



**MENTERI PERHUBUNGAN
REPUBLIK INDONESIA**

PERATURAN MENTERI PERHUBUNGAN REPUBLIK INDONESIA

NOMOR : PM 98 TAHUN 2015

TENTANG

**PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN 21
(*CIVIL AVIATION SAFETY REGULATIONS PART 21*) TENTANG
PROSEDUR SERTIFIKASI UNTUK PRODUK DAN BAGIAN-BAGIANNYA
(*CERTIFICATION PROCEDURES FOR PRODUCT AND PARTS*)**

DENGAN RAHMAT TUHAN YANG MAHA ESA

MENTERI PERHUBUNGAN REPUBLIK INDONESIA,

- Menimbang** : bahwa untuk melaksanakan ketentuan Pasal 18, Pasal 20, dan Pasal 40 Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan, perlu menetapkan Peraturan Menteri Perhubungan tentang Peraturan Keselamatan Penerbangan Sipil Bagian 21 (*Civil Aviation Safety Regulations Part 21*) Tentang Prosedur Sertifikasi Untuk Produk Dan Bagian-Bagiannya (*Certification Procedures For Product And Parts*);
- Mengingat** :
1. Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 1, Tambahan Lembaran Negara Republik Indonesia Nomor 4956);
 2. Peraturan Pemerintah Nomor 3 Tahun 2001 tentang Keamanan dan Keselamatan Penerbangan (Lembaran Negara Republik Indonesia Tahun 2001 Nomor 9, Tambahan Lembaran Negara Nomor 4075);
 3. Keputusan Presiden Republik Indonesia Nomor 21 Tahun 1987 tentang Pengesahan *Protocol Relating To An Amandement To The Convention On International Civil Aviation (Article 83 Bis)* (Lembaran Negara Republik Indonesia Tahun 1987 Nomor 26);
 4. Peraturan Presiden Nomor 7 Tahun 2015 tentang Organisasi Kementerian Negara (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 8);

5. Peraturan Presiden Nomor 40 Tahun 2015 tentang Kementerian Perhubungan (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 75);
6. Keputusan Menteri Perhubungan Nomor KM 41 Tahun 2001 tentang Peraturan Umum Tentang Pengoperasian Pesawat Udara sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 80 Tahun 2011;
7. Peraturan Menteri Perhubungan Nomor KM 60 Tahun 2010 tentang Organisasi dan Tata Kerja Kementerian Perhubungan sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 68 Tahun 2013;
8. Peraturan Menteri Perhubungan Nomor PM 41 Tahun 2011 tentang Organisasi dan Tata Kerja Kantor Otoritas Bandar Udara;
9. Peraturan Menteri Perhubungan Nomor PM 31 Tahun 2013 tentang Program Keamanan Penerbangan Nasional;
10. Peraturan Menteri Perhubungan Nomor PM 14 Tahun 2015 Tentang Peraturan Keselamatan Penerbangan Sipil Bagian 830 (*Civil Aviation Safety Regulation Part 830*) Tentang Pemberitahuan Dan Pelaporan Kecelakaan, Kejadian Serius Pesawat Udara Sipil Serta Prosedur Investigasi Kecelakaan Dan Kejadian Serius Pesawat Udara Sipil;

MEMUTUSKAN:

Menetapkan : PERATURAN MENTERI PERHUBUNGAN TENTANG PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN 21 (*CIVIL AVIATION SAFETY REGULATIONS PART 21*) TENTANG PROSEDUR SERTIFIKASI UNTUK PRODUK DAN BAGIAN-BAGIANNYA (*CERTIFICATION PROCEDURES FOR PRODUCT AND PARTS*).

Pasal 1

- (1) Memberlakukan Peraturan Keselamatan Penerbangan Sipil Bagian 21 (*Civil Aviation Safety Regulations Part 21*) Tentang Prosedur Sertifikasi Untuk Produk Dan Bagian-Bagiannya (*Certification Procedures For Product And Parts*).
- (2) Peraturan Keselamatan Penerbangan Sipil Bagian 21 (*Civil Aviation Safety Regulations Part 21*) Tentang Prosedur Sertifikasi Untuk Produk Dan Bagian-Bagiannya (*Certification Procedures For Product And Parts*) sebagaimana dimaksud dalam ayat (1) tercantum dalam Lampiran Peraturan ini dan merupakan bagian yang tidak terpisahkan dari Peraturan ini.

Pasal 2

Ketentuan lebih lanjut mengenai Peraturan Keselamatan Penerbangan Sipil Bagian 21 (*Civil Aviation Safety Regulations Part 21*) Tentang Prosedur Sertifikasi Untuk Produk Dan Bagian-Bagiannya (*Certification Procedures For Product And Parts*) sebagaimana dimaksud dalam Pasal 1 diatur dengan Peraturan Direktur Jenderal Perhubungan Udara.

Pasal 3

Pada saat Peraturan ini mulai berlaku, Peraturan Menteri Perhubungan Nomor KM 13 Tahun 2008 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 21 (*Civil Aviation Safety Regulation Part 21*) tentang Prosedur Sertifikasi Untuk Produk Dan Bagian-Bagiannya (*Certification Procedures For Product And Parts*), dicabut dan dinyatakan tidak berlaku.

Pasal 4

Direktur Jenderal Perhubungan Udara melakukan pengawasan terhadap pelaksanaan Peraturan ini.

Pasal 5

Peraturan ini mulai berlaku pada tanggal diundangkan.

Agar setiap orang mengetahuinya, memerintahkan pengundangan Peraturan Menteri Perhubungan ini dengan penempatannya dalam Berita Negara Republik Indonesia.

Ditetapkan di Jakarta
Pada tanggal 6 Juni 2015

MENTERI PERHUBUNGAN
REPUBLIK INDONESIA,

ttd.

IGNASIUS JONAN

Diundangkan di Jakarta
pada tanggal 18 Juni 2015

MENTERI HUKUM DAN HAK ASASI MANUSIA
REPUBLIK INDONESIA,

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YASONNA H. LAOLY

BERITA NEGARA REPUBLIK INDONESIA TAHUN 2015 NOMOR 899

Salinan sesuai dengan aslinya

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NOMOR : PM 98 Tahun 2015

TANGGAL : 9 Juni 2015

CIVIL AVIATION SAFETY REGULATIONS

CASR 21

CERTIFICATION PROCEDURES FOR PRODUCT AND PARTS

REPUBLIC OF INDONESIA
MINISTRY OF TRANSPORTATION

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SUBPART A GENERAL

21.1 Applicability.

- (a) This part prescribes -
 - (1) Procedural requirements for issuing and changing –
 - (i) design approvals;
 - (ii) production approvals;
 - (iii) airworthiness certificates and;
 - (iv) airworthiness approvals.
 - (2) Rules governing the holders of any certificate specified in paragraph (a) (1) of this section; and
 - (3) Procedural requirements for the approval of certain materials, parts, processes, and appliances.

- (b) For the purposes of this part –
 - (1) Airworthiness approval means a document issued by the DGCA for an aircraft, aircraft engine, propeller, or article which certifies that the aircraft, aircraft engine, propeller, or article conforms to its approved design and is in a condition for safe operation;
 - (2) Article means a material, part, component, process, or appliance;
 - (3) Commercial part means an article that is listed on an DGCA-approved Commercial Parts List included in a design approval holder's Instructions for Continued Airworthiness required by section 21.50;
 - (4) Design approval means a type certificate (including amended and supplemental type certificates) or the approved design under a PMA, TSO authorization, letter of TSO design approval, or other approved design;
 - (5) Product means an aircraft, aircraft engine, or propeller;
 - (6) Production approval means a document issued by the DGCA to a person that allows the production of a product or article in accordance with its approved design and approved quality system, and can take the form of a production certificate, a PMA, or a TSO authorization;
 - (7) State of Design means the country or jurisdiction having regulatory authority over the organization responsible for the design and continued airworthiness of a civil aeronautical product or article;
 - (8) State of Manufacture means the country or jurisdiction having regulatory authority over the organization responsible for the production and airworthiness of a civil aeronautical product or article.

21.2 Falsification of Application, reports, or records.

- (a) No person shall make or cause to be made.
 - (1) Any fraudulent or intentionally false statement on any application for a certificate or approval under this part;
 - (2) Any fraudulent or intentionally false entry in any record or report that is required to be kept, made, or used to show compliance with any requirement for the issuance or the exercise of the privileges of any certificate or approval issued under this part;

- (3) Any reproduction for the fraudulent purpose of any certificate or approval issued under this part;
 - (4) Any alteration of any certificate or approval issued under this part.
- (b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any certificate or approval issued under this part and held by that person.

21.3 Reporting of failures, malfunctions, and defects.

- (a) Except as provided in paragraph (d) of this section, the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval (PMA), or a TSO authorization, or the licensee of a Type Certificate shall report any failure, malfunction, or defect in any product, part, process, or article manufactured by it that it determines has resulted in any of the occurrences listed in paragraph (c) of this section.
- (b) The holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval (PMA), or a TSO authorization, or the licensee of a Type of Certificate shall report any defect in any product, part, or article manufactured by it that has left its quality control system and that it determines could result in any of the occurrences listed in paragraph (c) of this section.
- (c) The following occurrences must be reported as provided in paragraphs (a) and (b) of this section:
 - (1) Fires caused by a 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.

