

#### General Administration of Civil Aviation of China (CAAC)

Order of the General Administration of Civil Aviation of China No. 183

# CERTIFICATION PROCEDURES FOR CIVIL AVIATION PRODUCTS AND PARTS

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## CERTIFICATION PROCEDURES FOR CIVIL AVIATION PRODUCTS AND PARTS

#### Subpart A - General

#### §21.1 Purpose and authority.

This part is stipulated to ensure airworthiness of civil aviation products and parts under the authority of "Civil Aviation Law of The People's Republic of China", "Regulations for Airworthiness of Civil Aircraft of The People's Republic of China" and "The Decision of State Council to Set up Administration Permission to Administrative Examination and Approval Project Needing to Reserve Indeed".

#### §21.2 Applicability.

This part prescribes type certificates, production certificates and airworthiness certificates for civil aviation products and parts, which includes application, issue and management of following certificates:

- (a) Type certificates,
- (b) Type Design Approvals,
- (c) Supplement Type Certificates,
- (d) Modification and Design Approvals,
- (e) Validation of Type Certificates,
- (f) Validation of Supplement Type Certificates,
- (g) Validation of Design Approvals of Civil Aviation Materials, Parts and Appliances,
- (h) Production Certificates,
- (i) Approvals of Production Inspection System,
- (j) Part Manufacturing Approvals,
- (k) CAAC Technical Standard Order Authorization,
- (1) Airworthiness Certificates,
- (m) Export Airworthiness Certificates,
- (n) Validation of Foreign Airworthiness Certificates,
- (o) Special Flight Permits, and
- (p) Airworthiness Approval tags

#### §21.3 Definitions.

As used in this part:

- (a) Administrator: means the General Administration of Civil Aviation of China (hereafter referred to as CAAC) and the CAAC regional administrations.
- (b) Civil aviation products: except as otherwise defined in subpart I, means civil aircraft, aircraft engines, and propellers.
- (c) Parts: means any material, instrument, machine equipment, detail part, component, assembly, accessory, and communication materials used or to be used on civil aircraft.
- (e) Design compliance: means that the design of products and/or parts complies with prescribed airworthiness regulations and requirements.
- (f) Conformity: means that the manufacture, test, and installation etc. of products and/or parts conform to the approved design.

#### §21.4 Retroactive requirements.

The retroactive requirements of airworthiness certification for civil aviation products are as follows:

- (a) Civil aviation products designed and manufactured on or after June 1, 1987 must comply with provisions of this part.
- (b) For civil aviation products which had been design qualified on or before June 1, 1987, under applicable PRC standards when used in civil aviation activities:
- (1) It may not be necessary to make an application for a new type certificate or type design approval, but certain alterations may be required, or operational limitations may be imposed by the authority, as deemed necessary to correct defects which impact the safety and airworthiness of those products;
- (2) For any design change on civil aviation products described above after June 1, 1987, subpart C of this part applies;
- (3) If the same civil aviation product as described above is produced subsequently by its designer or manufacturer, subparts D and E of this part apply;
- (4) For military aviation products which had been granted PRC level design qualification before June 1, 1987, and which are to be manufactured and used for civil aviation activities subsequent to that date, subparts B, D, E and F of this part apply.

#### §21.5 Certification procedure

An applicant for an airworthiness certificate for civil aviation products and parts according to §21.2 of this part shall submit the application letter and required files in a uniform form specified by the CAAC-AAD.

After receiving the application, the CAAC shall establish a validation team to carry on a primary review, and notify the applicant in writing whether the application is accepted or not within 5 working days. If the application is rejected, the CAAC shall show the reasons in writing.

The applicant shall pay correlated charges according to the notification.

After ensuring that the applicant has pay the correlated charges, the CAAC shall establish a validation committee and team or inspector to carry on inspection, and notify the applicant in writing whether the airworthiness certificate is issued or not within 20 working days after receiving the inspection report. If the certificate is not issued, the CAAC shall show the reasons in writing.

#### **§21.6** Petitions for exemptions.

- (a) Any person who is restricted by related provisions of airworthiness regulations and environmental protection requirements may petition the CAAC-AAD (Aircraft Airworthiness Department) for a temporary or permanent exemption from some of those regulations for technical reason.
- (b) Each petition submitted to the CAAC-AAD shall have the following information as a minimum:
- (1) The airworthiness regulations, environmental protection requirements and specific provisions thereof, from which the exemption is sought.
- (2) The reason why the granting is requested and the action to be taken, or the operational limitations to be imposed by the petitioner to provide an equal level of safety.
- (3) The extent of the relief sought including the description of each aircraft and the proposed period during which the exemption applies.
- (4) The name and address of the petitioner include the name of the petitioner's legal delegate and his occupation, as applicable.
- (c) The CAAC-AAD shall establish a validation team to carry on a thorough review of the petition ,and after receiving the reports from the validation team, notify the petitioner in writing whether the petition for exemption is granted or not.

#### §21.7 Flight manual.

Each holder of a type certificate, a type design approval, a supplemental type certificate, a modification and design approval, or the license of a type certificate, or the holder of a validation of type certificate, a validation of supplement type certificate shall make available to

the user, at the time of delivery of that aircraft, a current CAAC approved flight manual.

#### §21.8 Reporting of failures, malfunctions and defects.

Occurrences of failures, malfunctions and defects in any civil aviation product, part or article must be reported as follows:

- (a) The holder of a type certificate, a type design approval, a supplemental type certificate, a modification and design approval, a parts manufacturer approval, or a CAAC technical standard order authorization, or the license of a type certificate or type design approval, shall report any failure, malfunction, or defect in any product, part or article manufactured by it that it determines has resulted in any of the occurrences listed in paragraph (d) of this section, to the CAAC or its geographically responsible regional administration.
- (b) The holder of a type certificate, a type design approval, a supplemental type certificate, a modification and design approval, a production certificate, a approval of production inspection system, a parts manufacturer approval or a CTSOA, or the license of a type certificate or a type design approval, shall report any defect in any civil aviation product, part, or article manufactured by it that has left its quality control system and that determines could result in any of the occurrences listed in paragraph (d) of this section, to the CAAC or its geographically responsible regional administration.
- (c) In case of occurrences described in paragraph (d) of this section, which are determined to have been caused by improper maintenance or improper usage, or which are known had been reported to the CAAC or its geographically responsible regional administration by the operator or any person, the requirements of paragraph (b) of this section do not apply.
- (d) The following occurrences must be reported as provided in paragraph (a), (b) and (e) of this section:
  - (1) Fires caused by an aircraft system or equipment failure, malfunction, or defect.
- (2) An engine exhaust system failure, malfunction, or defect which causes damage to the engine, adjacent aircraft structure, equipment, or components.
- (3) The accumulation or circulation of toxic or noxious gases in the crew compartment or passenger cabin.
  - (4) A malfunction, failure or defect of a propeller control system.
  - (5) A propeller or rotorcraft hub, or blade structural failure.
  - (6) Flammable fluid leakage in areas where an ignition source normally exists.
  - (7) A brake system failure caused by structural or material failure during operation.
  - (8) A significant aircraft primary structural defect or failure caused by any autogenous

condition (fatigue, understrength, corrosion, etc.).

- (9) Any abnormal vibration or buffeting caused by a structural or system malfunction, defect, or failure.
  - (10) An engine failure.
- (11) Any structural or flight control system malfunction, defect, or failure which causes an interference with normal control of the aircraft for which derogates the flying qualities.
- (12) A complete loss of more than one electrical power generating system or hydraulic power system during a given operation of the aircraft.
- (13) A failure or malfunction of more than one attitude, airspeed, or altitude instrument during a given operation of the aircraft.
- (e) The holder of a certificate or the license of a certificate in paragraph (a) and (b) of this section shall make reports in a specified form to the CAAC or its geographically responsible regional administration within 48 hours after it has determined that the failure, malfunction, or defect required to be reported has occurred. It shall include as much of the following information as is available and applicable:
  - (1) Aircraft serial number.
- (2) When the failure, malfunction or defect is associated with an appliance, the serial number and model designation of that appliance.
- (3) When the failure, malfunction or defect is associated with an engine and/or propeller, the engine or propeller serial number.
  - (4) Civil aviation product model.
  - (5) Identification of the part, component, or system involved, including part number.
  - (6) Nature of the failure, malfunction or defect.
- (7) When and where the failure, malfunction, or defect occurred, and an investigation report of the preliminary reason.

## Subpart B - Type Certificates, Type Design Approval, Validation of Type Certificates and Validation of Supplemental Type Certificates

#### §21.11 Applicability.

This part prescribes application and issue of following certificates, and management of the holder of these certificates:

- (a) Type certificates and/or type design approvals of aircraft.
- (b) Type certificates of aircraft engine or propeller.
- (c) Validation of type certificates of civil aircraft, engine and/or propeller.
- (d) Validation of supplement type certificates of civil aircraft, engine and/or propeller.

#### §21.13 Eligibility of proposer for type certificates and/or type design approvals.

Any person capable of civil aviation products design may apply for a type certificate and/or type design approval to CAAC.

#### §21.15 Application for type certificates or type design approvals.

An applicant for a type certificate and/or a type design approval must submit application together with the following information:

- (a) An application for an aircraft type certificate and/or type design approval must be accompanied by a description of the aircraft design features, a three-view drawing, and available preliminary basic data of that aircraft.
- (b) An application for an aircraft engine type certificate must be accompanied by a description of the engine design features, the engine operating characteristics, and the proposed engine operating limitations.
- (c) An application for a propeller type certificate must be accompanied a description of the propeller design features, its operating principles and the proposed operating limitations.
  - (d) Applicable compliance substantiation plans.

#### **§21.16** Special conditions.

If the related airworthiness standards do not contain adequate or appropriate safety requirements for a civil aviation product being submitted for a type certification because of following reasons, the CAAC-AAD will prescribe and issue special conditions for that product:

- (a) Civil aviation products have novel or unusual design feature.
- (b) The proposed purpose of civil aviation products is special.

(c) The products maybe unsafe, judged from records of similar products or similar design features products in use.

The special conditions shall have a level of safety equivalent to applicable airworthiness regulations.

