IMPLEMENTATION PROCEDURES

For

AIRWORTHINESS

Covering

Design Approval, Production and Surveillance Activities,

EXPORT AIRWORTHINESS APPROVAL,

Post Design Approval Activities, and

TECHNICAL ASSISTANCE

Under the Agreement between The Government of the United States of America and The Government of the People's Republic of China For the Promotion of Aviation Safety

> Revision 0 2017

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IMPLEMENTATION PROCEDURES

for

<u>AIRWORTHINESS</u>

Covering

Design Approval, Production and Surveillance Activities, Export Airworthiness Approval, Post Design Approval Activities, and Technical Assistance between the United States and the People's Republic of China

SECTION I GENERAL

1.1 <u>Authorization</u>

These Implementation Procedures for Airworthiness are authorized by Article III of the Agreement between the Government of the United States of America (U.S.) and the Government of the People's Republic of China (P.R.C.) for the Promotion of Aviation Safety, dated October 20, 2005, also known as the Bilateral Aviation Safety Agreement (BASA), or "BASA Executive Agreement." The Federal Aviation Administration (FAA) and the Civil Aviation Administration of China (CAAC) have determined that the aircraft certification systems of each Authority for the design approval, production approval, airworthiness approval, and continuing airworthiness of the civil aeronautical products and articles identified in this document are sufficiently equivalent or compatible in structure and performance to support these Implementation Procedures.

1.2 Purpose

The purpose of these Implementation Procedures for Airworthiness (IPA), referred to hereafter as these Implementation Procedures, is for the FAA and the CAAC to define the civil aeronautical products and articles eligible for import into the U.S. and the P.R.C. as Importing States, the process for obtaining eligibility for import, and the means for providing continued support of those civil aeronautical products and articles after import.

1.3 <u>Principles</u>

1.3.1 These Implementation Procedures are based on mutual confidence and trust between the FAA and the CAAC on their technical competence, regulatory capabilities, and the compatibility of each other's certification and approval systems. When a finding is made by one Authority in accordance with the laws and regulations of the other Authority and these Implementation Procedures, that finding is given the same validity as if it were made by the other Authority. Therefore, the fundamental principle of these Implementation Procedures is to maximize the use of the Certificating Authority's (CA's) aircraft certification system to ensure that the airworthiness requirements and environmental requirements of the Validating Authority (VA) are satisfied.

- 1.3.2 The FAA and the CAAC are committed to the elimination of duplication of work and exclusive retention of findings of compliance when acting as the VA or Authority for the Importing State.
- 1.3.3 The FAA and the CAAC mutually recognize and accept each other's delegation systems as part of their respective aircraft certification systems. To the maximum extent permitted by these Implementation Procedures and each Authority's regulations, the findings, compliance determinations and approvals made through these systems are given the same validity as those made directly by either the FAA or the CAAC.
- 1.3.4 The FAA and the CAAC will not routinely notify the other of their designees', delegates' or delegated organizations' activities in advance of any of those persons traveling to the U.S. or the P.R.C. to witness tests, to perform conformity inspections, and/or to make determinations of compliance. However, there may be situations where one Authority may communicate directly with an individual designee or delegate of the other Authority. In this case, prior notification to the other Authority is required.
- 1.3.5 The FAA and the CAAC agree that all information, including technical documentation, exchanged under these Implementation Procedures will be in the English language.

1.4 Changes in the Authority Aircraft Certification Systems

- 1.4.1 These Implementation Procedures are based upon sufficiently compatible Authority certification systems being in place at the time of signing. Therefore, the FAA and the CAAC will keep each other informed of significant changes within those systems, such as changes in:
 - 1.4.1.1 Statutory responsibilities;
 - 1.4.1.2 Organizational structure (e.g., key personnel, management structure, technical training, office location);
 - 1.4.1.3 Significant revisions to airworthiness, certification, and environmental standards and procedures;
 - 1.4.1.4 Production quality system oversight, including oversight of out-ofcountry production of products and articles; or
 - 1.4.1.5 Delegated functions or the kinds of organizations to which functions have been delegated, and those mechanisms of the system that manage their interfaces, such as changes to delegated functions.
- 1.4.2 The FAA and the CAAC recognize that revision by either Authority to its regulations, policies, procedures, statutory responsibility, organizational structure, production quality system oversight, or delegation system may affect the basis and scope of these Implementation Procedures. Accordingly, upon notice of such changes by one Authority, the other Authority may request a meeting to review the need for amendment to these Implementation Procedures.
- 1.4.3 The FAA and the CAAC may notify each other of relevant draft policy and

guidance material and will consult on new or proposed changes to standards, including but not limited to airworthiness and environmental standards.

1.5 <u>Governance</u>

The FAA and the CAAC agree to meet, through management meetings, as necessary, to review these Implementation Procedures and ensure their continued validity. The frequency of these meetings will be mutually agreed upon by both Authorities, via the focal points identified in Appendix A, and will depend on the number and significance of the issues to be discussed between the Authorities. Every effort should be made to alternate the location of these meetings between the U.S. and the P.R.C.

1.6 Continued Maintenance of Confidence

- 1.6.1 A provision of the BASA Executive Agreement states that these Implementation Procedures shall be subject to periodic evaluation. There is an obligation placed on the FAA and the CAAC, as executive agents of the BASA, to ensure that both Authorities remain capable of carrying out the obligations contained in these Implementation Procedures beyond the period of initial assessment that resulted in the original version of these Implementation Procedures. The periodic evaluations will focus on the equivalency or compatibility of the respective standards, rules, practices, procedures, and systems as prescribed by the BASA Executive Agreement, and maintaining the mutual confidence in the FAA's and CAAC's technical competence and ability to perform regulatory functions within the scope of these Implementation Procedures.
- 1.6.2 In order to ensure the continuing ability by the FAA and the CAAC to rely on each other under these Implementation Procedures, the two Authorities will establish a routine activity that is intended to promote continued understanding and compatibility in each other's systems. Both authorities will agree on the procedures and processes constituting such activity, and require the conduct of such activity on a regular basis. For this purpose, the FAA and the CAAC will assign focal points who will be responsible for monitoring the activity and reporting findings arising from the conduct of such activities to the Authorities. This oversight model will cover at least the following elements:
 - 1.6.2.1 A desktop sampling audit process to verify approvals and findings post-validation. The process should include provisions for optional sampling visits based on the trend of results of the desktop exercise.
 - 1.6.2.2 Sharing of relevant information on standardization and quality management activities.
 - 1.6.2.3 The FAA and the CAAC will track metrics related to the milestones outlined in 3.5.2 as well as the time from application to VA approval of all approval types covered under the scope of these Implementation Procedures. Periodic review of these metrics will take place at a frequency consistent with that established under 1.6.2.
 - 1.6.2.4 The FAA and the CAAC will establish a sampling system of production systems in accordance with 1.6.2.
 - 1.6.2.5 Findings resulting from the sampling system audits performed by one

Authority will be shared with the other. Resolution and follow-up of these findings will be agreed upon between the FAA and the CAAC. The results of will be presented during regular bilateral meetings. Any concerns deriving from the results obtained during the audits are to be discussed during those bilateral meetings.

1.7 Applicable National Requirements, Procedures, and Guidance Material

- 1.7.1 The FAA's standards for airworthiness and environmental certification include, but are not limited to: Title 14 of the Code of Federal Regulations (14 CFR), parts 21, 23, 25, 26, 27, 29, 31, 33, 34, 35, 36, 39, 43, and 45. The FAA also uses European Aviation Safety Agency (EASA) Certification Specifications (CS)-22, CS-VLA (Very Light Airplanes), Joint Aviation Requirements (JAR)-22, and JAR-VLA for some special class aircraft. Additional regulations are included in Airworthiness Directives (ADs). Guidance material, policy, and procedures are contained in FAA Advisory Circulars (ACs), Orders, Notices, and Policy Memoranda.
- 1.7.2 The CAAC's standards for airworthiness and environmental certification include, but are not limited to: China Civil Aviation Regulations (CCAR) 21, 23, 25, 26, 27, 29, 31, 33, 34, 35, 36, 37, 39, 43, and 45. Guidance material, policy, and procedures are contained in CAAC Advisory Circulars (ACs), Airworthiness Directives (ADs), Aviation Procedures, Management Documents, and Manuals.
- 1.7.3 The FAA and the CAAC will comply with their respective, applicable domestic laws in applying these Implementation Procedures.

1.8 Interpretations and Resolution of Conflicts

- 1.8.1 In the case of conflicting interpretations between the FAA and the CAAC regarding the laws, airworthiness or environmental regulations/standards, requirements, or acceptable means of compliance pertaining to certifications, approvals, or acceptance under these Implementation Procedures, the interpretation of the Authority whose laws, regulations, standards, requirements, or acceptable means of compliance are being interpreted will prevail.
- 1.8.2 The FAA and the CAAC agree to the timely resolution of issues through consultation or any other mutually agreed-upon means. Every effort should be made to resolve issues at the working staff level before elevating issues through the responsible management hierarchy. To resolve conflicts, the FAA and the CAAC will use the following process.
 - 1.8.2.1 When a Project Manager and Project Certification Manager cannot agree, the first certification decision point is between the FAA local office manager and the CAAC local office director.
 - 1.8.2.2 If resolution cannot be reached, the issue will be expeditiously escalated to the FAA Division Director, and the CAAC-AAD Division Director.
 - 1.8.2.3 If resolution cannot be reached, the FAA Aircraft Certification Service

Executive Director and the CAAC-AAD Director General will resolve the matter.

- 1.9 <u>Technical Consultations</u>
 - 1.9.1 The FAA and the CAAC may notify each other of relevant draft policy and guidance material and consult on new article performance standards or proposed changes to these standards.
 - 1.9.2 The FAA and the CAAC may invite each other to participate in aviation rulemaking committees to promote collaborative rulemaking activity.
 - 1.9.3 The FAA and the CAAC agree to consult as necessary to provide input when requested on technical issues and resolve technical disagreements. The frequency of these exchanges will depend on the number and significance of the issues to be discussed.
 - 1.9.4 The FAA and the CAAC agree to open communication at the Authority level and to assist each other in resolving complex technical issues outside of specific projects.

1.10 <u>Cooperation on Investigation or Enforcement Action</u>

Both the FAA and the CAAC agree to mutual cooperation and mutual assistance in the investigation of any alleged or suspected violations of the FAA or the CAAC laws or regulations. Both Authorities will cooperate in sharing information needed for any investigation or enforcement action, including its closure. The sharing of information will be subject to the laws and regulations of the U.S. and the P.R.C. that govern the disclosure or sharing of the requested information.

- 1.11 Revisions, Amendments, and Points of Contact
 - 1.11.1 The designated focal points for these Implementation Procedures are:
 - 1.11.1.1 For the FAA: Aircraft Certification Service, International Division (AIR-400); and
 - 1.11.1.2 For the CAAC: Airworthiness Inspection Division, Aircraft Airworthiness Certification Department (CAAC-AAD).
 - 1.11.1.3 Contact information for the identified offices is listed in Appendix A.
 - 1.11.2 These Implementation Procedures may be amended by mutual consent of the FAA and the CAAC. Such amendments will be made effective by signature of the duly authorized representative of the FAA and the CAAC.

1.12 Effective Date, Termination, and Cancellations

1.12.1 Effective Date

These Implementation Procedures enter into force upon signature by the duly authorized representatives of both the FAA and the CAAC, and will remain in force until terminated by either Authority.

1.12.2 <u>Termination</u>

Either the FAA or the CAAC may terminate these Implementation Procedures upon receipt of sixty (60) days written notice by the other Authority.

Termination will take effect at the end of the sixty (60) days and will not affect the validity of activities conducted under these Implementation Procedures prior to termination.

1.12.3 Cancellations

The documents identified in Appendix D are superseded and canceled without prejudice to approvals granted or obtained during the period those documents were in effect. The applicable provisions contained in the documents listed in Appendix D have been incorporated in this revision of these Implementation Procedures.

1.13 Definitions

Notwithstanding the definitions set forth in Title 14 of the Code of Federal Regulations and in the China Civil Aviation Regulations, for purposes of these Implementation Procedures, the following definitions shall apply. For any discrepancy between a definition set forth in Article II of the BASA Executive Agreement and a following definition, the follow definition will apply.

- 1.13.1 <u>"Acceptance"</u> means the CA has granted an approval, issued a certificate, or made a finding of compliance and the VA will accept that approval, certificate, or finding as satisfactory evidence that a product and/or design provides a level of safety equivalent to the VA's applicable standards.
- 1.13.2 "<u>Acoustical Change</u>" means any voluntary change in the type design of an aircraft to be approved that may increase the noise levels of that aircraft.
- 1.13.3 <u>"Additional Technical Condition"</u> means a requirement of the importing State that is in addition to the applicable airworthiness and environmental requirements of the State of Design or that may be prescribed:
 - 1.13.3.1 For airworthiness requirements, that provides a level of safety equivalent to that provided by the applicable airworthiness requirements for the importing State.
 - 1.13.3.2 For environmental requirements, that provides noise, fuel venting, and exhaust emission levels no greater than those provided by the applicable environmental requirements of the importing State.
- 1.13.4 <u>"Aircraft Flight Manual (AFM)"</u> means an authoritative document prepared for each aircraft type by the type certificate holder and approved by the CA. Its required content is specified in the appropriate airworthiness standards.
- 1.13.5 <u>"Airworthiness Approval"</u> is issued by an Authority for an aircraft, aircraft engine, propeller or article which certifies that the product or article conforms to its approved design and is in a condition for safe operation.
- 1.13.6 <u>"Airworthiness Directives (AD)"</u> means legally enforceable rules issued by the FAA in accordance with 14 CFR part 39 or legally enforceable rules issued by the CAAC in accordance with CCAR-39.
- 1.13.7 <u>"Airworthiness Standards"</u> means regulations governing the design and performance of civil aeronautical products and articles.

- 1.13.8 <u>"Alteration"</u> can be classified as major or minor. A major alteration is an alteration not listed in the aircraft, aircraft engine, or propeller specifications that might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or is not done according to accepted practices or cannot be done by elementary operations. A minor alteration is any alteration other than a major alteration.
- 1.13.9 <u>"Appliance"</u> means any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, aircraft engine, or propeller.
- 1.13.10 <u>"Approved Manuals"</u> means manuals, or sections of manuals, requiring approval by the FAA or the CAAC as part of a certification program. These include the AFM, the airworthiness limitation section of the Instructions for Continued Airworthiness (ICA), the engine and propeller installation and operating instructions manuals, and the certification maintenance requirements.
- 1.13.11 "Article" is defined differently in the U.S. and in the P.R.C.
 - 1.13.11.1 For the FAA, an article means a material, part, component, process, or appliance.
 - 1.13.11.2 For the CAAC, an article means a material, part, component, appliance, or software.
- 1.13.12 <u>"Certificating Authority (CA)</u>" means the FAA or the CAAC, as charged by their laws to fulfill the ICAO responsibilities as a State of Design to regulate the design, production, and airworthiness approval and environmental certification of civil aeronautical products and articles originated in their State.
- 1.13.13 <u>"Certification Basis"</u> 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.
- 1.13.14 <u>"Civil Aeronautical Product"</u> or <u>"product"</u> means each civil aircraft, aircraft engine, or propeller.
- 1.13.15 "<u>Compliance Determination</u>" means the determination, by either the FAA's system or the CAAC's system, during the certification process, that the applicant has demonstrated compliance with identified, individual airworthiness, environmental, or other standards.
- 1.13.16 <u>"Concurrent Certification"</u> means a process whereby the certification applicant requests validation of the product at the same time as certification is conducted by the CA.
- 1.13.17 <u>"Design Approval"</u> means a Type Certificate (TC), Supplemental Type Certificate (STC), including amendments thereto, approved data in support of repairs, the approved design under a Parts Manufacturer Approval (PMA) and

Technical Standard Order Authorization (TSOA), TSO Letter of Design Approval (LODA), Validation Design Approval (VDA), and any other design approval document.