- (d) The requirements of paragraph (a) of this section do not apply to -
- (1) Failures, malfunctions, or defects that the holder of a Type Certificate (including a Supplemental Type Certificate), Parts Manufacturer Approval (PMA), or TSO authorization, or the licensee of a Type Certificate -
 - (i) Determined were caused by improper maintenance, or improper usage;
 - (ii) Known were reported to the DGCA by another person under the applicable regulations; or
 - (iii) Has already reported under requirements of Reporting of Accidents and Overdue Aircraft.
 - (2) Failures, malfunctions, or defects in products, parts, or articles manufactured by a foreign manufacturer under an Indonesia Type Certificate issued under Sec. 21.29 or Sec. 21.621, or exported to the Republic of Indonesia under Sec. 21.502.
- (e) Each report required by this section -
- (1) Shall be made to the DGCA within 24 hours after it has determined that the failure, malfunction, or defect required to be reported has occurred. However, a report that is due on a Sunday may be delivered on the following Monday and one that is due on a holiday may be delivered on the next workday;
 - (2) Shall be transmitted in a manner and form acceptable to the DGCA and by the most expeditious method available; and
 - (3) Shall include as much of the following information as is available and applicable:
 - (i) Aircraft serial number.
 - (ii) When the failure, malfunction, or defect is associated with an article approved under a TSO authorization, the article serial number and model designation, as appropriate.
 - (iii) When the failure, malfunction, or defect is associated with an engine or propeller, the engine or propeller serial number, as appropriate.
 - (iv) Product model.
 - (v) Identification of the part, component, or system involved. The identification must include the part number.
 - (vi) Nature of the failure, malfunction, or defect.
- (f) Whenever the investigation of an accident or service difficulty report shows that an article manufactured under a TSO authorization is unsafe because of a manufacturing or design defect, the manufacturer shall, upon request of the DGCA, report to the DGCA the results of its investigation and any action taken or proposed by the manufacturer to correct that defect. If action is required to correct the defect in existing articles, the manufacturer shall submit the data necessary for the issuance of an appropriate airworthiness directive to the DGCA.

21.4 ETOPS reporting requirements.

- (a) Early ETOPS: reporting, tracking, and resolving problems. The holder of a type certificate for an airplane-engine combination approved using the Early ETOPS method specified in CASR part 25, Appendix K, must use a system for

reporting, tracking, and resolving each problem resulting in one of the occurrences specified in paragraph (a)(6) of this section.

- (1) The system must identify how the type certificate holder will promptly identify problems, report them to the DGCA, and propose a solution to the DGCA to resolve each problem. A proposed solution must consist of—
 - (i) A change in the airplane or engine type design;
 - (ii) A change in a manufacturing process;
 - (iii) A change in an operating or maintenance procedure; or
 - (iv) Any other solution acceptable to the DGCA.
- (2) For an airplane with more than two engines, the system must be in place for the first 250,000 world fleet engine-hours for the approved airplane-engine combination.
- (3) For two-engine airplanes, the system must be in place for the first 250,000 world fleet engine-hours for the approved airplane-engine combination and after that until—
 - (i) The world fleet 12-month rolling average IFSD rate is at or below the rate required by paragraph (b)(2) of this section; and
 - (ii) The DGCA determines that the rate is stable.
- (4) For an airplane-engine combination that is a derivative of an airplane-engine combination previously approved for ETOPS, the system need only address those problems specified in the following table, provided the type certificate holder obtains prior authorization from the DGCA:

(5) If the change does not require a new airplane type certificate and . . .	Then the Problem Tracking and Resolution System must address . . .
(i) Requires a new engine type certificate	All problems applicable to the new engine installation, and for the remainder of the airplane, problems in changed systems only.
(ii) Does not require a new engine type certificate	Problems in changed systems only.

c

ertificate holder must identify the sources and content of data that it will use for its system. The data must be adequate to evaluate the specific cause of any in-service problem reportable under this section or section 21.3(c) that could affect the safety of ETOPS.

- (6) In implementing this system, the type certificate holder must report the following occurrences:
 - (i) IFSDs, except planned IFSDs performed for flight training.
 - (ii) For two-engine airplanes, IFSD rates.
 - (iii) Inability to control an engine or obtain desired thrust or power.
 - (iv) Precautionary thrust or power reductions.
 - (v) Degraded ability to start an engine in flight.
 - (vi) Inadvertent fuel loss or unavailability, or uncorrectable fuel imbalance in flight.

- (vii) Turn backs or diversions for failures, malfunctions, or defects associated with an ETOPS group 1 significant system.
- (viii) Loss of any power source for an ETOPS group 1 significant system, including any power source designed to provide backup power for that system.
- (ix) Any event that would jeopardize the safe flight and landing of the airplane on an ETOPS flight.
- (x) Any unscheduled engine removal for a condition that could result in one of the reportable occurrences listed in this paragraph.

(b) Reliability of two-engine airplanes —

- (1) Reporting of two-engine airplane in-service reliability. The holder of a type certificate for an airplane approved for ETOPS and the holder of a type certificate for an engine installed on an airplane approved for ETOPS must report monthly to DGCA on the reliability of the world fleet of those airplanes and engines. The report provided by both the airplane and engine type certificate holders must address each airplane engine combination approved for ETOPS. The DGCA may approve quarterly reporting if the airplane engine combination demonstrates an IFSD rate at or below those specified in paragraph(b)(2) of this section for a period acceptable to the DGCA. This reporting may be combined with the reporting required by Section 21.3. The responsible type certificate holder must investigate any cause of an IFSD resulting from an occurrence attributable to the design of its product and report the results of that investigation to the DGCA. Reporting must include:
 - (i) Engine IFSDs, except planned IFSDs performed for flight training.
 - (ii) The world fleet 12-month rolling average IFSD rates for all causes, except planned IFSDs performed for flight training.
 - (iii) ETOPS fleet utilization, including a list of operators, their ETOPS diversion time authority, flight hours, and cycles.
- (2) World fleet IFSD rate for two-engine airplanes. The holder of a type certificate for an airplane approved for ETOPS and the holder of a type certificate for an engine installed on an airplane approved for ETOPS must issue service information to the operators of those airplanes and engines, as appropriate, to maintain the world fleet 12-month rolling average IFSD rate at or below the following levels:
 - (i) A rate of 0.05 per 1,000 world-fleet engine-hours for an airplane-engine combination approved for up to and including 120-minute ETOPS. When all ETOPS operators have complied with the corrective actions required in the configuration, maintenance and procedures (CMP) document as a condition for ETOPS approval, the rate to be maintained is at or below 0.02 per 1,000 world-fleet engine-hours.
 - (ii) A rate of 0.02 per 1,000 world-fleet engine-hours for an airplane-engine combination approved for up to and including 180-minute ETOPS, including airplane-engine combinations approved for 207-minute ETOPS in the North Pacific operating area under appendix P, section I, paragraph (h), of CASR part 121.
 - (iii) A rate of 0.01 per 1,000 world-fleet engine-hours for an airplane-engine combination approved for ETOPS beyond 180 minutes, excluding airplane-engine combinations approved for 207-minute ETOPS in the North Pacific operating area under appendix P, section I, paragraph (h), of CASR part 121.

21.5 Airplane or Rotorcraft Flight Manual.

- (a) The holder of a Type Certificate (including a Supplemental Type Certificate) or the licensee of a Type Certificate shall make available to the owner at the time of delivery of the aircraft a current approved Airplane or Rotorcraft Flight Manual.
- (b) The Airplane or Rotorcraft Flight Manual required by paragraph (a) of this section must contain the following information:
 - (1) The operating limitations and information required to be furnished in an Airplane or Rotorcraft Flight Manual or in manual material, markings, and placards, by the applicable regulations under which the airplane or rotorcraft was type certificated.
 - (2) The maximum ambient atmospheric temperature for which engine cooling was demonstrated must be stated in the performance information section of the Flight Manual, if the applicable regulations under which the aircraft was type certificated do not require ambient temperature on engine cooling operating limitations in the Flight Manual.

21.6 Manufacture of new aircraft, aircraft engines, and propellers.

- (a) Except as specified in paragraphs (b) and of this section, no person may manufacture a new aircraft, aircraft engine, or propeller based on a type certificate unless the person—
 - (1) Is the holder of the type certificate or has a licensing agreement from the holder of the type certificate to manufacture the product; and
 - (2) Meets the requirements of subpart F or G of this part.
- (b) The requirements of this section do not apply to—
 - (1) New aircraft imported under the provisions of section 21.183(c), or 21.185(c); and
 - (2) New aircraft engines or propellers imported under the provisions of section 21.500.

21.7 Continued airworthiness and safety improvements for transport category airplanes.

- (a) On or after the date as specified in CASR Part 26, the holder of a design approval and an applicant for a design approval must comply with the applicable continued airworthiness and safety improvement requirements of CASR Part 26.
- (b) For new transport category airplanes manufactured under the authority of the DGCA, the holder or licensee of a type certificate must meet the applicable continued airworthiness and safety improvement requirements specified in CASR Part 26 for new production airplanes. Those requirements only apply if the DGCA has jurisdiction over the organization responsible for final assembly of the airplane.

21.8 Approval of articles.

If an article is required to be approved under applicable regulation, it may be approved—

- (a) Under a PMA;
- (b) Under a TSO;
- (c) In conjunction with type certification procedures for a product; or
- (d) In any other manner approved by the DGCA.

