

**TECHNICAL AGREEMENT  
BETWEEN  
THE GENERAL ADMINISTRATION OF CIVIL AVIATION OF CHINA  
AND  
THE INTERSTATE AVIATION COMMITTEE  
FOR THE BE-103 CERTIFICATION IN CHINA**

## **1. PURPOSE**

This Technical Agreement defines the working relationships between the General Administration of Civil Aviation of China (CAAC) and the Interstate Aviation Committee (IAC) that will allow to facilitate and accomplish type certification of the BE-103 in China, subsequent design changes approval, and to define individual deliveries procedures and continued airworthiness activities.

This is in line with the Agreement between the Government of the People's Republic of China and the Government of the Russian Federation for promotion of aviation safety related to airworthiness certification and environmental protection, the approval of the imported/exported products and the cooperation in these areas.

## **2. OBJECTIVES**

This Technical Agreement is intended to accomplish the following objectives:

2.1. to define working procedures under the respective responsibilities of each Authority:

- a) in the certification process,
- b) in subsequent post TC activities.

2.2. to minimize redundant inspections, tests, demonstrations, evaluations, and approvals.

## **3.DURATION**

This Agreement shall become effective upon approval by CAAC and IAC.

It shall continue in effect throughout all phases of the BE-103 certification program by CAAC, including post TC activities, until it is superseded, revised, or terminated by either party or by mutual agreement.

## **4. CAAC/IAC COMMUNICATIONS AND PROCEDURES**

To carry out this Technical Agreement, IAC designates the Aviation Register of IAC (IAC AR) and CAAC designates the Aircraft Airworthiness Certification Department (CAAC-AAD) as responsible bodies.

Regarding the working procedure for operation and maintenance of Be-103 exported to China, CAAC designates the Flight Standard Department of CAAC (CAAC-FSD) as responsible body.

IAC AR will nominate BE-103 program manager who will act as a focal point of contact with CAAC-AAD. On CAAC-AAD side, the BE-103 project certification manager will be in charge of all communications with IAC AR. (See Annex 1).

All correspondence between CAAC-AAD and IAC AR related to BE-103 certification will be made between these two individuals in English.

The project managers shall be supported in the certification process by technical specialists in all disciplines required. Direct informal technical discussions at a specialist level are encouraged.

The technical airworthiness evaluation by CAAC-AAD will be performed through meetings and correspondence with IAC AR and Beriev Design Organization.

Beriev is responsible for providing and verifying the compliance with the Chinese certification basis and for demonstrating this compliance to both authorities. Any documents provided to CAAC-AAD must have been approved by IAC AR.

In case of any problems, CAAC-AAD and IAC AR will further discuss them to find a way to satisfy Russian requirements without violating the Chinese ones.

All correspondence between Beriev and CAAC-AAD will be duplicated to IAC AR in order to enable IAC AR to fulfill its tasks.

## **5. TYPE CERTIFICATION PROCESS**

### **5.1. The CAAC Be-103 Certification Basis is the following:**

(1) CCAR 36 (issued on March 20,2002).

(2) Initial Certification basis established by IAC AR and Additional Technical Conditions from CAAC-AAD. The CAAC-AAD Additional Technical Conditions will include any or all of the following:

- a) Additional Technical Conditions based on differences between CCAR23 (including amendment 3), CAAC airworthiness related operation regulations and BE-103 IAC AR approved Certification Basis based on AP-23 (including amendment 4), and differences in applications, policies, and guidance materials of CAAC and IAC;
- b) Special Conditions related to novel or unusual features of the product design` not covered in the IAC airworthiness standards;
- c) Additional Technical Conditions resulting from the evaluation of equivalent safety findings and exemptions granted to the Applicant by IAC AR for domestic certification;
- d) Mandatory airworthiness actions directed by IAC AR to correct unsafe conditions experienced during the operation of the product prior to the application to CAAC;

- e) Any other requirements specified by CAAC-AAD.

CAAC-AAD will notify in writing of any requirements necessary for type certification in China in addition to IAC AR BE-103 certification basis.

## **5.2. Finding of compliance**

For the validation of the BE-103 certification basis, CAAC-AAD will define the scope of its involvement taking into account the principle of the paragraph 2.2 of this Agreement. CAAC AAD may request additional technical design data, may review the product, and may fly the product for its certification and familiarization purposes. Also, when deemed necessary, the CAAC-AAD may fly, or conduct a detailed review of the product to ensure compliance with the Additional Technical Conditions. Beriev should submit all data, requested by CAAC-AAD, to IAC AR for its verification and transmission to CAAC-AAD.

Normally, the compliance findings on the Additional Technical Conditions will be made by IAC AR on behalf of CAAC-AAD. If necessary, CAAC-AAD will provide IAC AR in writing with any interpretative materials or any data regarding the means of compliance pertaining to those Additional Technical Conditions.

For the purpose of finding compliance with the CAAC-AAD certification basis, CAAC-AAD may present Issue Papers and Action Items.

CAAC-AAD will notify IAC AR and Beriev of the status of each Issue Paper and Action Item and will request formal IAC AR position on the Issue Papers. All Issue Papers and Action Items must be closed before the validation of type certification is completed.

To expedite the validation process the CAAC-AAD Validation Team will review the English version of the BE-103 Compliance Check List and define the compliance documents they will need in English, so that Beriev could prepare the translations and send those to CAAC-AAD before the Validation Team comes to Moscow.

## **5.3. Final statement**

IAC AR will provide, at the end of the process, a formal statement attesting that IAC AR has found compliance with CAAC certification basis.

