

IMPLEMENTATION PROCEDURE OF  
AIRWORTHINESS

FOR

**DESIGN APPROVAL,  
PRODUCTION ACTIVITIES,  
EXPORT AIRWORTHINESS CERTIFICATION,  
POST DESIGN APPROVAL ACTIVITIES, AND  
TECHNICAL ASSISTANCE BETWEEN  
AUTHORITIES**

UNDER THE MEMORANDUM OF  
UNDERSTANDING

BETWEEN

**THE CIVIL AVIATION ADMINISTRATION OF  
CHINA (CAAC)**

AND

**NATIONAL CIVIL AVIATION AGENCY OF  
BRAZIL (ANAC)**

FOR  
PROMOTION OF CIVIL AVIATION SAFETY

Revision I – 02 August 2024

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## **1. GENERAL**

### **1.1. Nature**

According to the article IX of the Memorandum of Understanding between the Civil Aviation Administration of China and the National Civil Aviation Agency of Brazil for promotion of civil aviation safety, Aircraft Airworthiness Certification Department of CAAC (CAAC-AAD) and Department of Airworthiness of ANAC (ANAC-SAR) are designated as the branches responsible for the implementation of the Memorandum of Understanding. CAAC and ANAC developed the present Implementation Procedure of Airworthiness – IPA relating design approval, production activities, export airworthiness certification, post design approval activities, and technical assistance between them.

This IPA is intended to facilitate the approval process of the authorities for civil aeronautical products and articles being imported and exported between Brazil and China and also intended to facilitate mutual cooperation and technical assistance, including accident and incident investigations for aircraft being manufactured in Brazil and in China.

### **1.2. Basis**

The basis for this IPA is stated in article IV and IX of the Memorandum of Understanding in force between CAAC and ANAC.

### **1.3. Principles and Concept**

CAAC and ANAC have been presented and understood the aircraft certification systems of each authority for the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products and articles, and decided to make this IPA feasible and to determine the appropriate scope between the authorities. (See Section 2 - Scope).

This document defines the procedures that each authority agrees to follow to enable that authority to meet its regulatory requirements for importing and supporting civil aeronautical products and articles.

An important objective of this IPA, in accordance with the Memorandum of Understanding, is to ensure that the maximum practical credit is given to the certifying authority's (CA) certification system during the certification/validation of a product or article by the validating authority (VA).

In order to optimize the validation efforts, both Authorities have established procedures for risk based assessment, to be used as guidelines for validation activities. The assessment shall be influenced by the extent of past certification experience with similar CA products, as well as the specific design features and operational characteristics of the design presented for validation. The validation approach based on these procedures directs the establishment of the VA level of involvement, focusing on aspects considered more critical to safety.

Both ANAC and CAAC agree that all information, including technical documentation, exchanged under this IPA will be in the English language.

CAAC and ANAC mutually recognize and accept each other's delegation, accreditation or organization certification system as part of their respective product certification system. To the maximum extent permitted by these Implementation Procedures and each Authority's laws, regulations, standards, policies, and procedures, the findings, compliance determinations and approvals made through these systems are given the same validity as those made directly by either the CAAC or ANAC

#### **1.4. Changes in Authority Aircraft Certification Systems**

There is a need for continuing ANAC and CAAC dialogue to ensure that the same or consistent information and requirements are issued on a given product or article. Therefore it is expected that both authorities will keep each other informed of all relevant airworthiness and environmental laws, regulations, standards, and requirements, and of their airworthiness certification systems.

Each authority may, to the maximum extent practicable:

- a) Notify the other authority of any plans to make revisions to its regulations/standards or requirements, and its system for airworthiness and environmental certification or approval;
- b) Offer the other authority an opportunity to comment; and
- c) Give due consideration to the comments made by the other authority on the intended revision.

Nevertheless, each authority shall advise the other of any changes in its:

- a) Statutory (legal) responsibilities;
- b) Organizational structure (e.g., key personnel, management structure, technical training, office location);
- c) Production quality system oversight; or
- d) Delegated responsibilities.

The other authority has the right to familiarize itself with such changes, including on-site discussions with the other authority to ensure the continued acceptance of this IPA.

The ANAC and CAAC further recognize that revision by either authority to its regulations, policies, procedures, statutory responsibility, organizational structure, production quality system oversight, or delegated responsibilities may affect the basis and the scope of this IPA. Accordingly, upon notice of such changes by one authority, the other authority may propose actions to review the need for amendment to this IPA.

#### **1.5. Authority Meetings**

ANAC and CAAC agree to meet when deemed appropriate, preferably once a year, to discuss this IPA, on-going and future certification projects, changes in authority organization, any revisions to their certification systems, technical assistance requests, or any other matters relating to the promotion of aviation safety under this IPA. The industry may be invited as necessary.

## **1.6. Interpretations**

In the case of conflicting interpretations of the laws, airworthiness or environmental regulations/standards, requirements, or acceptable means of compliance pertaining to certifications, approvals, or acceptance under this IPA, the interpretation of the civil aviation authority whose law, regulation/standard, requirement or acceptable means of compliance is being interpreted shall prevail.

## **1.7. Continuous improvement of this IPA**

CAAC and ANAC are responsible for the administrative process of keeping this document current. Suggestions for improvement are welcomed and can be addressed to either of the offices at the addresses indicated in the Appendix A of this IPA.

### **1.7.1. Revision**

This IPA may be revised at any time by mutual consent of the ANAC and CAAC. Also, this IPA may be revised periodically, taking into account improvements, additions, special arrangements or changes suggested by either the ANAC or CAAC, by the Brazilian or Chinese aviation industry associations or their member companies, or by other interested parties, to ensure that this IPA remain current.

Revisions shall be co-developed and made effective by the signatures of the duly authorized representatives of ANAC and CAAC and shall specify its effect, if any, on activities conducted under this IPA prior to the revision enter in force.

All revision to this IPA, including its appendices, will be jointly administered by the ANAC and the CAAC.

### **1.7.2. Special arrangements**

It is anticipated that urgent or unique situations may develop – with respect to design approval, export airworthiness certification, production activities, or technical assistance – which have not been specifically addressed in this IPA, but which are anticipated by the Memorandum of Understanding.

If such situation arises, ANAC and CAAC will address a solution for the situation and this IPA may be revised according to section 1.7.1 of this IPA.

The implementation of the solution can be developed, if necessary, by a special arrangement. Special arrangements shall be co-developed and made effective by the signatures of the duly authorized representatives of ANAC and CAAC. If it is apparent

that the situation is with little possibility of repetition, the special arrangement can be of limited duration.

## **1.8. Entry into Force**

The IPA enter into force immediately after signature by the duly authorized representatives, and will remain in force, contingent upon the Memorandum of Understanding remaining valid, unless terminated by either Authority in accordance with section 1.9.

## **1.9. Termination**

ANAC or CAAC may terminate this IPA upon 60 (sixty) days written notice to the other party. Termination of this IPA will not affect the validity of activity conducted under their provisions prior to termination and each authority shall continue to perform the obligations stated in the Section 4.2, Part II of the Annex 8 to the Convention on International Civil Aviation, as signed by the People's Republic of China and the Federative Republic of Brazil concerning continuing airworthiness, for as long as any civil aeronautical product or article imported from the Certifying Authority's country is operated in the Validating Authority's country.

## **1.10. Definitions**

The definitions in Article II of the Memorandum of Understanding are incorporated by reference in this IPA. As used in this IPA, the following definitions are provided to supplement those definitions.