#### §21.17 Designation of applicable regulations.

Applicable regulations must be designated as follows for an application for a type certificate:

- (a) If §23.2 of CCAR-23, §25.2 of CCAR-25, §27.2 of CCAR-27, §29.2 of CCAR-29, CCAR-34 and CCAR-36 do not provide related regulations, an applicant for a type certificate or a type design approval must show that the aircraft, aircraft engine and/or propeller concerned meets:
- (1) The applicable airworthiness standards and environment protection requirements that are effective on the date of application for the type certificate or the type design approval.
  - (i) Specified by the CAAC-AAD.
- (ii) The applicable airworthiness standards and environment protection requirements selected or according with the requirements of this section after the date of application.
  - (2) Special conditions prescribed by the CAAC.
- (b) For special classes of aircraft, including the engines and propellers installed thereon (e.g., gliders, airships, and other nonconventional aircraft), for which airworthiness standards have not been issued by CAAC. For special classes of aircraft including the engines and/or propellers installed thereon, the applicable requirements will be the portions of those airworthiness requirements contained in CCAR-23, 25, 27, 29, 31, 33, and 35 which are applicable, or any other airworthiness requirements that the CAAC-AAD finds are applicable to the special type design and its proposed purpose, and may provide an equivalent level of safety to those parts.
- (c) An application for a type certificate of a transport category aircraft is effective for 5 years and an application for a type certificate and/or a type design approval of any other category aircraft and a type certificate of aircraft engines, propellers is effective for 3 years, unless an applicant shows, at the time of application that his product requires a longer period of time for design, development, and testing, and the CAAC approves a longer period.
- (d) In a case where a type certificate has not been issued, or it is clear that a type certificate will not be issued within the time limit established under §21.17, the applicant may:
  - (1) File a new application for a type certificate and/or a type design approval and comply

with all the provisions of paragraph (a) of this section; or

- (2) File for an extension of the original application. In this circumstance, the applicant must show that this design is in compliance with applicable airworthiness regulations and environmental protection requirements which are effective on a date, to be selected by the applicant, not earlier than the date which precedes the date of expiration of the application for extension by the time limit established under §21.17 for the original application.
- (e) If an applicant elects to comply with an amendment to an applicable airworthiness regulation and environmental protection requirement that is effective after the filing of the application for a type certificate and/or a type design approval, he must also comply with any other amendment that the CAAC-AAD finds is directly related.
- (f) For preliminary category, including the engines and/or propellers installed thereon, the applicable requirements will be portions of the airworthiness requirements contained in CCAR-23, 25, 27, 29, 33 and 35 which are applicable, or any other airworthiness requirements that the CAAC finds are applicable to the special type design, and its proposed purpose, and may provide an equivalent level of safety to those parts.

#### §21.19 Changes requiring a new type certificate and/or a type design approval.

Each person who proposes to change a product must apply for a new type certificate and/or a type design approval if the proposed change in design, power, thrust, or weight is so extensive that a substantially complete investigation of compliance with the applicable regulations is required.

## §21.21 Issue of type certificate: normal, utility, acrobatic, commuter, and transport category aircraft; manned free balloons; special classes of aircraft; aircraft engines; propellers.

An applicant is entitled to a type certificate for an aircraft in the normal, utility, acrobatic, commuter, or transport category, or for a manned free balloon, special class of aircraft, or an aircraft engine or propeller, if:

- (a) The applicant submits the type design, test reports, and computations necessary to show that the civil aviation product to be certificated meets the applicable airworthiness regulations, environment protection requirements and special conditions prescribed by the CAAC-AAD.
- (b) Upon examination of the type design, and after completion of all tests and inspections, the CAAC finds that the type design and the civil aviation product meet the applicable airworthiness regulations, special conditions, and applicable environmental protection

requirements, or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and

- (c) The applicant for a type certificate and/or a type design approval for a military aviation product to be used in civil aviation submit its previous qualifications, and acceptance, and service record, on the basis of which the product shows substantially the same level of airworthiness regulations requirements. For a product that has shown equivalent level of safety by its military service record, or may ensure operational safety under appropriately prescribed limitations, the CAAC may relieve the applicant from strict compliance with some applicable regulations which would impose a severe burden on the applicant.
- (d) For an aircraft concerned, there is no feature or characteristic that makes it unsafe for the inspections category in which certificate is applied.

#### §21.24 Issue of type design approval: primary category aircraft.

An applicant is entitled to a type design approval for a primary category aircraft, if:

- (a) The special aircraft meets all the following conditions:
- (1) Is unpowered; is an airplane powered by a single, naturally aspirated engine with a 113-km/h (61-knot) or less stall speed as defined in §23.49; or is a rotorcraft with a 29.3-kg/square meter (6-pound per square foot) main rotor disc loading limitation, under sea level standard day conditions;
- (2) Weighs not more than 1125 kg (2,700 pounds); or, for seaplanes, not more than 1530.9 kg (3,375 pounds);
- (3) Has a maximum seating capacity of not more than four persons, including the pilot; and
  - (4) Has an unpressurized cabin.
  - (b) An applicant is entitled to a type design approval for a primary category aircraft, if:
- (1) The applicant submits the type design, test reports, and computations necessary to show that the civil aviation product to be certificated meets the applicable airworthiness regulations, environment protection requirements and special conditions prescribed by the CAAC-AAD.
- (2) Upon examination of the type design, and after completion of all tests and inspections, the CAAC finds that the type design and the civil aviation product meet the applicable airworthiness regulations, special conditions, and applicable environmental protection requirements, or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and

(3) The aircraft has no feature or characteristic that makes it unsafe for its intended use.

#### §21.25 Issue of type design approval: restricted category aircraft.

- (a) Restricted category aircraft is design for special purpose operations. An applicant is entitled to a type design approval for a p restricted category aircraft, if:
- (1) The applicant submits the type design, test reports, and computations necessary to show that the civil aviation product to be certificated meets the applicable airworthiness regulations, environment protection requirements and special conditions prescribed by the CAAC-AAD, except for the requirements that CAAC finds which are unrelated to the special aircraft.
- (2) Upon examination of the type design, and after completion of all tests and inspections, the CAAC finds that the type design and the civil aviation product meet the applicable airworthiness regulations, special conditions, and applicable environmental protection requirements, or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and
  - (3) The aircraft has no feature or characteristic that makes it unsafe for its intended use.
  - (b) For the purposes of this section, "special purpose operations" includes
  - (1) Agricultural (spraying, dusting, and seeding etc);
  - (2) Forest and wildlife conservation;
  - (3) Aerial surveying (photography, mapping, and oil and mineral exploration);
  - (4) Patrolling (pipelines, power lines, and canals);
  - (5) Weather control (cloud seeding);
  - (6) Aerial advertising; and
  - (7) Any other operation specified by the CAAC.

## §21.29 Issue of Validation of Type Certificates and Validation of Supplement Type Certificates.

Import civil aviation products to be used must obtain validation of type certificates and/or validation of supplement type certificates issued by the CAAC. The holder of type certificates and/or supplement type certificates issued by the airworthiness administration of the exporting country can submit an applicant to the CAAC for a validation of type certificates and/or validation of supplement type certificates, as applicable. The following provisions apply:

(a) Prior to the issue of a validation of type certificates and/or validation of supplement type certificates for an import product, it must be confirmed by the CAAC that PRC has signed -10-

an airworthiness agreement, a memorandum or technical agreement for the acceptance of these products for export and import with the exporting country.

- (b) An applicant for a validation of type certificate and/or a validation of supplement type certificate must submit, as a minimum, the following information
- (1) An application for a validation of type certificate and/or a validation of supplement type certificate which is made on a form prescribed by the CAAC;
- (2) The type certificate, type certificate data sheet, and production certificate for that product, issued by the authority of the exporting country;
- (3) An approval for the airworthiness regulations and amendments thereof, and any special conditions and exemptions (if any) under which the type design is made;
  - (4) Applicable portions of the substantiation data prescribed in §21.21(a) of this part;
- (5) A statement that the product meets the basis of certificate specified by the CAAC-AAD;
  - (6) Any other information the CAAC-AAD deems necessary.
- (c) An application for a validation of type certificate of a transport category aircraft is effective for 5 years and an application for a validation of type certificate of any other category aircraft, engines, and propellers is effective for 3 years from the time of application.
- (d) A validation of type certificate and/or a validation of supplement type certificate are issued if the special civil aviation product meets the following requirements, upon that CAAC review all the information prescribed in paragraph (b) of this section after conducting all necessary inspections at the facility.
- (1) The applicable airworthiness requirements of this subchapter as designated in §21.17, or the applicable airworthiness requirements of the country in which the product was manufactured and any other requirements the CAAC-AAD may prescribe to provide a level of safety equivalent to that provided by the applicable airworthiness requirements of this subchapter as designated in §21.17;
- (2) The applicable environment protection requirements of this subchapter as designated in §21.17, or environment protection requirements of the country in which the product was manufactured, and any other requirements the CAAC-AAD may prescribe to provide noise, fuel venting and exhaust emission levels no greater than those provided by the applicable aircraft noise, fuel venting, and exhaust emission requirements of this subchapter as designated in §21.17; and
- (e) The manuals, placards, listings, and instrument markings required by the applicable airworthiness (and noise, where applicable) requirements are presented in the Chinese or

English language, and the following items must be presented in the Chinese language:

- (1) All the literal markings or placards of tips, warnings and notifications marking to the passengers.
- (2) All the literal markings or placards of emergency exits and doors position to the passengers, or rescuer out of the aircraft
  - (3) All the instructions and directions of emergency sets for the passengers to use.
- (f) The validation of type certificate and the validation of supplement type certificate are not transferable.

#### §21.31 Type design.

The type design consists of:

- (a) The drawings and specifications, and a listing of those drawings and specifications, necessary to define the configuration and the design features of the civil aviation product shown to comply with the related airworthiness regulation and environment protection requirements;
- (b) Information on dimensions, materials, and processes necessary to define the structural strength of the civil aviation product;
- (c) The Airworthiness Limitations section of the Instructions for Continued Airworthiness as required by CCAR-23, 25, 27, 29, 31, 33, and 35; and as specified in the applicable airworthiness criteria for special classes of aircraft defined in §21.17(b); and
- (d) Any other data necessary to allow, by comparison, the determination of the airworthiness and environment protection requirement (where applicable) of later civil aviation products of the same type.