- 1.13.18 <u>"Deviation"</u> when used with respect to TSO articles means a difference from any performance standard of a TSO and requires factors or design features providing an equivalent level of safety to compensate for the standards from which a deviation is requested.
- 1.13.19 <u>"Emissions Change"</u> means any voluntary change in the type design of an aircraft or aircraft engine which may increase fuel venting or exhaust emissions.
- 1.13.20 <u>"Environmental Approval"</u> means a finding that a civil aeronautical product complies with applicable noise, fuel venting, and exhaust emissions standards.
- 1.13.21 <u>"Environmental Standards"</u> means regulations or certification specifications governing designs with regard to noise characteristics, fuel venting, and exhaust emissions of civil aeronautical products and articles.
- 1.13.22 "<u>Environmental Compliance Demonstration</u>" means a process by which a civil aeronautical product is evaluated for compliance with those standards, using procedures agreed upon between the Authorities.
- 1.13.23 "Equivalent Level of Safety Finding (ELOS)" means a finding that alternative action taken provides a level of safety equal to that provided by the requirements for which equivalency is being sought.
- 1.13.24 "<u>Exemption</u>" means a grant of relief from requirements of a current regulation when processed through the appropriate regulatory procedure by the FAA or the CAAC.
- 1.13.25 <u>"Export"</u> means the process by which a product or article is released from the FAA's or the CAAC's system for subsequent use in the other's regulatory system.
- 1.13.26 <u>"Exporting Civil Airworthiness Authority"</u> means the organization within the exporting State charged by the laws of the exporting State, to regulate the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products, parts, and articles. The Exporting Civil Airworthiness Authority will be referred to herein as the Exporting Authority (EA).
 - 1.13.26.1 For the U.S., the Exporting Authority is the FAA; and
 - 1.13.26.2 For the P.R.C., the Exporting Authority is the CAAC:
- 1.13.27 <u>"Familiarization"</u> means the process whereby the Validating Authority (VA) obtains information and experience on an aeronautical product designed in the exporting State in order to: prescribe additional technical conditions for that product; mandate corrective airworthiness action in the event that the product experiences service difficulties during its operation in the importing State; and ensure the development of appropriate maintenance, operating, and pilot type rating information (if applicable) for the product.
- 1.13.28 <u>"Finding"</u> means a determination of compliance or non-compliance with

airworthiness and environmental standards as the result of the FAA's or the CAAC's review, investigation, inspection, test, and/or analysis.

- 1.13.29 <u>"Import"</u> means the process by which a product or article is accepted into the FAA's or the CAAC's regulatory system for subsequent use in that regulatory system.
- 1.13.30 <u>"Importing Civil Airworthiness Authority"</u> means the 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, parts, and articles. The Importing Civil Airworthiness Authority will be referred to herein as the Importing Authority (IA).

1.13.30.1 For the U.S., the Importing Authority is the FAA.

1.13.30.2 For the P.R.C., the Importing Authority is the CAAC.

- 1.13.31 <u>"Issue Paper"</u> means a document describing an item that requires closure prior to the issuance of a design approval.
- 1.13.32 <u>"Letter of Design Approval (LODA)"</u> means a Letter of Design Approval issued by the FAA for an article manufactured outside the United States that meets a specific TSO.
- 1.13.33 <u>"Licensing Agreement"</u> means a commercial agreement between a design approval holder and a production approval holder (or applicant) formalizing the rights and duties of both parties to use the design data for the purpose of manufacturing the product or article.
- 1.13.34 <u>"Maintenance"</u> means the performance of inspection, overhaul, repair, preservation, and the replacement of parts, materials, appliances, or components of a product to assure the continued airworthiness of that product, but excludes alterations or modifications.
- 1.13.35 <u>"Manufacturer"</u> means the person who, by FAA or CAAC regulation, is responsible for determining that all products or articles produced within the quality system conform to an FAA or CAAC-approved design or established government or industry standard and are in a condition for safe operation.
- 1.13.36 <u>"Modification Design Approval"</u> 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 or after July 01, 2017, applies only to third party minor design change approvals, for both domestic and imported products.
- 1.13.37 <u>"Multi-National Consortium"</u> means a group of manufacturers from multiple countries who have agreed to form a single company for the design and/or production of a particular product.
- 1.13.38 <u>"New Aircraft"</u> is defined differently in the U.S. and in the P.R.C.
 - 1.13.38.1 For the FAA, 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.

- 1.13.38.2 For the 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.
- 1.13.39 <u>"Non-TSO Function"</u> means one that is not covered by a TSO-approved minimum performance standard, does not support or affect the hosting article's TSO function(s), and could technically be implemented outside of the TSO article.
- 1.13.40 <u>"Parts Manufacturer Approval (PMA)"</u> means a combined design and production approval issued for modification or replacement articles. It allows a manufacturer to produce and sell these articles for installation on type certificated/validated products.
- 1.13.41 <u>"Person"</u> means an individual, firm, partnership, corporation, company, association, joint stock association, or government entity, and includes a trustee, receiver, assignee, or other similar representative of any of them.
- 1.13.42 <u>"Production Approval"</u> means a document issued by the FAA or the 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).
- 1.13.43 <u>"Production Certificate Extension"</u> means an extension by the FAA or the CAAC of a Production Certificate to a facility located in another country or jurisdiction
- 1.13.44 <u>"Production Quality System"</u> means a systematic process that meets the requirements of the Authority for the State of Manufacture (SoM) and ensures that the products and articles produced under this production quality system will conform to the approved design and will be in a condition for safe operation.
- 1.13.45 <u>"Rebuilt Engine"</u> For the FAA means an engine that has been disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item by the production approval holder in accordance with 14 CFR part 43.
- 1.13.46 <u>"Repair"</u> can be classified as major or minor. A major repair is a repair that, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness or that is not done according to accepted practices or cannot be done by elementary operations. A minor repair is any repair other than a major repair.
- 1.13.47 <u>"Restricted Category Aircraft"</u> means an aircraft intended for special purpose operations that:
 - 1.13.47.1 For the CAAC and the FAA: Shows compliance with applicable noise requirements and shows no feature or characteristic that makes it

unsafe when it is operated under the limitations prescribed for its intended use, and that the aircraft meets the airworthiness requirements of an aircraft category, except those requirements that are determined to be inappropriate for the special purpose for which the aircraft is to be used;

- 1.13.47.2 For the FAA: May also be of a type that has been manufactured in accordance with the requirements of and accepted for use by an Armed Force of the United States and has been later modified for a special purpose.
- 1.13.48 <u>"Revocation"</u> means when a certificate is no longer valid, and the holder may not exercise any of its privileges. A certificate that has been revoked cannot be reinstated.
- 1.13.49 <u>"Safety Elements"</u> mean areas used by the CA and VA to classify validation projects and to manage the VA level of review of those projects (see section 3.5.3)
- 1.13.50 <u>"Sequential Validation"</u> means a process whereby the CA has completed its certification, or is well advanced in the certification process, before a validation application is submitted.
- 1.13.51 <u>"Special Conditions"</u> means additional safety standard(s) prescribed by the FAA or the CAAC 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 the FAA or the CAAC finds necessary to establish a level of safety equivalent to that established in the applicable regulations.
- 1.13.52 <u>"Standard Airworthiness Certificate"</u> means an airworthiness certificate that meets the requirements for its issuance under ICAO Annex 8, Airworthiness of Aircraft, and issued to a civil aircraft in accordance with Article 31 of the Convention on International Civil Aviation.
- 1.13.53 <u>"Standard Part"</u> means a part that may be acceptable for use on aircraft and is manufactured in conformance with an established government or industryaccepted specification, which contains design, manufacturing, and uniform identification requirements. The specification must include all information necessary to produce and conform the part, and must be published so that any person or organization may manufacture the part.
- 1.13.54 <u>"State of Design (SoD)"</u> means the State or territory having regulatory authority over the organization responsible for the type design and continued airworthiness of the product or article.
- 1.13.55 <u>"State of Manufacture (SoM)</u>" means the State or territory having regulatory authority over the organization responsible for the production and airworthiness of a civil aeronautical product or article.
- 1.13.56 <u>"State of Registry (SoR)</u>" means the State or territory on whose register an aircraft is entered.
- 1.13.57 <u>"Supplier"</u> means a person at any tier in the supply chain who provides a

product, article, or service that is used or consumed in the design or manufacture of, or installed on, a product or article.

- 1.13.58 <u>"Surrender"</u> means when a certificate holder voluntarily relinquishes a certificate and the associated privileges. This surrender does not immediately affect the aircraft previously manufactured.
- 1.13.59 <u>"Suspension"</u> means a temporary action to withhold the effectiveness or validity of a certificate, approval, or authorization as ordered by the FAA or the CAAC.
- 1.13.60 <u>"TC/PC Split"</u> means a product for which the State or territory having jurisdiction over the Authority having regulatory responsibility for the type design and continued airworthiness of the product or article is different from the State or territory having jurisdiction over the Authority having regulatory responsibility for the production and airworthiness of a civil aeronautical product or article.
- 1.13.61 <u>"Technical Standard Order (TSO)"</u> means a minimum performance standard for specified articles. Each TSO covers a certain type of article.
- 1.13.62 <u>"Technical Standard Order Authorization (TSOA)"</u> means a design and production approval issued to the manufacturer of an article that has been found to meet a specific TSO. A TSOA is not an approval to install and use the article in the aircraft. It means that the article meets the specific TSO and the applicant is authorized to manufacture it.
- 1.13.63 <u>"Used Aircraft"</u> means an aircraft that is not a new aircraft
- 1.13.64 <u>"Validating Authority (VA)"</u> means the FAA or the CAAC, who are charged by their laws to fulfill the ICAO responsibilities of a State of Registry (SoR) to regulate the design, production and airworthiness approval and environmental certification of civil aeronautical products and articles imported from the other.
- 1.13.65 <u>"Validation"</u> means the FAA's or the CAAC's process for issuing an approval of a design also approved by the other.
- 1.13.66 <u>"Validation Design Approval (VDA)"</u> means the approval issued by the CAAC to an article of a foreign applicant, based on the TSO Authorization of its CA.
- 1.13.67 <u>"Work Plan"</u> means the scope of the VA's technical review developed using risk-based principles. 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 validation process. It is endorsed by the VA management and shared with the applicant and the CA.

SECTION II Scope of These Implementation Procedures

- 2.1 <u>General</u>
 - 2.1.1 These Implementation Procedures apply to such aircraft type designs to be type certificated by the FAA and the CAAC for standard category airworthiness certification, except as described in 2.1.4.
 - 2.1.2 The FAA and the CAAC do not normally validate design approvals for products or articles outside their regulatory jurisdiction unless there is a demonstrated market interest in issuing the approval.
 - 2.1.3 The FAA and the CAAC issue standard airworthiness certificates in the normal, utility, acrobatic, 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.
 - 2.1.4 Aircraft for which a special airworthiness certificate is issued by the FAA or the CAAC will be dealt with on a case-by-case basis through the Special Arrangements provision in Section IX of these Implementation Procedures. The FAA and the CAAC agree that restricted category aircraft are not eligible for a standard airworthiness certificate.

2.2 Design Approvals and Airworthiness Certifications

These Implementation Procedures cover the products and articles identified below, their approvals, and the provisions set forth in subsequent sections.

- 2.2.1 <u>Design Approvals</u>
 - 2.2.1.1 Type Certificates (TCs) and amended TCs (ATCs) for products listed in Table 1 for which the U.S. is the SoD and TCs, ATCs, and Type Design Approvals (TDA) listed in Table 2 for which the P.R.C. is the SoD.

Note: where TC is referenced in this IPA, it includes TDA issued before July 01, 2017;

2.2.1.2 Supplemental Type Certificates (STCs) and amended STCs for products listed in Table 1 and STCs, amended STCs, and Modification Design Approvals (MDA) for products listed in Table 2 that have been issued both an FAA and a CAAC type design approval, regardless of SoD.

Note: where STC is referenced in this IPA, it includes MDA issued before July 01, 2017;

2.2.1.3 CA approved design data used in the support of repairs, as identified in 3.3.3, for products and articles for which both the FAA and the CAAC have issued a type design approval for the product;

- 2.2.1.4 TSO and PMA approvals as listed in Table 1 and Table 2 (see 2.2.3.4); and
- 2.2.1.5 Any other design change approved under the CA's system.

2.2.2 Export Certificates of Airworthiness

Export Certificates of Airworthiness issued by the U.S. or the P.R.C. for aircraft that conform to a Type Design approved by the Importing Authority (IA), provided that the conditions detailed in 7.2 (as applicable) are satisfied, including:

- 2.2.2.1 New and used aircraft for which the U.S. or the P.R.C. is the SoD and also the SoM.
- 2.2.2.2 New and used aircraft for which the U.S. or the P.R.C. is the SoD and the other is the SoM, provided that:
 - (a) A management plan has been entered, defining the FAA's and the CAAC's roles and responsibilities relating to continued airworthiness. It will:
 - (1) Be developed and approved by the FAA and the CAAC for each TC/PC split project and provide all relevant detailed information on the design approval holder, production approval holder, and the product concerned;
 - (2) Provide procedural guidance in regulatory responsibilities; and
 - (3) Establish a communication methodology addressing the exchange of information between the FAA and the CAAC;
 - (b) A licensing agreement exists between the design approval holder and the manufacturer, ensuring the continued airworthiness of the design; and
 - (c) The type certificate data sheet (TCDS) issued by the SoD lists all production approvals.
- 2.2.2.3 New and used aircraft for which a third State is the SoD and also the SoM.
- 2.2.2.4 New and used aircraft with different SoD and SoM for which a third State is the SoD and the U.S. or the P.R.C. is the SoM, provided that:
 - An agreement/arrangement has been entered between the SoD and the SoM defining each Authority's roles and responsibilities for continued airworthiness and is available to the Importing Authority (IA);
 - (b) A licensing agreement exists between the design approval holder and the manufacturer, ensuring the continued airworthiness of the design; and

- (c) The TCDS issued by the SoD lists all production approvals.
- 2.2.2.5 New and used aircraft with different SoD and SoM for which the U.S., the P.R.C., or a third State is the SoD and a State other than the U.S. or the P.R.C. is the SoM will require:
 - (a) Either development of a Special Arrangement under Section IX of these Implementation Procedures; or IA review and acceptance of an existing arrangement established between the SoD and the SoM;
 - (b) A licensing agreement exists between the design approval holder and the manufacturer, ensuring the continued airworthiness of the design; and
 - (c) The TCDS issued by the SoD lists all production approvals.

2.2.3 <u>Authorized Release Certificates / Airworthiness Approval Tag (or equivalent)</u>

New and rebuilt aircraft engines and new propellers that conform to a Type Design approved by the IA, provided that the conditions detailed in 7.3 (as applicable) are satisfied, including:

- 2.2.3.1 New and rebuilt aircraft engines and new propellers for which the U.S. or the P.R.C. is the SoD and also the SoM;
- 2.2.3.2 New and rebuilt aircraft engines and new propellers for which the U.S. or the P.R.C. is the SoD and the other is the SoM, provided that:
 - (a) A management plan has been entered, defining the FAA's and the CAAC's roles and responsibilities relating to continued airworthiness;
 - (b) A licensing agreement exists between the design approval holder and the manufacturer, ensuring the continued airworthiness of the design; and
 - (c) The TCDS issued by the SoD lists all production approvals.
- 2.2.3.3 New and rebuilt aircraft engines and new propellers for which a third State is the SoD and the U.S. or the P.R.C is the SoM, provided that:
 - (a) The IA reviews and accepts an existing arrangement established between the SoD and the SoM;
 - (b) A licensing agreement exists between the design approval holder and the manufacturer, ensuring the continued airworthiness of the design; and
 - (c) The TCDS issued by the SoD lists all production approvals.
- 2.2.3.4 Articles that Conform to an IA Design Approval
 - (a) New TSO articles;

- (b) New replacement and modification parts that conform to IA approved design data and that are eligible for installation in a product or article which has been granted an IA design approval, as follows:
 - New replacement parts manufactured by the original production approval holder for all products and articles, regardless of the SoD;
 - (2) New modification parts manufactured by the original production approval holder for all products and articles, regardless of the SoD; and
 - (3) New PMA

PMA approvals for modification and/or replacement parts for installation on products certified or validated by the IA:

- (i) PMA parts to be installed on products for which the Exporting Authority (EA) is the SoD;
- PMA parts to be installed on products for which the EA is not the SoD, provided that the design approval basis is STC or identicality with a licensing agreement Note: If the design approval for a PMA is an STC, the STC must be validated; or
- (iii) PMA parts to be installed on products for which the EA is not the SoD, provided that the design approval is based on test and computation in the following cases:
 - a. The article's consequence of failure has a failure condition of 'no safety effect' or 'minor' as defined in FAAAC: AC 23.1309-1E, AC 25.1309-1A, AC 27-1B, AC 29-2C or CAAC non-critical parts as defined in CAAC MD AA2007007.
 - <u>b.</u> For test and computation articles approved for installation on engines or Auxiliary Power Units (APU), the consequence of failure has a CAAM hazard level less than 3 as defined in Appendix 2 of FAA AC 39-8 or CAAC noncritical parts as defined in CAAC MD AA2007007.

2.3 Standard Parts

Standard Parts (not commercial parts) conforming to established government or industry accepted specifications are generally delivered by the manufacturer with a

Certificate of Conformity and are accepted by both the FAA and the CAAC providing they do conform to established government or industry accepted specifications, and are identified by the approved design data of the products or articles in which they are installed.

2.4 <u>Continued Airworthiness</u>

The scope of these Implementation Procedures includes continued airworthiness, as detailed in Section IV.

2.5 <u>Production and Surveillance</u>

The scope of these Implementation Procedures includes production and surveillance, as detailed in Section VI.