21.9 Replacement and modification articles.

- (a) If a person knows, or should know, that a replacement or modification article is reasonably likely to be installed on a type-certificated product, the person may not produce that article unless it is—
 - (1) Produced under a type certificate;
 - (2) Produced under a production approval;
 - (3) A standard part (such as a nut or bolt) manufactured in compliance with a government or established industry specification;
 - (4) Commercial Part
 - (5) Produced by an owner or operator for maintaining or altering that owner or operator's product; or
 - (6) Fabricated by an appropriately rated certificate holder with a quality system, and consumed in the repair or alteration of a product or article in accordance with CASR Part 43.
- (b) Except as provided in paragraphs (a)(1) through (a)(2) of this section, a person who produces a replacement or modification article for sale may not represent that part as suitable for installation on a type-certificated product.

SUBPART B TYPE CERTIFICATES

21.11 Applicability.

This subpart prescribes -

- (a) Procedural requirements for the issue of type certificates for aircraft, aircraft engines, and propellers; and
- (b) Rules governing the holders of those certificates.

21.13 Eligibility.

Any interested person as prescribes in Sub Part J Design Organization Approval (DOA) may apply for a type certificate.

21.15 Application for type certificate.

- (a) An application for a type certificate is made on a form and in a manner prescribed by the DGCA and is submitted to the DGCA office.
- (b) An application for an aircraft type certificate must be accompanied by a three view drawing of that aircraft and available preliminary basic data.
- (c) 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.

21.16 Special Conditions.

If the DGCA finds that the airworthiness regulations do not contain adequate or appropriate safety standards for an aircraft, aircraft engine, or propeller because of a novel or unusual design feature of the aircraft, aircraft engine or propeller, he prescribes special conditions and amendments thereto for the product. The special conditions are issued in accordance with CASR Part 11 and contain such safety standards for the aircraft, aircraft engine or propeller as the DGCA finds necessary to establish a level of safety equivalent to that established in the regulations.

21.17 Designation of Applicable Regulations.

- (a) Except as provided in CASR Part 23 Sec. 23.2, CASR Part 25 Sec. 25.2, CASR Part 27 Sec. 27.2, CASR Part 29 Sec 29.2, Part 34, and Part 36, an applicant for a type certificate must show that the aircraft, aircraft engine, or propeller concerned meets -
 - (1) The applicable requirements of the airworthiness standard that are effective on the date of application for that certificate unless -
 - (i) Otherwise specified by the DGCA; or
 - (ii) Compliance with later effective amendments is elected or required under this section; and
 - (2) Any special conditions prescribed by the DGCA.

- (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, the applicable requirements will be the portions of those other airworthiness requirements contained in CASR PART 23, Part 25, Part 27, Part 29, Part 31, and Part 33 found by the DGCA to be appropriate for the aircraft and applicable to a specific type design, or such airworthiness criteria as the DGCA may find provide an equivalent level of safety to those parts.
- (c) An application for type certification of a transport category aircraft is effective for 5 years and an application for any other type certificate 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 DGCA 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 paragraph (c) of this section, the applicant may -
 - (1) File a new application for a type certificate and comply with all the provisions of paragraph (a) of this section applicable to an original application; or
 - (2) File for an extension of the original application and comply with the applicable airworthiness requirements that were effective on a date, to be selected by the applicant, not earlier than the date which precedes the date of issue of the type certificate by the time limit established under paragraph (c) of this section for the original application.
- (e) If an applicant elects to comply with an amendment to the airworthiness standard that is effective after the filing of the application for a type certificate, he must also comply with any other amendment that the DGCA finds is directly related.

21.19 Changes requiring a new type certificate.

Any person who proposes to change a product must make a new application for a type certificate if the DGCA finds that the proposed change in design, configuration, power, power limitations (engines), speed limitations (engines), or weight is so extensive that a substantially complete investigation of compliance with the applicable regulations is required.

21.20 Compliance with applicable requirements.

The applicant for a type certificate, including an amended or supplemental type certificate, must—

- (a) Show compliance with all applicable requirements and must provide the DGCA the means by which such compliance has been shown; and
- (b) Provide a statement certifying that the applicant has complied with the applicable requirements.

21.21 Issue of Type Certificate: Normal, Utility, Acrobatic, Commuter, and Transport Category Aircraft; 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, special class of aircraft, or an aircraft engine or propeller, if -

- (a) [To be determined]
- (b) The applicant submits the type design, test reports, and computations necessary to show that the product to be certificated meets the applicable airworthiness, aircraft noise, fuel venting, and exhaust emission requirements and any special conditions prescribed by the DGCA, and the DGCA finds -
 - (1) Upon examination of the type design, and after completing all tests and inspections, that the type design and the product meet the applicable noise, fuel venting, and emissions requirements, and further finds that they meet the applicable airworthiness requirements or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and
 - (2) For an aircraft, that no feature or characteristic makes it unsafe for the category in which certification is requested.

21.23 [Reserved]

21.24 Issuance of type certificate: primary category aircraft.

- (a) The applicant is entitled to a type certificate for an aircraft in the primary category if—
 - (1) The aircraft—
 - (i) Is unpowered; is an airplane powered by a single, naturally aspirated engine with a 61-knot or less V_{so} stall speed as defined in CASR 23.49; or is a rotorcraft with a 6-pound per square foot main rotordisc loading limitation, under sea level standard day conditions;
 - (ii) Weighs not more than 2,700 pounds; or, for seaplanes, not more than 3,375 pounds;
 - (iii) Has a maximum seating capacity of not more than four persons, including the pilot; and
 - (iv) Has an unpressurized cabin.
 - (2) The applicant has submitted—
 - (i) Except as provided by paragraph (c) of this section, a statement, in a form and manner acceptable to the DGCA, certifying that: the applicant has completed the engineering analysis necessary to demonstrate compliance with the applicable airworthiness requirements; the applicant has conducted appropriate flight, structural, propulsion, and systems tests necessary to show that the aircraft, its components, and its equipment are reliable and function properly; the type design complies with the airworthiness standards and noise requirements established for the aircraft under section 21.17(f); and no feature or characteristic makes it unsafe for its intended use;

- (ii) The flight manual required by section 21.5(b), including any information required to be furnished by the applicable airworthiness standards;
 - (iii) Instructions for continued airworthiness in accordance with section 21.50(b); and
 - (iv) A report that: summarizes how compliance with each provision of the type certification basis was determined; lists the specific documents in which the type certification data information is provided; lists all necessary drawings and documents used to define the type design; and lists all the engineering reports on tests and computations that the applicant must retain and make available under section 21.49 to substantiate compliance with the applicable airworthiness standards.
- (3) The DGCA finds that—
- (i) The aircraft complies with those applicable airworthiness requirements approved under section 21.17(f) of this part; and
 - (ii) The aircraft has no feature or characteristic that makes it unsafe for its intended use.
- (b) An applicant may include a special inspection and preventive maintenance program as part of the aircraft's type design or supplemental type design.
- (c) For aircraft manufactured outside of the Republic of Indonesia in a country with which the Republic of Indonesia has a bilateral airworthiness agreement for the acceptance of these aircraft, and from which the aircraft is to be imported into the Republic of Indonesia—
- (1) The statement required by paragraph (a)(2)(i) of this section must be made by the civil airworthiness authority of the exporting country; and
 - (2) The required manuals, placards, listings, instrument markings, and documents required by paragraphs (a) and (b) of this section must be submitted in Bahasa Indonesia and/or English.

21.25 Issue of type certificate: Restricted category aircraft.

- (a) An applicant is entitled to a type certificate for an aircraft in the restricted category for special purpose operations if he shows compliance with the applicable noise requirements of CASR Part 36, and if he shows that no feature or characteristic of the aircraft makes it unsafe when it is operated under the limitations prescribed for its intended use, and that the aircraft -
- (1) Meets the airworthiness requirements of an aircraft category except those requirements that the DGCA finds inappropriate for the special purpose for which the aircraft is to be used; or
 - (2) [To be determined]
- (b) For the purposes of this section, "special purpose operations" includes -
- (1) Agricultural (spraying, dusting, and seeding, and livestock and predatory animal control);
 - (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 (skywriting, banner towing, airborne signs and public address systems); and
- (7) Any other operation specified by the DGCA.

21.27 [Reserved]

21.29 Issue of Type Certificate: Import Products.

- (a) A type certificate may be issued for a product that is manufactured in a foreign country if it is to be imported into the Republic of Indonesia if -
 - (1) The country in which the product was manufactured certifies that the product has been examined, tested, and found to meet -
 - (i) The applicable aircraft noise, fuel venting and exhaust emissions requirements as designated in Sec. 21.17, or the applicable aircraft noise, fuel venting and exhaust emissions requirements of the country in which the product was manufactured, and any other requirements the DGCA 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 as designated in Sec. 21.17; and
 - (ii) The applicable airworthiness requirements as designated in Sec. 21.17, or the applicable airworthiness requirements of the country in which the product was manufactured and any other requirements the DGCA may prescribe to provide a level of safety equivalent to that provided by the applicable airworthiness requirements as designated in Sec. 21.17;
 - (2) The applicant has submitted the technical data, concerning aircraft noise and airworthiness, respecting the product required by the DGCA; and
 - (3) The manuals, listings, and instrument markings required by the applicable airworthiness (and noise, where applicable) requirements are presented in the English language, and for the placards are presented in Bahasa Indonesia and English language.
- (b) A product type certificated under this section is considered to be type certificated under the noise standards of CASR Part 36 and the fuel venting and exhaust emission standards of CASR Part 34. Compliance with parts 36 and 34 is certified under paragraph (a)(1)(i) of this section, and the applicable airworthiness standards, or an equivalent level of safety, with which compliance is certified under paragraph (a)(1)(ii) of this section.