#### §21.33 Inspection and tests.

Provisions of inspection and tests include:

- (a) Each applicant must allow the CAAC to make any inspection and any flight and ground test necessary to determine compliance with the applicable requirements of the civil aviation regulation of China (CCAR), and:
- (1) No civil aviation product or part thereof may be presented to the CAAC for test unless compliance with paragraphs (b) (2) through (b) (4) of this section unless otherwise authorized by the CAAC.
- (2) No change may be made to a civil aviation product or part that is presented to the CAAC for test thereof in the time that compliance with paragraphs (b) (2) through (b) (4) of this section unless otherwise authorized by the CAAC.

- (b) Each applicant must make all inspections and tests necessary to determine:
- (1) Compliance with the applicable airworthiness regulations and environment requirements;
  - (2) That materials and products conform to the specifications in the type design;
  - (3) That parts of the products conform to the drawings in the type design; and
- (4) That the manufacturing processes, construction and assembly conform to those specified in the type design.

#### §21.35 Flight tests.

Provisions of flight tests include:

- (a) Each applicant must make the tests listed in paragraph (b) of this section. Before making the tests the applicant must show to the CAAC:
  - (1) Compliance with the applicable structural requirements of airworthiness regulations;
  - (2) Completion of necessary ground inspections and tests;
  - (3) That the aircraft conforms with the type design; and
  - (4) The applicant completed necessary flight tests and submitted test reports to the CAAC.
- (b) Upon showing compliance with paragraph (a) of this section, the applicant must make all flight tests that the CAAC finds necessary:
  - (1) To determine compliance with the airworthiness regulations; and
- (2) For aircraft to be certificated under airworthiness regulations, to determine whether there is reasonable assurance that the aircraft, its components, and its equipment are reliable and function properly.
- (c) Each applicant must, if practicable, make the tests prescribed in paragraph (b) (2) of this section upon the aircraft that was used to show compliance with:
  - (1) Paragraph (b) (1) of this section; and
- (2) For rotorcraft, the rotor drive endurance tests prescribed in §27.923 or §29.923 of CCAR, as applicable.
- (d) Each applicant must show for each flight test (except in a glider or a manned free balloon) that adequate provision is made for the flight test crew for emergency egress and the use of parachutes.
- (e) An applicant must discontinue flight tests under this section until he shows that corrective action has been taken, whenever:
- (1) The applicant's test pilot is unable or unwilling to make any of the required flight tests; or

- (2) Items of noncompliance with requirements are found that may make additional test data meaningless or that would make further test unduly hazardous.
  - (f) The flight tests prescribed in paragraph (b) (2) of this section must include:
- (1) For aircraft incorporating turbine engines of a type not previously used in a type certificated aircraft or a type design approval, at least 300 hours of operation with a full complement of engines that conform to a type certificate; and
  - (2) For all other aircraft, at least 150 hours of operation.

#### §21.37 Flight test pilot.

Each applicant for a type certificate or a type design approval according to the CCAR-23, 25, 27, 29 must provide a person holding an appropriate pilot certificate to make the flight tests required by this part.

#### §21.39 Flight test instrument calibration and correction report.

Provisions of flight test instrument calibration and correction report include:

- (a) Each applicant for a type certificate according to the CCAR-23, 25, 27, 29 must submit a report to the CAAC showing the computations and tests required in connection with the calibration of instruments used for test purposes and in the correction of test results to standard atmospheric conditions.
- (b) Each applicant must allow the CAAC to conduct any flight tests that he finds necessary to check the accuracy of the report submitted under paragraph (a) of this section.

## §21.41 Type certificates, type design approvals, validation of type certificates and validation of supplement type certificates.

The type certificates, type design approvals, validation of type certificates and validation of supplement type certificates are considered to include the type design, the operating limitations, the certificate data sheet, the applicable airworthiness regulations and environment protection requirements with which the CAAC records compliance, and any other conditions or limitations prescribed for the civil aviation product.

Besides, the validation of type certificates and validation of supplement type certificates are considered to include the applicable information issued by the exporting country.

#### §21.45 Privileges.

The holder of a type certificate and/or a type design approval, or licensee of a type -14

certificate and/or a type design approval for a product may:

- (a) In the case of aircraft, upon compliance with applicable provisions of subpart F of this part, obtain an airworthiness certificate;
- (b) In the case of aircraft engines or propellers, upon compliance with applicable provisions of subpart F of this part, obtain approval for installation or certified aircraft;
- (c) In the case of any product, upon compliance with applicable provisions of subpart E of this part, obtain a production certificate for the type certificated product;
  - (d) Obtain approval of replacement parts for that civil aviation product.

#### §21.47 Transferability.

A type certificate and/or a type design approval may be transferred to or made available to third persons by licensing agreements. Each grantor shall, within 30 days after the transfer of a certificate or execution or termination of a licensing agreement, notify in writing the CAAC. The notification must state the name and address of the transferee or licensee, the date of the transaction, and in the case of a licensing agreement, the extent of authority granted the licensee.

#### §21.50 Instructions for continued airworthiness.

The holder of a type certificate, a type design approval, and a validation of type certificate and a validation of supplement type certificate shall furnish at least one set of complete Instructions for Continued Airworthiness, as applicable, to the owner of aircraft, upon its delivery, or upon issuance of the first standard airworthiness certificate for the affected aircraft. In addition, changes to the Instructions for Continued Airworthiness shall be made available to the owner of aircraft.

#### §21.51 Duration.

A type certificate, a type design approval, a validation of type certificate or a validation of supplement type certificate is effective until surrendered, suspended, revoked, or a termination date is otherwise established by the CAAC. The holder of a type certificate, a type design approval, a validation of type certificate or a validation of supplement type certificate must make those certificates available to be reviewed when the CAAC deems necessary.

#### §21.53 Statement of conformity.

Each applicant must submit a statement of conformity to the CAAC for each product, and

part thereof, which is presented to the CAAC for test. This statement of conformity must include a statement that the applicant has complied with the requirements of §21.33 (a) of this subpart.

# Subpart C - Changes to Type Certificates, changes to Type Design Approvals, Supplemental Type Certificates, and Modification DesignApprovals

#### §21.91 Applicability.

This subpart prescribes procedural requirements for the issue of changes to type certificates, changes to type design approvals, supplemental type certificates, and modification design approvals for import product, and rules governing the holders of those certificates.

#### §21.93 Classification of changes in type design.

- (a) Changes in type design are classified as follows:
- (1) A "minor change" is one that has no applicable effect on the weight and balance, structural strength, reliability, operational characteristics or other characteristics affecting the airworthiness of the product.
  - (2) A "major change" is any change other than "minor change" and "acoustical change".
- (b) An "acoustical change" is any change in the type design of an aircraft that may increase the noise level of that aircraft. The acoustical change must be made in compliance with the noise standards. An "emission change" is any change in the type design of an aircraft or engine that may increase the fuel venting or exhaust emissions. The acoustical change must be made in compliance with the noise standards.

#### §21.95 Approval of minor changes in type design.

Minor changes in a type design may be approved under a method acceptable to the CAAC.

#### §21.97 Approval of major changes in type design.

In the case of major changes in a certificated type design not great enough to require a new application of type certificates or type design approvals in accordance with §21.19 of this part, the applicant must submit substantiating data and necessary descriptive data for showing that the product after changes is in compliance with the provisions of §21.101 of this part.

The manners in which the CAAC approves major changes in type design include -

- (a) Approval of changes to type certificates and/or changes to type design approvals.
- (b) Issue of supplemental type certificates and/or modification design approval.

The holder of a type certificate and/or a type design approval may apply for changes to type certificates and/or changes to type design approvals in a specified form of this part, and

any other applicant shall apply for supplement type certificates and/or modification design approvals in a specified form of this part.

#### §21.99 Required design changes.

When an Airworthiness Directive is issued by the CAAC, the holder of the type certificate, the type design approval, the supplement type certificate and the modification design approval for the product concerned must:

- (a) Submit appropriate design changes to the CAAC for approval in accordance with the requirements of the Airworthiness Directive;
- (b) Upon approval of the design changes from the CAAC, make available the descriptive data covering the changes to all operators and owners of the type of the product concerned.

In a case where there are no current unsafe conditions, but the holder of those certificates finds through service experience that changes in type design will contribute to the safety of the product, the holder of those certificates may submit to the CAAC and implement upon approval the appropriate design changes. The holder shall make information on the design changes available to all operators or owners of the type of product concerned.

#### §21.101 Designation of applicable regulations.

- (a) An applicant for a change to a type certificate, a type design approval, a validation of type certificate, a supplement type certificate and/or a modification design approval must show that the changed product complies with the airworthiness requirements and environment protection requirements applicable to the category of the product in effect on the date of the application for the change. Exceptions are detailed in paragraphs (b) and (c) of this section.
- (b) If paragraphs (b)(1), (2), or (3) of this section apply, an applicant may show that the changed product complies with an earlier amendment of a regulation required by paragraph (a) of this section, and of any other regulation the CAAC finds is directly related. However, the earlier amended regulation may not precede either the corresponding regulation incorporated by reference in the type certificate, the type design approval and/or validation of type certificate, or related special requirements in the airworthiness regulations that is related to the change. The applicant may show compliance with an earlier amendment of an airworthiness regulation for any of the following:
- (1) A change that the CAAC finds not to be significant. In determining whether a specific change is significant, the CAAC considers the change in context with all previous relevant -18-

design changes and all related revisions to the applicable regulations incorporated in the type certificate, the type design approval and/or the validation of type certificate for the product. Changes that meet one of the following criteria are automatically considered significant:

- (i) The general configuration or the principles of construction are not retained.
- (ii) The assumptions used for certification of the product to be changed do not remain valid.
- (2) Each area, system, component, equipment, or appliance that the Administrator finds is not affected by the change.
- (3) Each area, system, component, equipment, or appliance that is affected by the change, for which the CAAC finds that compliance with a regulation described in paragraph (a) of this section would not contribute materially to the level of safety of the changed product or would be impractical.
- (c) If the CAAC finds that the regulations in effect on the date of the application for the change do not provide adequate standards with respect to the proposed change because of a novel or unusual design feature, the applicant must also comply with special conditions, and amendments to those special conditions, prescribed, to provide a level of safety equal to that established by the regulations in effect on the date of the application for the change.
- (d) An application for a change to a type certificate and/or a validation of type certificate, and a application for a supplement type certificate and/or a modification design approval for a transport category aircraft is effective for 5 years, and an application for a change to any other type certificate, type design approval and/or validation of type certificate, and a application for any other supplement type certificate, validation of supplement type certificate and/or modification design approval is effective for 3 years. If the change has not been approved, or if it is clear that it will not be approved under the time limit established under this paragraph, the applicant may do either of the following:
- (1) File a new application for a change to the type certificate, the type design approval and/or the validation of type certificate, and a new application for the supplement type certificate, the validation of supplement type certificate and/or a modification design approval and comply with all the provisions of paragraph (a) of this section applicable to an original application for a change.
- (2) File for an extension of the original application and comply with the provisions of paragraph (a) of this section. The applicant must then select a new application date. The new application date may not precede the date the change is approved by more than the time period established under this paragraph (d).