- a) "Acceptance" means the certifying authority (CA) has granted an approval or finding of compliance and the validating authority (VA) will accept that approval or finding as satisfactory evidence that a product, article, and/or design complies with the VA's applicable standards and will not issue its own equivalent approval.
- b) "Additional Technical Condition" is a requirement of the VA that is in addition to the applicable airworthiness and environmental requirements of the SoD and that may be prescribed:
  - 1) For airworthiness requirements, that provides a level of safety equivalent to that provided by the applicable airworthiness requirements of the VA;
  - 2) For environmental requirements, that provides noise, fuel venting, and exhaust emission levels no greater than those provided by the applicable environmental requirements of the VA.
- c) "Aircraft Flight Manual (AFM)" means an authoritative document prepared for each aircraft type by the type certificate (TC) holder and approved by the CA. Its required content is specified in the appropriate airworthiness standards.
- d) "Airworthiness Approval" means a document issued by the CAAC or ANAC for an aircraft, aircraft engine, propeller, or article which certifies that the aircraft, aircraft engine, propeller, or article conforms to its approved design and is in a condition for safe operation.
- e) "Airworthiness Directives (AD)" means legally enforceable rules issued by ANAC in accordance with RBAC 39 or legally enforceable rules issued by the CAAC in accordance with CCAR 39.



- f) "Airworthiness Standards" means regulations governing the design and performance of civil aeronautical products and articles.
- g) "Approved Manuals" means manuals, or sections of manuals, requiring approval by ANAC or CAAC as part of a certification program. These include, but not limited to, the approved sections of the Aircraft Flight Manual, the airworthiness limitations section of the Instructions for Continued Airworthiness (ICA), the engine and propeller installation and operating instructions manuals, and the Certification Maintenance Requirements.
- h) "Article" means, for the intents of this IPA, a material, part, component, process or software intended for use in an aeronautical product.
- i) "Certificating Authority (CA)" means the national organization within the State of Design, charged by the laws of the State of Design with regulating the design, production, airworthiness approval and environmental certification of aeronautical products and articles.
- j) "Certification Basis" means the applicable airworthiness and environmental standards established by a CA for the purpose of certification and by a VA for the purpose of validation. The certification basis may include additional technical conditions, special conditions, equivalent level of safety findings, and exemptions or deviations when determined to apply to the type design.
- k) "Chinese Technical Standard Order (CTSO)" or Ordem Técnica Padrão (OTP) means a minimum performance standard used to evaluate an article. Each CTSO/OTP covers a certain type of article. When authorized to manufacture an article to a CTSO standard, this is referred to as a CTSO Authorization for the CAAC. For ANAC, in order to manufacture an article to an OTP it is necessary to obtain a CPAA and a COP.
- l) "Chinese Technical Standard Order Authorization (CTSOA)" means a design and production approval issued to the manufacturer of an article that has been found to meet a specific CTSO. A CTSOA is not an approval to install and use the article in the aircraft. It means that the article meets the specific CTSO and the applicant is authorized to manufacture it.
- m) "Civil Aeronautical Product" or "product" means each civil aircraft, aircraft engine, or propeller.
- n) "Compliance Determination" means the determination, by either CAAC's system or ANAC's system, during the certification process, that the applicant has demonstrated compliance with identified, individual airworthiness, environmental, or other standards.
- o) "Conformity" means that a product is examined against pertinent type design, test, and quality control data and is found to meet those data.
- p) "Design Approval" means a type certificate (for CAAC TC and for Brazil CT) (including amended TCs/CTs), supplemental type certificates (for CAAC STC and MDA, and for Brazil CST), (including amendments thereto), repair design approval, the approved article or article design under a CPAA, CTSO authorization, TSO Design Approval Letter (DAL), Validation of Design Approval (VDA), or other design approval document.
- q) "Design Change" means changes to the construction, configuration, performance, environmental characteristics, or operating characteristics of the product or article.
- r) "Environmental Standards" means regulations governing designs with regard to noise characteristics and exhaust emissions of civil aeronautical products.

- s) "Environmental Compliance Demonstration" means a process by which the design or change to a design of a civil aeronautical product is evaluated for compliance with applicable standards and procedures concerning noise, fuel venting or exhaust emissions.
- t) "Equivalent Level of Safety Finding" means a determination that alternative action taken provides a level of safety equal to that provided by the requirements for which equivalency is being sought.
- u) "Exemption" means a grant of relief from requirements of a current regulation when processed through the appropriate regulatory procedure by ANAC or CAAC, as applicable.
- v) "Export" means the process by which a product or article is release from a civil aviation authority's regulatory system for subsequent use in the other civil aviation authority's regulatory system.
- w) "Exporting Authority (EA)" means the national organization within the exporting State, charged by the laws of the exporting State with regulating the airworthiness and environmental certification, approval, or acceptance of aeronautical products and articles.
- x) "Familiarization" means the process whereby the VA obtains information and experience on an aeronautical product designed in the State of the CA in order to: prescribe additional technical conditions for that product, mandate corrective airworthiness action on the event that the product experiences service difficulties during its operation in the State of the VA, and ensure the development of appropriate maintenance, operating, and pilot type rating information (if applicable) for the product.
- y) "Finding" means a determination of compliance or non-compliance as the result of the ANAC or CAAC's review, investigation, inspection, test, and/or analysis.
- z) "Import" means the process by which a product or article is accepted into a civil aviation authority's regulatory system for subsequent use in that civil aviation authority's regulatory system.
- aa) "Importing Authority (IA)" means the national organization within the importing State, charged by the laws of the importing State with regulating the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products and articles .
- bb) "Issue Paper (IP)" or "Ficha de Controle de Assuntos Relevantes (FCAR)" means a document describing an item that requires disposition prior to the issuance of a Design Approval.
- cc) "Maintenance" means the performance of inspection, overhaul, repair, preservation and the replacement of parts, materials, or components of a product to assure the continued airworthiness of that product but excludes modifications.
- dd) "Manufacturer" means the person responsible for the final assembly of a product under an ANAC or CAAC approved production quality system, which ensures conformity of the product to an approved type design. Final assembly includes the activities of producing or fabricating, notwithstanding that portions of the product may have been manufactured by other persons at other locations.
- ee) "Modification Design Approval (MDA)" means an approval issued by the CAAC for design changes. Before July 01, 2017, applies to major or minor design changes to imported products only. On and after July 01, 2017, applies only to third party minor design change approvals, for both domestic and imported products.
- ff) "New Aircraft" is defined differently in Brazil and in China.

1. For ANAC, a new aircraft means an aircraft that is still owned by the manufacturer, distributor or dealer, if there is no intervening private owner, lease, or time sharing arrangement, and the aircraft has not been used in any pilot school and/or other commercial operation.
  2. For CAAC, a new aircraft means an aircraft that is still owned by the manufacturer, alteration station or dealer, if there is no intervening other owner or lease, and the aircraft has only made flights necessary for production flight, crew training flight conducted by the manufacturer, or delivery flight.
- gg) "Person" means any individual, firm, co-partnership, corporation, company, association, joint stock association, or governmental entity, and includes a trustee, receiver, assignee, or other similar representative thereof.
- hh) "Production Approval" means a document issued by ANAC or CAAC to a person that allows the production of a product or article in accordance with its approved design and approved quality system, and can take a form of a Production Certificate, a Parts Manufacturer Approval (PMA), or a Technical Standard Order Authorization (TSOA).
- ii) "Production Quality System" means a systematic process which provides confidence that aeronautical products will conform to the approved type design and will be in a condition for safe operation.
- jj) "Restricted Category Aircraft" means an aircraft that meets the airworthiness requirements of an aircraft category except those that the Authority finds inappropriate for the special purpose operation for which the aircraft is to be used; shows compliance with the applicable noise requirements; and has no feature or characteristic that makes it unsafe when operated under the limitations prescribed for its intended use. For the purpose of this IPA, and notwithstanding an aircraft's type certification by either Authority in the restricted category, restricted category aircraft does not include aircraft manufactured in accordance with the requirements of, and accepted for use by, an Armed Force of Brazil or China that is modified later for a special purpose.
- kk) "Special Condition" means an additional safety standard(s) prescribed by CAAC or ANAC when the airworthiness standards for the category of product do not contain adequate or appropriate safety standards due to novel or unusual design features. Special Conditions contain such safety standards as CAAC or ANAC finds necessary to establish a level of safety equivalent to that established in the applicable regulations.
- ll) "State of Design" (SoD) means the State having jurisdiction over the organization responsible for the type design.
- mm) "State of Manufacture" (SoM) means the State having jurisdiction over the organization responsible for the final assembly of the aircraft.
- nn) "State of Registry" (SoR) means the State on whose register the aircraft is entered.
- oo) "Type Design Approval" means the issuance of a certificate, approval, or acceptance by, or on behalf of, an airworthiness authority for the type design of a product.
- pp) "Used Aircraft" means each aircraft that is not a new aircraft
- qq) "Validating Authority" (VA) means the national organization within the validating State, charged by the laws of the validating State with regulating the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products and articles.