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 product shown to comply with the requirements of this Part applicable to the product;
- (b) Information on dimensions, materials, and processes necessary to define the structural strength of the product;

- (c) The Airworthiness Limitations section of the Instructions for Continued Airworthiness as required by CASR PART 23, Part 25, Part 27, Part 29, Part 31 and Part 33; and as specified in the applicable airworthiness criteria for special classes of aircraft defined in Sec. 21.17(b); and
- (d) Any other data necessary to allow, by comparison, the determination of the airworthiness, noise characteristics, fuel venting, and exhaust emissions (where applicable) of later products of the same type.

21.33 Inspection and Tests.

- (a) Each applicant must allow the DGCA to make any inspection and any flight and ground test necessary to determine compliance with the applicable requirements. However, unless otherwise authorized by the DGCA -
 - (1) No aircraft, aircraft engine, propeller, or part thereof may be presented to the DGCA for test unless compliance with paragraphs (b)(2) through (b)(4) of this section has been shown for that aircraft, aircraft engine, propeller, or part thereof; and
 - (2) (2) No change may be made to an aircraft, aircraft engine, propeller, or part thereof between the time that compliance with paragraphs (b)(2) through (b)(4) of this section is shown for that aircraft, aircraft engine, propeller, or part thereof and the time that it is presented to the DGCA for test.
- (b) Each applicant must make all inspections and tests necessary to determine-
 - (1) Compliance with the applicable airworthiness, aircraft noise, fuel venting, and exhaust emission 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.

- (a) Each applicant for an aircraft type certificate (other than under Secs. 21.25 through 21.29) must make the tests listed in paragraph (b) of this section. Before making the tests the applicant must show -
 - (1) Compliance with the applicable structural requirements of the applicable CASR;
 - (2) Completion of necessary ground inspections and tests;
 - (3) That the aircraft conforms with the type design; and
 - (4) That the DGCA received a flight test report from the applicant (signed, in the case of aircraft to be certificated under CASR Part 25, by the applicant's test pilot) containing the results of his tests.
- (b) Upon showing compliance with paragraph (a) of this section, the applicant must make all flight tests that the DGCA finds necessary -
 - (1) To determine compliance with the applicable requirements of the applicable CASR; and

- (2) For aircraft to be certificated under the applicable CASR, except gliders and except airplanes of 6,000 lbs. or less maximum certificated weight that are to be certificated under CASR Part 23 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 CASR Part 27 Sec. 27.923 or CASR Part 29 Sec. 29.923, as applicable.
- (d) Each applicant must show for each flight test 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 testing 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, 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 normal, utility, acrobatic, commuter, or transport category aircraft type certificate 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.

- (a) Each applicant for a normal, utility, acrobatic, commuter, or transport category aircraft type certificate must submit a report to the DGCA 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 DGCA 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 certificate.

Each type certificate is considered to include the type design, the operating limitations, the certificate data sheet, the applicable regulations with which the DGCA records compliance, and any other conditions or limitations prescribed for the product.

21.43 Location of Manufacturing Facilities.

Except as provided in Sec. 21.29, the DGCA does not issue a type certificate if the manufacturing facilities for the product are located outside of the Republic of Indonesia, unless the DGCA finds that the location of the manufacturer's facilities places no undue burden on the DGCA in administering applicable airworthiness requirements.

21.45 Privileges.

The holder or licensee of a type certificate for a product may -

- (a) In the case of aircraft, upon compliance with Secs. 21.173 through 21.189, obtain airworthiness certificates;
- (b) In the case of aircraft engines or propellers, obtain approval for installation on certified aircraft;
- (c) In the case of any product, upon compliance with sub part G of this part, obtain a production certificate for the type certificated product;
- (d) Obtain approval of replacement parts for that product.

21.47 Transferability.

A type certificate 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 DGCA. The notification must state the name and address of the transferee or licensee, date of the transaction, and in the case of a licensing agreement, the extent of authority granted the licensee.

21.49 Availability.

The holder of a type certificate shall make the certificate available for examination upon the request of the DGCA or Investigation Committee.

21.50 Instructions for Continued Airworthiness and Manufacturer's Maintenance Manuals Having Airworthiness Limitations Sections.

- (a) The holder of a type certificate for a rotorcraft for which a Rotorcraft Maintenance Manual containing an "Airworthiness Limitations" section has been issued under CASR Part 27 Sec. 27.1529 (a)(2) or CASR Part 29 Sec. 29.1529 (a)(2), and who obtains approval of changes to any replacement time, inspection interval, or related procedure in that section of the manual, shall make those changes available upon request to any operator of the same type of rotorcraft.
- (b) The holder of a design approval, including either the type certificate or supplemental type certificate for an aircraft, aircraft engine, or propeller, shall furnish at least one set of complete Instructions for Continued Airworthiness, prepared in accordance with CASR Part 23 Sec. 23.1529, CASR Part 25 Sec. 25.1529, CASR Part 27 Sec. 27.1529, CASR Part 29 Sec. 29.1529, CASR Part 33 Sec. 33.4, or CASR Part 35 Sec. 35.4, or as specified in the applicable airworthiness criteria for special classes of aircraft defined in Sec. 21.17(b), as applicable, to the owner of each type of aircraft, aircraft engine, or propeller upon its delivery, or upon issuance of the first standard

airworthiness certificate for the affected aircraft, whichever occurs later, and thereafter make those instructions available to any other person required by this pertinent CASRs to comply with any of the terms of these instructions. In addition, changes to the Instructions for Continued Airworthiness shall be made available to any person required by this pertinent CASRs to comply with any of those instructions.

- (c) To designate commercial parts, the holder of a design approval, in a manner acceptable to the DGCA, must submit:
 - (1) A Commercial Parts List;
 - (2) Data for each part on the List showing that:
 - (i) The failure of the commercial part, as installed in the product, would not degrade the level of safety of the product; and
 - (ii) The part is produced only under the commercial part manufacturer's specification and marked only with the commercial part manufacturer's markings; and
 - (3) Any other data necessary for the DGCA to approve the List.

21.51 Duration.

A type certificate is effective until surrendered, suspended, revoked, or a termination date is otherwise established by the DGCA.

21.53 Statement of Conformity.

- (a) Each applicant must submit a statement of conformity to the DGCA for each aircraft engine and propeller presented to the DGCA for type certification. This statement of conformity must include a statement that the aircraft engine or propeller conforms to the type design therefore.
- (b) Each applicant must submit a statement of conformity to the DGCA for each aircraft or part thereof presented to the DGCA for tests. This statement of conformity must include a statement that the applicant has complied with Sec. 21.33(a) (unless otherwise authorized under that paragraph).

21.55 Responsibility of Type Certificate Holders to Provide Written Licensing Agreements.

A type certificate holder who allows a person to use the type certificate to manufacture a new aircraft, aircraft engine, or propeller must provide that person with a written licensing agreement acceptable to the DGCA.

SUBPART C PROVISIONAL TYPE CERTIFICATES

21.71 Applicability.

This subpart prescribes -

- (a) Procedural requirements for the issue of provisional type certificates, amendments to provisional type certificates, and provisional amendments to type certificates; and
- (b) Rules governing the holders of those certificates.

21.73 Eligibility.

- (a) Any manufacturer of aircraft manufactured within the Republic of Indonesia who is a Republic of Indonesia citizen may apply for Class I or Class II provisional type certificates, for amendments to provisional type certificates held by him, and for provisional amendments to type certificates held by him.
- (b) Any manufacturer of aircraft manufactured in a foreign country which the Republic of Indonesia accepts of those aircraft for import may apply for a Class II provisional type certificate, for amendments to provisional type certificates held by him, and for provisional amendments to type certificates held by him.
- (c) An aircraft engine manufacturer who is a Republic of Indonesia citizen and who has altered a type certificated aircraft by installing different type certificated aircraft engines manufactured by him within the Republic of Indonesia may apply for a Class I provisional type certificate for the aircraft, and for amendments to Class I provisional type certificates held by him, if the basic aircraft, before alteration, was type certificated in the normal, utility, acrobatic, commuter, or transport category.

21.75 Application.

Applications for provisional type certificates, for amendments thereto, and for provisional amendments to type certificates must be submitted to the DGCA and must be accompanied by the pertinent information specified in this subpart.

21.77 Duration.

- (a) Unless sooner surrendered, superseded, revoked, or otherwise terminated, provisional type certificates and amendments thereto are effective for the periods specified in this section.
- (b) A Class I provisional type certificate is effective for twenty four months after the date of issue.
- (c) A Class II provisional type certificate is effective for twelve months after the date of issue.
- (d) An amendment to a Class I or Class II provisional type certificate is effective for the duration of the amended certificate.

- (e) A provisional amendment to a type certificate is effective for six months after its approval or until the amendment of the type certificate is approved, whichever is first.

21.79 Transferability.

Provisional type certificates are not transferable.