(e) For aircraft certificated under §21.17(b), 21.21, and 21.29, the airworthiness requirements applicable to the category of the product in effect on the date of the application for the change include each airworthiness requirement that the CAAC finds to be appropriate for the type certification, the type design approval and/or the validation of type certificate of the aircraft in accordance with those sections.

## §21.113 Requirement of supplemental type certificate and modification design approval.

For a supplemental type certificate and a modification design approval:

- (a) Any person who submits an application in a form specified by the CAAC may apply for a supplemental type certificate and/or a modification design approval to the CAAC according to \$21.97 of this part.
  - (b) A supplemental type certificate consists of:
  - (1) The approval of a change in the type design of the civil aviation product; and
- (2) The type certificate, the type design approval and/or validation of type certificate previously issued for the civil aviation product.

#### §21.119 Privileges.

The holder of a supplemental type certificate and/or a modification design approval may

- (a) In the case of aircraft, obtain airworthiness certificates;
- (b) In the case of other civil aviation products, obtain approval for installation on certificated aircraft; and
- (c) Obtain a production certificate for the change in the type design that was approved by that supplemental type certificate and/or modification design approval.

#### §21.120 Instructions for continued airworthiness.

The holder of a change to the type certificate and/or the type design approval, and a supplemental type certificate and/or a modification design approval shall furnish at least one complete set of Instructions for Continued Airworthiness, prepared in accordance with the applicable airworthiness regulations to the owner of aircraft upon the delivery of the first affected aircraft having an airworthiness certificate. In addition, changes to the Instructions for Continued Airworthiness shall be made available in succession to any owner.

#### Subpart D - Production Under Type Certificate Only or Type Design Approval

#### §21.121 Applicability.

This subpart prescribes rules for production under a type certificate only.

#### §21.123 Production under type certificate or type design approval.

Each manufacturer of a product being manufactured under a type certificate only or a type design approval shall:

- (a) Make each product available for inspection by the Administrator;
- (b) Maintain at the place of manufacture the technical data and drawings necessary for the Administrator to determine whether the product and its parts conform to the type design;
- (c) Except as otherwise authorized by the CAAC, for products manufactured more than 1 year after the date of issue of the type certificate and/or the type design approval, establish and maintain an approved production inspection system that insures that each product conforms to the type design and is in condition for safe operation; and
- (d) Submit to the Administrator an application of the production inspection system, and a manual and an audit plan in written form that comply with §21.97 of this part.

#### §21.125 Production inspection system.

For a production inspection system and its approval:

- (a) Each manufacturer required to establish a production inspection system by §21.123(c) shall
- (1) Establish a Material Review Board to include representatives from the Inspection, Engineering and any other cognizant technical department, and material review procedures; and
  - (2) Retain complete records of Materials Review Board action for at least 5 years.
- (b) The production inspection system must provide a means for determining at least the following:
- (1) Incoming materials, and bought or subcontracted parts used in the finished product must be as specified in the type design data, or must be suitable equivalents.
- (2) Incoming materials, and bought or subcontracted parts, must be properly identified if their physical or chemical properties can not be readily and accurately determined.
- (3) Materials subject to damage and deterioration must be suitably stored and adequately protected.

- (4) Processes affecting the quality and safety of the finished product must be accomplished in accordance with specifications and standards acceptable to the CAAC.
- (5) Parts and components in process must be inspected for conformity with the type design data at points in production where accurate determinations can be made.
- (6) Current design drawings must be readily available to manufacturing and inspection personnel, and used when necessary.
- (7) Design changes, including material substitutions, must be controlled and approved before being incorporated in the finished product.
- (8) Rejected materials and parts must be segregated and identified in a manner that precludes installation in the finished product.
- (9) Materials and parts that are withheld because of departures from design data or specifications must be processed through the Material Review Board. Those materials and parts determined by the Board to be serviceable must be properly identified and re-inspected if rework or repair is necessary. Materials and parts rejected by the Board must be marked and disposed of to ensure that they are not incorporated in the final product.
- (10) Inspection records must be identified with the completed product where applicable, and retained for at least five years.
- (c) Upon determination that the manufacturer meets the requirements prescribed in paragraph (a), (b) of this section, the CAAC will issue to the manufacturer a production inspection system approval with its effective duration identified. The production inspection system approval is effective for 5 years and not transferable.

#### §21.127 Tests: aircraft.

Each manufacturer who produces aircraft under a type certificate only or a type design approval shall conduct tests for that aircraft in accordance with the following provisions:

- (a) Establish production flight test procedures and flight check-off forms, and in accordance with such procedures and forms, flight test each aircraft produced.
  - (b) Each production flight test procedure must include the following:
- (1) An operational check of the trim, controllability, or other flight characteristics to establish that the production aircraft has the same range and degree of controllability as the prototype aircraft;
- (2) An operational check of each part or system operated by the crew which in flight to establish that, during flight, instrument readings are within normal range;
- (3) A determination that all instruments are properly marked, and that all placards and -22-

required flight manuals are installed after flight tests;

- (4) A check of the operational characteristics of the aircraft on the ground;
- (5) A check on any other items peculiar to the aircraft being tested that can best be done during either ground of flight operation of the aircraft.

#### §21.128 Tests: aircraft engines.

- (a) Each manufacturer who produces aircraft engines under a type certificate only shall conduct tests for such engines in accordance with the following requirements:
  - (1) Subject each engine to an acceptable test run that includes the following:
- (i) Break-in runs that include a determination of fuel and oil consumption and a determination of power characteristics at rated maximum continues power or thrust and, if applicable, at rated takeoff power or thrust;
- (ii) At least five hours of operation at rated maximum continuous power or thrust. For engines having a rated takeoff power (or thrust) higher than rated maximum continuous power (or thrust), the five-hour run must include 30 minutes at rated takeoff power (or thrust);
- (2) The test run required by paragraph (a) of this section may be made with the engine appropriately mounted and using current types of power (or thrust) measuring equipment.
- (b) Each manufacturer who produces propellers under a type certificate only shall give each variable pitch propeller an acceptable functional test to determine if it works properly throughout the normal range of operation.

#### §21.130 Responsibilities of manufacturer.

Responsibilities of manufacturer include:

- (a) A product manufacturer before the production inspection system of its manufacturer was approved must meet the requirements prescribed in §21.123 (a), (b) and the applicable requirements of §21.127, §21.128 of this part, and must be subject to the inspection of the Administrator.
- (b) Each manufacturer must maintain his approved production inspection system. Any changes to that system must be submitted to the Administrator for approval prior to their implementation.
- (c) Each product must be marked for identification and have placard installed in accordance with the requirements prescribed in Subpart J of this part.

#### §21.130 Statement of conformity.

Each holder or licensee of a type certificate and/or a type design approval shall, for a product manufactured by him under that type certificate only or type design approval, upon application for the original issue of an aircraft airworthiness certificate or an aircraft engine or propeller airworthiness approval, give the Administrator a statement of conformity signed by a person authorized by the manufacturer, which must include:

- (a) For each product, a statement that the product conforms to its type certificate and is in a condition for safe operation;
  - (b) For each aircraft, a statement that the aircraft has been ground and flight checked; and
- (c) For each aircraft engine or variable pitch propeller, a statement that the engine or propeller has been subjected by the manufacturer to a final test run or operational check.

#### **Subpart E - Production Certificates**

#### §21.131 Applicability.

This subpart prescribes procedural requirements for the application and issue of production certificates and rules governing the holders of those certificates.

#### §21.133 Eligibility.

The eligibility and procedural requirements for an application for production certificate are as follows:

- (a) Any person may apply for a production certificate if he holds, for the product concerned, one of the following documents, or meets other conditions as may be imposed by the CAAC:
  - (1) A current type certificate or type design approval;
  - (2) A supplement type certificate or modification design approval; or
  - (3) Right to the benefits of the above certificates under a licensing agreement.
- (b) Each application for a production certificate must be made in a form and manner prescribed by the CAAC, and submit information prescribed in §21.143 of this part.

#### §21.135 Issue of production certificates.

An applicant is entitled to a production certificate by the CAAC if the Administrator finds, after examination of the quality control data, and after inspection of the organization and production facilities, that the applicant has established and can maintain a quality control system which meets the requirements of §21.139 and §21.143 of this part, to ensure that each product is produced in compliance with the design requirements of the related type certificate, type design approval, supplement type certificate and/or modification design approval. The Administrator may authorize more than one type-certificated product to be manufactured under the terms of one production certificate, if the products have similar production characteristics.

#### §21.139 Quality control system.

Each applicant must show that he has establish and can maintain, a quality control system for any product for which he requests a production certificate, so that each article will meet the design provisions of the pertinent type certificate, type design approval, supplement type certificate and/or modification design approval.

#### §21.143 Quality control system and data requirements.

Requirements of quality control system and data include:

- (a) Each applicant must submit to the CAAC for approval data describing the inspection and test procedures necessary to ensure that each article produced conforms to the type design an is in a condition for safe operation, as applicable, including:
- (1) A statement describing assigned responsibilities and delegated authority of the quality control organization, together with a chart indicating the functional relationship of the quality control organization to management and to other organizational components, and indicating the line of authority and responsibility within the quality control organization;
- (2) A description of inspection procedures for incoming raw materials, purchased items, and parts and assemblies produced by the manufacturers' suppliers including methods used to ensure acceptable quality of parts and assemblies that cannot be completely inspected for conformity and quality when delivered to the prime manufacturer's plant;
- (3) A descriptions of the methods used for production inspection of individual parts and complete assemblies, including the identification of any special manufacturing process involved, the means used to control the processes, the final test procedure for the complete product, and, in the case of aircraft, a copy of the manufacturer's production flight test procedures and check-off list;
- (4) An outline of the materials review system, including the procedure for recording review board decisions and disposing of rejected parts;
- (5) An outline of a system for informing company inspectors of current changes in engineering drawings, specifications, and quality control procedures; and
  - (6) A list or chart showing the location and type of inspection stations.
- (b) Each prime manufacturer shall make available to the Administrator information regarding all delegation of authority to suppliers to conduct major inspections of parts or assemblies for which the prime manufacturer is responsible.