- rr) “Validation” means the ANAC’s or CAAC’s process for issuing an approval of a design certificated by the other.
- ss) “Work Plan” means the scope of the VA’s technical review developed using risk-based criteria. The work plan identifies specific design features, systems, or characteristics of an aeronautical product where the VA will focus its technical review as part of its Technical Validation process. It is endorsed by the VA management and shared with the applicant and the CA.

## **2. SCOPE**

### **2.1. General**

- 2.1.1. These Implementation Procedures apply to such aircraft type designs to be type certificated by ANAC and CAAC for obtaining a standard airworthiness certificate, except as described in paragraphs 2.1.3 and Appendix B;
- 2.1.2. The ANAC and CAAC issue standard airworthiness certificates in the normal, utility, aerobatic, commuter, and transport categories of aircraft, as well as for manned free balloons and special classes of aircraft which include airships, very light airplanes (VLA), gliders, and other non-conventional aircraft.
- 2.1.3. Aircraft for which a special airworthiness certificate is issued by ANAC or CAAC may be dealt with on a case-by-case basis through the special arrangements provision in Appendix B of this document. ANAC and CAAC agree that restricted category aircraft are not eligible for a standard airworthiness certificate.

### **2.2. Provisions for Products and Parts Accepted for Import under this IPA**

- a) China acceptance of ANAC Export Certificates of Airworthiness for new and used aircrafts.
- b) China acceptance of ANAC Authorized Release Certificate / Airworthiness Approval Tag, or equivalent document, for new engines, propellers, and articles.
- c) Brazil acceptance of CAAC Export Certificates of Airworthiness for new and used aircrafts.
- d) Brazil acceptance of CAAC Authorized Release Certificate / Airworthiness Approval Tag for new aircraft engines, propellers, and articles.

### **2.3. Provisions for Technical Assistance**

ANAC and CAAC agree to cooperate when technical assistance is needed by one airworthiness authority in fulfilling its national airworthiness and environmental duties in the other airworthiness authority's country.

## **3. ESTABLISHED WORKING PROCEDURES**

### **3.1. Design Approval Procedures**

### **3.1.1. General**

Acceptance or validation of initial design approval of each other's civil aeronautical products and articles, of subsequent design changes to those products and articles, and approval of design data used in support of repairs and alterations will be based, to the maximum extent practicable, on technical evaluations, tests, inspections, and compliance determinations made by the CA.

The appropriate design approval is issued by the VA for an aeronautical product or article if the CA, after consultation with the VA, certifies to the VA that the design has been examined, tested, inspected, and found to meet the VA certification basis.

The Authorities recognize that there may be situations when direct communications between the VA and the applicant are necessary. Direct communications will be limited to technical questions regarding the product or article and will be conducted with the awareness and consent of the CA. The CA will be informed of the outcome of these discussions.

Chinese and Brazilian design approval holders are required to hold relevant type design information (e.g. type design data, drawings, processes, materials specifications, operating limitations, approved manuals, accepted manuals, and service bulletins) and to make it available to their respective Authority upon request. This information shall be available to the VA upon request to the CA.

### **3.1.2. Type Design Approval Application Consideration**

#### **3.1.2.1. Brazil**

Any aircraft model exported to Brazil (under a purchasing or leasing agreement), regardless of being new or used, must have a Brazilian type certificate, issued on the basis of the CA type certificate, to be eligible for registration on the Brazilian Registry.

Any aircraft with a Brazilian type certificate, modified in accordance with a foreign authority supplemental type certificate, or equivalent document, exported to Brazil, must have a Brazilian supplemental type certificate, or equivalent approval, issued on the basis of the CA supplemental type certificate, or equivalent document.

Any aircraft engine or propeller model exported to Brazil must have a Brazilian type certificate, issued on the basis of the CA type certificate, to be eligible for installation on any aircraft with a Brazilian type certificate.

Any article not included in the approved Brazilian type design definition, must have a Brazilian approval or acceptance for installation, based on the CA approval, to be eligible for installation on any product with a Brazilian type certificate.

#### **3.1.2.2. China**

Any aircraft model exported to China (under a purchasing or leasing agreement), regardless of being new or used, must have a Chinese type certificate, issued on the

basis of the CA type certificate, to be eligible for registration on the China Registry or to be operated under lease by a China certificated air carrier or commercial operator under Chinese Civil Aviation Regulations.

Any aircraft with a Chinese type certificate, modified in accordance with a foreign authority supplemental type certificate, or equivalent document, exported to China, must have a Chinese supplemental type certificate, or equivalent approval, issued on the basis of the CA supplemental type certificate, or equivalent document.

Any aircraft engine or propeller model exported to China must have a Chinese type certificate, issued on the basis of the CA type certificate, to be eligible for installation on any aircraft with a Chinese type certificate.

Any article not included in the approved Chinese type design definition, must have a Chinese approval or acceptance for installation, based on the CA approval, to be eligible for installation on any product with a Chinese type certificate.

### **3.1.3. Procedure for Approval of New Type Design (Aircraft, Aircraft Engines, and Propellers)**

ANAC issues “Certificado de Tipo” (CT) and CAAC issues “Validation of Type Certificate” (VTC) for imported products to grant approval of the type design of aircraft, aircraft engines, and propellers.

The following procedures apply to such products type design to be approved by ANAC or by CAAC for obtaining a standard airworthiness certificate.

#### **3.1.3.1. Application**

An application for type design approval will have to be made by the applicant through the CA with a request that the application and related information be forwarded to the VA.

##### **3.1.3.1.1. CA Application Responsibilities:**

Upon receipt of an application for validation from an applicant, the CA will:

- a) Assure that the application is eligible for validation (is within the scope of this agreement);
- b) Prepare the application package for transmittal to the VA.

##### **3.1.3.1.2. Application Package**

Applications should include:

- a) Cover letter from the CA identifying the following:
  1. Applicant requested timeline
  2. Application Category Requested:
    - i. Concurrent Certification Validation
    - ii. Sequential Certification Validation

- b) Completed VA application form.
- c) A description of the product in accordance with RBAC 21.15 for applications to ANAC, or CCAR 21.29 for applications to CAAC;
- d) The Type Certificate and the Type Certificate Data Sheet, if available, or a document that defines the applicable airworthiness standards and environmental requirements for design approval, as established by the CA for its own domestic design approval.
- e) If not directly identified in the documentation described in this section, the CA should also provide the reference date used to establish the certification basis.
- f) A proposal for identification of areas of involvement, guided by the risk based criteria, according to section 3.1.3.4. The VA may use this information to assist in establishing its scope and level of involvement.
- g) If applicable, a description of the CA similar designs previously validated through a complete validation process by the VA under the procedures established in this IPA or its previous revisions, including the extent of the similarities, for the VA evaluation of the risk based criteria, according to section 3.1.3.4.
- h) Any additional data/information for known in-service issues to enable understanding of continuing airworthiness implications and how they have been addressed.
- i) Compliance checklist.
- j) Copy of all CA exemptions, special conditions, equivalent level of safety findings.
- k) List of all IPs for CAAC, or Ficha de Controle de Assunto Relevante (FCAR) for ANAC, raised during the CA's certification activities, for sequential validations.
- l) Brief description of all novel or unusual design features.
- m) Information on VA interested operators and delivery schedules, if exist.
- n) Top level drawing of the aircraft.
- o) Approved manuals.
- p) Weight and balance data if not contained in an approved manual.
- q) Instructions for continued airworthiness.
- r) In cases where the applicant chooses to voluntarily adopt into the VA certification basis later amendments to airworthiness or environmental standards, those later amendments will be identified in the application.

