paragraphs:

- a) the Jabiru model J160-C aircraft (CASA Type Certificate VA515);
- b) the Jabiru model 2200C engine (CASA Type Certificate VE501); and
- c) the Jabiru model C000242 and model 4A401 propellers (CASA Type Certificate VP503).

4. REQUIREMENTS AND BASIS

The requirement for this Technical Arrangement results from paragraphs 2.2.1 and 2.2.2 of CAAC AP-21-01R2 dated October 12, 2006 (English version) Validation Procedures for Import of Civil Aviation Products and Parts.

5. COMMUNICATION

- 5.1 The Aircraft Airworthiness Certification Department (CAAC-AAD) of CAAC and the Airworthiness Engineering Group of CASA as Aircraft Certification Authority will be responsible for the implementation of this Technical Arrangement.
- 5.2 A project manager will be assigned by each Authority to facilitate the implementation of this Technical Arrangement. All routine communication related to

the activities of this Technical Arrangement will formally take place between these two project managers. (See Appendix 1 for contact listing).

- 5.3 Avtech Pty Ltd will be the primary source for providing the technical support to CAAC-AAD. When requested, CASA 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 CASA related to the activities of this Technical Arrangement will be made in the English language.
- 5.5 Unless otherwise specified, CASA shall be copied with all correspondence between Avtech Pty Ltd and CAAC related to the activities of this Technical Arrangement in order for CASA to support Avtech Pty Ltd and CAAC in the future.

6. TYPE VALIDATION ACTIVITES

6.1 General

- a) Avtech Pty Ltd is responsible for showing and verifying the compliance with the CAAC validation basis and for demonstrating this compliance to both Authorities. Subject to paragraph 6.2(c)(ii), any compliance documents provided to CAAC shall be approved by CASA.
- b) The CAAC type validation of affected products as listed above must be accomplished in respect of all laws and regulation governing both Authorities.
- c) CASA will forward the application (i.e. VTC/VSTC) and related information to CAAC.

6.2 Certification basis

a) The certification bases for the aircraft models are the following:

i) For CASA:

As defined in Type Certificate Data Sheets (TCDS) at the latest applicable issue, and

ii) For CAAC:

According to CAAC procedure, CAAC accepts the CASA certification basis for civil aviation products plus "Additional Technical Conditions (ATC)" as validation basis in Validation Type Certificate Data Sheet of VTC.

- b) CAAC will notify in writing both CASA and Avtech Pty Ltd of any ATC necessary for the CAAC type validation.
- c) CASA will review the ATC to ensure its understanding thereof. As necessary, CAAC will provide CASA in writing with any interpretative material or any data regarding the means of compliance pertaining to those ATC.
 - i) CASA, upon request from CAAC, will initiate the process of finding compliance referred to in paragraph 6.4 once the necessary understanding of the particular CAAC ATC has been acquired.
 - ii) CAAC will perform its own findings of compliance on ATC for which CASA has not acquired sufficient understanding.

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 Technical Arrangement.

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), CASA, upon request, will make the findings of compliance with the ATC on behalf of CAAC. CASA 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, CASA 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 validation basis, CAAC may raise Issue Papers (IP) and Action Items (AI).
- b) An IP is normally opened to document the ATC (one IP per ATC):
 - i) to document any controversial technical issue; and
 - ii) 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 Avtech Pty Ltd.
- d) CAAC will notify CASA and Avtech Pty Ltd of the status of each IP. All IP and AI must be closed before the issuance of the CAAC type certificate.

6.6 Final statement

At the end of the process CASA will provide a formal statement attesting that CASA has found compliance with CAAC validation basis to support the CAAC to issue VTC. The CAAC approved type design will be identified in a CAAC VTCDS to be produced Avtech Pty Ltd and to be approved by CASA.