## **6.POST TC ACTIVITIES**

### **6.1. Modification approval**

(1) Major changes as defined in CCAR21 subpart C (e.g., model changes, product improvements, etc.) to the type design, sought by Beriev, as the holder of CAAC validation of type certificate, may be approved as amendments to the validation of type certificate issued by the CAAC. A certification procedure similar to that described in paragraph 5 shall be applied, but adjusted accounting for the magnitude and complexity

of the design change. The CAAC AAD retains the right to determine, if the proposed change is so substantial that it may require a new CAAC Validation of Type Certificate for the changed type design. In this case, IAC AR and CAAC-AAD will discuss the item to find a mutual agreement.

To assist the CAAC AAD to determine its level of activity related to a specific design change, the IAC AR should ensure that the CAAC AAD is notified of each major type design change proposed by the type certificate holder that would affect the airplanes under CAAC airworthiness supervision, including:

- a) the CAAC type certification basis;
- b) the Type Certificate Data Sheet;
- c) the Aircraft Flight Manual, the Approved Airworthiness Limitations, the Certification Maintenance Requirements (Aircraft Maintenance Schedule and Maintenance Manual);
- d) the Master Minimum Equipment List;
- e) all other specific changes identified by the CAAC.

Based on this information, the CAAC-AAD will determine whether the changes can be considered approved by the CAAC upon IAC AR's approval under its normal procedures. For every major change, CAAC-AAD will notify its approval.

(2) The IAC AR shall notify the CAAC-AAD whenever the certification basis of a proposed change includes a requirement where the CAAC-AAD may exercise discretion in making the finding. This includes findings of equivalent level of safety, Additional Technical Conditions, and other requirements where the CAAC-AAD will exercise its judgment in making the finding on compliance.

(3) Minor design changes made by the Holder of validation of type certificate shall be considered approved by the CAAC-AAD upon their approval by the IAC AR under its normal procedures.

An IAC AR statement of compliance in the Export Certificate of Airworthiness provided to CAAC-AAD will be considered sufficient to cover minor changes.

(4) As specified in CCAR 21 for the purpose of complying with CCAR 34, each voluntary change in the type design of an airplane or engine that may increase fuel venting or exhaust emissions is "an emission change," requiring a further demonstration of compliance. For the purpose of complying with CCAR 36, each voluntary change in the type design of an aircraft that may increase the noise levels of that aircraft is "an acoustical change", requiring a further demonstration of compliance.

## **6.2 Approval of Aircraft Flight Manual**

The Flight Manual for individual aircraft exported to China must be approved by IAC AR on behalf of CAAC-AAD according to the CAAC approved type design.

#### **6.3 Individual aircraft deliveries**

For each aircraft to be delivered in China, IAC AR will issue an individual Export Certificate of Airworthiness stating that the aircraft complies with CAAC approved Type design and is in a condition for safe operation.

#### **6.4. Service Bulletins approval**

All Service Bulletins issued by Beriev that have affected airworthiness of Be-103 aircraft will be IAC AR approved and incorporate a statement to that effect. This statement may be interpreted by a Chinese BE-103 operator as approved by CAAC-AAD. Any Service Bulletin that will address a major change not yet approved by CAAC must follow paragraph 6.1 prior to its release to China.

#### **6.5. Repair approval**

A repair not listed in the IAC AR approved Maintenance Manual must be approved as a modification to the Type design. Any repair defined in the IAC AR approved Maintenance Manual, may be considered by a Chinese operator as approved by CAAC-AAD.

#### **6.6. Spare parts**

IAC AR will ensure its approval of the current List of BE-103 spare parts Suppliers to be sent by Beriev to the Chinese BE-103 aircraft operators.

IAC AR will ensure that spare parts manufactured in Commonwealth of Independent States (except for class III Components manufactured to State or Industry standards and delivered according to documents agreed on between the Supplier and the Importer) to be delivered to China will be accompanied with IAC AR Approval Tags (Form 4-96) issued by IAC AR or IAC AR Representatives.

### **7.CONTINUED AIRWORTHINESS**

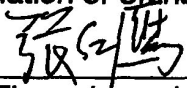
IAC AR will provide CAAC-AAD with the necessary information on continuing airworthiness of the BE-103 including AD issued by IAC AR. The mandatory continued airworthiness information should be provided by IAC AR in a timely manner.

IAC AR will insure that the design (production) organization provides the BE-103 operator with the necessary information on continued airworthiness of the BE-103.

CAAC will insure that the BE-103 operator provides Beriev with information about failures, malfunctions and defects.

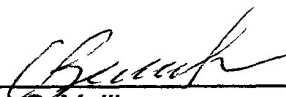
When the service experience in China indicates the existence of an unsafe condition related to the design, manufacture or maintenance of the BE-103, CAAC will inform IAC AR and Beriev. IAC AR shall give an expedient attention to this information, define appropriate corrective actions and inform CAAC of these actions.

For the General Administration of  
Civil Aviation of China (CAAC)

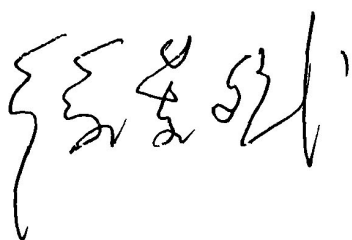
  
Zhang hongying  
CAAC-AAD Director General

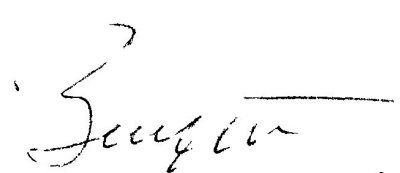
Date: Jan. 25, 2006

For the Interstate Aviation Committee

  
S. Velikanov  
IAC Deputy Chief

Date: 21/11/2005





## Annex 1

The following IAC AR and CAAC-AAD persons are the focal contacts regarding certification and continued airworthiness of the Be-103:

### IAC AR

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Branch for International Agreements  
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