2.6 Summary Table

The following tables summarize the design approvals, products and articles designed and manufactured in the U.S. or the P.R.C. that are eligible for approval under these Implementation Procedures.

Table 1

Summary of U.S. State of Design Products, Articles, and their Associated FAA Approvals Eligible for Approval by the CAAC.

PRODUCT	FAA Type Certificates & Amendments	FAA Supplemental Type Certificates	FAA Technical Standard Order Authorizations	Parts Manufacturer Approvals
Airplanes in the following categories:				
Normal	\checkmark	\checkmark	N/A	N/A
Utility	\checkmark	\checkmark	N/A	N/A
Aerobatic	\checkmark	\checkmark	N/A	N/A
Commuter	\checkmark	~	N/A	N/A
Transport	\checkmark	\checkmark	N/A	N/A
Rotorcraft in the following categories:				
Normal	\checkmark	\checkmark	N/A	N/A
Transport	\checkmark	\checkmark	N/A	N/A
Manned Free Balloons	\checkmark	✓	N/A	N/A
Aircraft Engines	\checkmark	\checkmark	N/A	N/A
Propellers	\checkmark	\checkmark	N/A	N/A
Aircraft in Special Classes:				
Airships	\checkmark	√	N/A	N/A
VLA	\checkmark	✓	N/A	N/A
Gliders	\checkmark	\checkmark	N/A	N/A
Powered Lift	\checkmark	\checkmark	N/A	N/A
Aircraft type certificated in the restricted category	(see Note 1)	(see Note 1)	N/A	N/A
TSO Articles	N/A	N/A	\checkmark	N/A
PARTS:				
Replacement or Modification Parts for the above airplanes, rotorcraft, balloons, aircraft engines, propellers, special class aircraft, and articles.	✓	✓	\checkmark	(see Note 2)

Note 1: Aircraft certified in the restricted category for purposes of agricultural, forest and wildlife conservation, aerial surveying, patrolling, weather control, aerial advertising, aerial dispensing of liquids, and other special purpose operations, on a case by case basis, as determined by the Authorities.

Note 2: PMA approvals for modification and/or replacement parts for installation on products certified or validated by the IA: (i) PMA parts to be installed on products for which the EA is the SoD; (ii) PMA parts to be installed on products for which the EA is not the SoD, provided that the design approval basis is STC or identicality with a licensing agreement (Note: If the PMA is part of an STC, the STC must be validated); or (iii) PMA parts to be installed on products for which the EA is not the design approval is based on test and computation in the following cases: (a) The article's consequence of failure has a failure condition of 'no safety effect' or 'minor' as defined in FAA AC: AC 23.1309-1E, AC 25.1309-1A, AC 27-1B, AC 29-2C or CAAC non-critical parts as defined in CAAC MD AA2007007; or (b) For test and computation articles approved for installation on engines or APUs, the consequence of failure has a CAAM hazard level less than 3 as defined in Appendix 2 of FAA AC 39-8 or CAAC equivalent guidance.

Table 2

Summary of P.R.C. State of Design Products, Articles, and their Associated CAAC Approvals Eligible for Approval by the FAA.

PRODUCT	CAAC Type Certificates & Amendments (see Note 3)	CAAC Supplemental Type Certificates (see Note 4)	CAAC Technical Standard Order Authorizations	Parts Manufacturer Approvals
Airplanes in the following categories:				
Normal	\checkmark	\checkmark	N/A	N/A
Utility	\checkmark	\checkmark	N/A	N/A
Aerobatic	\checkmark	\checkmark	N/A	N/A
Commuter	\checkmark	\checkmark	N/A	N/A
Transport	\checkmark	\checkmark	N/A	N/A
Rotorcraft in the following categories:				
Normal	\checkmark	\checkmark	N/A	N/A
Transport	\checkmark	\checkmark	N/A	N/A
Manned Free Balloons	\checkmark	\checkmark	N/A	N/A
Aircraft Engines	\checkmark	\checkmark	N/A	N/A
Propellers	\checkmark	\checkmark	N/A	N/A
Aircraft in Special Classes:				
Airships	\checkmark	\checkmark	N/A	N/A
VLA	\checkmark	\checkmark	N/A	N/A
Gliders	\checkmark	\checkmark	N/A	N/A
Powered Lift	\checkmark	\checkmark	N/A	N/A
Aircraft type certificated in the restricted category	(see Note 1)	(see Note 1)	N/A	N/A
TSO Articles	N/A	N/A	\checkmark	N/A
PARTS:				
Replacement or Modification Parts for the above airplanes, rotorcraft, balloons, aircraft engines, propellers, special class aircraft, and articles.	~	~	~	(see Note 2)

- **Note 1:** Aircraft certified in the restricted category for purposes of agricultural, forest and wildlife conservation, aerial surveying, patrolling, weather control, aerial advertising, aerial dispensing of liquids, and other special purpose operations, on a case by case basis, as determined by the Authorities.
- **Note 2:** PMA approvals for modification and/or replacement parts for installation on products certified or validated by the IA: (i) PMA parts to be installed on products for which the EA is the SoD; (ii) PMA parts to be installed on products for which the EA is not the SoD, provided that the design approval basis is STC or identicality with a licensing agreement (Note: If the PMA is part of an STC, the STC must be validated); or (iii) PMA parts to be installed on products for which the EA is not the SoD, provided that the design approval basis on test and computation in the following cases: (a) The article's consequence of failure has a failure condition of 'no safety effect' or 'minor' as defined in FAA AC: AC 23.1309-1E, AC 25.1309-1A, AC 27-1B, AC 29-2C or CAAC non-critical parts as defined in CAAC MD AA2007007; or (b) For test and computation articles approved for installation on engines or APUs, the consequence

of failure has a CAAM hazard level less than 3 as defined in Appendix 2 of FAA AC 39-8 or CAAC equivalent guidance.

- Note 3: Where TC is referenced in this IPA, it includes TDA issued before July 01, 2017.
- Note 4: where STC is referenced in this IPA, it includes MDA issued before July 01, 2017

SECTION III VALIDATION PROCEDURES

3.1 <u>General</u>

- 3.1.1 The principles and procedures in this Section apply to the acceptance or validation of the 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.
- 3.1.2 Applications for FAA or CAAC approval are intended for civil aeronautical products and articles. Products and articles which are intended only for public use are not eligible for FAA or CAAC validation under this agreement unless the Authority for the SoD has accepted to certify the product or article and there is a civilian and/or public use application within the jurisdiction of the importing State. In these cases, the FAA and the CAAC will consult to determine whether validation is within the scope of the agreement or requires a Special Arrangement under Section IX of these Implementation Procedures.
- 3.1.3 The purpose of validation is to determine that the approval or certificate issued by the CA and compliance with any other requirements the VA may prescribe will provide for an equivalent level of safety or compliance with the VA's environmental and airworthiness requirements.
- 3.1.4 Close cooperation between the VA and the CA is necessary to provide for effective management of the validation process and for the most cost-effective utilization of resources. Working under the principle that communication should occur between Authorities, correspondence will be answered through and coordinated with the CA. The FAA and the CAAC also recognize that direct communication between the VA and the applicant are sometimes necessary. Direct communication should be limited to technical questions regarding the product (familiarization) and should be conducted with the awareness and consent of the CA. The CA should be informed of the outcome of these discussions.
- 3.1.5 Applicants are encouraged to seek concurrent certification and validation approvals. Both Authorities may agree to undertake concurrent design approval projects covered by the scope of these Implementation Procedures. A type design that satisfies both the VA and the CA requirements is the desired outcome of a concurrent approval process.
- 3.1.6 The resolution process in 1.8 will be used to address any disagreements on the validation process.

- 3.1.7 Submission of Electronic Data
 - 3.1.7.1 When a U.S. or P.R.C. applicant complies with FAA Order 8000.79, or CAAC's electronic data policy, as applicable, the applicant is considered to have an arrangement acceptable to both the FAA and the CAAC for the submission and storage of electronic data, as long as the data is in a format that is compatible with the VA's information system. The applicant is responsible for the transmission of the electronic data they consider proprietary to the VA under the guidance of the CA.
- 3.1.8 Certificates and design approvals are accepted or validated by the VA using one of the following three procedures:
 - 3.1.8.1 Acceptance
 - (a) Acceptance of the CA approval by the VA without issuance of its own approval.
 - (b) No application for validation is required.
 - 3.1.8.2 Streamlined Validation (SV)
 - (a) An approval by the VA without any technical review, with the issuance of a VA approved document.
 - (b) Design change approvals that are not impacted by the Safety Elements in 3.5.3 are eligible for Streamlined Validation.
 - 3.1.8.3 <u>Technical Validation</u>
 - (a) All design approvals not eligible for Acceptance or Streamlined Validation will undergo a Technical Validation.
 - (b) For Technical Validation, the VA will issue an approval document.
 - (c) Technical Validation includes:
 - (1) Full Technical Validation (FTV)
 - (i) Technical validation of the certificate or change will be performed by the VA.
 - (ii) The objectives of FTV are for the VA to evaluate compliance with applicable standards, and thereby, identify areas for further technical confidence building. These areas will be applied to future projects under the Limited Technical Validation process.
 - (iii) The ideal scenario for this process is a concurrent certification-validation program to facilitate VA technical assessment.

- (2) Limited Technical Validation (LTV)
 - (i) Technical Validation of the certificate or change will be performed by the VA using Safety Elements (3.5.3) to define its level of involvement.
- 3.1.9 To determine whether the CA approval will be subject to Acceptance or one of three Validation processes, the CA will apply the following decision process:

Does the CA approval qualify for Acceptance, as defined in 3.2?

- 3.1.9.1 If yes, the VA will follow the Acceptance Procedures in 3.3.
- 3.1.9.2 If no, continue to 3.4 to determine the type of validation procedure to follow.

3.2 <u>Acceptance</u>

The FAA and the CAAC conclude that certain approvals can benefit from mutual acceptance. There are specific CA approvals (further described in 3.3) that will be accepted by the VA without issuance of its own approval, and therefore no application for validation is required for:

- 3.2.1 Design changes, per 3.3.1;
- 3.2.2 PMA, per 3.3.2 Note: If the PMA is part of an STC, the STC must be validated;
- 3.2.3 Design data for repairs and alterations per 3.3.3. For the CAAC, this includes an MDA issued on or after July 01, 2017 for repairs and alterations, issued for one aircraft only; and
- 3.2.4 Minor changes to TSO LODA and VDA, per 3.3.4.

3.3 <u>Acceptance Procedures</u>

The acceptance of the following approvals by the VA is based solely on the CA's approval without the need for submission of an application for validation by the CA. An approval originally granted by the FAA or the CAAC shall be automatically accepted by the other as being equivalent to having granted and issued its own approval.

- 3.3.1 Design Changes by the Design Approval Holder
 - 3.3.1.1 Design changes made by the design approval holder, classified as minor changes to type design, and approved by the CA under their procedures, which do not require the CA or the VA to issue a new or revised TC, TCDS, or STC.
 - 3.3.1.2 Design changes made by the design approval holder, classified as major changes to type design, and approved by the CA under their procedures, for which none of the Safety Elements identified in 3.5.3 is applicable, and which do not require the CA or the VA to issue a new or revised TC, TCDS, or STC.
 - 3.3.1.3 No application is required and the design change is accepted by the VA without any involvement; and

- 3.3.1.4 These design changes are to be included in the design approval holder's type design.
- 3.3.2 Parts Manufacture Approval (PMA)
 - 3.3.2.1 PMA parts to be installed on products for which the EA is the SoD;
 - 3.3.2.2 PMA parts to be installed on products for which the EA is not the SoD, provided that the design approval basis is STC or identicality with a licensing agreement;
 - 3.3.2.3 PMA parts to be installed on products for which the EA is not the SoD, provided that the design approval is based on test and computation in the following cases:
 - (a) The article's consequence of failure has a failure condition of 'no safety effect' or 'minor' as defined in FAA AC: AC 23.1309-1E, AC 25.1309-1A, AC 27-1B, AC 29-2C or CAAC non-critical parts as defined in CAAC MD AA2007007.
 - (b) For test and computation articles approved for installation on engines or APUs, the consequence of failure has a CAAM hazard level less than 3 as defined in Appendix 2 of FAAAC 39-8 or CAAC non-critical parts as defined in CAAC MD AA2007007.
 - 3.3.2.4 No application is required and the PMA is accepted by the VA without any involvement.

3.3.3 Design Data for Repairs and Alterations

3.3.3.1 Acceptance of Design Data in Support of Repairs

The FAA and the CAAC shall accept approved design data from each other provided that the approval was granted in accordance with their respective repair design approval procedures and used in support of repairs of products, parts, or appliances within the scope of these Implementation Procedures as noted in Section II, if:

- (a) the IA has certificated/validated the product or appliance, and
- (b) the CA/EA is acting on behalf of the SoD for the repair design data, and
- (c) the CA repair design data approval is documented via applicable repair design approval letter, form or other official document based on the applicable repair design approval procedure, and
- (d) the repair is not in an area that is subject to an AD, unless the VA's AD allows for acceptance of repair design approval.
- 3.3.3.2 Acceptance of Design Data in Support of Alterations

CA approved or accepted alterations in accordance with 14 CFR part 43 or CCAR-43, installed on a product exported from the U.S. or the P.R.C., regardless of the SoD of the product, are considered approved by IA at the time of import. The IA will accept such CA alteration data when substantiated by the FAA via an appropriately executed FAA Form 8110-3, 8100-9, 337 (block 3) or logbook entry, or by the CAAC via an appropriately executed CAAC Form AAC-039, 245, 085 (block 6), logbook entry, or MDA as defined in 3.2.3.

- 3.3.4 Acceptance of Minor Changes to TSO LODA and VDA.
 - 3.3.4.1 The FAA and the CAAC shall accept minor changes to TSO LODA and VDA from each other provided that the approval was granted in accordance with their respective procedures.

3.4 <u>Classification of Applications for Validation</u>

- 3.4.1 For CA design approvals that do not meet the Acceptance criteria established in 3.2, the Authorities have established a risk-based approach influenced by the extent of past certification and operational experience with similar CA products, as well as the specific design features and operational characteristics of the project presented for validation. This risk-based approach establishes the VA level of involvement, according to the project classification as either Streamlined Validation or Technical Validation (which includes Full Technical Validation and Limited Technical Validation).
- 3.4.2 The CA will classify an application for validation according to the following decision process:
 - 3.4.2.1 If the type design or major change in type design application for validation is for a product (14 CFR / CCAR 23, 25, 27, 29, 31, 33, 35) which has not been previously submitted for validation to the VA the VA may conduct an FTV, following the process outlined in 3.5.
 - 3.4.2.2 If the type design or major change in type design application for validation is for a product (14 CFR / CCAR23, 25, 27, 29, 31, 33, 35) which has been previously submitted for validation to the VA, conduct a review of the Safety Elements in 3.5.3.
 - (a) If one or more of the Safety Elements is applicable, the VA will conduct an LTV, following the applicable process outlined in 3.5.
 - (b) If none of the Safety Elements is applicable, the VA will conduct a SV, following the applicable process outlined in 3.5.If the application is for validation of a TSO article, follow the process outlined in 3.6.

3.5 Validation Process

All three Validation processes (FTV, LTV, SV) require an application to the VA, a certification statement from the CA to the VA, and issuance of a VA design approval. However, the intermediate steps between application and VA approval vary depending on which process is applied.

- 3.5.1 Application (applies to FTV, LTV, and SV)
 - 3.5.1.1 Upon receipt of an application for validation from an applicant, the CA will send it to the VA after it has verified that:

- (a) The product or design change is within the scope of these Implementation Procedures as provided in 2.2;
- (b) The product or design change has been issued a TC or STC by the CA, or an application has been made to the CA; and
- (c) The application is not eligible for Acceptance;
- 3.5.1.2 All applications must be submitted by the CA, who will ensure that the package contains the following information and forward this information to the appropriate VA office as listed in Appendix A:

NOTE: For certain projects some elements of the application package will not be known at the time of application; those applications must include all known data. Missing information will be provided to the VA as it becomes available during the course of the validation project.