NOTE 1: The validation processes in Brazil are subject to specific fees as established under the Law 11.182/2005, available on the ANAC website: <https://www.anac.gov.br/assuntos/legislacao>.

NOTE 2: ANAC, as the VA, agrees to receive the application package prior to the payment of the fees to advise the applicant on the process for fee payment.

NOTE 3: The validation processes in China are subject to specific fees as established under the document no. [2011]3214 issued by the National Development and Reform Commission and the Ministry of Finance.

NOTE 4: CAAC, as the VA, agrees to receive the application package prior to the payment of the fees to advise the applicant on the process for fee payment.

NOTE 5: For concurrent validation projects some elements of the application package will not be known at the time of application; those applications must include all known data and submit any missing elements when it becomes available.

#### 3.1.3.2. Validation

Validation can be performed as a sequential or as a concurrent validation.

##### 3.1.3.2.1. Sequential Validation

In a sequential validation, the CA has completed its certification, or is well advanced in the certification process, before the applicant requests validation by the VA. In this case, the CA certification basis and methods of compliance (MOCs) have been established by the CA. Type design changes, revised operating limitations, or new or revised certification testing or analysis may be required in a sequential project to meet the requirements of the VA, since these requirements may not have been considered during the original CA certification.

##### 3.1.3.2.2. Concurrent Validation

In a concurrent validation, the applicant requests validation of the product by the VA at the same time as certification by the CA, with the objective to get the CA and the VA approval at the same, or nearly the same time.

- a) This approach allows unique VA requirements to be addressed during the design development and initial compliance demonstration.
- b) A concurrent validation provides an opportunity for collaborative development of both CA and VA certification basis. Additionally, it provides for early identification of areas where jointly agreed solutions are not readily available.
- c) A concurrent validation may use any or all of the following optional provisions:

- 1) Common Issue Papers (IP) and Ficha de Controle de Assunto Relevante (FCAR)

The CA and the VA may jointly develop and approve IPs or FCARs that are common or identical, as applicable, depending on which authority is the CA. Common IP/FCAR can be limited to a single issue, or may be used extensively throughout the project.

- 2) Single Certification Basis

The CA and VA may elect to jointly develop a single agreed certification basis that satisfies both China and Brazil regulatory requirements.

#### 3.1.3.3. Validation Procedures

- a) The VA will review the application and request any missing information within ten (10) working days after receipt of the application.
- b) If there is no missing information, or after receipt of all missing information, the VA will advise the applicant of the applicable fees within ten (10) working days. Upon receipt of payment of any applicable fees, the VA will begin working on the validation project.
- c) The VA will establish an estimated date to conclude its risk-based assessment, and inform the CA.



- d) The VA will perform an assessment on the proposed validation design according to the Validation Risk Based Criteria in section 3.1.3.4, considering the similarities of the proposed design with previous validated designs from the CA. This assessment may be complemented with the technical familiarization.
- e) If the VA decides no involvement on validation is required after the assessment of the application package, a Work Plan is not needed. The VA will notify the CA of its decision and it is ready to receive the certification statement from the CA according to 3.1.3.3(h). The VA shall issue a certificate within twenty (20) working days after receiving the certification statement from the CA.
- f) When the VA identifies the need for its involvement on validation, the VA will develop a Work Plan according to section 3.1.3.5. The VA may choose to issue a Work Plan based only on its review of the validation package at the beginning of the validation program, before the technical familiarization. However, there must be a Work Plan, developed based on the review of application package and knowledge of the product gained through technical familiarization, issued right after conclusion of the technical familiarization according to 3.1.3.6.1. The VA shall send the Work Plan and any further revision to the CA and the Applicant for planning purposes.
- g) Once the validation activities are concluded, the VA will notify the CA, in writing, that it has completed its review of any compliance documents it requested, and that it is ready to receive the CA certification statement.
- h) Upon completion of the CA certification and receipt of the VA notification described in section 3.1.3.3(g) the CA will provide the following statement to the VA:  
 “The CA certifies that the {specific product type, model, or STC} complies with the {VAs} certification basis”.
- i) The VA shall issue a certificate after successfully completing the Work Plan activities, receipt of the CA Certification Statement and the CA issuance of the SoD approval.

#### **3.1.3.4. Validation Risk Based Assessment**

The VA will conduct an assessment on the application for establishing its scope and level of involvement in technical review. The extent of the similarity of the current design with others previously validated by the VA according to procedures of this IPA shall be considered in the assessment against risk based criteria. Similar designs in this context can be a different model under the same TC, a product/modification with comparable configuration and certification basis, and others. The VA shall take credit from previous assessments to the maximum extent possible, to perform the current validation risk based assessment.

The assessment will be guided by the following considerations. The list below represents criteria considered critical for safety and should be used to identify the necessary subjects to be included by the VA in the validation Work Plan for verification, depending on the VA analysis.

- a) The VA certification basis includes or is anticipated to include Additional Technical Conditions, according to section 1.10(b);

- b) The VA or CA certification basis includes or is anticipated to include a new or amended Exemption, Special Condition or Equivalent Level of Safety (ELOS);
- c) Changes classified as “significant” by the CA in accordance with CCAR 21.101 or RBAC 21.101;
- d) Changes affecting compliance with an unilateral AD issued by the VA, or affecting compliance with an AD issued by a third party and adopted by the VA;
- e) The use of a new or different applicable method of compliance from that previously agreed by the CA and the VA;
- f) The specific design features and operational characteristics of the design presented for validation (New technologies, new applications of existing technologies, novelties, non-usual characteristics, etc.);
- g) A potential unsafe condition identified by either Authority that warrants issuing a mandatory continuing airworthiness information for this product or similar. A potential unsafe condition may also be one in which the product contains design features pursuant to RBAC 21.21(a)(2)(ii) or CCAR 21.21(a)(2) where experience with other products in service with same design features has shown an unsafe condition might occur in that product.

If the VA considers for the necessity of involvement on items not related to the considerations above, the VA will present those items to the CA together with technical justification for involvement. The CA may provide clarifications to the VA, in order to address its concerns. After evaluation, the VA will decide for inclusion or not of such items in the validation Work Plan.

Based on this assessment, the VA shall develop a Work Plan to establish the scope of its validation program and the VA’s Level of Involvement (LOI) on each validation project.

### 3.1.3.5. Work Plan

#### 3.1.3.5.1. General

- a) The Work Plan is mandatory for product validations, when there is involvement of the VA on compliance determination with applicable requirements.
- b) The Work Plan establishes the scope and depth of VA involvement and is used to document the VA certification basis.
- c) For a new TC application, the risk-based criteria in section 3.1.3.4, can be used as guidelines to assist in focusing the VA’s level of involvement in the Work Plan. The level of involvement can be expanded upon mutual agreement between CA and VA.
- d) A Work Plan may be created by the VA right after conclusion of the risk based assessment, based on VA review of the application package.
- e) Technical familiarizations may be requested by the VA for better understanding of design aspects, which could impact the VA certification basis and involvement.
- f) In a concurrent project, the Work Plan may evolve over the course of the validation program as the VA gains knowledge during technical familiarizations, or as the design presented for validation, as well as its methods of compliance, evolves over the course of the certification program.

- g) In a sequential project, the VA Work Plan should be finalized upon completion of the technical familiarization meetings (section 3.1.3.6.1).
- h) The first Work Plan issuance and any subsequent changes that may result in the expansion of the VA's involvement, must be approved by VA management, to assure that the VA's involvement remains within the criteria for establishing the Work Plan referenced in paragraph 3.1.3.4.
- i) As soon as possible, the VA will share the approved Work Plan with the CA and the applicant so that the CA can prepare its resources for the validation activities.