21.81 Requirements for Issue and Amendment of Class I Provisional Type Certificates.

- (a) An applicant is entitled to the issue or amendment of a Class I provisional type certificate if he shows compliance with this section and the DGCA finds that there is no feature, characteristic, or condition that would make the aircraft unsafe when operated in accordance with the limitations established in paragraph (e) and (h) of this section.
- (b) The applicant must apply for the issue of a type or supplemental type certificate for the aircraft.
- (c) The applicant must certify that -
 - (1) The aircraft has been designed and constructed in accordance with the airworthiness requirements applicable to the issue of the type or supplemental type certificate applied for;
 - (2) The aircraft substantially meets the applicable flight characteristic requirements for the type or supplemental type certificate applied for; and
 - (3) The aircraft can be operated safely under the appropriate operating limitations specified in paragraph (a) of this section.
- (d) The applicant must submit a report showing that the aircraft had been flown in all maneuvers necessary to show compliance with the flight requirements for the issue of the type or supplemental type certificate applied for, and to establish that the aircraft can be operated safely in accordance with the limitations contained in the airworthiness standard.
- (e) The applicant must establish all limitations required for the issue of the type or supplemental type certificate applied for, including limitations on weights, speeds, flight maneuvers, loading, and operation of controls and equipment unless, for each limitation not so established, appropriate operating restrictions are established for the aircraft.
- (f) The applicant must establish an inspection and maintenance program for the continued airworthiness of the aircraft.
- (g) The applicant must show that a prototype aircraft has been flown for at least 50 hours under an experimental certificate issued under Secs. 21.191 through 21.195. However, in the case of an amendment to a provisional type certificate, the DGCA may reduce the number of required flight hours.
- (h) Provisionally certificated civil aircraft: Operating limitations.
 - (1) No person may operate a provisionally certificated civil aircraft unless that person is eligible for a provisional airworthiness certificate under Sec. 21.213.

- (2) No person may operate a provisionally certificated civil aircraft outside the Republic of Indonesia unless that person has specific authority to do so from the DGCA and each foreign country involved.
- (3) Unless otherwise authorized by the DGCA, no person may operate a provisionally certificated civil aircraft in air transportation.
- (4) Unless otherwise authorized by the DGCA, no person may operate a provisionally certificated civil aircraft except-
 - (i) In direct conjunction with the type or supplemental type certification of that aircraft;
 - (ii) For training flight crews, including simulated air carrier operations;
 - (iii) Demonstration flight by the manufacturer for prospective purchasers;
 - (iv) Market surveys by the manufacturer;
 - (v) Flight checking of instruments, accessories, and equipment that do not affect the basic airworthiness of the aircraft; or
 - (vi) Service testing of the aircraft.
- (5) Each person operating a provisionally certificated civil aircraft shall operate within the prescribed limitations displayed in the aircraft or set forth in the provisional aircraft flight manual or other appropriate document. However, when operating in direct conjunction with the type or supplemental type certification of the aircraft, that person shall operate under the experimental aircraft limitations of Sec. 21.191 and when flight testing, shall operate under the requirement of paragraph (h)(12) of this section.
- (6) Each person operating a provisionally certificated civil aircraft shall establish approved procedures for-
 - (i) The use and guidance of flight and ground personnel in operating under this section; and
 - (ii) Operating in and out of airports where takeoffs or approaches over populated areas are necessary. No person may operate that aircraft except in compliance with the approved procedures.
- (7) Each person operating a provisionally certificated civil aircraft shall ensure that each flight crewmember is properly certificated and has adequate knowledge of, and familiarity with, the aircraft and procedures to be used by that crewmember.
- (8) Each person operating a provisionally certificated civil aircraft shall maintain it as required by applicable regulations and as may be specially prescribed by the DGCA.
- (9) Whenever the manufacturer, or the DGCA, determines that a change in design, construction, or operation is necessary to ensure safe operation, no person may operate a provisionally certificated civil aircraft until that change has been made and approved. Section 21.99 applies to operations under this section.
- (10) Each person operating a provisionally certificated civil aircraft -
 - (i) May carry in that aircraft only persons who have a proper interest in the operations allowed by this section or who are specifically authorized by both the manufacturer and the DGCA; and
 - (ii) Shall advise each person carried that the aircraft is provisionally certificated.

- (11) The DGCA may prescribe additional limitations or procedures that the DGCA considers necessary, including limitations on the number of persons who may be carried in the aircraft.
- (12) Flight test areas. No person may flight test an aircraft except over open water, or sparsely populated areas, having light air traffic.

21.83 Requirements for Issue and Amendment of Class II Provisional Type Certificates.

- (a) An applicant who manufactures aircraft within the Republic of Indonesia is entitled to the issue or amendment of a Class II provisional type certificate if he shows compliance with this section and the DGCA finds that there is no feature, characteristic, or condition that would make the aircraft unsafe when operated in accordance with the limitations in paragraph (h) and (k) of this section, and Sec. 21.81(h).
- (b) An applicant who manufactures aircraft in a country which the Republic of Indonesia accepts of those aircraft for import is entitled to the issue or amendment of a Class II provisional type certificate if the country in which the aircraft was manufactured certifies that the applicant has shown compliance with this section, that the aircraft meets the requirements of paragraph (f) of this section and that there is no feature, characteristic, or condition that would make the aircraft unsafe when operated in accordance with the limitations in paragraph (h) and (k) of this section, and Sec. 21.81(h).
- (c) The applicant must apply for a type certificate, in the transport category, for the aircraft.
- (d) The applicant must hold a Republic of Indonesia type certificate for at least one other aircraft in the same transport category as the subject aircraft.
- (e) The DGCA's official flight test program or the flight test program conducted by the authorities of the country in which the aircraft was manufactured, with respect to the issue of a type certificate for that aircraft, must be in progress.
- (f) The applicant or, in the case of a foreign manufactured aircraft, the country in which the aircraft was manufactured, must certify that -
 - (1) The aircraft has been designed and constructed in accordance with the airworthiness requirements applicable to the issue of the type certificate applied for;
 - (2) The aircraft substantially complies with the applicable flight characteristic requirements for the type certificate applied for; and
 - (3) The aircraft can be operated safely under the appropriate operating limitations of the applicable airworthiness requirement.
- (g) The applicant must submit a report showing that the aircraft has been flown in all maneuvers necessary to show compliance with the flight requirements for the issue of the type certificate and to establish that the aircraft can be operated safely in accordance with the limitations of the applicable airworthiness requirement.
- (h) The applicant must prepare a provisional aircraft flight manual containing all limitations required for the issue of the type certificate applied for, including limitations on weights, speeds, flight maneuvers, loading, and operation of

controls and equipment unless, for each limitation not so established, appropriate operating restrictions are established for the aircraft.

- (i) The applicant must establish an inspection and maintenance program for the continued airworthiness of the aircraft.
- (j) The applicant must show that a prototype aircraft has been flown for at least 100 hours. In the case of an amendment to a provisional type certificate, the DGCA may reduce the number of required flight hours.
- (k) Provisionally certificated air carrier airplane: Operating limitations. In addition to the limitations in Sec. 21.81(h), the following limitations apply to the operation of provisionally certificated airplane by air carriers:
 - (1) In addition to crewmembers, each air carrier may carry on such an airplane only those persons who are listed in paragraph (k)(3) of this section or who are specifically authorized by both the air carrier and the DGCA.
 - (2) Each air carrier shall keep a log of each flight conducted under this section and shall keep accurate and complete records of each inspection made and all maintenance performed on the airplane. The air carrier shall make the log and records made under this section available to the manufacturer and the DGCA.
 - (3) Admission to flight deck. No person may admit any person to the flight deck unless there is a seat available for his use in the passenger compartment, except -
 - (i) A DGCA air carrier inspector or an authorized representative of the DGCA or Investigation Committee who is checking or observing flight operations;
 - (ii) An air traffic controller who is authorized by the DGCA to observe ATC procedures;
 - (iii) A certificated airman employed by the certificate holder whose duties require an airman certificate;
 - (iv) A certificated airman employed by another certificate holder whose duties with that carrier require an airman certificate and who is authorized by the certificate holder operating the aircraft to make specific trips over a route;
 - (v) An employee of the certificate holder operating the aircraft whose duty is directly related to the conduct or planning of flight operations or the inflight monitoring of aircraft equipment or operating procedures, if his presence on the perform his duties and he has been authorized in writing by a responsible supervisor, listed in the Operations Manual as having that authority; and
 - (vi) A technical representative of the manufacturer of the aircraft or its components whose duties are directly related to the in-flight monitoring of aircraft equipment or operating procedures, if his presence on the flight deck is necessary to perform his duties, and he has been authorized in writing by the DGCA and by a responsible supervisor of the operations department of the certificate holder, listed in the Operations Manual as having that authority.

21.85 Provisional Amendments to Type Certificates.

- (a) An applicant who manufactures aircraft within the Republic of Indonesia is entitled to a provisional amendment to a type certificate if he shows

compliance with this section and the DGCA finds that there is no feature, characteristic, or condition that would make the aircraft unsafe when operated under the appropriate limitations contained in the applicable airworthiness requirement.