- (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
 - (3) Validation Classification (see 3.4.2):
 - (i) Streamlined Validation
 - (ii) Technical Validation (FTV or LTV);
- (b) Completed VA application form;
- (c) A copy of the CA's TC/TDA and data sheet (if available) or STC/MDA that identifies the certification basis upon which the CA's design approval was issued. In the absence of a TC/TDA data sheet, the CA will submit the document that defines the certification basis;
- (d) The date of the application to the CA;
- (e) A description of the product in accordance with the following:
 - (1) For a TC, descriptive data defined in 14 CFR 21.15 for applications to the FAA, or CCAR 21.15 for applications to CAAC;
 - (2) For a design change, a detailed description of the change, together with the make and model of the changed product;
- (f) For TCs and STCs, the CA will list any applicable ADs and provide an assessment that changes to correct the unsafe condition identified in the AD have been incorporated into the type design;

- (g) Compliance Checklist, including reference to any applicable VA additional technical conditions, and means of compliance;
- (h) Approved Manuals or changes to Approved Manuals as applicable (see 3.5.5.8);
- (i) Master Drawing List;
- (j) Maintenance/Repair Manual Supplements;
- (k) Weight and Balance data;
- (I) Instructions for Continued Airworthiness;
- (m) A description of the criteria that led to the FTV, LTV, or SV project categorization;
- Issue Papers raised during the CA's certification activities related to the Safety Elements;
- (o) Continued Operational Safety Plan or Documentation;
- (p) Environmental: For a TC, a definition of the noise, fuel venting, and exhaust emissions standards upon which the design approval was or will be based, and the proposed applicable VA environmental standards. For changed products, identification of the change as an acoustical or emissions changes, if applicable;
- (q) A detailed description of areas impacted by the Safety Elements, in 3.5.3, as applicable to the project;
- (r) Information on VA market interest and proposed delivery schedules; and
- (s) A CA certification statement, as described in 3.5.6.
- 3.5.2 Acknowledgement of Application (applies to FTV, LTV, and SV)
 - 3.5.2.1 The VA will notify the CA within ten (10) working days of receipt of application.
 - 3.5.2.2 The VA will review the application, confirm whether it agrees with the validation process identified by the CA (sequential, concurrent, FTV, LTV, SV), and request the CA to send any missing information required for the application within thirty (30) working days of receipt of an application.
 - 3.5.2.3 The VA will advise the applicant of any applicable fees within fifteen (15) working days of receipt of a complete application package.
 - 3.5.2.4 Upon receipt of payment of any applicable fees, the VA will begin working on the validation project.
- 3.5.3 Safety Elements Review (applies to LTV and SV projects only)
 - 3.5.3.1 If one or more of the Safety Elements is applicable, the VA will conduct a LTV.
 - 3.5.3.2 If none of the Safety Elements is applicable, the VA will conduct a SV.

- 3.5.3.3 The VA will establish the scope of its technical review based upon the following Safety Elements:
 - (a) Special Emphasis Items Areas of VA interest for all products of a certain class. These include areas where acceptable methods of compliance, at an industry level, continue to evolve, there is subjectivity in their application, and VA awareness is necessary. Each Authority will publish, for public consumption, and periodically update, a list of such generic certification issues for each product class. In the absence of such a published list, this criterion will not be invoked.
 - (b) Significant Changes The design change is classified as significant under 14 CFR 21.101 or CCAR 21.101, as applicable. The VA may accept the CA's classification, or reclassify the design change. For changes classified as significant, the VA may accept the CA analysis or conduct its own analysis.
 - (c) **Novel Applications of Existing Technology** A known technology being used in a manner different from previous experience of the CA or VA.
 - (d) **The Product Use is Unconventional** A product being used for a purpose for which it was previously not designed.
 - (e) Potential Unsafe Condition A potential unsafe condition identified by either Authority that warrants issuing a mandatory continuing airworthiness information (MCAI) for this product or similar. A potential unsafe condition may also be one in which the product contains design features pursuant to 14 CFR § 21.21(b)(2) or CCAR 21.21(a)(2) where experience with other products in service has shown an unsafe condition might occur in that product, even though compliance with the standards in the VA certification basis can be demonstrated. Unsafe is measured with respect to the overall level of safety intended by the product VA certification basis.
 - (f) New Standard Interpretations or new Methods of Compliance (MOC) for the Existing Airworthiness Standards – Interpretations/MOC applied by the CA that are different from those already accepted between the CA and the VA. An interpretation of a method of compliance or standard would not be considered "new" if it had been applied in a similar context by both the VA and the CA.
 - (g) **New VA Standards** When new VA airworthiness standards are adopted and any of the following apply:
 - (1) limited past experience by the VA with their application to a CA product; or
 - (2) they have an important impact on the whole product or a product's critical feature; or

- (3) engineering judgment is required to establish compliance.
- (h) **Exemptions** Exemption from applicable standards.
- (i) **Equivalent Level of Safety** Areas identified as requiring an ELOS finding to applicable standards.
- (j) **Special Conditions** Areas identified when the applicable airworthiness standards do not contain adequate or appropriate safety standards for the aircraft, aircraft engine, or propeller.
- (k) Significant Standards Difference (SSD) Airworthiness standards differences where the standards are substantively different and may result in type design changes (including approved manuals) to meet the airworthiness standards of the VA. SSDs will be identified by the VA based on a comparison of applicable VA and CA standards. If no specific SSD listing is available, this safety element may not be applied.
- Acoustical or Emissions Change A change classified as an acoustical or emissions change per 14 CFR 21.93 or CCAR 21.93.
- (m) Regulations or Airworthiness Standards at Prior Amendment Levels – The VA or the CA has documented that the prior regulations present a known and documented safety hazard.
- (n) Continued Airworthiness Concerns The VA is aware of an issue for similar products already in service and may be actively taking steps to address the concern.
- (o) Areas for Further Technical Confidence Building
 - (1) Technical areas for further confidence building consist of specific airworthiness standards, design features, or technologies identified by the VA.
 - (2) These standards, design features, or technologies are identified by the VA and must be based on either a lack of validation experience or objective evidence gathered from past validation and/or operational experience with similar CA products, where that experience supports a need for further confidence building.
 - (3) Areas for further confidence building are documented and shared between the Authorities. These initial lists will be provided by each Authority within 60 days after signing this agreement. Absent such a list, this Safety Element will not be applied by the VA.
 - (4) The number of technical areas that require further confidence building is expected to decrease as the VA gains validation and/or operational experience with CA articles or products of the same type. When requesting

items to be removed from the list, the CA must collect and submit objective evidence to the VA to demonstrate a steady trend of infrequent gaps in compliance determinations found by the VA.

- (5) However, if persistent gaps in compliance determinations are discovered by the VA during validation projects or operation of an article or product of the same type, the number of technical areas requiring further confidence building can increase. The VA must collect and submit objective evidence to the CA to demonstrate a steady trend of increasing number of gaps in compliance determinations to justify an increase in the number of technical areas.
- (6) Changes to the initial list will be effective 30 days after the change is provided, and will be applicable to new applications submitted after that effective date.
- (7) Each Authority is responsible for communicating the other's list to its workforce, to facilitate correct project classification by the CA. In addition, each Authority will communicate its own list to its workforce, to facilitate Work Plan development consistent with these procedures.

3.5.4 <u>Streamlined Validation</u>

- 3.5.4.1 The SV process is limited to the administrative actions required for the VA to issue its design approval based on the corresponding CA approval and a certification statement from the CA to the VA, as described in 3.5.6.
- 3.5.4.2 SV projects are only managed as sequential projects, in which the CA submits the application to the VA after the CA has completed its certification program, when it is ready to provide a certification statement to the VA as described in 3.5.6.
- 3.5.4.3 The VA will issue its design approval based on the CA's statement of compliance with the VA's certification basis and rely on the data provided by the CA, including acceptance of any CA approved manuals provided as part of the application package.
- 3.5.4.4 Once the data requirements for the SV process have been met, the administrative review of the application file has been completed, and the applicable design approval documentation has been prepared, the VA shall issue the corresponding design approval or letter of acceptance, as appropriate.
- 3.5.4.5 The VA will issue final approval within thirty-five (35) working days after acknowledging a complete application (as defined in 3.5.2), and confirmation of payment of any applicable fees.

3.5.5 <u>Technical Validation (applies to FTV, LTV projects only)</u>

- 3.5.5.1 Technical Validation is intended to allow the VA to:
 - (a) Familiarize itself with the type design, with emphasis on identification of applicable Safety Elements (3.5.3) and additional technical conditions (as defined in 1.13.3);
 - (b) Develop and use a Work Plan that incorporates active management oversight to ensure common principles and procedures are applied to maximize reliance on the CA's findings and compliance determinations;
 - (c) Rely on the CA to conduct compliance determinations to the VA's certification basis as applicable; and
 - (d) Issue its own design approval based on the CA's design approval, any additional VA ATCs and a statement from the CA that the type design complies with the VA's certification basis.
- 3.5.5.2 Technical Familiarization
 - (a) The VA will use the technical familiarization process to refine and finalize the Work Plan for FTV and LTV projects. Technical familiarization objectives include:
 - (1) Establishment of the VA certification basis, including identification of any ATCs.
 - (2) Establishment of the VA scope of review, limited to the applicable Safety Elements for an LTV project.
 - (3) Establishment of the VA depth of review, where the VA will review compliance data or otherwise participate directly in compliance determination activities.
 - (b) The CA will arrange all familiarization meetings between the VA, the CA, and the applicant.
 - (c) The VA will establish a project validation team if required for the project.
 - (d) The technical familiarization is only for the purpose of gaining an understanding of the product type design. 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 verify the Safety Elements that are impacted, to determine if Issue Papers are necessary, and to update the Work Plan, if needed. 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

- (e) Familiarization flights are a unique aspect of technical familiarization since in a concurrent program, they cannot be conducted until late in the project when a flying article is available. In a sequential or concurrent LTV project, familiarization flights 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 technical familiarization.
 - (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.
- (g) Familiarization flights should be supported by the CA flight test team to facilitate completion of the objectives described in (e).
- (h) 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.
- 3.5.5.3 Depth of Technical Review (applies to LTV projects only):
 - (a) The depth of VA technical review within each impacted Safety Element is guided by the procedures and principles provided below.
 - (b) The VA will rely, to the maximum extent possible, on the CA to make compliance determinations on its behalf. VA justification is required for any VA review of a compliance determination, including the review of any compliance document. This justification normally falls into the following general areas:
 - (1) Applicable Safety Elements, when
 - (i) the VA has limited experience in applying those Safety Elements and engineering judgment is required to establish compliance, or
 - (ii) areas for further technical confidence building, as defined in 3.5.3.3(o)
 - (2) New or novel features, new MoCs, or novel application of existing MoCs

Note: Once the VA has accepted a MOC for a given standard on any program with the CA, the expectation is that the VA will accept that MOC in the future as long as the area is not identified for further confidence building and the assumptions made in the MOC are applicable. An exception is where a past MOC has
been determined not to be sufficient. This determination must be discussed between the VA and the CA.

(3) Sensitive issues usually associated with an accident or incident on a product with similar design features.

NOTE: A compliance document in this context is any test report or other document that directly supports a determination of compliance.

- (c) VA review of compliance determinations, including review of any compliance documents, must be identified in the Work Plan along with the associated justification, and approved by VA management
- (d) If the VA, upon completion of its review of a compliance document, finds the document acceptable, the VA will provide a written statement to the CA verifying that the document is acceptable for demonstration of compliance to the VA certification basis.
- 3.5.5.4 Development and Implementation of the Work Plan
 - (a) The VA's level of involvement is made up of both the scope and depth of review. Scope identifies *what* to review. Depth identifies *how much* to review, and to what level of detail. The level of involvement is documented in the Work Plan.
 - (b) For LTV projects, The VA will determine the scope of its review using the Safety Elements (3.5.3) as reviewed against the CA application package contents and CA statement of compliance.
 - (c) For FTV projects, the VA will determine the scope of its review without being constrained by the Safety Elements.
 - (d) For LTV projects, the VA will determine the depth of its technical review, including review of compliance documents, based on the criteria in 3.5.5.3.
 - (e) The Work Plan should support VA confidence in a level of safety as required by the VA system.
 - (f) The Work Plan will outline the project, document the VA certification basis, identify additional technical conditions that the VA will apply, and list requested meetings and assistance from the CA.
 - (g) The VA will rely, to the maximum extent possible, on the CA to make compliance determinations on its behalf. The VA may identify preferred MOC for applicable Safety Elements.

- (h) The VA is expected to continue to rely on the CA for previously conducted compliance determinations on future programs, once the CA has successfully demonstrated to the VA that it can find compliance.
- (i) The Work Plan must be approved by VA management and communicated to the CA for review prior to any validation activities, to ensure support during the validation activities.
- (j) For LTV projects, if during implementation of the Work Plan the VA determines that involvement is needed in an area not included in the original validation Work Plan, it must be justified against the same Safety Element criteria (3.5.3) and approved by management.
- (k) Familiarization flights or familiarization meeting activities, if necessary for issuing the validated TC/STC or approving a change to a validated TC/STC, will be documented in the Work Plan.
- 3.5.5.5 Work Plan Contents
 - (a) Based on the scope and scale of the project, the validation Work Plan will include:
 - (1) Identification of the CA and its applicant;
 - (2) Date of the CA's application on behalf of its applicant;
 - (3) VA's office identification and its assigned PM;
 - (4) Familiarization requirements;
 - (5) CA certification basis;
 - (6) VA certification basis, including identification of the applicable VA airworthiness and environmental standards.
 - (i) For the purpose of establishing the VA's certification basis, the applicable VA's standards in effect on the date of application (otherwise known as effective application date) by the applicant to the CA for the issuance of a CA design approval (see exception for environmental standards below) will be applied.
 - (ii) The VA will review the CA certification basis and identify any additional technical conditions and any additional requirements deemed necessary as a result of service history and actions taken by either Authority to correct unsafe conditions.
 - (iii) Applications for a U.S. TC, or for a design change classified as an emissions change according to 14 CFR 21.93(c), must comply with the applicable fuel venting and exhaust emission standards of 14 CFR

part 34.

- (iv) Applications for a U.S. TC or for a design change classified as an acoustical change according to 14 CFR 21.93(b) must comply with the noise standards of 14 CFR part 36 in effect on the reference date established under 3.5.5.5(a)(6)(i).
- (v) Applications for a P.R.C. VTC must comply with the applicable fuel venting and exhaust emission standards of CCAR part 34.
- (vi) Applications for a P.R.C. VTC must comply with the noise standards as specified in CCAR part 36 that are in effect on the reference date established under 3.5.5.5(a)(6)(i).
- (7) Applicable Safety Elements per 3.5.3.3
- (8) Validation project milestones that can be used to develop a joint project schedule with the applicant and the CA;
- (9) Operational considerations, including applicable Board activities referenced in 3.5.5.9 and any requested involvement in review of the COS plan and ICA, if applicable;
- (10) Additional validation plan items to consider depending on the scope and scale of the project.
- (11) Listing of all CA Issue Papers potentially applicable to the VA program. The Work Plan will ultimately document all CA issue papers formally accepted by the VA as applicable to its validation program;
- (12) Proposed compliance showings subject to VA verification;
- (13) Technical assistance requests;
- 3.5.5.6 Using and Maintaining the Work Plan
 - (a) The VA will develop an initial Work Plan based on a review of the application package (LTV and FTV projects).
 - (b) The VA will provide its Work Plan to the CA and applicant following VA management approval.
 - (c) The Work Plan will be revised by the VA if, during the course of the validation project, it determines a need to revise the scope or depth of its validation review. Any such changes will be approved by the VA at the same level approving the original Work Plan and communicated to both the CA and applicant.
 - (d) For LTV projects, if Work Plan elements are added during the validation, they must be justified against the same Safety Element criteria (3.5.3).

(e) The CA will hold the VA accountable to limit its level of review to what is specified in the Work Plan.

3.5.5.7 Use of Issue Papers

- (a) The VA should avoid duplication of an issue paper on a subject that is already addressed by the CA with which the VA concurs.
- (b) Issue Papers will be coordinated through the CA to the design approval holder to expedite a timely and mutually acceptable resolution. The VA will incorporate the CA's and the applicant's position in all Issue Papers originated by the VA.
- (c) VA intention to raise IPs must be documented in the Work Plan and approved by VA management.

3.5.5.8 Approved Manuals

- (a) The CA approves all manuals unless the VA specifies it will do so directly and that intent is documented in the approved Work Plan.
- (b) If the VA requires changes to the manuals during the validation process, the VA will communicate to the CA the changes needed, and the approval of the manual will be made by the CA.
- (c) Changes to manuals required by the VA must be directly related to Work Plan items.
- (d) Stand-alone changes to approved manuals (i.e., changes that are not associated with physical design changes) shall be dealt with as any other design change according to the Acceptance, SV, LTV, or FTV procedures, as applicable.
- 3.5.5.9 Evaluation of Operational and Maintenance Aspects
 - (a) Evaluation of U.S. Operational and Maintenance Aspects
 - (1) The FAA has established Aircraft Evaluation Groups (AEGs). The AEGs are responsible for the operational and maintenance evaluation necessary to support introduction of products into the FAA system.
 - (2) The AEG will conduct Boards, as appropriate, to review the following items on P.R.C. SoD products prior to entry into U.S. operation: Scheduled maintenance requirements, crewmember training and licensing requirements; and the formulation and approval of a Master Minimum Equipment List (MMEL).
 - (3) The AEG will be invited to participate in the familiarization meeting by the FAA Project Manager and will generate Issue Papers as appropriate to the intended operational use and maintenance program.
 - (4) Compliance with AEG requirements is not required at the time of FAA TC issuance, but must be demonstrated

before issuance of the first U.S. standard airworthiness certificate. To avoid operational suitability problems, applicants are encouraged to complete AEG requirements early in the project.