#### 3.1.3.5.2. Work Plan Contents

- a) Identification of the applicant;
- b) A brief description of the product or change, as provided in the application package;
- c) The VA certification basis according to 3.1.3.6.5.
- d) A list of proposed areas of VA level of involvement, with reference to the applicable risk-based criteria;
- e) If applicable, a proposal for technical familiarization activities necessary to achieve a final Work Plan;
- f) Identification of the responsible VA project certification manager and any VA team members identified based on review of the application; and
- g) A proposal for familiarization flight activities, if applicable, according to 3.1.3.6.1 (e) and (f).

Elements above will be regularly updated by the VA over the course of a validation program, as needed.

#### 3.1.3.6. Validation Guidelines

##### 3.1.3.6.1. Technical Familiarization

- a) After the application has been received by the VA with all necessary information, and when the design is sufficiently defined, a familiarization on the product may be requested by the VA. Technical familiarization can be requested for better understanding of some design and operational aspects, complementing the assessment to be performed according to the validation risk based criteria.
- b) The technical familiarization can only be fully satisfied when the applicant or CA has presented to the VA the following information:
  - 1) An overview of the proposed type design, intended operational use, and, if applicable, relation to previously approved products; and
  - 2) The proposed CA and VA certification basis, including analysis of potential differences.
- c) The VA will focus its attention during technical familiarization on understanding the general compliance methodologies used or to be used by the applicant, including assumptions, boundary conditions and critical parameters of that methodology, to determine if IPs/FCARs are necessary. Further details, including review of test plans or other compliance documents, test witnessing, or other details of the compliance demonstration are deferred until that depth of review is added to the Work Plan and approved by VA management.

- d) When technical familiarization meetings are requested, they will be arranged by the CA. The CA must be represented at any technical familiarization meetings with the VA and the applicant, unless otherwise agreed between the CA and the VA.
- e) Familiarization flights are a unique aspect of technical familiarization since, in a concurrent project, they cannot be conducted until late in the project when a flying article is available. Familiarization flights are not to be used to repeat compliance determinations performed by the CA. Rather, they have the following purposes:
  - 1) Identify to the CA for resolution any potential compliance issues not previously identified by the validation team in the course of Work Plan definition;
  - 2) Familiarize the VA with the type design as necessary to support operational introduction and continued operational safety of the VA-registered fleet.
- f) VA requests for familiarization flights must be identified in the Work Plan.
  - 1) Familiarization flights should be supported by the CA flight test team to facilitate completion of the objectives described in paragraph (e) above.
  - 2) Familiarization flights are typically conducted for all new TC programs. Familiarization flights may also be conducted for other design change programs having a significant impact on the operational capabilities or limitations, or pilot/aircraft interface. The VA will determine whether and what familiarization flights are requested for each program.

#### 3.1.3.6.2. Technical Meetings

In addition to the technical familiarization, other technical meetings may be necessary to ensure that any additional technical conditions and design-related operational requirements that have been communicated to the CA are well understood, and that any outstanding technical issues are resolved. All technical meetings will normally be arranged through the CA. Location of the meetings may vary, depending on the needs and priorities, and will normally have both Authorities' representatives in attendance. Such meetings (and guidelines for the meetings) may include:

- a) Technical meetings requested by the applicant, the CA, or the VA for the purpose of reporting new developments, reviewing changes, or resolving technical compliance questions;
- b) Technical meetings between both Authorities for timely resolution of outstanding issues; and
- c) Technical meetings held with the applicant to provide the applicant with the VA's position with respect to any unresolved technical issues.

#### 3.1.3.6.3. Managing VA Level of Involvement and Review of Compliance Data

- a) A VA decision to directly review a compliance document is typically reached through an assessment on the application using the validation risk based criteria, through technical familiarization, or through additional meetings following technical familiarization, correspondence (in the context of an established IP or FCAR), or other interactions. A compliance document in this context is any test report or other document that directly supports a determination of compliance.
- b) The VA will rely, to the maximum extent possible, on the CA to make compliance determinations/verifications on its behalf. VA justification is required for any VA review of a compliance determination/verification that are not related to the

validation risk based criteria in section 3.1.3.4, including the review of any compliance document.

- c) In the case of new or amended exemption, SC, ELOS, if the exemption, SC, ELOS has been applied previously in a similar context and no changes are anticipated for the current projects, VA involvement is limited to the administrative action necessary to extend the applicability or to reissue the exemption, SC, or ELOS to the new project.
- d) A new or different Means of Compliance identified is intended to ensure awareness of the VA of a new or different Means of Compliance, and to allow subsequent applications of the same Means of Compliance without further review.
- e) VA review of compliance determinations, including review of any compliance documents, must be identified in the Work Plan along with the associated justification.
- f) When the VA requests review of a compliance document according to the validation risk based criteria and the procedures in this Section, the VA, at the completion of its review, will inform the CA that the document is acceptable for demonstration of compliance to the VA certification basis.

#### 3.1.3.6.4. Use of IP's and FCAR's

- a) Issue Paper (IP), for CAAC, and “Ficha de Controle de Assuntos Relevantes” (FCAR), for ANAC, may be prepared by the VA, as applicable, which describe issues such as Additional Technical Conditions to be resolved before the VA can grant a CT/VTC. The exact form and scope of these documents will be determined by each Authority and details of their use will be provided to the other Authority.
- b) The VA will not generate an IP or FCAR on a subject which has already been addressed by the CA and with which the VA concurs, if applicable to the validation.
- c) The VA will coordinate IPs or FCARs through the CA to the applicant in order to expedite a mutually acceptable resolution with the awareness of both Authorities.

#### 3.1.3.6.5. Establishment of the VA Certification Basis

- a) The VA will define the VA Certification Basis for projects received for validation.
- b) The VA shall develop its Type Certification Basis using:
  - a. For airworthiness and noise standards, the applicable VA standards in effect on the date of application by the applicant to the CA for the issuance of a CA design approval;
  - b. For the fuel venting and emissions, and CO<sub>2</sub> emissions standards, the VA standards in effect on the date of application to the VA.
- c) The VA Certification Basis could be in the form of accepting the CA Certification Basis and may be supplemented with Additional Technical Conditions.
- d) The VA special conditions, ELOS and exemptions will be either adopted from the CA certification basis or created as part of the Technical Validation and added to the VA certification basis as applicable.
- e) CA classification of changes as either significant or non-significant according to CAAC CCAR 21.101 or ANAC RBAC 21.101, as amended, may be accepted by the VA. For changes classified by the CA as significant, the VA will use the date

of application to the CA as reference to determine the final VA Certification Basis for the change, including any exceptions.

#### **3.1.3.6.6. Design Related Operational Requirements**

Operational requirements of the VA for a particular kind or condition of operation, which would affect the design or performance of the product, could include the provision of additional equipment, as well as supplementary advisory information in the aircraft flight manual and maintenance information.

Mandatory design-related operational requirements will be notified by the VA at the time of each validation process.

#### **3.1.4. Acceptance of Design Data Used in Support of Repairs and Alterations**

The CAAC and ANAC agree that data generated in the design approval of repairs, data generated in support of alterations, and MDAs issued on and after July 01<sup>st</sup>, 2017 shall be considered approved by both the CAAC and ANAC, regardless of the SoD of the aeronautical product, without further showing, provided that the approval was granted in accordance with the CA internal approval procedures. This includes approvals by CAAC and ANAC approved organizations or under CAAC delegation system or ANAC accreditation system.

#### **3.1.5. Supplemental Type Approval**

ANAC may issue “Certificado Suplementar de Tipo” (CST) and CAAC may issue “Validation of Supplemental Type Certificate” (VSTC) for validation of foreign Authorities design change approvals, provided the product associated with the design change approval has been type certified by the VA.

The CST is based on STC issued by CAAC or Modification Design Approval (MDA) issued by CAAC before 01 July 2017 for a major change. VSTC is based on CST issued by ANAC.

For Supplemental Type design approval, a certification procedure similar to that described in section 3.1.3 will be applied, but adjusted as appropriate for the category, significance and complexity of the design.