- (b) An applicant who manufactures aircraft in a foreign country which the Republic of Indonesia accepts of those aircraft for import is entitled to a provisional amendment to a type certificate if the country in which the aircraft was manufactured certifies that the applicant has shown compliance with this section, that the aircraft meets the requirements of paragraph (e) of this section and that there is no feature, characteristic, or condition that would make the aircraft unsafe when operated under the appropriate limitations contained in the applicable airworthiness requirement.
- (c) The applicant must apply for an amendment to the type certificate.
- (d) The DGCA's official flight test program or the flight test program conducted by the authorities of the country in which the aircraft was manufactured, with respect to the amendment of the type certificate, must be in progress.
- (e) The applicant or, in the case of foreign manufactured aircraft, the country in which the aircraft was manufactured, must certify that -
 - (1) The modification involved in the amendment to the type certificate has been designed and constructed in accordance with the airworthiness requirements applicable to the issue of the type certificate for the aircraft;
 - (2) The aircraft substantially complies with the applicable flight characteristic requirements for the type certificate; and
 - (3) The aircraft can be operated safely under the appropriate operating limitations of the applicable airworthiness requirement.
- (f) The applicant must submit a report showing that the aircraft incorporating the modifications involved has been flown in all maneuvers necessary to show compliance with the flight requirements applicable to those modifications and to establish that the aircraft can be operated safely in accordance with the limitations specified in Secs. 21.81(h) and 21.83(k).
- (g) The applicant must establish and publish, in a provisional aircraft flight manual or other document and on appropriate placards, all limitations required for the issue of the type certificate applied for, including weight, speed, flight maneuvers, loading, and operation of controls and equipment, unless, for each limitation not so established, appropriate operating restrictions are established for the aircraft.
- (h) The applicant must establish an inspection and maintenance program for the continued airworthiness of the aircraft.
- (i) The applicant must operate a prototype aircraft modified in accordance with the corresponding amendment to the type certificate for the number of hours found necessary by the DGCA.

SUBPART D CHANGES TO TYPE CERTIFICATES

21.91 Applicability.

This subpart prescribes procedural requirements for the approval of changes to type certificates.

21.92 Eligibility.

- (a) Only the type-certificate holder may apply for approval of a major change to a type design under this Subpart; all other applicants for a major change to a type design shall apply under Subpart E.
- (b) Any natural or legal person may apply for approval of a minor change to a type design under this Subpart.

21.93 Classification of Changes in Type Design.

- (a) In addition to changes in type design specified in paragraph (b) of this section, changes in type design are classified as minor and major. A "minor change" is one that has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product. All other changes are "major changes" (except as provided in paragraph (b) of this section).
- (b) For the purpose of complying with CASR Part 36, and except as provided in paragraphs (b)(2), (b)(3), and (b)(4) of this section, any voluntary change in the type design of an aircraft that may increase the noise levels of that aircraft is an "acoustical change" (in addition to being a minor or major change as classified in paragraph (a) of this section) for the following aircraft:
 - (1) Transport category large airplanes.
 - (2) Turbojet powered airplanes (regardless of category). For airplanes to which this paragraph applies, "acoustical changes" do not include changes in type design that are limited to one of the following -
 - (i) Gear down flight with one or more retractable landing gear down during the entire flight, or
 - (ii) Spare engine and nacelle carriage external to the skin of the airplane (and return of the pylon or other external mount), or
 - (iii) Time-limited engine and/or nacelle changes, where the change in type design specifies that the airplane may not be operated for a period of more than 90 days unless compliance with the applicable acoustical change provisions CASR Part 36, is shown for that change in type design.
 - (3) Propeller driven commuter category and small airplanes in the normal, utility, acrobatic, transport, and restricted categories, except for airplanes that are:
 - (i) Designated for "agricultural aircraft operations" to which CASR Part 36 Sec. 36.1583 does not apply, or
 - (ii) Designated for dispensing firefighting materials to which CASR Part 36 Sec. 36.1583 does not apply, or
 - (iii) [To be determined]

- (iv) Land configured aircraft reconfigured with floats or skis. This reconfiguration does not permit further exception from the requirements of this section upon any acoustical change not enumerated in Sec. 21.93(b).
- (4) Helicopters, (except for those helicopters that are designated exclusively for "agricultural aircraft operations", for dispensing firefighting materials, or for carrying external loads). For helicopters to which this paragraph applies, "acoustical changes" include the following type design changes:
 - (i) Any changes to, or removal of, a muffler or other component designed for noise control.
 - (ii) Any other design or configuration change (including a change in the operating limitations of the aircraft) that, based on DGCA-approved analytical or test data, the DGCA determines may result in an increase in noise level.
- (c) For purposes of complying with CASR Part 34, any voluntary change in the type design of the airplane or engine which may increase fuel venting or exhaust emissions is an "emissions change."

21.95 Approval of Minor Changes in Type Design.

Minor changes in a type design may be approved under a method acceptable to the DGCA before submitting to the DGCA any substantiating or descriptive data.

21.97 Approval of Major Changes in Type Design.

- (a) In the case of a major change in type design, the applicant must -
 - (1) Provide substantiating data and necessary descriptive data for inclusion in the type design.
 - (2) Show that the change and areas affected by the change comply with the applicable requirements, and provide the DGCA the means by which such compliance has been shown; and
 - (3) Provide a statement certifying that the applicant has complied with the applicable requirements.
- (b) Approval of a major change in the type design of an aircraft engine is limited to the specific engine configuration upon which the change is made unless the applicant identifies in the necessary descriptive data for inclusion in the type design the other configurations of the same engine type for which approval is requested and shows that the change is compatible with the other configurations.

21.99 Required Design Changes.

- (a) When an Airworthiness Directive is issued under requirements of Maintenance and Modifications of Aircraft, Aircraft Components and Appliances the holder of the type certificate for the product concerned must-
 - (1) If the DGCA finds that design changes are necessary to correct the unsafe condition of the product, and upon his request, submit appropriate design changes for approval; and
 - (2) Upon approval of the design changes, make available the descriptive data covering the changes to all operators of products previously certificated under the type certificate.

- (b) In a case where there are no current unsafe conditions, but the DGCA or the holder of the type certificate finds through service experience that changes in type design will contribute to the safety of the product, the holder of the type certificate may submit appropriate design changes for approval. Upon approval of the changes, the manufacturer shall make information on the design changes available to all operators of the same type of product.

21.101 Designation of Applicable Regulations.

- (a) Except as provided in CASR Part 23 Sec. 23.2, CASR Part 25 Sec. 25.2, CASR Part 27 Sec. 27.2, CASR Part 29 Sec. 29.2, CASR Part 34, and CASR Part 36, an applicant for a change to a type certificate must comply with either -
 - (1) The regulations incorporated by reference in the type certificate; or
 - (2) The applicable regulations in effect on the date of the application, plus any other amendments the DGCA finds to be directly related.
- (b) If the DGCA finds that a proposed change consists of a new design or a substantially complete redesign of a component, equipment installation, or system installation, and that the regulations incorporated by reference in the type certificate for the product do not provide adequate standards with respect to the proposed change, the applicant must comply with -
 - (1) The applicable provisions of the airworthiness standard, in effect on the date of the application for the change, that the DGCA finds necessary to provide a level of safety equal to that established by the regulations incorporated by reference in the type certificate for the product; and
 - (2) Any special conditions, and amendments to those special conditions, prescribed by the DGCA to provide a level of safety equal to that established by the regulations incorporated by reference in the type certificate for the product.
- (c) Unless otherwise required by Sec. 21.19(a), an applicant for a change to a type certificate for a transport category airplane involving the replacement of reciprocating engines with the same number of turbopropeller powerplants must comply with the requirements of CASR Part 25 applicable to the airplane as type certificated with reciprocating engines, and with the following:
 - (1) The certification performance requirements prescribed in Secs. 25.101 through 25.125 and 25.149, 25.1533, 25.1583, and 25.1587.
 - (2) The powerplant requirements CASR Part 25 applicable to turbo propeller engine powered airplanes.
 - (3) The requirements of CASR Part 25 for the standardization of cockpit controls and instruments, unless the DGCA finds that compliance with a particular detailed requirement would be impractical and would not contribute materially to standardization.
 - (4) Any other requirement of CASR Part 25 applicable to turbopropeller engine powered airplanes that the DGCA finds to be related to the changes in engines and that are necessary to ensure a level of safety equal to that of the airplane certificated with reciprocating engines. For each new limitation established with respect to weight, speed, or altitude that is significantly altered from those approved for the airplane with reciprocating engines, the applicant must show compliance with the requirements of CASR Part 25 applicable to the limitations being changed.

SUBPART E SUPPLEMENTAL TYPE CERTIFICATES

21.111 Applicability.

This subpart prescribes procedural requirements for the issue of supplemental type certificates.

21.112 Eligibility.

Any interested person as prescribes in Sub Part J Design Organization Approval (DOA) may apply for a supplemental type certificate

21.113 Requirement of Supplemental Type Certificate.

- (a) If a person holds the TC for a product and alters that product by introducing a major change in type design that does not require an application for a new TC under Section 21.19, that person must either apply to the DGCA for an STC or apply to amend the original type certificate under subpart D of this part.
- (b) If a person does not hold the TC for a product and alters that product by introducing a major change in type design that does not require an application for a new TC under Section 21.19, that person must apply to the DGCA for an STC.
- (c) The application for a supplemental type certificate is made on a form and in a manner prescribed by the DGCA.

21.115 Applicable Requirements.

- (a) Each applicant for a supplemental type certificate must show that the altered product meets applicable airworthiness requirements as specified in paragraphs (a) and (b) of Sec. 21.101 and, in the case of an acoustical change described in Sec. 21.93(b), show compliance with the applicable noise requirements of CASR Part 36 Secs. 36.7 and 36.9 and, in the case of an emissions change described in Sec. 21.93(c), show compliance with the applicable fuel venting and exhaust emissions requirements of CASR Part 34.
- (b) Each applicant for a supplemental type certificate must meet Secs. 21.33 and 21.53 with respect to each change in the type design.

