

## **RUSSIAN FEDERATION - SPECIAL REQUIREMENTS**

(Revised - September 2, 1998)

### **1. INTRODUCTION.**

This document prescribes special requirements for airworthiness acceptance of aeronautical products imported to Russia from the United States of America, which are based on the Agreement for Promotion of Aviation Safety signed between the Government of the [[United States of America]] (USA) and the Government of [[the]] Russian Federation on September 02, 1998.

### **2. RUSSIAN AIRWORTHINESS AUTHORITIES.**

Flight safety in civil aviation in the Russian Federation is supervised by [[the]] following organizations:

**2.1.** The Aviation Register of the Interstate Aviation Committee (IAC AR) is responsible for Type Design approvals, initial airworthiness certification of produced aircraft examples, production certification and for all issues related to production surveillance and continued airworthiness of aircraft type design.

**2.2.** The Federal Aviation Authority of Russia (FAAR) is responsible for issues related to continuing in-service airworthiness of aircraft operated in the Russian Federation.

IAC AR Address  
Aviation Register  
Interstate Aviation Committee  
7, Krjijjanovsky st. bld 1  
Moscow 117875  
Russia  
Tel. (7 095) 129-6155  
Fax (7 095) 125-5195

FAAR Address  
Federal Aviation Authority of Russia  
37, Leningradsky prosp. A-167  
Moscow 125863  
Russia  
Tel. (7 095) 155-5204  
Fax (7 095) 155-5535

### **3. DESIGN APPROVAL PROCEDURES FOR RUSSIAN TYPE CERTIFICATES.**

#### **3.1. Application for Russian Type Certificate.**

**3.1.1.** An application for Russian Type Certificate, in accordance with Russian Regulation AP 21, paragraph 4.7.4, from and applicant in the USA, should be sent to the geographically responsible FAA Aircraft Certification Office (ACO) which will forward the application with FAA cover letter to the IAC AR.

**3.1.2.** The ACO should ensure the application has the following information:

**3.1.2.1.** An FAA statement that the applicant is a holder/applicant for a U.S. type certificate for the product for which the IAC AR certification is requested.

**3.1.2.2.** If the applicant already holds a U.S. type certificate, then the following documents should be submitted in the application package:

- a copy of the FAA type certificate;
- a copy of the type certificate data sheet (includes the FAA certification basis);

- copies of special conditions, equivalent level of safety findings and exemptions;
- the FAA - approved Aircraft Flight Manual;
- a product description (e.g. detailed specifications, including any novel or unusual design features);
- procedures required for safe operation of the aircraft (e.g. Instructions for Continued Airworthiness).

**3.1.2.3.** If the applicant does not yet hold a U.S. Type certificate for the product model, the application should include:

- a definition of the national airworthiness and environmental standards upon which the FAA design approval is to be based, and the Russian airworthiness and environmental standards the FAA believes to be satisfied by its own standards;
- a description of any novel or unusual design features known to the applicant or the FAA at the time of application which might necessitate issuance of IAC AR special technical conditions under AP 21, paragraph 3.4, or which might require a special review or acceptable means of compliance;

**3.1.2.4.** A planning date for IAC AR type certification;

**3.1.2.5.** Any information available on Russian market potential, including particular customers.

### **3.2. Familiarization Meeting.**

**3.2.1.** AR will notify the geographically responsible FAA ACO in writing at least 45 days prior to any familiarization meeting. As part [[of]] its notification the AR will identify any special requirements related to the specific aeronautical product which must be addressed by FAA and the U.S. applicant, e.g. certification review items. The FAA ACO will acknowledge AR's notification and advise AR whether it is able to support an AR validation team during the requested period.

**3.2.2.** The FAA will arrange this familiarization meeting between the FAA, AR and the applicant to discuss the validation program, the domestic U.S. certification basis, and any novel or unusual feature of the product.

**3.2.3.** At this meeting the AR will work to establish the Russian type certification basis and the means of compliance for the product under application by determining the Russian airworthiness and environmental standards that would be applied to a similar product if it were to be produced in the Russian Federation.

**3.2.4.** As part of the familiarization meeting, the AR will require the applicant to provide information about its production facility. The AR may visit the applicant's production facility if deemed necessary.