#### **3.1.6. Design Approvals of Articles**

##### **3.1.6.1. Design Approvals of TSO Articles**

CAAC and ANAC note that both authorities have standards applicable to articles equivalent to the US FAA Technical Standard Orders (TSO).

The ANAC design approval of articles for Brazilian applicants is characterized by the issuance of a “Certificado de Produto Aeronáutico Aprovado – CPAA” (Certificate of Approved Aeronautical Product) according to an “Ordem Técnica Padrão – OTP” (equivalent to FAA TSO, and has the same number as FAA TSO) specification. The ANAC production approval for an article is characterized by the issuance of a

“Certificado de Organização de Produção – COP” (Production Organization Certificate). The ANAC issues “Design Approval Letter – DAL” for validation of foreign authorities TSO design approval.

The CAAC design and production approval for these articles is characterized by the issuance of a “Chinese Technical Standard Order Authorization (CTSOA)” according to a CTSO (can be equivalent to FAA TSO when CTSO has the same number of FAA TSO, or exclusive Chinese TSO) specification. The CAAC issues “Validation of Design Approval (VDA)” for validation of foreign authorities TSO design approval.

CAAC VDA/CTSOA and ANAC DAL/CPAA does not constitute an approval for installation of the CTSO/OTP article on a specific aircraft type. For that purpose, the applicant/installer must obtain installation approval from its national civil aviation authority for use on either a Chinese or a Brazilian registered aircraft.

#### 3.1.6.1.1. Application for Design Approvals of TSO Articles

An application for design approval of a TSO article will have to be made by the applicant through the CA with a request that the application and related information be forwarded to the VA.

#### 3.1.6.1.2. Application Package for Design Approvals of TSO Articles

Applications should include:

- a) Statement of the applicant, with confirmation by the CA, that the design and the performance of the part comply with the respective applicable standard;
- b) All the required data pertaining to the proper design, installation, performance, operation, and maintenance of the article;
- c) Any approvals of deviations granted by the CA. VA and CA Deviations must be approved by the VA.

VA can request other specific technical data that can be necessary to demonstrate compliance with an OTP, CTSO or a third Country Authority TSO as accepted by the VA.

#### 3.1.6.1.3. Validation Procedure for Design Approvals of TSO Articles

- a) The VA will review the application and request any missing information within ten (10) working days after receipt of the application;
- b) When there is no missing information, the VA will begin processing the application;
- c) VA performs a review on the application package and any necessary verifications;
- d) Upon successfully completion of the VA assessment and verifications, the VA shall issue the appropriate form of design approval to the applicant. When acting as VA, ANAC will issue the DAL, and CAAC will issue the VDA.

#### 3.1.6.2. Design Approvals of Modification and Replacement Articles (PMA, CPAA)

The ANAC design approval of modification and replacement articles is characterized by the issuance of a CPAA. The ANAC production approval for an article is characterized by the issuance of a COP.

The CAAC design and production approval for these articles is characterized by the issuance of a “Parts Manufacturer Approval (PMA)”.

Specific procedures for design approval of modification and replacement articles (PMA, CPAA) will be established in a Special Arrangement or in the next review of this IPA.

### **3.1.7. Design Changes**

#### **3.1.7.1. Approval of Changes to a Type Design**

- a) Approval of changes to the design (e.g., model changes) sought by the type certificate holder will be issued as amendments to the VTC/CT by the VA. A certification procedure similar to that described in section 3.1.3 will be applied, but adjusted as appropriate for the category, significance and complexity of the design change. The VA retains the right to determine if the proposed change is of such significance as to require a new type certificate for the changed type design, based on how the change would be dealt with for similar product and circumstances in the State of the VA.
- b) All major type design changes having an effect on the VA type certificate datasheet should be submitted to the VA for validation through the CA. The VA will evaluate and establish its LOI according to provisions of the validation risk based assessment in section 3.1.3.4 and will inform the CA of the design change approval.
- c) All major type design changes having no effect on the VA’s type certificate datasheet will be automatically accepted by the VA without technical validation, on the basis of the CA’s statement of compliance, and without issuance of any additional approval document. Notification of its acceptance from the VA is not required for such situation.
- d) Except where notified under sections 3.1.7.1(b) and (c) above, all other design changes approved or accepted by the CA, its approved organizations, or its delegated/accredited persons will be accepted by the VA without issuance of an approval, and therefore no application for validation and no notification is required.
- e) All minor design changes that have an impact to the VA TCDS shall be informed to the VA for documentation update. This information is not considered an application, as it is already accepted according to item (d) above.

#### **3.1.7.2. Procedures for Changes to a Supplemental Type Certificate**

The CAAC and the ANAC agree to follow the procedures in paragraph 3.1.3 to the extent applicable. Where unique situations may occur, the CAAC and ANAC will consult with each other on the specific process to be applied.



#### 3.1.7.3. Approval of Revisions to Aircraft Flight Manual

The VA will delegate to the CA the review and approval of revisions to the flight manuals, supplements and appendices, according to the type design approval, on behalf of each other, in order to facilitate their timely approval. This includes CA approvals by the CAAC and ANAC approved organizations or under CAAC delegation system or ANAC accreditation system.

Stand-alone changes to approved manuals shall be dealt with as any other design change following the procedures established in 3.1.3.

#### 3.1.7.4. Procedures for Changes to a ANAC DAL or a CAAC VDA

Major changes to a CAAC VDA or ANAC DAL design must be applied for validation in the VA, requiring a new issuance of the CAAC VDA or ANAC DAL, respectively. Minor changes to a CAAC VDA or ANAC DAL design will be considered accepted by the VA, and no application is required.

### 3.2. Export Airworthiness Certification Procedures

#### 3.2.1. General

- a) For ANAC, as exporting authority for products and articles identified in item 2.2, Export Certificates of Airworthiness shall be issued by ANAC for aircraft and Authorized Release Certificate / Airworthiness Approval Tags, or equivalent document, shall be issued by ANAC or by authorized persons for aircraft engines, propellers and articles.
- b) For CAAC, as exporting authority for products and articles identified in item 2.2, Export Certificates of Airworthiness shall be issued for aircrafts by CAAC, and Authorized Release Certificate / Airworthiness Approval Tags shall be issued by CAAC or by authorized persons for aircraft engines, propellers and articles.

#### 3.2.2. Production Approval

All products and articles exported under the provisions of this IPA shall be produced in accordance with a process acceptable to the exporting authority, which assures conformity to the type design approved by the importing authority and ensures that completed products are in a condition for safe operation. Therefore, a separate approval of the manufacturer's production by the importing authority is not required.

If a production approval has been granted and it was extended to a manufacturing site or facility in another country, the completed products being exported from that manufacturing site or facility shall be considered as manufactured in the exporting authority's country.

#### 3.2.3. Production under a Licensing Agreement

The Authorities recognize that some business relationships may result in the licensing of data for products or articles designed under one Authority's approval and manufactured under the other Authority's approval. In such cases, the Authorities will work together to develop an arrangement defining their regulatory responsibilities to ensure accountability under Annex 8 to the Chicago Convention. Such arrangements will address the responsibilities of the SoD and the SoM and will be documented in accordance with section 1.7.2 of these Implementation Procedures.

3.2.4. Issuing and Accepting Export Certificates of Airworthiness, and Authorized Release Certificates / Airworthiness Approval Tags (or equivalent document) for Export

3.2.4.1. Complete Aircraft,

The importing authority shall accept the Export Certificate of Airworthiness of the exporting authority on the aircraft, only if a TC holder exists to support continuing airworthiness of such aircraft, and when the exporting authority certifies that each aircraft:

- a) Conforms to a type design approved by the importing authority, as specified in the importing authority's type certificate data sheet;
- b) Is in a condition for safe operation, including compliance with applicable importing authority's ADs;
- c) Meets the special requirements of the importing country, according to section 3.2.5.1 or 3.2.5.2; and
- d) For Used Aircraft only:
  - (a) Is properly maintained using approved procedures and methods throughout its service life to the requirements of an approved maintenance program as evidenced by logbooks and maintenance records; and
  - (b) Has records which verify that all overhauls, major changes and repairs were accomplished in accordance with approved data.