#### §21.147 Changes in quality control system.

After the issue of a production certificate, each change to the quality control system is subject to review and approval by the Administrator. The holder of a production certificate shall immediately notify the Administrator, in writing of any change that may affect the inspection, conformity, or airworthiness of the product.

#### §21.151 Production limitation record.

A production limitation record lists each product that the applicant is authorized to manufacture under the terms of the production certificate, the name, the serial number of its type certificate, type design approval, supplement type certificate and modification design approval, and the date when its production was authorized.

#### §21.153 Amendment of the production certificates.

The holder of a production certificate desiring to amend it to add a type certificate and/or a type design approval, or model, or both, must apply therefor in a form and manner prescribed by the Administrator. The applicant must comply with the applicable requirements of §21.139, 21.143, and 21.147.

#### §21.155 Transferability.

A production certificate is not transferable.

#### §21.157 Inspections and tests.

Each holder of a production certificate shall allow the Administrator to make any inspections and tests necessary to determine compliance with the applicable regulations.

#### §21.159 Duration.

A production certificate is effective until:

- (a) Surrendered, suspended or revoked by the CAAC;
- (b) A termination date is otherwise established by the Administrator, or
- (c) The location of the manufacturing facility is changed.

#### §21.161 Display.

The holder of a production certificate shall display it prominently in the main office of the factory in which the product concerned is manufactured.

#### §21.163 Privileges.

The holder of production certificate may:

(a) Obtain an airworthiness certificate without further showing, except that the CAAC may inspect the aircraft for conformity with the approved type design and in conditions for safe operation; or

(b) Obtain an airworthiness approval for aircraft engines or propellers for installation on certificated aircraft, except that the CAAC may inspect the aircraft engines or propellers for conformity with the approved type design and in conditions for safe operation.

#### §21.165 Responsibility of holder.

The holder of a production certificate shall -

- (a) Ensure that the quality control system is maintained in conformance with the data and procedures approved for the production certificate; and
- (b) Ensure that each completed product submitted for airworthiness certification or approval conforms to the type design and is in a condition for safe operation;
- (c) Conduct surveillance of all his subcontractors to ensure that they observe the provisions of §21.139 and §21.143 of this part, and allow the Administrator to make any inspections deemed necessary;
- (d) Take necessary corrective action and submit reports to the CAAC by §21.8 of this part in the time specified if any discrepancy and/or failure is found.
  - (e) Maintain records of production until the product retire permanently.

## Subpart F - Airworthiness Certificates, Airworthiness Approvals, and Validation of Foreign Airworthiness Certificates

#### §21.170 Applicability.

This subpart prescribes procedural requirements for the application and issue of Airworthiness Certificates, Airworthiness Approvals, and Validation of Foreign Airworthiness Certificates for aircraft, engine and/or propeller and rules governing the holders of those certificates.

#### §21.171 Airworthiness certificates: classification.

The airworthiness certificate is classified into the following two types:

(a) The standard airworthiness certificate

The standard airworthiness certificate, which is issued for aircraft type certificated or type certificate validated under this part as applicable.

(b) The Special airworthiness certificates

The Special airworthiness certificates, which is issued for aircraft other than those described in paragraph (a) of this section.

#### §21.172 Application.

The provisions of application for the airworthiness certificate and validation of foreign airworthiness certificates include:

- (a) Any owner or occupant of a PRC-registered aircraft may apply for an airworthiness certificate for that aircraft.
- (b) Any occupant who legally operates civil aircraft with foreign registration and airworthiness certificate, may apply for validation of the foreign airworthiness certificate of that aircraft, or apply for a new airworthiness certificate.
- (c) Each applicant for an airworthiness certificate shall submit the following information to the CAAC as applicable:
- (1) A complete veracious "The application for an airworthiness certificate to the CAAC" in a form prescribed by the CAAC;
  - (2) "Statement of conformity"
- (3) An export airworthiness certificate issued by the authority of the exporting country or the country where that aircraft was manufactured;
  - (4) Description for the aircraft configuration and the configuration difference of the

aircraft approved or certificated.

- (3) Any related technical data necessary to show the aircraft, after important repair or alteration, is in compliance with the approved type design, and to ensure the aircraft is in continued airworthiness:
  - (6) A list for the Instructions for Continued Airworthiness
- (7) A statement that the aircraft meets the applicable airworthiness directives and a list for airworthiness directives completed.
  - (8) Any other information considered necessary by the CAAC.
- (d) Each applicant for a validation of foreign airworthiness certificate shall submit the following information to the CAAC as applicable:
- (1) A complete veracious "The application for a validation of foreign airworthiness certificate for the CAAC" in a form prescribed by the CAAC;
- (2) A current approved instrument for confirmation of the aircraft airworthiness certificate by the foreign airworthiness Administrator.
- (3) A foreign airworthiness certificate, a nationality registration and a licence duplicate of radio station.
- (4) A statement that the aircraft meets the applicable airworthiness directives and a list for airworthiness directives completed.
  - (5) Any other information considered necessary by the CAAC.

#### §21.173 Airworthiness inspections.

Each applicant must allow the Administrator to conduct airworthiness inspections on his aircraft in accordance with the following provisions:

- (a) An applicant for an airworthiness certificate or validation of foreign airworthiness certificate shall present the aircraft concerned for necessary inspection of the Administrator, at the time and place previously agreed upon with the Administrator.
- (b) Airworthiness inspections include the review of the certificates, technical data and instructions for continued airworthiness, and the inspection of the technical conditions at the time of delivery of that aircraft and the approved type design compliance.
- (c) The applicant must perform any flight test of the aircraft as considered necessary by the Administrator, showing that the performance, controllability, and function of electronic equipment of that aircraft meet applicable airworthiness requirements.
- (d) In the case of a used aircraft, the applicant must submit for review complete records for all alterations, maintenance, inspections, flight tests and calibration previously performed on -30-

that aircraft, and give support for records of compliance status with airworthiness directives, service bulletins and any data the CAAC deems necessary; the applicant must make inspections necessary to the aircraft, and submit inspection reports to the CAAC.

(e) An applicant must effectively correct every finding identified by the CAAC during the above inspections, and submit evidence showing that the aircraft concerned is in compliance with the approved type design, and that all design modifications are approved and that the aircraft is in condition for safe operation.

## §21.174 Issue of airworthiness certificates and validation of foreign airworthiness certificates.

For the issue of airworthiness certificates, and validation of foreign airworthiness certificates, the following apply:

- (a) The applicant for an airworthiness certificate for a new aircraft manufactured under a CAAC production certificate is entitled to an airworthiness certificate without further showing, upon submittal of all the necessary information prescribed in §21.172 (c) of this part by the applicant, except that the Administrator may inspect the aircraft to determine conformity to the approved type design and condition for safe operation in accordance with §21.173 of this part.
- (b) The applicant for an airworthiness certificate for a new aircraft manufactured under type certificate only, as authorized by the CAAC is entitled to an airworthiness certificate, upon presentation of all related information as prescribed in §21.172 (c) of this part, and if the CAAC finds, after airworthiness inspections by the Administrator or designee in accordance with this part, that the aircraft conforms to the approved type certificate and is in a condition for safe operation.
- (c) According to §21.29 of this part, the applicant for an airworthiness certificate for an import new aircraft, to which validation of type certificates or validation of supplemental type certificates has been issued, is entitled to an airworthiness certificate upon presentation of all related information described in §21.172 (c) of this part, and if having been confirmed by the country where that aircraft was manufactured and the Administrator finds, after airworthiness inspections conducted in accordance with §21.173 of this part, that the aircraft conforms to the CAAC approved type design and is in a condition for safe operation.
- (d) According to §21.29 of this part, the applicant for an airworthiness certificate for an import used aircraft, to which validation of type certificates or validation of supplemental type certificates has been issued, is entitled to an airworthiness certificate upon presentation of not only all related information described in §21.172 (c) of this part, but also:

- (1) The bilateral agreement has been subscribed between the exporting country and the CAAC if the aircraft is import from the country where that aircraft was not manufactured to CHINA.
- (2) The aircraft, after repair or alteration prescribed by the CAAC, is ensured to be airworthiness by the qualified organization or person, or the original manufacturer of the aircraft before the airworthiness certificate is entitled by the CAAC.

The applicant is entitled to an airworthiness certificate if having been confirmed by the exporting country and the Administrator finds, after airworthiness inspections conducted in accordance with §21.173 of this part, that the aircraft conforms to the CAAC approved type design and is in a condition for safe operation.

- (e) The applicant for CAAC validation of foreign airworthiness certificates, or a CAAC airworthiness certificate for foreign registered aircraft with a foreign airworthiness certificate, for which the CAAC has validated the type design, is entitled to validation of foreign airworthiness certificates or an airworthiness certificate, upon presentation of all related information described in §21.172 (d) of this part, and if the Administrator finds, after conducting airworthiness inspections in accordance with §21.173 of this part, that the aircraft meets all the applicable airworthiness requirements and is in a condition for safe operation.
- (f) The applicant for an airworthiness certificate for aircraft nor covered from paragraph (a) to (e) of this section is entitled to an airworthiness certificate if he presents all related information prescribed in §21.172 of this part, and if the Administrator finds, after airworthiness inspections conducted in accordance with §21.173 of this part, that the aircraft conforms to the approved type design and is in a condition for safe operation.
- (g) The applicant have access to technical support from the qualified organization or person, or the original manufacturer to reassemble the aircraft together that is imported for the first time if necessary. The aircraft is approved after flight tests are completed according to §21.127. The airworthiness certificate is issued after the CAAC insure that the aircraft conforms to its type certificate and is in a condition for safe operation according to §21.173.

# §21.175 General requirements and limitations of issue of a special airworthiness certificate.

(a) Classification of special classes airworthiness certificate

The preliminary category special airworthiness certificate is issued for aircraft the preliminary category type design approved, and the limited category airworthiness certificate is issued for aircraft the limited category type design approved and meets any other conditions of

#### the CAAC

(b) The requirement of identification

The identification as "The preliminary category" or "The limited category" characters of special airworthiness certificated aircraft must be secured to the aircraft fuselage exterior either adjacent to the main most entrance door or the crew compartment. The identification must be durable and prominently, and its size must be between 5 to 20 centimeter.