- (b) Evaluation of P.R.C. Operational and Maintenance Aspects
 - (1) The CAAC has established Aircraft Evaluation Groups (AEG). The AEGs are responsible for the operational and maintenance evaluation necessary to support introduction of products into the CAAC system.
 - (2) The AEG evaluation will conduct Boards, as appropriate, to review the following items on U.S. SoD products prior to entry into P.R.C. operation: Operational Configuration, Pilot Training and Licensing Requirements; Maintenance Person Training and Licensing Requirements, the formulation and approval of a Master Minimum Equipment List (MMEL), the formulation and approval of a Scheduled Maintenance Requirements, Operational Documents and Instruction of Continued Airworthiness (other than Approved Manuals required as part of a certification program).
 - (3) The AEG evaluation will be initiated by the acceptance of an application for a validation project, following by confirmation of the evaluation items with the applicant as appropriate to the type design.
 - (4) Compliance with AEG requirements is not required at the time of CAAC VTC issuance, but must be demonstrated before issuance of the first P.R.C. standard airworthiness certificate. To avoid operational suitability problems, applicants are encouraged to complete AEG requirements early in the project.
- 3.5.5.10 Environmental Compliance Demonstration and Approval Procedures
 - (a) For the FAA:
 - (1) General:
 - (i) The FAA is authorized to make findings of compliance to 14 CFR parts 34 and 36 based upon FAAwitnessed tests conducted in accordance with FAAapproved test plans. The FAA will review and approve all compliance demonstration plans and reports submitted via the CAAC. FAA certification procedural requirements are documented in FAA Order 8110.4, Type Certification.
 - (2) The FAA process for environmental testing and approvals includes the following:

- Environmental (noise, fuel venting and exhaust emissions) certification compliance demonstration plans must be submitted to the FAA for review, comment, and subsequent approval prior to undertaking certification testing.
- (ii) Information and data must be supplied to the FAA in order to conduct a finding. Before issuing an original TC for an aircraft of any category, the FAA must assess the extent of noise abatement technology incorporated into the type design and determine whether additional noise reduction is achievable. This examination must be initiated as soon as possible after the application for type certification in each original type certification project and reflect noise reduction potentials that become evident during the design and certification process.
- (iii) Information and data must be supplied to the FAA in order to conduct an evaluation of the measurement and analysis methods and practices, and data correction procedures of the applicant for aircraft noise certification under 14 CFR part 36, subparts B, F, and/or H.
- (iv) Compliance demonstration aircraft noise test plans and engine exhaust emissions test plans to be used for demonstrating U.S. environmental certification compliance must be submitted to the FAA for review and comment, and subsequent approval not less than ninety (90) days prior to commencing testing.
- (v) Proposed equivalent procedures to be used by the applicant during testing, data processing, data reduction, and data analysis must be specifically identified to the FAA and approved in advance by the FAA as part of items (i) and (iv) above.
- (vi) FAA personnel must witness compliance demonstration tests. Prior to the start of testing it is necessary to ensure the conformity of the test article (aircraft or engine configuration) to that identified in the FAA-approved compliance demonstration test plans.
- (vii) Compliance demonstration reports must be submitted to the FAA for review and/or comment and subsequent approval prior to type certification approval.

- (b) For the CAAC:
 - (1) General:
 - (i) The CAAC is responsible for making findings of compliance to CCAR 34 and CCAR 36 based upon CAAC-witnessed tests conducted in accordance with CAAC-approved test plans. The CAAC will review and approve all compliance demonstration plans and reports submitted via the FAA. CAAC environmental requirements are documented in AP-21-03, Type Certification Procedures.
 - (2) The CAAC process for environmental testing and approvals includes the following:
 - Environmental (noise, fuel venting and exhaust emissions) certification compliance demonstration plans must be submitted to the CAAC for review, comment, and subsequent approval prior to undertaking certification testing.
 - (ii) Information and data must be supplied to the CAAC in order to conduct an evaluation of the measurement and analysis methods and practices, and data correction procedures of the applicant for aircraft noise certification under CCAR 36, Subparts B, G, and/or H.
 - (iii) Compliance demonstration aircraft noise test plans and engine exhaust emissions test plans to be used for demonstrating P.R.C. environmental certification compliance must be submitted to the CAAC for review and comment, and subsequent approval not less than 90 days prior to commencing testing.
 - (iv) Proposed equivalent procedures to be used by the applicant during testing, data processing, data reduction, and data analysis must be specifically identified to the CAAC and approved in advance by the CAAC as part of items (i) and (iii)
 - (v) CAAC personnel must witness compliance demonstration tests. Prior to the start of testing it is necessary to ensure the conformity of the test article (aircraft or engine configuration) to that identified in the CAAC approved compliance demonstration test plans.
 - (vi) Compliance demonstration reports must be submitted to the CAAC for review and/or comment and subsequent approval prior to type certification approval.

3.5.6 Issuance of the Design Approval

Once the VA is satisfied that the Technical Validation process is completed, the Work Plan activities are concluded, compliance with the VA's certification basis has been demonstrated, and confirmation of payment of any applicable fees, the VA will notify the CA that it is ready to receive the certification statement, in the following form:

"The CA certifies that the {specific product type, model, or STC} complies with the {VA's} certification basis as identified in {Work Plan, Issue Paper, STC, TCDS, etc., as applicable to the project} dated {date}"

3.6 <u>Design Approval Procedures for Technical Standard Order Design Approval and Non-</u> <u>TSO Functions</u>

3.6.1 <u>Application Process for an FAA Letter of TSO Design Approval (LODA) or a</u> <u>CAAC Validation of Design Approval (VDA)</u>

- 3.6.1.1 An application for an FAA LODA or a CAAC VDA of a TSO article may only be submitted for articles that have been approved by the CA through a TSO Authorization and of a kind for which a minimum performance standard has been published by the VA in a TSO.
- 3.6.1.2 The applicant must forward the application package including all applicable technical data listed in 3.6.1.3 to the CA.
- 3.6.1.3 The CA will ensure that the application package contains the following information:
 - (a) All required data/documentation pertaining to the proper installation, performance, operation, and maintenance of the TSO article, as specified in the TSO performance standard;
 - (b) If applicable, a request to deviate from the VA's TSO standard (including any CA-approved deviations) and substantiation data for VA approval, or identification of the deviation and evidence of VA approval;
 - (c) A statement of conformance to the VA's TSO performance standard from the applicant;
 - A certifying statement from the CA indicating that the article has been examined, tested, and found to meet the VA's applicable TSO;
 - (e) A copy of the CA's TSO Authorization; and
 - (f) Evidence that the article will be imported into the State of the VA, installed on an aircraft registered in the State of the VA, or installed on a product manufactured in the State of the VA. The evidence must identify the VA's TSO article model at a minimum. The evidence provided must be valid at the time of application in order for the project to be worked promptly.

- 3.6.1.4 The CA will ensure that its approval is issued against the latest VA TSO performance standards. If the CA approval was issued against a lower TSO performance standard, the CA must first issue its approval to the equivalent standard before applying for validation.
- 3.6.1.5 When the CA forwards an application for validation to a TSO performance standard with which the CA has limited experience, the CA will inform the VA, who may elect to conduct an additional technical evaluation.
- 3.6.1.6 The points of contact for FAA LODAs and CAAC VDAs are:
 - (a) For the FAA: Los Angeles ACO Branch (AIR-790).
 - (b) For the CAAC: CAAC-Aircraft Airworthiness Certification Department.
- 3.6.1.7 The VA will notify the CA within ten (10) working days of receipt of application. The VA will review the application and request any missing information within thirty (30) working days.

3.6.2 Issuance of the FAA LODA or the CAAC VDA

- 3.6.2.1 The FAA may issue a LODA or the CAAC may issue a VDA after:
 - (a) Receipt of all the items identified in 3.6.1.3, above;
 - (b) Conducting a review of the data/documentation specified in the VA TSO performance standard;
 - (c) Receipt and review of other specific technical data, as jointly agreed between the CA and the VA, needed to demonstrate compliance with the VA's TSO standard; and
 - (d) Approval of all proposed deviations to the VA's TSO.
- 3.6.2.2 The VA will forward the LODA or the VDA, as applicable, to the applicant and notify the CA of its issuance.
- 3.6.3 Acceptance of Non-TSO Functions
 - 3.6.3.1 The FAA and the CAAC will accept, without further validation, data on non-TSO functions where those functions are integrated into an existing or proposed article when:
 - The non-TSO functions included in the article have been shown not to interfere with the TSO functions and/or ability to comply with the TSO standard;
 - (b) The data provided with the article relative to non-TSO functions is valid data as processed by the approving Authority; and
 - (c) The non-TSO functions are covered under the FAA TSO or CTSO approval holder's quality system.
 - 3.6.3.2 The acceptance of data on non-TSO functions does not constitute installation approval.

- 3.6.3.3 The CA and VA may agree to mutual cooperation and technical assistance for the evaluation of non-TSO functions at the product level before granting TSO approval.
- 3.6.4 <u>Procedure for Changes to TSO LODA and VDA by the Design Approval</u> <u>Holder</u>
 - 3.6.4.1 Minor changes to TSO LODA and VDA are considered approved by the VA according to the procedures in 3.3.4.
 - 3.6.4.2 Major changes to TSO LODA and VDA are processed as a new LODA or VDA application, per the procedures in 3.6.1.
- 3.6.5 Installation Approval
 - 3.6.5.1 An FAA LODA or a CAAC VDA does not constitute an installation approval for the article on an aircraft. The installer must obtain installation approval from their Authority for use on an aircraft registered in that State.

SECTION IV CONTINUED AIRWORTHINESS

4.1 General

- 4.1.1 In accordance with Annex 8 to the Chicago Convention, the SoD is responsible for resolving in-service safety issues related to design or production. The CA, as the Authority of the SoD, will provide applicable information that it has found to be necessary for mandatory modifications, required limitations and/or inspections to the other Authority to ensure continued operational safety of the product or article. Each Authority will review and normally accept the corrective actions taken by the CA in the issuance of its own mandatory corrective actions.
- 4.1.2 At the request of the VA, the CA will assist in determining what action is considered necessary for the continued operational safety of the product or article. The VA, as Authority of the State of Registry (SoR), retains sole Authority for decisions on final actions to be taken for products or articles under their jurisdiction. The FAA and the CAAC will strive to resolve differences.
- 4.1.3 The FAA and the CAAC recognize the importance of the sharing of Continued Operational Safety (COS) information as a means to assist in the identification and resolution of emerging airworthiness issues. The FAA and the CAAC will share their COS data with each other to assist in their respective COS oversight.
- 4.1.4 Once the design is validated, the CA will provide any mandatory continuing airworthiness information (MCAI) necessary to ensure continuing airworthiness of the product registered in the jurisdiction of the importing State.
- 4.1.5 The FAA and the CAAC will ensure active communication between specific focal points, for regular feedback and communicating continuing airworthiness issues on products certified by either the FAA or the CAAC and validated by the other. The extent of this engagement will reflect the continuing airworthiness activities associated with the product.
 - 4.1.6 The principles and procedures provided in 4.1.1 through 4.1.5 should be sufficient for the VA to fulfill its SoR COS responsibilities. However, the VA has discretionary authority to seek information from the CA, which includes, but is not limited to, design data and findings of compliance, when such requests are need to support resolution of COS concerns.
- 4.2 Failures, Malfunctions and Defects (FM&D) and Service Difficulty Reports (SDR)
 - 4.2.1 The FAA and the CAAC agree to perform the following functions for the products and articles for which it is the CA:
 - 4.2.1.1 Tracking of FM&D reports/SDR and accident/incidents;
 - 4.2.1.2 Evaluating FM&D reports/SDR and accident/incidents;

- 4.2.1.3 Investigating and resolving all suspected unsafe conditions; and
- 4.2.1.4 Advising the other Authority of all known unsafe conditions and the necessary corrective actions (see 4.3);
- 4.2.1.5 Upon request, providing the other Authority with the following:
 - (a) Reports of FM&D/SDR and accidents/incidents;
 - (b) Status of investigations into FM&D/SDR and accidents/incidents;
 - (c) Summary of FM&D/SDR investigation findings and conclusions.
- 4.2.1.6 Making a reasonable effort to resolve issues raised by the other Authority concerning matters of safety for products registered in their State.
- 4.2.2 The FAA and the CAAC, as Authorities for the SoR, agree to perform the following functions:
 - 4.2.2.1 Advising the CA of FM&D/SDR and accidents/incidents which are believed to be potentially unsafe conditions;
 - 4.2.2.2 Supporting the CA in investigations of unsafe conditions and their occurrences; and
 - 4.2.2.3 Advising the CA, if it has result of investigations made by the VA into FM&D/SDR and accidents/incidents, it has determined that it will make corrective actions mandatory.
 - 4.2.3 For COS issues related to investigations of Safety Recommendations, Service Difficulty Reports, accidents or incidents on the imported products, parts, or articles, the Authority for the SoR can directly request information from the design approval holder after informing the CA of the investigation.
- 4.2.4 Copies of FM&D/SDR reports from U.S. and P.R.C. can be obtained through the addresses listed in Appendix A.
- 4.3 Unsafe Condition and Mandatory Continuing Airworthiness Information (MCAI)
 - 4.3.1 The FAA (under 14 CFR part 39) and the CAAC (under CCAR 39) agree to perform the following functions for the products, articles, and design changes for which they are the CA:
 - 4.3.1.1 Issue an MCAI (e.g. AD) whenever the Authority determines that an unsafe condition exists in a type certificated product or article, and is likely to exist or develop in a type certificated product or article of the same type design. This may include a product that has an aircraft engine, propeller, or article installed on it and the installation causes the unsafe condition.
 - 4.3.1.2 Ensure that the following information is provided to the other Authority in support of the MCAI or directly from the approval holder:
 - (a) Service information that provides the instructions for how to perform the required corrective actions;
 - (b) A statement on the availability of parts; and

- (c) An estimate of the number of labor hours and the cost of parts required for the corrective actions.
- 4.3.1.3 Issue a revised or superseding AD when determined that any previously issued AD was incomplete or inadequate to fully correct the unsafe condition.
- 4.3.1.4 Provide timely notification to the VA of the unsafe condition and the necessary corrective actions by providing a copy of the AD at the time of publication to the address referenced in Appendix A. Additionally, upon request by the VA, the CA will arrange for copies of all relevant service bulletins referenced in the MCAI, as well as other supporting documentation, to be forwarded to the appropriate focal point in the FAA or to the CAAC, as appropriate.
- 4.3.1.5 In the case of emergency airworthiness information ensure special handling so that the other Authority is notified immediately.
- 4.3.1.6 Advise and assist the VA in defining the appropriate actions to take in the issuance of its own AD.
- 4.3.1.7 Maintain a web-based database of ADs that can be accessed by the VA.
- 4.3.2 The FAA and the CAAC recognize that they may disagree as to the finding of an unsafe condition and propose to issue a unilateral AD. In such a case, the VA should consult with the CA prior to issuing a unilateral AD.
- 4.3.3 The FAA and the CAAC, as VAs, agree to respond quickly to the issuance of an MCAI by the CA in making its own determination of the need for issuing its own similar MCAI that addresses all unsafe conditions on affected products or articles certified, approved or otherwise accepted by the VA.
- 4.3.4 The FAA and the CAAC, as the CA will share information on any changes that affect operating limitations, life limits, or any other airworthiness limitation, to include manual changes and changes to certification maintenance requirements. These changes should be promptly sent to the VA in order to ensure the continued operational safety of the aircraft. The FAA and the CAAC may treat a reduced life limit as an unsafe condition and will accordingly issue an AD. The FAA and the CAAC may also issue an AD for other limitation changes if they are considered an unsafe condition.
- 4.4 <u>Alternative Methods/Means of Compliance (AMOC) to an Airworthiness Directive (AD)</u>
 - 4.4.1 If the CA issues an AMOC of general applicability to an existing AD for its own SoD products, the CA will notify the VA of the decision.
 - 4.4.2 Upon request, the CA will provide sufficient information to the VA for its use in making a determination as to the acceptability of the AMOC. Based on this information, the VA will write an AMOC approval letter for their specific country's operations.
 - 4.4.3 An AMOC issued by the CA to the design approval holder for its SoD products will be provided to the VA for its consideration to issue a similar AMOC for the

VA's domestic registered fleet, if required.

4.4.4 Upon request by the VA, the CA shall assist in determining the acceptability of specific AMOC requests where the AD is issued by the CA for its own SoD products.

SECTION V ADMINISTRATION OF DESIGN APPROVALS

5.1 General

This section addresses procedures for the transfer, surrender, revocation, suspension, termination, or withdrawal of design approval.