Each aircraft imported to China or Brazil will have an Export Certificate of Airworthiness and should contain information equivalent to the following statement: "The [INSERT AIRCRAFT MODEL] covered by this certificate conforms to the type design approved under the TC Number [INSERT IMPORTING AUTHORITY TC NUMBER, REVISION LEVEL, AND DATE], and is found to be in a condition for safe operation," and any other clarifying language as specified in the TCDS. In addition, the EA shall provide a list of all STC and field approval documents incorporated in the particular aircraft.

3.2.4.2. Aircraft Engines, Propellers and Articles

The importing authority shall accept the Authorized Release Certificate / Airworthiness Approval Tag (or equivalent document) of the exporting authority on aircraft engines, propellers and articles when the exporting authority certifies that the aircraft engine, propeller or article:

- a) Conforms to design data approved by the importing authority;

- b) Is in a condition for safe operation, including compliance with applicable importing authorities' airworthiness directives;
- c) For an aircraft engine or propeller, had undergone a final operational check (was run and is working within the approved limits).
- d) Meets the special requirements of the importing Authority, according to section 3.2.5.1 or 3.2.5.2.

3.2.4.2.1. Each aircraft engine and propeller exported to the IA will have an Authorized Release Certificate / Airworthiness Approval Tag (or equivalent) that identifies the EA's approved design data (TC number). The document will be completed in accordance with the applicable procedures of the EA.

3.2.4.2.2. For aircraft engines and propellers, the Authorized Release Certificate / Airworthiness Approval Tag (or equivalent) should contain information equivalent to the following statement: "The [INSERT AIRCRAFT ENGINE OR PROPELLER MODEL] covered by this certificate conforms to the type design approved under the TC Number [INSERT IMPORTING AUTHORITY TYPE CERTIFICATE NUMBER, REVISION LEVEL, AND DATE], as available, and is found to be in a condition for safe operation and has undergone a final operational check," and any other clarifying language as specified in the IA's TCDS. In addition, the EA shall provide a list of all STC and field approval documents incorporated in the particular aircraft engine or propeller.

3.2.4.3. Export Certificate of Airworthiness exceptions

The exporting authority shall notify the importing authority of any non-compliance to the importing authority's approved type design by noting the deviation on the "Exceptions" section of the Export Certificate of Airworthiness. The exporting authority shall notify the importing authority about such deviations in advance, before issuing the Export Certificate of Airworthiness. This notification should help to resolve any issues concerning the aircraft eligibility for the importing authority airworthiness certification.

The importing authority should inform the exporting authority on the acceptance of these exceptions.

Any non-conformity to the importing authority's approved type design shall be noted by the exporting authority as an exception on the Export Certificate of Airworthiness document.

Aircraft deliveries to IA's operators will not be affected if the VA has successfully finished the review of the design change that affects the type certificate datasheet but for any reason the type certificate datasheet revision was not issued before the date of delivery. Under this situation, the VA will issue a temporary approval based on the request from the DAH through the CA, and the EA will note this temporary approval on the "Exceptions" section of the Export Certificate of Airworthiness.

3.2.4.4. Authorized Release Certificates / Airworthiness Approval Tag (or equivalent document) Exceptions

The exporting authority shall notify the importing authority prior to issuing an Authorized Release Certificate / Airworthiness Approval Tag (or equivalent document) in which a non-compliance to the importing authority approved type design is to be noted under the “Exceptions” section of the Authorized Release Certificate / Airworthiness Approval Tag (or equivalent document). This notification should help to resolve any issues concerning the aircraft eligibility for the importing authority certificate of airworthiness. The importing authority should inform the exporting authority on the acceptance of these exceptions.

Any non-conformity to the importing authority's approved design shall be noted by the exporting authority as an exception on the Authorized Release Certificate / Airworthiness Approval Tag (or equivalent document).

3.2.4.5. Used Aircraft Manufactured by a Third Party

The importing authority will also accept the Export Certificate of Airworthiness of exporting authority (other than the country of manufacture) for used aircraft of which the type design has been approved by the importing authority and the conditions of paragraphs 3.2.4.1 have been met (Third Party provision).

The importance of original and newly generated inspection and maintenance records cannot be overemphasized for use by the importing authority in determining the airworthiness of used aircraft. These may be requested by the importing authority and include, but are not limited to: a copy of the original Export Certificate of Airworthiness (specifically including any accepted deviations, exceptions, or waivers) issued by the country of export; verifying records which ensure that any overhauls, modifications, alterations, and repairs were accomplished in accordance with approved data; maintenance records and log entries which substantiate that the used aircraft has been properly maintained throughout its service life to the requirements of an approved maintenance program; etc.

These provisions shall only apply for aircraft of a third country when bilateral agreements/arrangements for this purpose have been formalized between any third countries and both the CAAC and ANAC, covering the same class of products.

3.2.5. Additional Requirements for Importing Products and Articles

3.2.5.1. Chinese Import Requirements

The following identifies those additional requirements that must be complied with as a condition of acceptance of products and articles imported into China, or for use on Chinese-registered aircraft.

a) Identification and marking.

- (i) Aircraft, aircraft engines, and propellers must be identified in a manner outlined in CCAR-21.

- (ii) Articles, for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section of the manufacturer's maintenance manual or Instructions for Continued Airworthiness, must be identified with a part number (or equivalent) and serial number (or equivalent).
  - (iii) Articles of a design approved by CAAC under a CTSO specification must be marked in accordance with the requirements outlined in CCAR 21, and any additional marking requirements specified in the particular CTSO. Approved deviations shall be marked by the holder of the CTSO design approval on the CTSO article or noted in attached limitations.
  - (iv) 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 trademark.
- b) Instructions for Continued Airworthiness. Each aircraft, aircraft engine, and propeller must be accompanied by instructions for continued airworthiness and manufacturer's maintenance manuals having airworthiness limitation sections.
  - c) Maintenance records. Each used aircraft, including the aircraft engine, propeller or article, must be accompanied by maintenance records equivalent to those specified in CCAR-145 and CCAR-121 that reflect the status of required inspections, life limits, etc. There should be evidences by logbooks and maintenance records that the aircraft has been properly maintained, altered, and operated using approved procedures and methods acceptable to the CAAC during its service life.
  - d) An approved Aircraft Flight Manual, including all applicable supplements, must accompany each aircraft.

#### 3.2.5.2. Brazilian import requirements

The following identifies those additional requirements that must be complied with as a condition of acceptance of products and articles imported into Brazil, or for use on Brazilian-registered aircraft.

- a) Identification and marking.
  - (i) Aircraft, aircraft engines, and propellers must be identified in a manner outlined in RBAC 45.
  - (ii) Articles, for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section of the manufacturer's maintenance manual or Instructions for Continued Airworthiness, must be identified with a part number (or equivalent) and serial number (or equivalent).
  - (iii) Articles of a design approved by an ANAC CPAA under an OTP specification must be marked in accordance with the requirements outlined in RBAC 21, Subpart O, and any additional marking requirements specified in the particular OTP. Approved deviations shall be marked by the holder of the OTP design approval on the OTP article or noted in attached limitations.
  - (iv) 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 trademark.

- b) Instructions for Continued Airworthiness. Each aircraft, aircraft engine, and propeller must be accompanied by instructions for continued airworthiness and manufacturer's maintenance manuals having airworthiness limitation sections.
- c) Maintenance records. Each used aircraft, including the aircraft engine, propeller or article, must be accompanied by maintenance records equivalent to those specified in RBAC 91 Section 91.417, RBAC 121 Section 121.380 and RBAC 135 Section 135.439 (see Appendix C), that reflect the status of required inspections, life limits, and so forth. There should be evidences by logbooks and maintenance records that the aircraft has been properly maintained, altered, and operated using approved procedures and methods acceptable to the ANAC during its service life.
- d) An approved Aircraft Flight Manual, including all applicable supplements, must accompany each aircraft.