(c) The special classes airworthiness certificated aircraft must not been operated for business passenger transport purpose.

#### §21.176 Renewal and re-issue of airworthiness certificates.

- (a) The applicant must submit to the CAAC an application for the renewal of the airworthiness certificates if:
  - (1) The issue record of the renewal of airworthiness certificates is full,
  - (2) The airworthiness certificate is damaged or lost;
- (b) The applicant must submit to the CAAC an application for re-issue of the airworthiness certificates if:
  - (1) The airworthiness certificate is revoked;
  - (2) The airworthiness certificate type is changed;
  - (3) The aircraft type is changed; or
  - (4) The national registration number is changed.
  - (c) The applicant shall submit to the CAAC the data as following:
  - (1) A descriptive letter to the CAAC.
  - (2) "The application for an airworthiness certificate to the CAAC".
- (3) A summary report including a list identifying all works accomplished on that aircraft since the last issue of its airworthiness certificate. This list must identify various working records, major inspections and repairs, records of compliance status with related airworthiness directives, service bulletins, or similar documents incorporated or not incorporated, and replacement records for significant equipment, components, and parts;
- (4) Operation hours (since the start or the last repair or overhaul) of the aircraft frame, aircraft engines or propellers etc;
- (5) The latest weight and balance report for that aircraft, including records of weighing, charts for center of gravity and the list of essential equipment for the aircraft;
  - (6) Demonstration flight test report necessary for making application;
  - (7) The correction data incorporated after the airworthiness certificate was revoked.

- (8) The related descriptive and technical data of application for the change of the airworthiness certificate type.
  - (9) Any other information the CAAC deems necessary.

## §21.177 Suspension and revocation of airworthiness certificate.

- (a) The CAAC can suspend the airworthiness certificate if:
- (1) Any characteristics of the aircraft are suspected of jeopardizing safety;
- (2) Any aircraft damage has occurred which can not be repaired in a short period of time;
- (3) An aircraft is sealed for storage.
- (4) During maintenance, alteration or modification according to approved plan.
- (b) The CAAC can revoke the airworthiness certificate if:
- (1) The flight exceeds the operation category or operation limitation of the certificate.
- (2) The maintenance and repair are not in compliance with the approved plan.
- (3) The aircraft does not meet the requirements under the time limit specified by the CAAC, such as the airworthiness directives.

In above (a) and/or (b) condition, any owner or occupant of the aircraft must return the airworthiness certificate to the affiliating CAAC regional administrations after he is notified that the airworthiness certificate of the aircraft was suspended or revoked.

#### **§21.179** Duration of airworthiness certificate.

During registration in China, if the aircraft is operated in compliance with maintenance requirements and operation limits, its airworthiness certificate is effective until suspended, revoked, or a termination date is otherwise established by the CAAC. The duration of validation of foreign airworthiness certificates is determined by the CAAC.

# §21.180 Display of airworthiness certificate.

An airworthiness certificate or validation of a foreign airworthiness certificate shall be displayed prominently in the aircraft concerned for access to inspection.

#### §21.181 Transferability.

An airworthiness certificate is transferable with the aircraft.

#### §21.182 Changes to airworthiness certificates.

Any change to an airworthiness certificate, or validation of a foreign airworthiness

certificate, may be made upon application to the CAAC.

# §21.183 Application for and issue of an airworthiness approval for aircraft engines and propellers.

An applicant is entitled to an airworthiness approval for his aircraft engine or propeller concerned if the Administrator finds, after such an application is made in a form prescribed by the CAAC, and after the inspection is accomplished by the Administrator, that the product conforms to its approved type design and is in a condition for safe operation.

# **Subpart G** - Special Flight Permits

# §21.211 Applicability.

This subpart prescribes procedural requirements for application, issue and management of a special fight permits.

#### §21.212 Classification of special flight permits

There are two classes for special flight permits: Class I, Class II.

- (a) A Class I special permit shall be obtained for a civil aircraft without a current airworthiness certificate, for the following purposes:
- (1) Flying the aircraft for testing new aircraft design concepts, new aircraft equipment, new aircraft installations, new aircraft operational techniques, or new uses for aircraft;
- (2) Flying the aircraft for showing compliance with applicable airworthiness standards, including demonstration flights to show compliance with the type certificate, type design approval, supplemental type certificate, and modification design approval for that aircraft, flights to substantiate major design changes, and flights to show compliance with function and reliability requirements of the applicable regulations;
  - (3) Production flight testing for new aircraft.
  - (4) Delivering or exporting the aircraft.
  - (5) Flying for flight crew training;
- (6) Flying for air competitions or exhibiting an aircraft's flight capabilities, performance, or unusual characteristics, including flying to and from competitions, air shows and productions;
  - (7) Flying the aircraft for market surveys and sales promotion;
  - (8) Other flights authorized by the CAAC.
- (b) A Class II special flight permit shall be obtained for an aircraft that does not have a current airworthiness certificate, or may not currently meet applicable airworthiness requirements, but is capable of safe flight under special limitations for the following purposes:
  - (1) Ferry flights for aircraft repairs, alterations, maintenance or storage;
  - (2) Ferry flights for aircraft delivery or export;
  - (3) Evacuating aircraft from area of impending danger; or
  - (4) Other flights considered necessary by the CAAC.

# §21.213 Application and issue of a special flight permits.

The provisions of application and issue of a special flight permits are as follows:

- (a) Any owner or occupant of civil aircraft may apply for a special flight permit for that aircraft.
  - (b) The applicant must submit an application in a form prescribed by the CAAC.
- (c) Upon receipt of the application, the CAAC will, after review of the application and identification of limit conditions, as necessary for safe operation, issue a special flight permit with its classification and necessary limitations identified.

# §21.214 General requirements and limitations.

General requirements and limitations are as follows:

- (a) No aircraft may conduct any flight under a special permit without a certificate of national registration unless a provisional registration is applied for to the CAAC and issued from the CAAC for that aircraft.
- (b) No aircraft may conduct any flight under a special permit unless the exterior of that aircraft is marked with a provisional registration identification assigned by the CAAC.
- (c) No aircraft with a Class I or Class II special permit may be used for transportation or other operations for the purpose of profit.
- (d) Each pilot who conducts a specially permitted flight must hold an appropriate pilot certificate issued or validated by the CAAC. Any person not related to this flight operation will not be allowed on-board the aircraft. Each flight crew member and other related person must be aware of the conditions, applicable requirements and actions for this specially permitted flight.
- (e) Each specially permitted flight must meet the applicable operational rules and avoid busy air traffic area, densely populated area or area where the public safety could be jeopardized.
- (f) Each specially permitted flight must be conducted within the performance limitations prescribed in the flight manual or any other limit conditions imposed on this specially permitted flight by the CAAC.
- (g) No aircraft with a special permit may fly over any country without permissions of the country.

#### §21.215 **Duration.**

The duration of each special flight permit is determined by the CAAC.

# Subpart H - Approval of Materials, Parts and Appliances

# §21.301 Applicability.

This subpart prescribes procedural requirements for the design and production approval of materials, parts and appliances, and rules governing the holders of those certificates.

# §21.302 Manners of approval.

A material, part or appliance may be approved:

- (a) Under a Parts Manufacturer Approval (PMA) issued under §21.303 to §21.308 of this part;
- (b) Under a CAAC Technical Standard Order Authorization (CTSOA) issued under §21.309 to §21.317 of this part;
- (c) In conjunction with a type certificate, type design approval, supplemental type certification and modification design approval process for a product; or
- (d) In conjunction with a validation of type certificate, validation of supplemental type certification process for a product; or
  - (e) Under a Validation of Design Approvals (VDA) issued under §21.319 of this part;
  - (f) In any other manner specified by the CAAC.

#### §21.303 Applicability of a PMA.

- (a) A Parts Manufacturer Approval (PMA) does not apply to the following:
- (1) Parts produced under a type certificate, type design approval or production certificate;
- (2) Parts produced under a CAAC Technical Standard Order Authorization (CTSOA);
- (3) Standard parts (such as bolts and nuts) considered to be conforming to applicable industry or national specifications by the CAAC;
- (4) Parts produced by an owner or leaseholder for maintenance or alteration of his own aircraft under any authorization from the CAAC.
- (b) Except as parts described in paragraph (a) of this section, no person may produce a modification and replacement part for a product that is issued a type certificate and type design approval unless he has obtained a Parts Manufacturer Approval issued in accordance with §21.303 to §21.309 of this part.

#### §21.304 Application for a PMA.

(a) The applicant must submit a completed application in a form specified by the CAAC,

identifying the name and model of the product on which the parts are to be installed, the name and address of the manufacturer, together with the following information:

- (1) The drawings and specifications necessary to define the configuration of the part;
- (2) Information on dimensions, materials and processes necessary to define the structural strength of the part;
- (3) Tests and analysis reports necessary to show that the design of the part is in compliance with the applicable airworthiness requirements for the product on which the part is to be installed, except that the applicant may otherwise show that his part has design features identical to those of the part approved under the type certificate and the type design approval for that product;
  - (4) A licensing agreement, if applicable, under which the design of the part was obtained.
  - (b) An application for a Parts Manufacturer Approval is effective for two years.

# §21.305 Conditions of issue of a PMA.

An applicant is entitled to a Parts Manufacturer Approval when he meets the following conditions:

- (a) Each applicant for a Parts Manufacturer Approval must make all inspections and tests necessary to determine:
  - (1) The part design is in compliance with applicable airworthiness requirements;
  - (2) The materials used for that part meet applicable specifications in the design;
  - (3) The part conforms to applicable drawings in the design; and
  - (4) The processes, constructions and assembly confirm to those in the design.
- (b) Each applicant must submit a statement indicating that a quality control system has been established in accordance with §21.143 of this part, together with all related information to the CAAC.
- (c) An applicant is entitled a Parts Manufacturer Approval for his product, and is allowed to identify his product according to §21.308, if the CAAC finds, upon examination of his design, tests and inspections, that the design is in compliance with applicable airworthiness regulations, and the CAAC determines, after evaluation of his quality control system, that the system is performing effectively;
- (d) An applicant must allow the CAAC to make any inspections or tests necessary to determine compliance with applicable airworthiness requirements. Except as otherwise approved by the CAAC, each applicant must:
  - (1) Not present his part to the CAAC for inspection or test unless he has shown

compliance with the requirements of (a) (1) to (a) (4) of this section; and

(2) Not make any change to a part which has been shown in compliance with (a) (2) to (a) (4) of this section before it is presented to the CAAC for inspection or test.