5.2 Transfer of TCs and STCs

The regulatory requirements for certificate transfers are equivalent in the U.S. and the P.R.C. The U.S. and the P.R.C. regulations allow the transfer of a TC/STC followed by notification to the FAA/CAAC. Early coordination with both Authorities is encouraged.

The FAA and the CAAC will administer the transfer of TCs/STCs only when an applicant agrees to assume responsibility for both a U.S. and a P.R.C. TC/STC and the affected operating fleet. The following paragraphs outline the procedures to be followed for TC/STC transfers.

5.2.1 Transfer of a TC/STC with a change in SoD

- 5.2.1.1 The transfer of the SoD responsibilities per Annex 8 of the Chicago Convention must be agreed upon by both Authorities. If agreement cannot be reached between the two Authorities, then the CA may revoke the certificate and notify the concerned ICAO States that there is no longer a design approval holder.
- 5.2.1.2 Early coordination between the current TC/STC holder and its Authority, together with the proposed TC/STC holder and its Authority is essential. The transferring Authority will notify the receiving Authority of the proposed transfer and include information about current production status. All information related to the transfer of a TC/STC, including technical documentation, will be in the English language.
- 5.2.1.3 Upon notification of a change in ownership of a TC/STC holder to a new holder in the State of the receiving Authority, the transferring Authority's responsible office will notify the receiving Authority's responsible office listed in Appendix A. An arrangement may be developed to identify each Authority's responsibilities throughout the transfer process.
- 5.2.1.4 The transferring Authority will transfer to the receiving Authority the ICAO SoD responsibilities for TCs and STCs within the scope of these Implementation Procedures. The receiving Authority will not assume ICAO SoD functions for models or design changes that have not been found to meet its certification requirements.
- 5.2.1.5 If the receiving Authority does not already have a corresponding TC/STC, the new holder will have to apply to their Authority for a new TC/STC. The transferring Authority will provide support to establish acceptance of the receiving Authority's TC/STC as showing compliance with the applicable certification requirements of the receiving Authority. This would include providing a statement of compliance that the product

meets the certification requirements of the new SoD (receiving Authority). Upon acceptance, the receiving Authority will issue its TC/STC.

- 5.2.1.6 If the receiving Authority already has a corresponding TC, but that TC does not include all of the models being transferred, the transferring Authority will, if requested, provide support to establish acceptance of the additional model(s) as showing compliance with the applicable certification requirements. This support would include providing a statement of compliance that the model meets the certification requirements of the new SoD (receiving Authority). Upon acceptance, the receiving Authority will place the additional model on its TC.
- 5.2.1.7 For STCs, if the original STC does not include a specific certificated model of the product listed on the new STC, the applicability of an STC issued by the receiving Authority will only include those models for which a TC has been validated by the receiving Authority.
- 5.2.1.8 The transfer of the ICAO SoD responsibilities for the TC/STC to the receiving Authority will be considered complete when the receiving Authority confirms all necessary data have been transferred to the new holder, and the new holder is able to perform the responsibilities required of a design approval holder.
- 5.2.1.9 If requested by the approval holder, the transferring Authority will issue a validated TC/STC after the receiving Authority issues its TC/STC.
- 5.2.1.10 If the new SoD's TC only covers a partial list of models from the transferring Authority's original TC and the new holder does not apply for approval of those additional models, the existing holder will continue to hold the data for those additional models and the transferring Authority will continue to fulfill its SoD responsibilities for those additional models.
- 5.2.2 Upon transfer, or a mutually agreed upon date, the receiving Authority, in carrying out SoD functions, will comply with the requirements of Annex 8 to the Chicago Convention for affected products. For TCs/STCs, the receiving Authority will notify the transferring Authority and all affected ICAO Contracting States (i.e. States of Registry) of the change in SoD responsibility and identify the new TC/STC holder, upon completion of all applicable procedures described above.
- 5.2.3 Transfer of TCs and STCs with no change in SoD
 - 5.2.3.1 Where there is no change in the SoD, the CA will notify the VA when a TC/STC validated by the VA is successfully transferred to a new design approval holder within the country of the CA.
 - 5.2.3.2 The CA shall provide the VA with a statement confirming the ability of the new holder to fulfill the regulatory responsibilities assigned to a design approval holder. The CA shall assist the VA in facilitating the reissuance of the validated TC/STC to the new holder.

- 5.2.3.3 The VA, upon completion of its review, will issue a TC/STC in the name of the new design approval holder, and notify the CA accordingly.
- 5.2.4 <u>Transfer of TCs and STCs to a Third State</u>

When a TC or STC is to be transferred to a third State, the CA will notify the VA prior to the transfer and provide any necessary technical assistance to the VA as needed. Early collaboration is crucial prior to processing such a transfer.

5.3 <u>Surrender of TCs or STCs</u>

- 5.3.1 If a certificate holder elects to surrender a TC or STC issued by the FAA, the FAA will immediately notify the CAAC in writing of the action at the address listed in Appendix A.
- 5.3.2 The FAA, as the CA, will accomplish all actions necessary to ensure continued airworthiness of the product until such time as:
 - 5.3.2.1 A new TC or STC for the product is issued as part of the full TC process with a new application since the surrendered TC or STC cannot be reissued to a third party or a former holder; or
 - 5.3.2.2 The FAA terminates the TC or STC. Prior to termination, the FAA will notify the CAAC of the pending action.
- 5.3.3 The CAAC does not allow a certificate holder to surrender a TC or STC for which the P.R.C. is the SoD.

5.4 <u>Revocation or Suspension of TCs or STCs</u>

- 5.4.1 In the event that either Authority revokes or suspends a TC or STC of a product manufactured for which it is the CA, that Authority will immediately inform the other. The VA, upon notification, will conduct an investigation to determine if action is required. If the revocation or suspension was for cause, and the VA concurs with the CA's certificate action, the VA will initiate revocation or suspension of its TC or STC.
- 5.4.2 Alternatively, the VA may decide to assume continued airworthiness responsibilities if there is sufficient information for it to support the continued operational safety of the fleet within its jurisdiction. In this case, the CA should obtain and provide type design data as requested to the VA. Final certificate action is at the sole discretion of the VA.
- 5.4.3 Either Authority may revoke its TC or STC if the continued airworthiness responsibilities would cause an undue burden for that Authority.

5.5 <u>Termination</u>

In the event that one Authority terminates a design approval, the information will be communicated between the FAA and the CAAC on a case by case basis.

- 5.6 Surrender or Withdrawal of a TSO Design Approval
 - 5.6.1 Surrender

If an FAA TSOA holder, FAA LODA holder, CAAC TSOA holder, or CAAC VDA holder elects to surrender their LODA, VDA, or TSOA/CTSOA approval issued

by the FAA or the CAAC respectively, the FAA or the CAAC will immediately notify the other in writing of the action. The CA will inform the VA when an unsafe condition has been identified, until such time as the approval is formally withdrawn by the CA.

5.6.2 Withdrawal

If a TSO/CTSO approval is withdrawn, the FAA or the CAAC will immediately notify the other in writing of the action. The CA will inform the VA when an unsafe condition has been identified. In the event of withdrawal of a TSO/CTSO approval for non-compliance, the CA will investigate all noncompliances for corrective action and notify the VA of the corrective action. The CA still has the responsibility for the continuing airworthiness of those TSO/CTSO articles manufactured under its Authority.

SECTION VI PRODUCTION AND SURVEILLANCE ACTIVITIES

6.1 Production Quality System

6.1.1 All products and articles produced in the U.S. or the P.R.C. and exchanged under the provisions of these Implementation Procedures will be produced in accordance with an approved production quality system that ensures conformity to the approved design and ensures that completed products and articles are in a condition for safe operation.

6.1.2 Surveillance of Production Approval Holders

- 6.1.2.1 The FAA and the CAAC, as authorities for the SoM, will conduct regulatory surveillance of production approval holders and their suppliers in accordance with each Authority's applicable regulations, policies, practices, criteria, and/or procedures. Scheduled evaluations or audits should be conducted to verify that the production approval holder is in continual compliance with their approved production quality system, manufacturing products and articles that fully conform to the approved design, and are in a condition for safe operation. The Authority for the SoM should verify the correction of all deficiencies.
- 6.1.2.2 The FAA's production approval holder and supplier surveillance programs are described in FAA Order 8120.23, Certificate Management of Production Approval Holders.
- 6.1.2.3 The CAAC's production approval holder and supplier surveillance programs are described in AP-21-04 and AC-21-04.
- 6.2 Extensions of Production Approvals
 - 6.2.1 As the Authority of the SoM, the FAA and the CAAC may authorize production approval extensions, to include manufacturing sites and facilities in each other's countries or in a third State. The Authority for the SoM remains responsible for the surveillance and oversight of these manufacturing sites and facilities.
 - 6.2.2 Each Authority for the SoM is responsible for surveillance and oversight of its production approval holders' operations located within the jurisdiction of the other Authority. Routine surveillance and oversight may be performed by the FAA or the CAAC on the other's behalf through the provisions of Section VIII.
 - 6.2.3 Either Authority for the SoM may seek assistance with regulatory surveillance and oversight functions from the Civil Aviation Authority (CAA) of a third State when a production approval has been granted or extended. This should be done only when a bilateral arrangement for technical assistance has been formalized between the FAA or CAAC and the CAA of the third State.
- 6.3 Production Approvals Based on Licensing Agreement
 - 6.3.1 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 IX of these Implementation Procedures.

- 6.3.2 For products and articles, either Authority may grant a production approval in its respective State based on design data obtained through a licensing agreement (i.e., licensing the rights to use the design data) with the design approval holder in the other Authority's State, or in a third State, to manufacture that product or article. In this case, the Authority granting that production approval should have a validated design approval and ensure the establishment of adequate manufacturing processes and guality control procedures to assure that each part conforms to the approved licensed design data. There must also be procedures to ensure that all changes to be introduced into the design by the production approval holder are approved. These design changes will be submitted to the type design holder who will obtain approval from its Authority using established procedures. Production approvals based on a licensing agreement covered under the scope of these Implementation Procedures will require a Management Plan. For those that are not covered under the scope of these Implementation Procedures, a Special Arrangement and Management Plan may be required, in accordance with Section IX, Special Arrangements and Management Plans.
- 6.3.3 For any TC/PC split, the FAA and CAAC will follow the following steps:
 - 6.3.3.1 Applicant to notify both Authorities
 - 6.3.3.2 Both Authorities to communicate and agree on the request
 - 6.3.3.3 SoM to issue the PC
 - 6.3.3.4 CA to update TCDS and VA to update VTCDS by adding new production approval
 - 6.3.3.5 Both Authorities to conclude a Management Plan

6.4 Supplier Surveillance – Outside the State of Manufacture (SoM)

- 6.4.1 The Authority for the SoM will include in its regulatory surveillance and oversight programs a means of surveillance of persons/suppliers, located outside its State. This surveillance and oversight will be equivalent to the program for domestic suppliers. This surveillance activity will assist the Authorities in determining conformity to approved design and if articles are safe for installation on type certificated products.
- 6.4.2 Each Authority for the SoM is responsible for surveillance and oversight of its production approval holders' suppliers located in the other State's jurisdiction. Routine surveillance and oversight may be performed by the other Authority through the provisions of Section VIII.
- 6.4.3 Either Authority may request that the other Authority conduct regulatory surveillance on its behalf for facilities located within the other Authority's country. The assisting Authority may either use its own policies, practices and

procedures or those of the requesting Authority. Details of this assistance will be documented in a management plan.

- 6.4.4 The Authority for the SoM may seek assistance with regulatory surveillance oversight functions from the CAA of a third State in which the supplier is located. This may only be done when an agreement/arrangement for this purpose has been formalized between the FAA or the CAAC and the CAA of the third State.
- 6.4.5 The production approval holder may not use a supplier in a State where the Authority of the production approval holder is denied unimpeded access, by either the supplier or the supplier's CAA, to the supplier's facility to perform surveillance activities. The production approval holder also may not use a supplier located in a State if that State denies entry to the Authority of the production approval holder.

6.5 <u>Multi-National Consortia</u>

- 6.5.1 Approvals may be issued to multi-national consortia for the design and production of products and/or articles in either the U.S. or the P.R.C. These consortia clearly designate one SoD and one SoM, for the purposes of regulatory accountability. There may be domestic and international suppliers to the approval holder(s) that produce parts for use in the final product.
- 6.5.2 The FAA and the CAAC will continue to conduct regulatory surveillance and oversight of the domestic design and production approval holder and should emphasize surveillance and oversight of parts suppliers. Each Authority will use its regulatory surveillance and oversight programs that best enable it to ensure the consortia suppliers are producing parts that conform to the approved design and are in a condition for safe operation.

SECTION VII EXPORT AIRWORTHINESS APPROVAL PROCEDURES

7.1 <u>General</u>

- 7.1.1 Export Certificates of Airworthiness are issued by the FAA and the CAAC for completed aircraft. Authorized Release Certificates (Airworthiness Approval Tags), or equivalent, are issued by the FAA and the CAAC for aircraft engines, propellers, and articles.
- 7.1.2 The FAA's requirements and procedures for import are described in 14 CFR part 21, FAA Order 8130.2, and Advisory Circular (AC) 21-23. The CAAC's requirements and procedures for import are described in CCAR-21 and AP 21-05.
- 7.1.3 The FAA's requirements for issuing export airworthiness approvals are contained in 14 CFR part 21, FAA Order 8130.2, FAA Order 8130.21, and FAA Advisory Circular (AC) 21-2. The CAAC's requirements for issuing export certificates are described in CCAR-21 and AP 21-05.

7.2 New or Used Aircraft Exported for which a Design Approval Has Been Granted

- 7.2.1 Except as provided in 7.6, the IA will accept an Export Certificate of Airworthiness on new aircraft and on used aircraft only if a TC holder exists to support continuing airworthiness of such aircraft, identified in 2.2.2. when the EA certifies that each aircraft:
 - 7.2.1.1 Conforms to a type design approved by the IA (including all applicable STCs);
 - 7.2.1.2 Has undergone a final operational check;
 - 7.2.1.3 Is in a condition for safe operation, including compliance with applicable IAADs;
 - 7.2.1.4 Meets all additional requirements prescribed by the IA in 7.8, as notified; and
 - 7.2.1.5 Additional requirement for Used Aircraft:
 - 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) Records which verify that all overhauls, major changes and repairs were accomplished in accordance with approved data.
- 7.2.2 Each aircraft imported to the U.S. or the P.R.C. with an EA airworthiness approval will have an Export Certificate of Airworthiness and should contain information equivalent to the following comment: "The [INSERT AIRCRAFT MODEL AND SERIAL NUMBER] covered by this certificate conforms to the type design approved under the TC Number [INSERT 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. Under certain conditions, the IA may decide that an Export Certificate of Airworthiness is not required for used aircraft.

- 7.2.3 When a U.S. or P.R.C. SoD used aircraft is to be imported from a third State into the U.S. or the P.R.C., the FAA or the CAAC, as the SoD Authority will, upon request by the other, assist in obtaining information regarding the configuration of the aircraft at the time it left the manufacturer. The SoD Authority will also provide, upon request, information regarding subsequent installations on the aircraft they have approved.
- 7.2.4 If a used civil aircraft produced in the U.S. or the P.R.C. has been used in military service in either country at any time, the EA will consult with the IA to determine if they will accept such an aircraft.
- 7.2.5 Acceptance of Used Aircraft Being Exported (Returned) to the original SoD
 - 7.2.5.1 Either Authority will accept an Export Certificate of Airworthiness on a used aircraft being exported (returned) to the original SoD for the aircraft, when the conditions of 7.2.1 have been met.
 - 7.2.5.2 If the EA is not in a position to assess whether or not the used aircraft satisfies the above conditions, it will inform the IA accordingly.
- 7.2.6 Acceptance of Used Aircraft for which a Third State is the SoD
 - 7.2.6.1 The IA will accept Export Certificates of Airworthiness from the EA for used aircraft for which a third State is the SoD.
 - 7.2.6.2 For used aircraft being imported from the P.R.C. to the U.S., or from the U.S. to the P.R.C., the conditions of 7.2.1 must be met.
 - 7.2.6.3 If the EA is not in a position to assess whether or not the used aircraft satisfies the above conditions, it will inform the IA accordingly.
- 7.3 <u>New and Rebuilt Aircraft Engines and New Propellers Exported to the U.S. or the P.R.C.</u>
 - 7.3.1 Except as provided in 7.7, the IA will accept the EA's Authorized Release Certificates, or equivalent, certifying that each new and rebuilt aircraft engine or new propeller identified in paragraph 2.2.3 exported to the U.S. or the P.R.C.:
 - 7.3.1.1 Conforms to a type design approved by the IA, as specified in the IA's TCDS, and any additional STCs accepted by the IA;
 - 7.3.1.2 Has undergone a final operational check;
 - 7.3.1.3 Is in a condition for safe operation, including compliance with applicable IA ADs; and
 - 7.3.1.4 Meets all additional requirements prescribed by the IA in 7.8.
 - 7.3.1.5 For rebuilt aircraft engines being exported to P.R.C. from the U.S., that the aircraft engine has been rebuilt by the production approval holder and the Total Time Since New (TTSN) is specified in both the

technical record of the aircraft engine and the accompanying Authorized Release Certificate, or equivalent.