21.117 Issue of Supplemental Type Certificates.

- (a) An applicant is entitled to a supplemental type certificate if he meets the requirements of Secs. 21.113 and 21.115.
- (b) A supplemental type certificate consists of -
 - (1) The approval by the DGCA of a change in the type design of the product; and
 - (2) The type certificate previously issued for the product.

21.119 Privileges

The holder of a supplemental type certificate may -

- (a) In the case of aircraft, obtain airworthiness certificates;
- (b) In the case of other 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.

21.120 Responsibility of supplemental type certificate holders to provide written permission for alterations.

A supplemental type certificate holder who allows a person to use the supplemental type certificate to alter an aircraft, aircraft engine, or propeller must provide that person with written permission acceptable to the DGCA.

SUBPART F PRODUCTION UNDER TYPE CERTIFICATE

21.121 Applicability.

This subpart prescribes rules for production under a type certificate.

21.122 Location of or change to manufacturing facilities.

- (a) A type certificate holder may utilize manufacturing facilities located outside of the Republic of Indonesia if the DGCA finds no undue burden in administering the applicable requirements of the pertinent CASRs.
- (b) The type certificate holder must obtain DGCA approval before making any changes to the location of any of its manufacturing facilities.
- (c) The type certificate holder must immediately notify the DGCA, in writing, of any change to the manufacturing facilities that may affect the inspection, conformity, or airworthiness of its product or article.

21.123 Production under Type Certificate.

Each manufacturer of a product being manufactured under a type certificate must -

- (a) Maintain at the place of manufacture all information and data specified in section 21.31 and 21.41;
- (b) Make each product and article thereof available for inspection by the DGCA;
- (c) Maintain records of the completion of all inspections and tests required by section 21.127, 21.128, and 21.129 for at least 5 years for the products and articles thereof manufactured under the approval and at least 10 years for critical components identified under CASR Part 45 section 45.15(c);
- (d) Allow the DGCA to make any inspection or test, including any inspection or test at a supplier facility, necessary to determine compliance with the applicable airworthiness standard;
- (e) Mark the product in accordance with CASR part 45, including any critical parts;
- (f) Identify any portion of that product (e.g., sub-assemblies, component parts, or replacement articles) that leave the manufacturer's facility as DGCA approved with the manufacturer's part number and name, trademark, symbol, or other DGCA manufacturer's identification; and
- (g) Except as otherwise authorized by the DGCA, obtain a production certificate for that product in accordance with subpart G of this part within 6 months after the date of issuance of the type certificate.

21.125 [Reserved]

21.127 Tests: Aircraft.

- (a) Each person manufacturing aircraft under a type certificate shall establish an approved production flight test procedure and flight check off form, and in accordance with that form, 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 control as the prototype aircraft.
 - (2) An operational check of each part or system operated by the crew while 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 required flight manuals are installed after flight test.
 - (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 the ground or flight operation of the aircraft.

21.128 Tests: Aircraft Engines.

- (a) Each person manufacturing aircraft engines under a type certificate shall subject each engine (except rocket engines for which the manufacturer must establish a sampling technique) to an acceptable test run that includes the following:
 - (1) Break-in runs that include a determination of fuel and oil consumption and a determination of power characteristics at rated maximum continuous power or thrust and, if applicable, at rated takeoff power or thrust.
 - (2) 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.
- (b) The test runs required by paragraph (a) of this section may be made with the engine appropriately mounted and using current types of power and thrust measuring equipment.

21.129 Tests: Propellers.

Each person manufacturing propellers under a type certificate shall give each variable pitch propeller an acceptable functional test to determine if it operates properly throughout the normal range of operation.

21.130 Statement of Conformity.

Each holder or licensee of a type certificate who manufactures a product under this subpart must provide, in a form and manner acceptable to the DGCA, a statement that the product for which the type certificate has been issued conforms to its type certificate and is in a condition for safe operation.

SUBPART G PRODUCTION CERTIFICATES

21.131 Applicability.

This subpart prescribes -

- (a) Procedural requirements for the issue of production certificates, and
- (b) Rules governing the holders of those certificates.

21.132 Eligibility.

Any person may apply for a production certificate if he holds, for the product concerned, a -

- (a) Current type certificate;
- (b) Right to the benefits of that type certificate under a licensing agreement; or
- (c) Supplemental type certificate.

21.133 Application.

Each application for a production certificate must be made in a form and manner prescribed by the DGCA.

21.135 Organization.

Each applicant for or holder of a production certificate must provide the DGCA with a document describing how its organization will ensure compliance with the provision of this subpart. At a minimum, the document must describe assigned responsibilities and delegated authority, and the functional relationship of those responsible for quality to management and other organizational components.

21.137 Quality System.

Each applicant for or holder a production certificate must establish and describe in writing a quality system that ensures that each product and article conforms to its approved design and is in condition for safe operation. This quality system must include:

- (a) Design data control. Procedures for controlling design data and subsequent changes to ensure that only current, correct, and approved data is used.
- (b) Document control. Procedures for controlling quality system documents and data and subsequent changes to ensure that only current, correct, and approved documents and data are used.
- (c) Supplier control. Procedures that—
 - (1) Ensure that each supplier-furnished product or article conforms to its approved design; and
 - (2) Require each supplier to report to the production approval holder if a product or article has been released from that supplier and subsequently found not to conform to the applicable design data.

- (d) Manufacturing process control. Procedures for controlling manufacturing processes to ensure that each product and article conforms to its approved design.
- (e) Inspecting and testing. Procedures for inspections and tests used to ensure that each product and article conforms to its approved design. These procedures must include the following, as applicable:
 - (1) A flight test of each aircraft produced unless that aircraft will be exported as an unassembled aircraft.
 - (2) A functional test of each aircraft engine and each propeller produced.
- (f) Inspection, measuring, and test equipment control. Procedures to ensure calibration and control of all inspection, measuring, and test equipment used in determining conformity of each product and article to its approved design. Each calibration standard must be traceable to a standard acceptable to the DGCA.
- (g) Inspection and test status. Procedures for documenting the inspection and test status of products and articles supplied or manufactured to the approved design.
- (h) Nonconforming product and article control.
 - (1) Procedures to ensure that only products or articles that conform to their approved design are installed on a type-certificated product. These procedures must provide for the identification, documentation, evaluation, segregation, and disposition of nonconforming products and articles. Only authorized individuals may make disposition determinations.
 - (2) Procedures to ensure that discarded articles are rendered unusable.
- (i) Corrective and preventive actions. Procedures for implementing corrective and preventive actions to eliminate the causes of an actual or potential nonconformity to the approved design or noncompliance with the approved quality system.
- (j) Handling and storage. Procedures to prevent damage and deterioration of each product and article during handling, storage, preservation, and packaging.
- (k) Control of quality records. Procedures for identifying, storing, protecting, retrieving, and retaining quality records. A production approval holder must retain these records for at least 5 years for the products and articles manufactured under the approval and at least 10 years for critical components identified under Section 45.15.
- (l) Internal audits. Procedures for planning, conducting, and documenting internal audits to ensure compliance with the approved quality system. The procedures must include reporting results of internal audits to the manager responsible for implementing corrective and preventive actions.
- (m) In-service feedback. Procedures for receiving and processing feedback on in-service failures, malfunctions, and defects. These procedures must include a process for assisting the design approval holder to—
 - (1) Address any in-service problem involving design changes; and
 - (2) Determine if any changes to the Instructions for Continued Airworthiness are necessary.

- (n) Quality escapes. Procedures for identifying, analyzing, and initiating appropriate corrective action for products or articles that have been released from the quality system and that do not conform to the applicable design data or quality system requirements.

21.138 Quality Manual.

Each applicant for or holder a production certificate must provide a manual describing its quality system to the DGCA for approval. The manual must be in the Bahasa Indonesia or English language and retrievable in a form acceptable to the DGCA.

21.139 Location of or Change to Manufacturing Facilities.

- (a) An applicant may obtain a production certificate for manufacturing facilities located outside of the Republic of Indonesia if the DGCA finds no undue burden in administering the applicable regulation
- (b) The production approval holder must obtain DGCA approval before making any changes to the location of any its manufacturing facilities.
- (c) The production approval holder must immediately notify to DGCA, in writing, of any change to the manufacturing facilities that may affect the inspection, conformity or airworthiness of its product or article.

21.140 Inspections and Tests.

Each applicant for or holder of a production certificate shall allow the DGCA to inspect its quality system, facilities, technical data, and any manufactured products or articles and witness any tests, including any inspections or test at supplier facility, necessary to determine compliance with the applicable CASR.

21.141 Issuance.

The DGCA issues a production certificate after finding that the applicant complies with the requirements of this subpart.

21.142 Production Limitation Record.

A production limitation record is issued as part of a production certificate. The record lists the type certificate of every product that the applicant is authorized to manufacture under the terms of the production certificate.

21.143 Duration.

A production certificate is effective until surrendered, suspended, revoked, or a termination date is otherwise established by the DGCA, or the location of the manufacturing facility is changed.

21.144 Transferability.

The holder of a production certificate may not transfer the production certificate.