#### §21.306 Duration and transferability of a PMA.

A Parts Manufacturer Approval is effective until suspended, revoked or a termination date is otherwise established by the CAAC.

A Parts Manufacturer Approval project list is a part of the Parts Manufacturer Approval, which includes project's name, type, part number, the replaced manufacturer's name or parts number of applicable aircraft, engine and propeller, model designation, serial number, register number and design approval basis. A Parts Manufacturer Approval project list is effective for 2 years.

A Parts Manufacturer Approval is not transferable.

# §21.307 Relocation of manufacturing facility.

The holder of a Parts Manufacturer Approval shall notify the CAAC in writing before the date the manufacturing facility at which the parts are manufactured is relocated or expanded to include additional facilities at other locations.

## §21.308 Responsibility.

Each holder of a Parts Manufacturer Approval shall:

- (a) Maintain his quality control system to continuously meet the requirements prescribed in §21.143 of this part;
- (b) Ensure each part manufactured conforms to the approved design and is safe for installation on a type-certificated product;
- (c) Identify each part with the letters "CAAC-PMA"; the name of the manufacturer, trademark, or symbol of the approval holder; the part type number, serial number; and the model designation of the product on which the part is installed. For parts that are too small or where it would be impracticable to mark with the above information, a tag with such information may be attached to the specific part's container.

#### §21.309 CAAC Technical Standard Order Authorizations (CTSOA).

\$21.310 to \$21.317 of this part prescribe the procedural requirements for issue of CAAC Technical Standard Order Authorizations (CTSOA) and rules governing the holders of a -40-

CTSOA.

A Technical Standard Order (CTSO) is a minimum performance standard issued by the CAAC for certain materials, parts or appliances (hereafter referred to as article).

A CTSOA is a design and production approval issued by the CAAC to a manufacturer whose article meets the Technical Standard Order (CTSO). No person, except the holder of a CTSOA, may identify his article with the applicable CTSOA marking.

#### §21.310 Application for a CTSOA.

- (a) Each applicant shall complete and submit to the CAAC an application in a form specified by the CAAC.
- (b) Each applicant who requests approval to deviate from any performance standard of a CTSO shall show that the standards from which a deviation is requested are compensated for by factors or design features providing an equivalent level of safety.
  - (c) Following information shall be submitted together with the application:
  - (1) One copy of the technical data required in the applicable CTSO;
- (2) A detailed description of the quality control system established in accordance with §21.143 of this part. In complying with this section, the applicant may refer to current quality control data filed with the CAAC as part of a previous CTSO authorization application;
- (3) A statement of conformance certifying that the applicant has met the requirements of this section and the applicable CTSO which is effective on the date of application for that article.
- (d) When a series of minor changes in accordance with §21.313 is anticipated, the applicant may set forth in his application the basic model of the article and the part number of the components with open brackets following, to denote that suffix change letters or numbers, or combination thereof, will be added from time to time.
  - (e) This application is effective for two years.

#### §21.311 Conditions of issue of a CTSOA.

After receiving the application and information required by §21.310 of this part, and after a determination has been made of the applicant's ability to produce duplicate articles under the related Technical Standard Order, the CAAC issues a CTSOA, including all Technical Standard Order deviations granted, to the applicant to identify articles with the applicable CTSOA number markings.

Each applicant must allow the CAAC to conduct any inspections or tests necessary to

determine whether the article conforms to the applicable CTSO. Unless otherwise approved by the CAAC, the applicant must:

- (a) Not present his article to the CAAC for inspection or test before he determines that the article conforms to the applicable CTSO;
- (b) Not make any change to an article which has been shown to conform with the applicable CTSO, before it is presented to the CAAC for inspection or test.

# §21.312 General rules governing the holders of a CTSOA.

Each manufacturer of an article for which a CTSOA has been issued shall:

- (a) Manufacture the article in accordance with this part and the applicable CTSO;
- (b) Conduct all required tests and inspections, and established and maintain a quality control system adequate to ensure that the article meets the requirements of paragraph (a) of this section and is in a condition for safe installation;
- (c) Prepare and retain for each model of each article for which a CTSOA has been issued, a current file of complete technical data and records, in accordance with §21.314 of this part; and
  - (d) Permanent and legibly mark each article with the following information:
  - (1) The name and address of the manufacture;
  - (2) The name, type, part number or model designation of the article;
  - (3) The serial number, and the date of manufacture of the article;
  - (4) The CTSOA number designated by the CAAC;

For parts that are too small or where it would be impracticable to mark with the above information, a tag with such information may be attached to the accessory airworthiness certificate tag or the special part's container.

(e) Articles manufactured under a CTSOA may be used for aircraft installation only when the applicable approval for installation on the aircraft is granted.

#### §21.313 Design changes.

- (a) A design change that is extensive enough to require a substantially complete re-investigation to determine compliance with the CTSO is a major change. Other change is a minor change.
- (b) The holder of a CTSOA may, after submitting all information prescribed in §21.310 (d) of this part to the CAAC, make minor design changes. In such a case, the changed article keeps the original model designation and uses the part number to identify minor changes.
- (c) Before making such a change, the holder of CTSOA shall assign a new type or model -42-

designation to the article and apply for an new authorization under §21.310.

(d) No design change by any person other than the holder of a CTSOA will be approved by the CAAC, unless a special permit is granted.

#### §21.314 Recordkeeping requirements.

Each manufacturer holding a CTSOA shall, for each article manufactured under that authorization, keep the following records at its factory:

- (a) A complete and current technical data file for each type or model article, including design drawings and specifications. The technical data files shall be retained until the article concerned no longer is manufactured, and submitted to the CAAC after production halts.
- (b) A complete and current inspection records showing that all inspections and tests prescribed in §21.312 of this part, have been properly completed and documented. The records shall be retained for at least 2 years.

#### §21.315 Inspections.

Each holder of a CTSOA shall allow the CAAC to -

- (a) Inspect any article manufactured under that CTSOA;
- (b) Inspect his quality control system;
- (c) Witness any tests;
- (d) Inspect the manufacture facilities;
- (e) Inspect the technical data files on such article.

# §21.316 Noncompliance articles.

The CAAC may, upon notice, withdraw the CTSOA from any holder who identifies with the CTSO marking an article in §21.312(d)(4) not meeting the performance standards of the applicable CTSO, and stop continuous use of that article.

# §21.317 Transferability and duration of a CTSOA.

A CTSOA is not transferable.

A CTSOA is effective until surrendered, revoked or otherwise terminated by the CAAC.

A CTSOA project list is a part of the CTSOA, which includes project's name, type, part number, CTSOA number markings approved and CTSOA deviations. A CTSOA project list is effective for 2 years.

# §21.318 Issue of an airworthiness approval.

The holder of a PMA or a CTSOA is entitled to an airworthiness approval tag if the CAAC finds, after the airworthiness inspection to the parts manufactured by the holder is accomplished by the CAAC, that the parts conforms to its approved type design and is in a condition for safe operation.

# §21.319 Validation of design approval for the import materials, parts and appliances

- (a) For priority materials, parts or appliances imported for the first time to the PRC, not as part of a certificated aircraft, a design approval or design validation shall be obtained from the CAAC. For importing products manufactured in a country with which the PRC has not signed an airworthiness agreement or memorandum for import or export of those products, the CAAC will not issue any such approval or validation;
- (b) The applicant for a design approval or validation of a material, part, or appliance must submit the following information to the CAAC:
  - (1) An application;
- (2) The airworthiness approval documents issued by the authority of the exporting state, including the applicable data, specification and operational limitations;
- (3) Applicable airworthiness requirements and technical standard used as basis of the design;
- (4) Design data, test reports and analyses necessary to show compliance with the applicable airworthiness and technical standards;
- (5) A statement of compliance with the special conditions and requirements prescribed by the CAAC:
  - (6) Any other information considered necessary by the CAAC.
- (c) The CAAC will issue a design approval or validation if it is found, upon review of all information specified in paragraph (b) of this section, and on-site inspections as necessary, that the materials, parts and appliances presented for inspection meet the applicable PRC airworthiness standards and installation requirements.
- (d) The CAAC does not issue a Part Manufacturer Approval to a materials, parts and appliances manufacturer if his facility is located outside of the PRC.

# **Subpart I** - Export Airworthiness Approvals

# §21.321 Applicability.

This subpart prescribes procedural requirements for the application and issue of export airworthiness certificates and airworthiness approval tags, and rules governing the holders of those certificates.

# §21.322 Classification of export products.

Export products are classified into the following three classes:

- (a) A Class I product is a type certificated or type design approved aircraft, aircraft engine, or propeller.
- (b) A Class II product is a major component of a Class I product, the failure of which would jeopardize the safety of a Class I product (e.g., wings, fuselages, landing gears, power transmissions, central surfaces, etc.), and any material, part or appliance manufactured under a CTSOA used on an aircraft.
- (c) A Class III product is any product other than Class I and Class II, including standard articles manufactured under the technical standards acceptable to the CAAC.

#### §21.323 Eligibility.

Any exporter or authorized designee may obtain an export airworthiness certificate or export airworthiness approval tag for Class I or Class II products.

Any manufacturer may obtain an export airworthiness approval tag for a Class III product if he holds:

- (a) A production certificate;
- (b) A production inspection system approval;
- (c) A CAAC Part Manufacturer Approval; or
- (d) A CTSOA.

## §21.325 Forms of approvals.

There are two forms of approvals:

- (a) An export certificate of airworthiness is issued for a Class I product. Such a certificate does not authorize the operation of an aircraft;
  - (b) Export airworthiness approval tags are issued for Class II and Class III products.

#### §21.327 Application.

- (a) An application for export products is made on a form and in a manner specified by the CAAC:
- (b) Each application must be accompanied by a written statement from the importing country that will validate the following specific conditions if the product being exported is -
  - (1) A product that does not meet the special requirements of the importing country; or
- (2) A product that does not meet the requirements specified in §21.329 of this part, for the issuance of an export airworthiness certificate or export airworthiness approval tag.
- (c) Export airworthiness certificates for Class I products are governed by the CAAC-AAD, and export airworthiness certificates for Class II and III are governed by the applicant's geographically responsible CAAC regional administrations.