### **3.3. Establishment of Russian Certification Basis.**

**3.3.1.** The AR will establish the Russian type certification basis to ensure that the highest practicable degree of safety in the public interest is achieved by the product being certificated at any given time. The AR will establish the Russian type certification basis in accordance with AP 21 paragraph 3.6, 4.7, utilizing the applicable airworthiness and environmental standards which are set

out in Russian Aviation Regulations 21, 23, 25, 29, 33, ICAO Annex 16 Volume 1 (or AP 34), 35 and 36 respectively. The AR will start with the applicable airworthiness standards in effect at the time the application was made to the FAA for a domestic TC. In order to establish the highest practicable level of safety for the product, the AR will assess the service history of that product, product of similar type, and current airworthiness standards. Regulatory and design changes that have occurred since the date of application will be considered when establishing the Russian certification basis.

**3.3.2.** In some instances to provide the safety level required, the AR may impose additional requirements based on regulatory differences between the U.S. and Russian airworthiness standards and aircraft service experience in the Russian Federation.

**3.3.3.** The AR will review any novel and unusual design features for development of special conditions. The AR will work closely with the FAA in the development of special conditions and exemptions providing both the FAA and the applicant the opportunity to coordinate on the proposed special conditions. Such coordination will allow the AR to benefit from the technical expertise of the FAA and, if requested by the AR, the FAA is in a position to make a proper finding of compliance.

**3.3.4.** The regulatory basis for compliance to environmental requirements (ICAO Annex 16, Volume 1 ( or AP 34)) and AP 36 is the effective amendment on the date of AR certification. An applicant for a TC must show that the aircraft meets the applicable airworthiness standards, special conditions, fuel venting and exhaust emission standards of ICAO Annex 16, Volume 1 (or AP 34) and the noise standards of AP 36.

#### **3.4. Agreement of Certification Criteria.**

The FAA should review the AR's proposed Russian type certification basis and notify the AR of the proposed means of compliance. If the FAA chooses to use its domestic airworthiness and environmental standards, the AR will start the process of developing additional technical conditions such that the Russian type certification basis can be met. The AR will coordinate with the FAA in the development of additional technical conditions to allow the AR to benefit from the technical expertise of the FAA and, if requested by the AR, the FAA is in position to make a proper determination of compliance.

#### **3.5. Environmental Testing and Approval Procedures.**

The AR will make findings of compliance to the environmental requirements based upon the FAA witnessed tests, conducted in accordance with 14 CFR Part 34 and 36 and with FAA approved test plans, and based upon FAA review and approval of all data and compliance demonstration reports. The applicant will submit any requested compliance records to the AR via the FAA.

#### **3.6. Data Submittal and Design Review.**

In order to find compliance with additional technical conditions, special conditions, or equivalent levels of safety, the AR may make requests for data in writing to the FAA. The FAA, in responding to such request, should verify that the data provided has been reviewed and, if required, approved by the FAA.

#### **3.7. Issuance of Type Certificate.**

The AR upon completion of the certification programs receipt and review of the documents submitted via the FAA as well as upon review of the FAA certifying statement, will prepare the TC and TC Data Sheet and forward them to the FAA for transmittal to the applicant.

#### **4. ISSUANCE OF AN IAC AR APPROVAL FOR CLASS II AND CLASS III PRODUCTS.**

##### **4.1. Form of Approvals.**

**4.1.1.** Appliances to be imported into Russia separately and considered as Class II or Class III products should be AR approved. This requirements does not cover to standards Appliances (i.e. manufactured in accordance with international or state, industrial or military standards accepted by the FAA) and spare parts of aircraft certificated as well. Upon the IAC AR decision Appliances may not require IAC AR approval if it is provided with export airworthiness tag in accordance with paragraphs 21.331 and 21.333 of FAR Part 21.

**4.1.2.** The IAC AR approval may be in the forms of Appliance Type Design Approval, or Approval Letter. The approval of the Appliance Type Design by the FAA in accordance with the USA regulation[[s]] and procedures, as accepted by the IAC AR, is the prerequisite for the IAC AR approval.