- 7.3.2 Each new aircraft engine and propeller exported will have an Authorized Release Certificate, or equivalent, that identifies the IA's approved design data.
- 7.3.3 For new aircraft engines and propellers, the Authorized Release Certificate, or equivalent, should contain information equivalent to the following statement: "The [INSERT AIRCRAFT ENGINE OR PROPELLER MODEL AND SERIAL NUMBER] covered by this certificate conforms to the type design approved under the IA's TC Number [INSERT TYPE CERTIFICATE NUMBER, REVISION LEVEL, AND DATE], 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.

7.4 <u>TSO Articles</u>

Under the provisions for TSO articles as detailed in Section III, the IA shall accept the EA's Authorized Release Certificate, or equivalent, for articles only when the EA certifies, that the article:

- 7.4.1 Conforms to the TSO/CTSO Design Approval, including any accepted non-TSO functions (see 3.6) as applicable;
- 7.4.2 Complies with all applicable EA ADs; and
- 7.4.3 Meets all additional requirements prescribed by the IA in 7.8, as notified.

7.5 Modification and Replacement Parts

- 7.5.1 The IA will accept the EA's Authorized Release Certificates, or equivalent, on modification and/or replacement parts as identified in 2.2.3 only when the EA certifies by issuance of an Authorized Release Certificates, or equivalent, that each part:
 - 7.5.1.1 Conforms to the applicable FAA or CAAC approved design data and is in a condition for safe operation; and
 - 7.5.1.2 Meets all additional requirements prescribed by the IA, in 7.8, as notified.
- 7.5.2 When parts are shipped under direct ship authorizations, the accompanying EA's Authorized Release Certificate, or equivalent documentation, must indicate that the responsible manufacturing/production approval holder has authorized direct shipment. This indication may be a supplemental "remark" entry on the Authorized Release Certificate, or equivalent, indicating the authorization to the supplier for direct shipment of parts from the supplier's location.
- 7.5.3 Each part exported to the importing State with the EA's airworthiness approval will have an EA's Authorized Release Certificate or equivalent.
- 7.6 <u>Coordination of Exceptions on an Export Certificate of Airworthiness</u>
 - 7.6.1 The EA will notify the IA prior to issuing an Export Certificate of Airworthiness when non-compliance with the IA's approved type design is to be noted

exporting approval document. This notification should help to resolve all issues concerning the aircraft's eligibility for an airworthiness certificate.

- 7.6.1.1 FAA: For new aircraft, this notification should be sent to the responsible FAA office listed in Appendix A. For used aircraft, this notification should be sent to the responsible FAA Flight Standards District Office (FSDO) available online at www.faa.gov.
- 7.6.1.2 CAAC: For new and used aircraft, this notification should be sent to the Aircraft Certification Division of CAAC-AAD, as detailed in Appendix A.
- 7.6.2 In all cases, a written acceptance of the exceptions from the IA is required before the issuance of the EA's Export Certificate of Airworthiness. A copy of this written acceptance will be included with the export documentation.

7.7 Coordination of Exceptions on an Authorized Release Certificate

- 7.7.1 The EA will notify the IA prior to the issuance of an Authorized Release Certificate for an aircraft engine, propeller, or TSO/PMA article when noncompliance with the IA approved design is to be noted in the "Remarks" block of the Authorized Release Certificate. This notification should help resolve all issues regarding the aircraft engine, propeller, or TSO/PMA article's installation eligibility.
- 7.7.2 This notification should be sent to the FAA responsible MIO or the Aircraft Certification Division of the CAAC-AAD, as detailed in Appendix A, as applicable. In all cases, a written acceptance from the IA is required before the issuance of the EA's Authorized Release Certificate. A copy of this written acceptance will be included with the export documentation.

7.8 Additional Requirements for Imported Products

The following identifies those additional requirements which must be complied with as a condition of acceptance for products and articles imported into the U.S. or the P.R.C., for use on a U.S.-registered aircraft or P.R.C.-registered aircraft, respectively:

7.8.1 Identification and Marking

Aircraft, aircraft engines, propellers and articles must be identified in accordance with the applicable subpart in 14 CFR part 45 for U.S-registered aircraft and CCAR 21 and 45 for P.R.C.-registered aircraft. Identification plates should have the manufacturer's legal name or as it appears in the approved data of the type design.

7.8.2 Instructions for Continued Airworthiness (ICA)

ICA and maintenance manuals having airworthiness limitation sections must be provided by the type certificate holder as prescribed in 14 CFR section 21.50 and CCAR 21.50.

7.8.3 Aircraft Flight Manual, Operating Placards and Markings, Weight and Balance Report, and Equipment List

Each aircraft must be accompanied by an approved AFM, including all applicable supplements. The aircraft must also have the appropriate operating

placards and markings, a current weight and balance report, and a list of installed equipment.

7.8.4 Logbooks and Maintenance Records

Each aircraft (including the aircraft engine, propeller, rotor, or article) must be accompanied by logbooks and maintenance records equivalent to those specified in 14 CFR § 91.417 for U.S.-registered aircraft and CCAR 91.317 and 91.319 for P.R.C.-registered aircraft. The maintenance records must also show that, for a used aircraft, that aircraft has had a 100-hour inspection, or equivalent, as specified in 14 CFR section 21.183(d) for U.S.-registered aircraft and 21.174 for P.R.C.-registered aircraft.

SECTION VIII TECHNICAL ASSISTANCE BETWEEN AUTHORITIES

8.1 <u>General</u>

- 8.1.1 Upon request and after mutual agreement and as resources permit, the FAA and the CAAC may provide technical assistance to each other when significant activities are conducted in either the U.S. or the P.R.C.
- 8.1.2 Every effort should be made to have these certification tasks performed locally on each other's behalf. These technical assistance activities will help with regulatory surveillance and oversight functions at locations outside of the requesting Authority's country. These supporting technical assistance activities do not relieve the Authority of the responsibilities for regulatory control, environmental certification and airworthiness approval of products and articles manufactured at facilities located outside of the requesting Authority's country.
- 8.1.3 The FAA and the CAAC will use their own policies and procedures when providing such technical assistance to the other, unless other Special Arrangements are agreed upon. Types of assistance may include, but are not limited to, the following:
 - 8.1.3.1 Certification Support
 - (a) Approving test plans;
 - (b) Witnessing tests;
 - (c) Performing conformity inspections;
 - (d) Reviewing reports;
 - (e) Obtaining data;
 - (f) Verifying/determining compliance;
 - (g) Monitoring the activities and functions of designees or approved organizations; and
 - (h) Conducting investigations of service difficulties.
 - 8.1.3.2 Conformity and Surveillance Support
 - (a) Witnessing Conformity inspections;
 - (b) Witnessing the first article inspection of parts;
 - (c) Monitoring the controls on special processes;
 - (d) Conducting sample inspections on production parts;
 - (e) Monitoring production certificate extensions;
 - (f) Monitoring the activities and functions of designees or approved organizations;
 - (g) Conducting investigations of service difficulties; and

(h) Evaluating or conducting surveillance of production quality systems including assistance in determining that a supplier complies with purchase order and quality requirements at locations in the U.S. or the P.R.C.

8.1.3.3 Airworthiness Certification Support

- (a) Assistance in the delivery of airworthiness certificates for aircraft; and
- (b) Determining the original export configuration of a used aircraft.

8.1.3.4 Technical Training

Any additional assistance needed to support the technical implementation of these Implementation Procedures.

8.2 <u>Witnessing of Tests During Design Approval</u>

- 8.2.1 The FAA or the CAAC may request assistance in the witnessing of tests from the other Authority.
- 8.2.2 Only Authority-to-Authority requests are permissible and neither the FAA nor the CAAC will respond to a test witnessing request made directly from the manufacturer or supplier, unless a specific procedure has been jointly agreed upon by both the FAA and the CAAC. Witnessing of tests will be conducted only after consultations and agreement between the FAA and the CAAC on the specific work to be performed. A written request for witnessing of tests will be provided.
- 8.2.3 Unless otherwise delegated, approval of the design approval applicant's test plans, test procedures, test specimens, and hardware configuration remains the responsibility of the Authority of the SoD. Establishing the conformity of each test article prior to the conduct of the test is the responsibility of the design approval applicant.
- 8.2.4 Test witnessing activities may require the development of a Management Plan based on the complexity and frequency of the requested certifications. At the discretion of the Authority receiving such requests, these activities may be delegated to authorized designees or delegated organizations, as applicable.
- 8.2.5 Where there is no Management Plan, requests for witnessing of individual tests must be specific enough to provide for identification of the location, timing, and nature of the test to be witnessed. An approved test plan must be provided by the FAA or the CAAC, as appropriate, at least two weeks prior to each scheduled test.
- 8.2.6 The FAA or the CAAC requests for conformity of the test set-up and/or witnessing of tests should be sent to the appropriate FAA or CAAC office which has responsibility for the location of the test. Requests for test witnessing may be sent on FAA Form 8120-10, Request for Conformity, or CAAC Form AAC-121, Request for Conformity and described in the Special Instructions section of the form. FAA and CAAC offices are listed in Appendix A.

8.2.7 Upon completion of test witnessing on behalf of the requesting Authority, the FAA or CAAC will send a report stating the outcome of the test and confirming the test results, as well as any other documentation as notified by the requesting Authority. These reports and documentation will be sent in a timely fashion, to support project milestones identified in the Work Plan.

8.3 <u>Compliance Determinations</u>

- 8.3.1 The FAA or the CAAC may also request that specific compliance determinations be made associated with the witnessing of tests or other activities. Such statements of compliance will be made to the airworthiness or environmental standards of the requesting Authority.
- 8.3.2 The FAA's or the CAAC's statements of conformity will be sent in a formal letter, transmitted electronically, to the requesting FAA or CAAC office.

8.4 Conformity Certifications during Design Approvals

- 8.4.1 The CA may request conformity certifications from the CAA in the State in which the design approval applicant's part supplier is located.
- 8.4.2 Only Authority-to-Authority requests are permissible and Authorities will not respond to a conformity certification request from the applicant, manufacturer, supplier or designee, unless a specific procedure has been jointly agreed upon by both the FAA and the CAAC. Certifications will be conducted only after consultations between the two Authorities on the specific work to be performed, and agreement has been obtained from the CAA in the State in which the supplier is located. Requests for conformity certifications should be limited to prototype/pre-production parts that are of such complexity that they cannot be inspected by the manufacturer or its CAA prior to installation in the final product. Conformity certifications may require the development of a working procedure based on the complexity of the requests, conformity certifications may be delegated to authorized designees or delegated organizations.
- 8.4.3 FAA requests for conformity certifications will be sent on a completed FAA Form 8120-10, Request for Conformity, to the CAAC at the address listed in Appendix A. CAAC requests for conformity certifications will be sent on a completed CAAC Form AAC-121, Request for Conformity, to the FAA responsible office at the address listed in Appendix A.
- 8.4.4 Conformity inspection can be requested to verify that the part is conformed to the type design via drawings, to verify certain types of equipment is installed, or to ascertain certain information on the test setup before the test begin. Any deviation to the type design, test set up, etc. needs to be recorded. The conformity deviation(s) has to be reviewed and approved by an engineer, DER, or Authorized Representative to ensure it will not affect the test data/result for certification credit.
- 8.4.5 Upon completion of all conformity inspections conducted on behalf of the requesting Authority, the FAA or the CAAC will complete and return all documentation to the requesting Authority, as notified. The CAA of the State in which the supplier is located will note all deviations from the requirements

notified by the design approval applicant's CAA on the conformity certification for the particular part. Any nonconformity described as a deviation must be brought to the attention of the FAA or the CAAC for evaluation and disposition. The FAA or the CAAC must receive a report stating the disposition required on each deviation before an FAA Form 8130-3 or CAAC Form AAC-038 is issued.

8.4.6 Neither conformity certification on prototype/pre-production parts, nor inspections on prototype/pre-production parts, should be construed as being an export airworthiness approval, since a conformity certification does not constitute an airworthiness determination. Airworthiness determinations remain the responsibility of the design or production approval holder and the CAA of the State in which the holder is located.

8.5 Other Requests for Assistance or Support

The FAA or the CAAC may request other types of technical assistance. Each request will be handled on a case-by-case basis, as resources permit. Each written request will include sufficient information for the task to be performed and reported back to the requestor. Where the technical assistance is repetitive or long-term, a Special Arrangement may be needed. Upon completion of all surveillance and other support conducted on behalf of the requesting authority, the FAA or the CAAC will complete and return all documentation to the requesting authority, as notified.

8.6 <u>Airworthiness Certificates</u>

There may be certain programs and conditions that warrant technical assistance for the issuance of standard airworthiness certificates so that aircraft may be placed directly into operation from the site of manufacture. The IA may seek assistance from the EA in the final processing and delivery of an airworthiness certificate when the aircraft has been manufactured, granted an Export Certificate of Airworthiness by the EA, and entered on the importing State's registry. This will require the development of a Special Arrangement between the EA and the IA.

8.7 Protection of Proprietary Data

Both authorities recognize that data submitted by a design approval holder is the intellectual property of that holder, and release of that data by the FAA or the CAAC is restricted. The FAA and the CAAC agree that they will not copy, release, or show proprietary data obtained from either Authority to anyone other than an FAA or a CAAC employee without written consent of the design approval holder or other data submitter. This written consent will be obtained by the FAA or the CAAC from the design approval holder through the CAA of the SoD and will be provided to the other Authority.

8.8 <u>Freedom of Information Act (FOIA) Requests and the Government Information Public</u> <u>Regulation (GIPR) Requests</u>

8.8.1 The FAA often receives requests from the public under the United States Freedom of Information Act (FOIA) (5 U.S.C. 552) to release information that the FAA may have in its possession. Each record the FAA has in its possession must be disclosed under the FOIA unless a FOIA exemption applies to that record. Trade secrets and financial or commercial information that is confidential or privileged are examples of criteria that may exempt records from FOIA. Design approval holders' data may include trade secrets or other information that is confidential because release of the information would damage the competitive position of the holder or other person.

- 8.8.2 When the FAA receives a FOIA request related to a product or article of an FAA approval holder or applicant who is located in the P.R.C., the FAA will request the CAAC's assistance in contacting the FAA approval holder or applicant to obtain justification for a determination of what may qualify for exemption under the criteria found in 5 U.S.C. 552.
- 8.8.3 When the CAAC receives requests from the public under the Government Information Public Regulation (GIPR) to release information, each record the CAAC has must be disclosed under the GIPR unless a GIPR exemption applies to that record. CAAC may not publicly disclose records concerning trade secrets or personal privacy. However, records involving trade secrets or personal privacy may be made public by the consent of the holder or if the CAAC considers there may be a major impact on public interest without disclosure.
- 8.8.4 When the CAAC receives a request based upon the GIPR related to a product or article of a CAAC approval holder or applicant who is located in the U.S., the CAAC will request the FAA's assistance in contacting the CAAC approval holder or applicant to obtain justification for a determination of what may qualify for exemption under the GIPR.
- 8.9 Accident/Incident and Suspected Unapproved Parts Investigation Information Requests
 - 8.9.1 When either the FAA or the CAAC needs information for the investigation of service incidents, accidents, or suspected unapproved parts involving a product or article imported under these Implementation Procedures, the request for the information should be directed to the appropriate Authority. In turn, upon receipt of the request for information, the EA will ensure that the requested information is provided in a timely manner.
 - 8.9.2 In case of an incident/accident, the FAA and the CAAC will cooperate to address urgent information needs, and support the SoD's timely investigation and resultant continual safety actions. Following an incident/accident, upon receipt of a request for urgent information, the FAA or the CAAC will provide the requested information. The FAA and the CAAC will establish individual focal points to respond to each other's questions and ensure that timely communication occurs. The FAA or the CAAC may request information directly from a manufacturer if immediate contact with the appropriate focal points cannot be made. In such cases, notification of this action will be made as soon as possible. Either the FAA or the CAAC, as applicable, will assist in ensuring that their manufacturer provides requested information expeditiously.