Guidance materials on the special requirements and procedures for exportation of civil aeronautical products and articles to Brazil are described in the ANAC- Supplemental Instruction (IS) 21-010 - Brazilian Approval of Imported Civil Aeronautical Products.

### **3.3. Post Design Approval Procedures**

#### **3.3.1. Continued Airworthiness**

##### **3.3.1.1. General**

The CA is responsible, as the State of Design (under the International Civil Aviation Organization – ICAO - Annex 8), for resolving in-service safety issues related to design, production. The CA shall provide all applicable mandatory continuing airworthiness information to the VA to ensure continued operational safety of the product. The VA will review and normally accept the corrective actions taken by the CA in the issuance of its own mandatory corrective actions.

At the request of the VA, the CA shall, in respect of products designed or manufactured in that State, assist the VA in determining action considered necessary by the VA for the continued operational safety of the product. The respective decision as to the final action to be taken lies solely with the VA.

##### **3.3.1.2. Malfunctions, Failures, and Defects Reports**

Each authority agrees, upon request, to provide the other with information on malfunctions, failures, defects, and accidents encountered in service at the addresses indicated in the Appendix A of this IPA.

##### **3.3.1.3. Unsafe Conditions**

When the service experience in the VA indicates the existence of an unsafe condition associated with the design, manufacture, or operation/maintenance of a product, such information should be provided without delay to the CA.

When such information is provided, the CA should give expedient attention to the information and consider appropriate action to correct the condition, and so advise the VA.

The CA shall assist the VA in developing remedies, as may become necessary, to correct any unsafe condition of the type design that may be discovered after the product type design is approved by the VA.

The CA shall identify the safety problem (unsafe condition) requiring the mandatory continuing airworthiness information. In the case of emergency airworthiness information, the CA should ensure special handling so that the other authority is notified immediately.

#### 3.3.1.4. Alternative Means/Methods of Compliance (AMOC) to an AD

If the CA issues an AMOC of general applicability to an existing AD for its own SoD products, articles or parts, the CA will notify the VA of the decision.

An AMOC of general applicability issued by the CA for its SoD products is considered automatically accepted by the VA without the need for further approval, unless otherwise determined differently by the VA.

The CA, upon request by the VA, will provide sufficient information to assist in the VA's determination of the acceptability of an AMOC request on an AD issued by the CA for its SoD products, or on an AD issued unilaterally by the VA.

## 4. TECHNICAL ASSISTANCE BETWEEN AUTHORITIES

### 4.1. General

Upon request and mutual agreement, one airworthiness authority may provide to the other airworthiness authority, or may provide on behalf of the other airworthiness authority, technical assistance in furtherance of the purposes and objectives of this IPA. Such areas of assistance may include, but are not limited to, the following:

### 4.2. Accident/incident Investigation Information Requests

When VA needs airworthiness information for the investigation of service incidents or accidents involving a product imported under this IPA, the request for the information should be directed to the appropriate CA office.

In turn, upon receipt of the request for information, the CA should immediately do everything necessary to make sure the requested information is provided in a timely manner.

If urgency requires that the VA request the information directly from the manufacturer when immediate contacts cannot be made with the CA, the VA shall immediately inform the responsible CA office of this action.

**5. ACCOUNTABILITY – PROTECTION OF PROPRIETARY DATA**

Subject to their respective legislation, the CAAC and ANAC shall neither disclose to the public, information received from each other under this IPA that constitutes trade secrets, intellectual property, confidential commercial or financial information, proprietary data, or information that relates to an ongoing investigation without previous written consent of the other party and the proprietary of the information. To this end such information shall be considered proprietary and be appropriately marked as such.

**6. AUTHORITIES SIGNATURES**

IN WITNESS WHEREOF, the undersigned, being duly authorized representatives of the respective Authorities have signed the present Implementation Procedure of Airworthiness, done in English language, which integrally replace the Implementation Procedure signed at 15 February 2011.

**Agência Nacional de Aviação Civil - Brazil**

**Civil Aviation Administration of China**

By

By

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**Roberto José Silveira Honorato**  
Head of Airworthiness Department  
Department of Airworthiness

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**Xu Feng**  
Director General  
Aircraft Airworthiness Certification Department

Date: 02 August 2024

Date: 02 August 2024

**\* Original signed copy filed with ANAC/SAR/GTNI**



## **APPENDIX A**

### **LIST OF ADDRESSES FOR ANAC-SAR OFFICE AND CAAC OFFICE**

#### **A.1. FOCAL POINT IN THE RESPECTIVE AUTHORITIES**

- A.1.1. When necessary, for specific activities between authorities, establish focal points, each authority should send to the other authority, a list of that focal points with the following applicable information:
- a. Name of the focal point;
  - b. Area where the focal point is working;
  - c. Address of the focal point area;
  - d. Matter related that focal point;
  - e. Telephone, mobile telephone, fax;
  - f. E-mail; and
  - g. Other information necessary to make the appropriate contact with the focal point.
- A.1.2. The list above mentioned should be update when necessary or every year, and the authority who received the list should internally, or externally to the authority, inform all person that are necessary to know the information of the focal points.

#### **A.2. ANAC-SAR HEADQUARTERS**

Superintendência de Aeronavegabilidade  
Edifício Parque Cidade Corporate, Torre A, 6º Andar  
Setor Comercial Sul, Quadra 09, Lote C  
CEP 70.308.200 – Brasília, DF  
Phone: 55 (61) 3314-4852  
Home page: [www.anac.gov.br](http://www.anac.gov.br)  
E-mail: [air.agreements@anac.gov.br](mailto:air.agreements@anac.gov.br)

#### **A.3. CAAC HEADQUARTERS**

Civil Aviation Administration of China  
Aircraft Airworthiness Certification Department  
155 Dongsì St. West  
100710, Beijing  
CHINA

General Affairs Division  
Telephone: 86(10)64092308  
Fax: 86(10)64033087  
E-mail: [jy\\_zhao@caac.gov.cn](mailto:jy_zhao@caac.gov.cn)

Airworthiness Certification Division  
Telephone: 86(10)64092311  
Fax: 86(10)64033087  
E-mail: [xj\\_liu@caac.gov.cn](mailto:xj_liu@caac.gov.cn)

Airworthiness Regulation and Standards Division

Telephone: 86(10)64091321

Fax: 86(10)64033087

E-mail: [chenye@caac.gov.cn](mailto:chenye@caac.gov.cn)

**APPENDIX B**  
**SPECIAL ARRANGEMENTS [RESERVED]**

## APPENDIX C

### RECORD OF REVISIONS

Revision	Date	Item	Description
Revision I	02/Aug/2024	1.8	Included paragraph “Entry into Force”
		2.2	Updated scope of products and parts accepted for import under this IPA, classes of products replaced by description, excluded used engines, propellers and articles from scope.
		3.1.2.3	Removed paragraph “New Category of Product”
		3.1.3.1.2	Updated documents to compose application package
		3.1.3.2	Familiarization procedures updated and moved to 3.1.3.6.1; Included possibility of sequential and concurrent validation.
		3.1.3.3	Included section describing Validation Procedures
		3.1.3.4	Included provisions for simplified risk-based validation
		3.1.3.5	Included provisions for validation Work Plan
		3.1.3.6	Adjustments in Validation Guidelines
		3.1.4	Included provisions for acceptance of design data in support of Repairs and Alterations
		3.1.6	Included provisions for design approvals of TSO articles, modification and replacement articles
		3.1.7	Removed need for notifications in case of changes not affecting TCDS
		3.2.4.5	Included provisions for export of aircraft designed in third countries
		3.3.1.4	Included provisions for Alternative Means of Compliance to Airworthiness Directives

		Appendix B	Removed current Special Arrangements
		Appendix D	Excluded Appendix D
		General	Complete review of wording throughout the IPA, adjustments and minor changes. Update of expressions, including Certifying, Validating, Exporting and Importing Authorities.