**4.1.3.** The Appliance Type Design Approval shall certify that a given Appliance type is approved for installation on aircraft and its characteristics meet the requirements of the IAC AR approved Appliance Qualification Basis.

**4.1.4.** The IAC AR Approval Letter shall be issued for Appliance intended for a particular type of aircraft. In this instance the Appliance shall be approved as a part of the aircraft type design.

##### **4.2. Obtaining the Appliance Type Design Approval.**

**4.2.1.** The Appliance Developer will submit to the IAC AR an application for the Appliance Type Design Approval. The Application letter shall be mailed through and endorsed by the geographically responsible FAA ACO.

**4.2.2.** The following documents shall support an application:

- documentation sufficient for the IAC AR to define the Appliance type design (the appliance Specification, drawings and description, installation, operation and maintenance manuals),
- a table containing the data on level of environmental effects (as per DO-160) for which the Appliance has been tested and the level of software criticality (as per DO-178),
- the copy of the FAA Approval.

**4.2.3.** The IAC AR will notify the Appliance Developer and the FAA of accepting an application, request, if necessary, additional data, draw up the Qualification Basis and inform the Developer on any additional activities and conditions necessary to make [[a]] decision on the issuance of an Approval. If needed, the IAC AR will request a visit to the Appliance Developer facility to conduct additional testing, analyze technical documentation and evaluate manufacturing processes.

**4.2.4.** After reviewing the Appliance Developer's documentation supporting the application as well as additional documentation submitted by the Appliance Developer to demonstrate the Appliance compliance with the Qualification Basis requirements the IAC AR will [[make]] a decision concerning the issuance of the Appliance Type Design Approval.

##### **4.3. Obtaining the Approval Letter.**

**4.3.1.** The Aircraft Developer shall submit to the IAC AR an application for the Approval Letter. The following documents shall support the application:

- documentation sufficient for the IAC AR to define the Appliance type design (the Appliance Specification, drawings and description, installation, operation and maintenance manuals).
- a table containing the data on level of environmental effects (as per DO-160) for which the Appliance has been tested and the level of software criticality (as per DO-178),
- the copy of FAA Approval,

Standards, compliance with which shall be established by the IAC AR. The standards shall be formulated as additional technical requirements from aircraft Developer.

- List of the aircraft certification basis issues compliance with which shall be defined after Appliance is installed.

**4.3.2.** The IAC AR shall review the Application and notify the Applicant about any additional activities and conditions needed to commence ground and/or flight tests of aircraft.

**4.3.3.** If the results of the above mentioned works and tests are favorable the IAC AR will draw up the Approval Letter which is to be sent to the aircraft Developer and to Appliance Developer and also will notify the FAA about Approval Letter issuance.

## **5. EXPORT AIRWORTHINESS REQUIREMENTS.**

### **5.1. Complete New Aircraft, Aircraft Engines, and Propellers.**

**5.1.1.** The AR shall accept FAA Export Certificates of Airworthiness only when the FAA certifies that each aircraft, aircraft engine or propeller:

- conforms to a type design approved by the AR as specified in the AR's type certificate data sheet,
- is in a condition for safe operation, including compliance with applicable AR airworthiness directives, and
- meets any additional requirements of the AR, as notified.

**5.1.2.** All aircraft, aircraft engines, and propellers exported to the Russian Federation with the FAA airworthiness approval will have an FAA Form 8130-4, Export Certificate of Airworthiness, issued in accordance with the requirements of 14 CFR Part 21, Subpart L.

**5.1.3.** For aircraft, the FAA Export Certificate of Airworthiness should contain an additional note such as: "The aircraft covered by this certificate conforms to the AR approved Type Certificate Number (INSERT TYPE CERTIFICATE NUMBER, REVISION LEVEL, AND DATE), and is found to be in a condition for safe operation." The note should also include a statement about conformity to all additional requirements of the AR, if any.