SECTION IX SPECIAL ARRANGEMENTS AND MANAGEMENT PLANS

9.1 <u>General</u>

- 9.1.1 It is anticipated that urgent or unique situations will develop that have not been specifically addressed in these Implementation Procedures, but which are within the scope of the BASA. When such a situation arises, it will be reviewed by the FAA Aircraft Certification Service International Division and the CAAC Aircraft Airworthiness Certification Department Airworthiness Inspection Division, and a procedure will be developed to address the situation. The procedure will be mutually agreed upon by the FAA and the CAAC in a separate Special Arrangement. If it is apparent that the situation is unique, with little possibility of repetition, then the Special Arrangement will be of limited duration. However, if the situation could lead to further repetitions, then these Implementation Procedures will be revised accordingly by the FAA and the CAAC.
- 9.1.2 When detailed terms and explanations of technical procedures are needed to carry out activities that fall within the scope of these Implementation Procedures or a Special Arrangement under these Implementation Procedures, then those terms and explanations will be set forth in Management Plans agreed to by the FAA and the CAAC.

SECTION X AUTHORITY

- 10.1 These Implementation Procedures enter into force upon signature by the duly authorized representatives of both the FAA and the CAAC, and will remain in force until terminated by either Authority.
- 10.2 These Implementation Procedures replace the earlier Schedule of Implementation Procedures (SIP) dated March 23, 1995, established under the Bilateral Airworthiness Agreement (BAA), dated October 08, 1991.
- 10.3 The FAA and the CAAC agree to the provisions of these Implementation Procedures as indicated by the signatures of their duly authorized representatives.

By

Federal Aviation Administration Department Of Transportation United States Of America Civil Aviation Administration of China People's Republic of China

By

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Title Executive Director, Aircraft Certification Service

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Title Aircraft Airworthiness Certification Department

Date

28/17

10/17/2017 Date

<u>APPENDIX A</u><u>ADDRESSES</u>

The designated focal point offices for these Implementation Procedures are:

For the FAA

International Division (AIR-400) Aircraft Certification Service Federal Aviation Administration 800 Independence Avenue, SW Washington, DC 20591 U.S.A. Tel: 1-202-385-8950 Fax: 1-202-493-5144 E-mail: 9-AWA-AVS-AIR400@faa.gov

For CAAC

Airworthiness Inspection Division of Aircraft Airworthiness Certification Department No.155 Dongsi West Street, Beijing P.R.C., 100710 Tel: 86-10-64091321 Fax: 86-10-64033087 E-mail: libo@caac.gov.cn

FAA Offices

Key Aircraft Certification Offices for these Implementation Procedures

Contact Point for Airworthiness Directives

Mailing Address

Continued Operational Safety Policy Section AIR-6D1 P.O. Box 22082 Oklahoma City, OK 73125 Tel: 1-405-954-4103 Fax: 1-405-954-2209 E-mail: <u>9-amc-faa-mcai@faa.gov</u>

Office Address

Continued Operational Safety Section AIR-6D1 ARB, Room 304 6500 MacArthur Boulevard Oklahoma City, OK, 73125

Contact Point for Article Approval Applications

Los Angeles ACO Branch AIR-790 3960 Paramount Boulevard, Suite 100 Lakewood, CA 90712-4137 Tel: 1-562-627-5200 Fax: 1-562-627-5210

Contact Point for TC Applications

Send to the applicable FAA Standards Branch

Contact Point for STC Applications

Send to the applicable FAA Standards Branch

Policy & Innovation Division

Certification Procedures Branch AIR-6C0 950 L'Enfant Plaza North, SW Washington, DC 20024 Tel: 1-202-385-6348 Fax: 1-202-385-6475 E-mail: 9-AWA-AVS-AIR1600-Coord@faa.gov

Engine and Propeller Standards Branch AIR-6A0 1200 District Avenue Burlington, MA 01803 Tel: 1-781-238-7110 Fax: 1-781-238-7199

Regulatory and policy responsibility for all aircraft engines, propellers, and auxiliary power units.

Rotorcraft Standards Branch AIR-680 10101 Hillwood Parkway Fort Worth, TX 76177 Tel: 1-817-222-5100 Fax: 1-817-222-5959

Regulatory and policy responsibility for powered lift, normal and transport category rotorcraft.

Small Airplane Standards Branch AIR-690 DOT Building 901 Locust Avenue Room 301 Kansas City, MO 64106 Tel: 1-816-329-4100 Fax: 1-816-329-4106

Regulatory and policy responsibility for:

- 1. Airplanes weighing less than 12,500 pounds and having passenger configurations of 9 seats or less;
- 2. Commuter airplanes weighing 19,000 pounds or less, with passenger configurations of 19 seats or less; and
- 3. Gliders, airships, manned free balloons, and VLA.

Transport Airplane Standards Branch

AIR-670 1601 Lind Avenue, SW Renton, WA 98055-4056 Tel: 1-425-227-2100 Fax: 1-425-227-1100

Regulatory and policy responsibility for all transport category airplanes.

Applications for VLA should be sent to:

Chicago ACO Branch AIR-7C0 2300 East Devon Avenue, Room 107 Des Plaines, IL 60018 Tel: 1-847-294-7357 Fax: 1-847-294-7834
System Oversight Division

New England MIO Branch

For the States of: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.

AIR-8A0 1200 District Avenue Burlington, MA 01803 Tel: 1-781-238-7180 Fax: 1-781-238-7898

Southwest MIO Branch

For the States of: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

AIR-880 10101 Hillwood Parkway Fort Worth, TX 76177 Tel: 1-817-222-5180 Fax: 1-817-222-5136

Central MIO Branch

For the States of: Alabama, Alaska, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Ohio, South Carolina, South Dakota, Tennessee, and Wisconsin.

AIR-890 DOT Building 901 Locust Avenue, Room 301 Kansas City, MO 64106 Tel: 1-816-329-4180 Fax: 1-816-329-4157

Northwest MIO Branch

For the States of: Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

AIR-870 1601 Lind Avenue, SW Renton, WA 98057-3356 Tel: 1-425-227-2108 Fax: 1-425-227-1100

Requests to FAA for Conformity Inspections

Small Airplanes:	<u>9-ACE-180-FRFC@faa.gov</u>
Rotorcraft:	9-ASW-180-FRFC@faa.gov
Engines & Propellers:	9-ANE-180-FRFC@faa.gov
Transport Airplanes:	9-ANM-108-FRFC@faa.gov

Environmental Policy and Regulations

Office of Environment and Energy AEE-1 800 Independence Avenue, SW Washington, DC 20591 Tel: 1-202-267-3576 Fax: 1-202-267-5594

FM&D/SDR Reports

Copies of U.S. FM&D/SDR reports are available from the FAA Mike Monroney Aeronautical Center, Aviation Data Systems Branch, AFS-620.

FAA ACO Branches

Anchorage ACO Branch AIR-770 222 West 7th Avenue, Unit 14, Room 128 Anchorage, AK 99513 Tel: 1-907-271-2669 Fax: 1-907-271-6365

Boston ACO Branch AIR-7B0 1200 District Avenue Burlington, MA 01803 Tel: 1-781-238-7150 Fax: 1-781-238-7170 Atlanta ACO Branch AIR-7A0 107 Charles W. Grant Parkway, Suite 201 Hapeville, GA 30354 Tel: 1-404-474-5500 Fax: 1-404-474-5606

Chicago ACO Branch AIR-7C0 2300 East Devon Avenue, Room 107 Des Plaines, IL 60018 Tel: 1-847-294-7357 Fax: 1-847-294-7834

Denver ACO Branch AIR-7D0 Technical Operations Center (TOC) 26805 E. 68th Avenue, Room 214 Denver, CO 80249 Tel: 1-303-342-1080 Fax: 1-303-342-1088 E-mail: 9-Denver-Aircraft-Cert@faa.gov

DSCO Branch

AIR-7J0 10101 Hillwood Parkway Fort Worth, TX 76177 Tel: 1-817-222-5190 Fax: 1-817-222-4960

New York ACO Branch

AIR-7H0 1600 Stewart Avenue, Suite 410 Westbury, NY 11590 Tel: 1-516-228-7300 Fax: 1-516-794-5531 E-mail: <u>7-AVS-NYA-ACO@faa.gov</u>

Wichita ACO Branch

AIR-7K0 1801 Airport Road Room 100, Mid-Continent Airport Wichita, KS 67209 Tel: 1-316-946-4100 Fax: 1-316-946-4107

BASOO Branch

AIR-860 1601 Lind Avenue SW Renton, WA 98057-3356 Tel: 1-425-917-6561 Fax: 1-425-917-6565

Engine Certification Office Branch AIR-7E0 1200 District Avenue Burlington, MA 01803 Tel: 1-781-238-7140 Fax: 1-781-238-7199

 Fort Worth ACO Branch

 AIR-7F0

 10101 Hillwood Parkway

 Ft. Worth, TX 76177

 Tel:
 1-817-222-5140

 Fax:
 1-817-222-5245

Los Angeles ACO Branch AIR-790 3960 Paramount Boulevard, Suite 100 Lakewood, CA 90712-4137 Tel: 1-562-627-5200 Fax: 1-562-627-5210

Seattle ACO Branch

AIR-780 1601 Lind Avenue SW Renton, WA 98057-3356 Tel: 1-425-917-6400 Fax: 1-425-917-6590 E-mail: <u>9-ANM-SACO-</u> <u>Foreign-</u> Validation@faa.gov

CAAC Offices Key Contacts for these Implementation Procedures

Contact Point for Airworthiness Directives, Article Approval Applications, VTC Applications, VSTC Applications

Aircraft Certification Division of Aircraft Airworthiness Certification Department No.155 Dongsi West Street, Beijing, P.R.C., 100710 Tel: 86-10-64091333 Fax: 86-10-64033087 E-mail: zhangsen@caac.gov.cn

CAAC Headquarters Aircraft Airworthiness Certification Department

<u>Airworthiness Inspection Division</u> No. 155 Dongsi West Street, Beijing, P.R.C., 100710 Tel: 86-10-64091321 Fax: 86-10-64033087 E-mail: libo@caac.gov.cn

<u>Aircraft Certification Division</u> No. 155 Dongsi West Street, Beijing, P.R.C., 100710 Tel: 86-10-64091333 Fax: 86-10-64033087 E-mail: zhangsen@caac.gov.cn

Propulsion Certification Division No. 155 Dongsi West Street, Beijing, P.R.C., 100710 Tel: 86-10-64091308 Fax: 86-10-64033087 E-mail: <u>guoqiang@caac.gov.cn</u>

CAAC Manufacturing Inspection Offices

Requests to CAAC for Conformity Inspections

<u>Airworthiness Certification Center of CAAC</u> No.3, Huajiadi East Road, Beijing, P.R.C., 100162 Tel: 86-10-58172916 Fax: 86-10-58172974 E-mail: <u>shenxm_acc@caac.gov.cn</u> Shanghai Aircraft Airworthiness Certification Center of CAAC No.128, Konggang First Road, Shanghai, P.R.C., 200335 Tel: 86-21-22326124 Fax: 86-21-22322252 E-mail: <u>guxin_hd@caac.gov.cn</u>

<u>Shenyang Aircraft Airworthiness Certification Center of CAAC</u> No.3, Xiaoheyan Road, Dadong District, Shenyang, P.R.C., 110043 Tel: 86-24-88299076 Fax: 86-24-88299189 E-mail: <u>luoym@syacc.org</u>

<u>Airworthiness Certification Division of North China Regional Administration of CAAC</u> No.10, Capital Airport Road, Chaoyang District, Beijing, P.R.C., 110621 Tel: 86-10-64590387 Fax: 86-10-64596413 E-mail: zongjie_hb@caac.gov.cn

<u>Airworthiness Certification Division of East China Regional Administration of CAAC</u> No.300, Yingbin Second Road, Changning District, Shanghai, P.R.C., 200335 Tel: 86-21-22326127 Fax: 86-21-62689859 E-mail: qianhuide_hd@caac.gov.cn <u>Airworthiness Certification Division of Central South China Regional Administration of CAAC</u> No.163, Yunxiao Road, Baiyun District, Guangzhou, P.R.C., 510405 Tel: 86-21-86122228 Fax: 86-20-86304190 E-mail: lianghaiming_zn@caac.gov.cn

<u>Airworthiness Certification Division of North East China Regional Administration of CAAC</u> No.3, Xiaoheyan Road, Dadong District, Shenyang, P.R.C., 110043 Tel: 86-24-88299237 Fax: 86-24-88293939 E-mail: wanght@dbcaac.gov.cn

Airworthiness Certification Division of North West China Regional Administration of CAAC No.27, Taoyuan South Road, Lianhu District, Xian, P.R.C., 710082 Tel: 86-29-88791074 Fax: 86-29-88793018 E-mail: lilw@nwcaac.gov.cn Airworthiness Certification Division of South West China Regional Administration of CAAC No.8, Yunling Road, Shuangliu District, Chengdu, P.R.C., 610200 Tel: 86-28-85710145 Fax: 86-28-85710155 E-mail: niyongtao_xn@caac.gov.cn

<u>Airworthiness Division of Xinjiang Administration of CAAC</u> No.46, Yingbin Road, Xinshi District, Wulumuqi, P.R.C., 830016 Tel: 86-991-3802279 Fax: 86-991-3804024 E-mail: sunjinling_xj@caac.gov.cn

FM&D/SDR Reports

Copies of P.R.C. FM&D/SDR reports are available from the CAAC Flight Standard Department

APPENDIX B LIST OF SPECIAL ARRANGEMENTS

[reserved]

APPENDIX C CROSS-REFERENCE OF STANDARDS

Product	FAA Regulations	CAAC Standards
	14 CFR	
Aircraft Emissions and Noise	Part 21 section 21.93 (b), (c)	CCAR-34 Fuel venting and exhaust
	Part 34 Fuel venting and exhaust	CCAR-36
	Part 36 Noise	
Gliders & Powered Gliders	Part 103	AC-21-07
Small Airplanes	Part 23	CCAR-23
Very Light Airplanes	Part 103	AC-21-05
(Light Sport Aircraft in the U.S.)		
Transport Category Airplanes	Part 25	CCAR-25
Continued Airworthiness and Safety Improvements for Transport Category Airplane	Part 26	CCAR-26
Normal Category Rotorcraft	Part 27	CCAR-27
Transport Category Rotorcraft	Part 29	CCAR-29
Manned Free Balloons	Part 31	CCAR-31
Aircraft Engines	Part 33	CCAR-33
Propellers	Part 35	CCAR-35
Articles & Parts	Part 21, Subpart O	CCAR-21, Chapter 9 and 10
Airships	Part 21	AC-21-09

The FAA's Regulatory & Guidance Library (RGL) contains many aviation regulatory, certification, and safety information documents: <u>http://rgl.faa.gov</u>

The CAAC's regulations and guidance material is available at http://www.caac.gov.cn/en/SY/

APPENDIX D DOCUMENTS SUPERSEDED OR CANCELLED BY THIS IPA

[Reserved]

APPENDIX E LIST OF ACRONYMS

AC	Advisory Circular
AD	Airworthiness Directive
AEG	Aircraft Evaluation Group
AFM	Aircraft Flight Manual
AIR-400	Aircraft Certification Service, International Division
AMOC	Alternative Methods/Means of Compliance
ATC	Additional Technical Condition
BAA	Bilateral Airworthiness Agreement
BASA	Bilateral Aviation Safety Agreement
CA	Certificating Authority
CAA	Civil Aviation Authority
CAAC	Civil Aviation Administration of China
CAAC-AAD	Civil Aviation Administration of China, Aircraft Airworthiness Department
CCAR	China Civil Aviation Regulations
CCV	Concurrent Validation
CFR	Code of Federal Regulations
14 CFR	Title 14, Code of Federal Regulations
COS	Continued Operational Safety
CS	Certification Specifications
CTSOA	Chinese Technical Standard Order Authorization
EA	Exporting Authority
EASA	European Aviation Safety Agency
FAA	Federal Aviation Administration
FM&D	Failures, Malfunctions and Defects
FOIA	Freedom of Information Act (U.S.)
FSDO	Flight Standards District Office
FTV	Full Technical Validation
IA	Importing Authority
ICA	Instructions for Continued Airworthiness
ICAO	International Civil Aviation Organization
IPA	Implementation Procedures for Airworthiness
JAR	Joint Aviation Requirements
LODA	FAA Letter of TSO Design Approval
LTV	Limited Technical Validation

MCAI	Mandatory Continuing Airworthiness Information
MDA	Modification of Design Approval
MMEL	Master Minimum Equipment List
MOC	Method of Compliance
P.R.C.	People's Republic of China
PCM	Project Certification Manager
PM	Project Manager
PMA	Parts Manufacturer Approval
SCV	Sequential Validation
SDR	Service Difficult Reports
SIP	Schedule of Implementation Procedures
SoD	State of Design
SoM	State of Manufacture
SoR	State of Registry
STC	Supplemental Type Certificate
SV	Streamlined Validation
ТС	Type Certificate
TCDS	Type Certificate Data Sheet
TDA	Type Design Approval
TSO	Technical Standard Order
TSOA	Technical Standard Order Authorization
U.S.	United States of America
VA	Validating Authority
VDA	Validation of Design Approval
VLA	Very Light Airplanes