7. POST TYPE VALIDATION ACTIVITIES

7.1 Design change approval

- a) Upon request, CASA will verify that design changes affecting the CASA type design which have been introduced after CAAC type validation and embodied on products to be delivered to China, comply with the CAAC validation 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) For any design changes which do not comply with the CAAC validation basis, they shall be validated by CAAC who will notify its approval.
- c) Prior to each product delivery, a formal statement of compliance with the CAAC validation basis will be provided by CASA to CAAC for major design changes. These type design changes will normally be approved by CAAC on the basis of the CASA 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 Avtech Pty Ltd and CASA accordingly. For these changes, CAAC will notify CASA and Avtech Pty Ltd of their approval.

d) The statement of compliance in c) above is considered sufficient to cover other changes, which are not considered as significantly affecting the approved type design.

8. AIRWORTHINESS SUPPORT ACTIVITES

8.1 Individual product deliveries

- a) For each airplane to be delivered to China, CASA or an authorised person will issue a CASA Export Certificate of Airworthiness in accordance with the Civil Aviation Safety Regulations Part 21, stating that the airplane is in conformity to the CAAC approved type design and complies with the CAAC validation basis and CAAC special requirements which are identified in VTCDS.
- b) Each aircraft engine, propeller, part and appliance will be delivered to China with an individual CASA Form 917 Authorised Release Certificate, issued in accordance with the production approval granted by CASA, stating that the aircraft engine, propeller, part and appliance is in conformity to the CAAC approved type design and is in a condition for safe operation, with note in Block 13 of CASA Form 917 that the aircraft engine, propeller, part and appliance is eligible for export to China.
- c) An Airplane Flight Manual (AFM) in the English language 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 CASA on behalf of the CAAC.

8.2 Continued Airworthiness

- a) In accordance with ICAO Annex 8, CASA will promptly inform CAAC of all mandatory airworthiness modifications, special inspections, special operating limitations or other actions necessary for maintaining the continuing airworthiness of the products.
- b) CAAC will promptly notify CASA and Avtech Pty Ltd of any unsafe condition associated with the design, manufacturing or maintenance of the products that are in service in China.
- c) CASA 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 Avtech Pty Ltd.
- d) CASA, upon request, will assist CAAC in establishing procedures deemed necessary by CAAC for maintaining the continuing airworthiness of aircraft models.

9. ENTRY INTO FORCE

This Technical Arrangement shall enter into force at the date of signature by the Authorities.

10. DURATION AND TERMINATION

Either Authority may at any time give written notice to other Authority of its decision to terminate this Technical Arrangement. This Technical Arrangement shall terminate twelve months following the date of receipt of the notice by the other Authority, unless the said notice of termination has been withdrawn by mutual agreement before the expire of this period.

11. AUTHORITIES

The Authorities agree to the provisions of this Technical Arrangement as indicated by the signature of their duly authorised representatives.

For The Civil Aviation Authority of Australia (CASA)

For The Civil Aviation Administration of China (CAAC)

Mr Mark Sinclair

Acting Group General Manager Airworthiness Engineering Group Mr. Yin Shijun

Deputy Director General,

Aircraft Airworthiness Certification

Department of CAAC

APPENDIX 1

POINTS OF CONTACT

| FOR CASA | FOR CAAC |
|-----------------------------------|--------------------------------------|
| Airworthiness Engineering Branch | Aircraft Airworthiness Certification |
| Civil Aviation Safety Authority | Department of CAAC |
| GPO Box 2005 | 155 Dongsi St.West |
| Canberra ACT 2601 | Beijing, China |
| AUSTRALIA | Post Code: 100710 |
| | |
| Mr Peter Dall | Zhang Sen |
| Principal Certification Engineer | Deputy Director, |
| Certification Policy and Programs | Airworthiness Certification Division |
| Phone: 61 2 6217 1836 | Phone:86-10-64091331 |
| Fax: 61 2 6217 1914 | Fax: 86-10-64092331 |
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