### **5.2. Used aircraft for which there has been a design approval granted by AR.**

**5.2.1.** The AR/FAAR shall accept used aircraft for import into the Russian Federation for airworthiness certification when the FAA certifies, by the [[issuance]] of an Export Certificate of Airworthiness, that:

- the used aircraft has been found to conform to the AR - approved type design as specified in the AR's type certificate data sheet;

- AR;
- the used aircraft has complied with all applicable Airworthiness Directives issued by the AR;
  - the used aircraft has been properly maintained and operated using approved procedures and methods acceptable to the AR/FAAR during its service life (evidenced by logbooks and maintenance records);
  - the used aircraft meets all additional requirements of the AR, as notified; and,
  - the used aircraft is in a condition for safe operation.

**5.2.2.** Inspection and maintenance records are important documents for use by AR/FAAR in determining the airworthiness of used aircraft. These may be requested by the AR/FAAR and include, but are not limited to; the original or certified true copy of the Export Certificate of Airworthiness issued by the FAA; verifying records which insure that any overhauls, modifications/alterations, and repairs were accomplished in accordance with approved data; and maintenance records log entries which substantiate that the used aircraft has been properly maintained throughout its service life to the requirements of an approved maintenance program.

### **5.3. Requirements for Class II and Class III Appliances.**

**5.3.1.** Each appliance installed on prototype aircraft (except standard parts approved in accordance with MIL and industry standards) must have a certificate from the FAA stating that the appliance conforms to the requirements of Russian manufacturer's type design in order for its ground [[and or]] flight tests to be carried out. The certificate of conformity of the appliance should be certified on an Airworthiness Approval Tag - FAA Form 8130-3. The conformity of TSO appliances is confirmed by issuance [[of an]] Export Airworthiness Certificate.

**5.3.2.** Each appliance installed on a serial production aircraft must have either FAA Form 8130-3 for identification purpose only or certificate of conformity of Appliance manufacturer.

## **6. ADDITIONAL REQUIREMENTS FOR TYPE CERTIFICATION.**

### **6.1. General**

Before granting an AR type certificate the AR may impose additional requirements due to possible differences between the certification basis of an aircraft as specified in Paragraph 3.3 and airworthiness to which [[it]] has been FAA type certificated.

### **6.2. Identification and Marking.**

**6.2.1.** Aircraft, engines, and propellers must be identified in a manner outlined in 14 CFR Part 45, Section 45.11.

**6.2.2.** Essential components of a product must be identified with a part number (or equivalent) and serial number (or equivalent).

**6.2.3.** Appliance and articles of a design approved by the FAA must be marked in accordance with the requirements outlined in 14 CFR Part 21, Subpart O and all additional marking requirements specified in the particular TSO. Approved deviations shall be marked by the holder of the TSO design approval on the TSO appliance and noted in attached limitations.

**6.2.4.** Parts to be used as replacement or modification parts must be identified by a part number, serial number if applicable, and the manufacturer's name or trade mark. In addition, information concerning the model designation of the type certificated product for which the [[parts]] are eligible for installation must be furnished with the part.

**6.3.** Noise.

An aircraft may be AR type certificated provided that noise measurements at ground levels are in compliance with requirements of ICAO Annex 16 (14 CFAR Part36).

**6.4.** Language.

Aircraft documentation such as Flight Manual, Maintenance Manual, Maintenance Planning Document shall be in the English language [[ unless stated otherwise]] in the Continued Airworthiness Agreement between Federal Aviation Service of Russia and State of Registration Authorities. If the Agreement states that the aircraft documentation must be in the Russian language this documentation [[translation]] must be approved by the IAC AR.

**6.5.** Flight Data Recorder.

An aircraft intended to be used in commercial flights must be equipped with a Flight Data Recorder. The list of parameters registered must be approved by the AIC AR.

**6.6.** Metric Instrumentation.

Each aircraft must be equipped [[with metric altimeter or a conversion table (meter-feet) must be installed in the crew cabin in a place visible to both pilots]].

**6.7.** Instruction for Continued Airworthiness.

Each aircraft, engine and propeller must be accompanied by instruction of continued airworthiness or maintenance manual having airworthiness limitation section.

**6.8.** Maintenance records.

Each aircraft, engine and propeller, rotor or appliance, must be accompanied by maintenance records equivalent to those specified in 14 CFR Part 91, Section 91.417, that reflect the status of required inspections, life limits, etc.