# §21.329 Issue of approvals.

An applicant is entitled to an export airworthiness certificate or export airworthiness approval tag if the CAAC finds that the product meets the following requirements as applicable:

- (a) For Class I products:
- (1) In the case of an aircraft, meet the requirements of §21.174 of this part;
- (2) In the case of a used aircraft, must have undergone a specified airworthiness inspection, and its owner or occupant shows that it meets the applicable requirements of continuous airworthiness;
- (3) In the case of a new engine or propeller, must conform to the type design and must be in a condition for safe operation;
  - (4) Meet the special requirements of the importing country.
  - (b) For Class II products:
- (1) The products are new or have been newly overhauled and conform to the approved design, and are in a condition for safe operation;
- (2) The products are identified with the manufacturer's name, part number, model designation and serial number or equipment; and
  - (3) Meet the special requirements of the importing country.
  - (c) For Class III products:
- (1) Conform to the designated design data in type design of Class I or Class II products, and are in a condition for safe operation;
  - (2) Meet the special requirements of the importing country.

## §21.334 Exception.

An export airworthiness approval may be issued on a product to be exported, that does not meet requirements of §21.329, only if it is acceptable to the importing country.

#### §21.335 Responsibilities of exporters.

Each exporter shall:

- (a) Forward to the air authority of the importing country all documents and information necessary for the proper operation of the products being exported, e.g., Flight Manuals, Maintenance Manuals, assembly instructions, and such other materials as may be stipulated in the special requirements of the importing country, and all subsequent revisions thereof.
- (b) Secure all proper foreign entry clearances from all the countries involved when conducting sales demonstrations or delivery flights; and
  - (c) When title to an aircraft passes or has passed to a foreign purchaser—
- (1) Request cancellation of the CAAC registration and airworthiness certificates, giving the date of the transfer of title, and the name and address of the foreign owners;
- (2) Return the Registration and Airworthiness Certificates to the CAAC and remove the marking of the PRC nationality and registration number from aircraft concerned.

# Subpart J - Placards or Markings

# §21.341 Applicability and provisions.

Product manufactured under a type certificate, type design approval or production certificate must be identified by means of a fireproof and permanent legible plate or mark that contains information of the type certificate, type design approval or production certificate number, the builder's name and serial number, model designation, and the date of building.

The aircraft identification plate must be secured to the aircraft fuselage exterior either adjacent to the main or rear most entrance door or on the obvious fuselage surface near the tail. Prototype aircraft produced for certification must have such an identification plate secured to it with the builder's name and serial number, model designation, and the date of building included before the CAAC issues a special flight permit and a provisional registration certificate.

For aircraft engines, the identification plate must be affixed to the engine at an accessible location in such a manner that it is not likely to be defaced or lost during normal service.

The identification for a propeller blade and hub must be placed on it on a non-critical surface.

Each critical component produced for installation on type-certificated aircraft, for which a replacement time and inspection interval is specified, shall be permanently and legibly marked with a part number and serial number.

The identification plate or mark for an abnormal aircraft must be secured properly on a location readily accessible to inspection.

# §21.342 Requirements.

Except as otherwise authorized, no person may remove change or damage any product identification plate or mark.

# Subpart K - Repair

# §21.343 General requirements.

Any repair work performed on an PRC registered civil aircraft must obtain approval from the CAAC if the design has not been approved or validated by type design thereof, and is considered as changes to its original type design.

# Subpart L - Enforcement

## **§21.345** Warning.

For any of the following offenses with no substantial consequences committed by any holder of the certificate listed in §21.2, the authorities shall order the holder to stop the offenses and take corrective measures within a definite time limit; In cases of serious offense, a warning shall be served.

- (a) In violation of §21.8, failing to report or report in a timely manner the malfunctions, failures or defects;
- (b) In violation of §21.50 or §21.120, failing to provide the instructions of continued airworthiness:
  - (c) In violation of §21.95, failing to obtain an approval for minor changes to type design;
- (d) In violation of §21.129, failing to fulfill the responsibilities of the holder of a production inspection system approval as prescribed in §21.129;
- (e) In violation of §21.161, failing to display a production certificate in accordance with the provisions;
- (f) In violation of §21.165, failing to fulfill the responsibilities of the holder of the production certificate as prescribed in§21.165;
- (g) In violation of §21.180, failing to display an airworthiness certificate according to the provisions;
- (h) In violation of §21.182, failing to submit an application to the authorities on any change made to an airworthiness certificate, or to the validation of a foreign airworthiness certificate;
- (i) In violation of §21.307, failing to inform the authorities of the relocation of manufacturing facility of the holder of a parts manufacturer approval;
- (j) In violation of §21.308, failing to fulfill the responsibilities of the holder of a parts manufacturer approval as prescribed in §21.308;
- (k) In violation of §21.335, failing to fulfill the responsibilities of the exporter as prescribed in §21.335;
- (1) In violation of §21.341 or §21.342, failing to place placards or markings as prescribed in §21.341 or §21.342.

#### §21.347 Fine

For any of the following offenses committed by any holder of any certificate listed in -50-

- §21.2, the authority shall order the relevant certificate holder to stop the offenses and take corrective measures within a definite time limit. The unlawful proceeds shall be confiscated, and a fine of no more than three times of the unlawful proceeds but not exceeding RMB 30,000 shall be imposed upon the offender. If no unlawful proceeds are involved, a fine of no more than RMB 10,000 shall be imposed.
- (a) Failing to take corrective measures within a definite time limit after a warning has been served by the authority;
- (b) making any offenses or getting into any situations listed in §21.345 and having created substantial consequences;
- (c) In violation of §21.19, failing to re-apply for a new type certificate or type design approval which is required by §21.19;
  - (d) In violation of §21.97, failing to obtain an approval of major changes to type design;
- (e) In violation of §21.99, the design change proposals are not presented in accordance with the requirements of the airworthiness directive, or the design change proposals are implemented without approval by the authority.
- (f) In violation of §21.147, the holder of a production certificate has failed to notify the changes of the quality control system to the authority, or failed to submit the changes for the authority' review and approval.
- (g) In violation of §21.153, the holder of a production certificate has failed to apply for the amendment to production certificates in accordance with the provisions.
- (h) In violation of §21.183 or §21.318, failing to apply for an airworthiness approval in accordance with the provisions, or refusing the relevant airworthiness inspections by the authority.

#### §21.349 Suspension.

For any of the following offenses committed by any holder of any certificate listed in §21.2, the authority shall order the relevant certificate holder to stop the offenses, and take corrective measures within a definite time limit, and a suspension of certificates shall be served. The unlawful proceeds shall be confiscated, and a fine of no more than three times of the unlawful proceeds but not exceeding RMB 30,000 shall be imposed upon the offender. If no unlawful proceeds are involved, a fine of no more than RMB 10,000 shall be imposed.

- (a) Failing to pay the fine imposed by the authorities or failing to accomplish the rectification within the time limit prescribed by the authorities.
  - (b) Making any offenses or getting into any situations listed in §21.345 or §21.347 and

having created serious consequences;

- (c) In violation of §21.125, the production inspection system approval is transferred.
- (d) In violation of §21.151, the productions have been made out of the range prescribed by the production limitation record list.
  - (e) In violation of §21.155, the production certificate is transferred.
- (f) In violation of §21.157, the holder of the production certificate has failed to conform persistently to the requirements of the provisions, or rejects the relevant inspections and tests by the authority, or failed to make a correction to fulfil the requirements of the regulations within a definite time limit.
- (g) In violation of §21.175, failing to comply with the requirements of special airworthiness certificate, or exceeding the limitations as prescribed in the special airworthiness certificates.
- (h) In violation of §21.214, failing to meet the requirements of special flight permits, or exceeding the limitations as prescribed in the special flight permits.
- (i) In violation of §21.306, the parts manufacturer approval has been transferred, or the productions have been made out of the range prescribed in the production limitation record list of the parts manufacturer approval.
- (j) In violation of §21.315, the holder of CTSOA has failed to conform persistently to the requirements of the provisions, or rejects the inspections of the authority.
- (k) In violation of §21.317, the CTSOA has been transferred, or the productions have been made out of the range prescribed in the CTSOA project list.

#### §21.351 Revocation.

For any of the following offenses committed by any holder of any certificate(s) listed in §21.2, the authority shall order the relevant certificate holder to stop the offenses, and a revocation of certificates shall be served.

- (a) Failing to pay the fine imposed by the authorities or failing to accomplish the rectification within the time limit prescribed by the authorities.
- (b) Any falsification in meeting the requirements of the provisions, or obtaining any certificate listed in §21.2 by wrongful means such as deception or embezzlement.
- (c) Serious consequences having been created due to production quality by the holders of the production certificate, the production inspection system approval, the parts manufacturer approval or the CTSOA.

# §21.353 Termination of production and operation

For the civil aircraft entered into operation without an airworthiness certificate, validation of a foreign airworthiness certificate or special fight permits, the authority shall order the operator to stop the aircraft flight. The unlawful proceeds shall be confiscated, and a fine of one time up to five times of the unlawful proceeds shall be imposed. If no unlawful proceeds are involved, a fine of RMB10,000 up to RMB100, 000 shall be imposed.

For any civil aircraft, aircraft engines and propellers entered into production without a type certificate, a type design approval, a supplemental type certificate, a modification design approval, a validation of type certificate, or a validation of supplemental type certificate, and for any equipment of civil aircraft entered into production without a validation of design approvals of civil aviation materials, parts and appliances, a parts manufacturer approval, or a Chinese technical standard order approval, the authority shall order the manufacturer to stop the production. The unlawful proceeds shall be confiscated, and a fine of no more than one time of the unlawful proceeds shall be imposed. If no unlawful proceeds are involved, a fine of RMB50, 000 up to RMB500, 000 shall be imposed.

For any civil aircraft, aircraft engines, and propellers enter into production without a production certificate or a production inspection system approval (except for the production under a type certificate only), the authority shall order the manufacturer to stop the production.

# **Subpart M** - **Supplementary Provision**

#### §21.355 Effectiveness.

This part shall come into effect as of April 15, 2007.