21.145 Privileges.

- (a) The holder of a production certificate may -
- (1) Obtain an aircraft airworthiness certificate without further showing, except that the DGCA may inspect the aircraft for conformity with the type design; or
 - (2) In the case of other products, obtain approval from the DGCA for installation on type-certificated aircraft.
- (b) Notwithstanding the provisions of CASR Part 147 section 147.5, the holder of a production certificate for a primary category aircraft, or for a normal, utility, or acrobatic category aircraft of a type design that is eligible for a special airworthiness certificate in the primary category under section 21.184(c), may—
- (1) Conduct training for persons in the performance of a special inspection and preventive maintenance program approved as a part of the aircraft's type design under section 21.24(b), provided a person holding a mechanic certificate with appropriate airframe and powerplant ratings issued under CASR part 65 gives the training; and
 - (2) Issue a certificate of competency to persons successfully completing the approved training program, provided the certificate specifies the aircraft make and model to which the certificate applies.

21.146 Responsibility of Holder.

The holder of a production certificate shall -

- (a) Amend the document required by section 21.135 as necessary to reflect changes in the organization and provide these amendments to the DGCA.
- (b) Maintain the quality system in compliance with the data and procedures approved for the production certificate;
- (c) Mark the product or article for which a certificate or approval has been issued. Marking must be in accordance with CASR part 45 , including any critical parts;
- (d) Identify any portion of the product or article (e.g., sub-assemblies, component parts, or replacement articles) that leave the manufacturer's facility as DGCA approved with the manufacturer's part number and name, trademark, symbol, or other DGCA approved manufacturer's identification;
- (e) Have access to type design data necessary to determine conformity and airworthiness for each product and article produced under the production certificate;
- (f) Retain its production certificate and make it available to the DGCA upon request; and
- (g) Make available to the DGCA information regarding all delegation of authority to supplier

21.147 Amendment of the Production Certificates.

The holder of a production certificate must apply for an amendment to a production certificate in a form and manner prescribed by the DGCA. The

applicant for an amendment to a production certificate to add a type certificate or model, or both, must comply with the applicable requirements of Section 21.137, 21.138, and 21.150.

21.150 Changes in Quality System.

After the issuance of a production certificate—

- (a) Each change to the quality system is subject to review by the DGCA; and
- (b) The holder of a production certificate must immediately notify the DGCA, in writing, of any change that may affect the inspection, conformity, or airworthiness of its product or article.

SUBPART H AIRWORTHINESS CERTIFICATES

21.171 Applicability.

This subpart prescribes procedural requirements for the issue of airworthiness certificates.

21.173 Eligibility.

Any registered owner of a Republic of Indonesia registered aircraft (or holder of power of attorney) may apply for an airworthiness certificate for that aircraft. An application for an airworthiness certificate must be made in a form and manner acceptable to the DGCA, and submitted to DGCA office.

21.175 Airworthiness Certificates: Classification.

- (a) Standard airworthiness certificates are airworthiness certificates issued for aircraft type certificated in the normal, utility, acrobatic, commuter, or transport category, and for manned free balloons, and for aircraft designated by the DGCA as special classes of aircraft.
- (b) Special airworthiness certificates are restricted, limited, light-sport, and provisional airworthiness certificates, special flight permits, and experimental certificates.

21.177 Amendment or Modification.

An airworthiness certificate may be amended or modified only upon application to the DGCA.

21.179 Transferability.

An airworthiness certificate is transferred with the aircraft.

21.181 Duration.

- (a) Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the DGCA, airworthiness certificates are effective as follows :
 - (1) Standard airworthiness certificates and special airworthiness certificates issued for primary, restricted or limited category aircraft are effective for one year after the date of issue or renewal as long as the maintenance, preventive maintenance, and alterations are performed in accordance with CASR Part 43 and Part 91, and the aircraft are registered in the Republic of Indonesia.
 - (2) A special flight permit is effective for the period of time specified in the permit.
 - (3) An experimental certificate for research and development, showing compliance with regulations, crew training, market surveys, amateur-built, exhibition and air-racing are effective for one year after the date of issue or renewal unless a shorter period is prescribed by DGCA.

- (4) A special airworthiness certificate in the light-sport category is effective as long as—
 - (i) The aircraft meets the definition of a light-sport aircraft;
 - (ii) The aircraft conforms to its original configuration, except for those alterations performed in accordance with an applicable consensus standard and authorized by the aircraft's manufacturer or a person acceptable to the DGCA;
 - (iii) The aircraft has no unsafe condition and is not likely to develop an unsafe condition; and
 - (iv) The aircraft is registered in the Republic of Indonesia.
- (b) The owner, operator, or holder of power of attorney of the aircraft shall, upon request, make it available for inspection by the DGCA.
- (c) Upon suspension, revocation, or termination by order of the DGCA of an airworthiness certificate, the owner, operator, or holder of power of attorney of an aircraft shall, upon request, surrender the certificate to the DGCA.

21.182 Aircraft Identification.

- (a) Except as provided in paragraph (b) of this section, each applicant for an airworthiness certificate under this subpart must show that his aircraft is identified as prescribed in CASR Part 45 Sec. 45.11.
- (b) Paragraph (a) of this section does not apply to applicants for the following:
 - (1) A special flight permit.
 - (2) An experimental certificate for an aircraft that is not amateur built, or operating light-sport aircraft.
 - (3) A change from one airworthiness classification to another, for an aircraft already identified as prescribed in CASR Part 45 Sec. 45.11.

21.183 Issue of Standard Airworthiness Certificates for Normal, Utility, Acrobatic, Commuter, and Transport Category Aircraft; and Special Classes of Aircraft.

- (a) New aircraft manufactured under a production certificate. An applicant for a standard airworthiness certificate for a new aircraft manufactured under a production certificate is entitled to a standard airworthiness certificate without further showing, except that the DGCA may inspect the aircraft to determine conformity to the type design and condition for safe operation.
- (b) New aircraft manufactured under type certificate. An applicant for a standard airworthiness certificate for a new aircraft manufactured under a type certificate only is entitled to a standard airworthiness certificate upon presentation, by the holder or licensee of the type certificate, of the statement of conformity prescribed in Sec. 21.130 if the DGCA finds after inspection that the aircraft conforms to the type design and is in condition for safe operation.
- (c) Import aircraft. An applicant for a standard airworthiness certificate for an import aircraft type certificated in accordance with Sec. 21.29 is entitled to an airworthiness certificate if the country in which the aircraft was manufactured certifies, and the DGCA finds, that the aircraft conforms to the type design and is in condition for safe operation.

- (d) Used aircraft. An applicant for a standard airworthiness certificate for used aircraft, is entitled to a standard airworthiness certificate if -
- (1) He presents evidence to the DGCA that the aircraft conforms to a type design approved under a type certificate or a supplemental type certificate and to applicable Airworthiness Directives;
 - (2) The aircraft (except an experimentally certificated aircraft that previously had been issued a different airworthiness certificate under this section) has been inspected in accordance with the performance rules of requirements of Maintenance and Modifications of Aircraft, Aircraft Components and Appliances and found airworthy by -
 - (i) The manufacturer;
 - (ii) The holder of a repair station certificate as provided in CASR Part 145;
 - (iii) The holder of a mechanic certificate as authorized in CASR Part 65; or
 - (iv) The holder of a certificate issued under CASR Part 121, and having a maintenance and inspection organization appropriate to the aircraft type; and
 - (3) The DGCA finds after inspection, that the aircraft conforms to the type design, and is in condition for safe operation.
- (e) Noise requirements. Notwithstanding all other provisions of this section, the following must be complied with for the original issuance of a standard airworthiness certificate:
- (1) For transport category large airplanes and turbojet powered airplanes that have not had any flight time before the dates specified in CASR Part 36 Sec. 36.1(d), no standard airworthiness certificate is originally issued under this section unless the DGCA finds that the type design complies with the noise requirements in CASR Part 36 Sec. 36.1(d) in addition to the applicable airworthiness requirements in this section. For import airplanes, compliance with this paragraph is shown if the country in which the airplane was manufactured certifies, and the DGCA finds, that CASR Part 36 Sec. 36.1(d) (or the applicable airplane noise requirements of the country in which the airplane was manufactured and any other requirements the DGCA may prescribe to provide noise levels no greater than those provided by compliance with CASR Part 36 Sec. 36.1(d)) and paragraph (c) of this section are complied with.
 - (2) For normal, utility, acrobatic, commuter, or transport category propeller driven small airplanes (except for those airplanes that are designed for "agricultural aircraft operations" or for dispensing firefighting materials to which CASR Part 36 Sec. 36.1583 does not apply) that have not had any flight time before the applicable date specified in CASR Part 36, no standard airworthiness certificate is originally issued under this section unless the applicant shows that the type design complies with the applicable noise requirements of CASR Part 36 in addition to the applicable airworthiness requirements in this section. For import airplanes, compliance with this paragraph is shown if the country in which the airplane was manufactured certifies, and the DGCA finds, that the applicable requirements of CASR Part 36 (or the applicable airplane noise requirements of the country in which the airplane was manufactured and any other requirements the DGCA may prescribe to provide noise levels no greater than those provided by compliance with the applicable requirements of CASR Part 36) and paragraph (c) of this section are complied with.

- (f) Passenger emergency exit requirements. Notwithstanding all other provisions of this section, each applicant for issuance of a standard airworthiness certificate for a transport category airplane manufactured after this Decree come into force, must show that the airplane meets the requirements of CASR Part 25 Sec. 25.807(c)(7). For the purposes of this paragraph, the date of manufacture of an airplane is the date the inspection acceptance records reflect that the airplane is complete and meets the DGCA-approved type design data.
- (g) Fuel venting and exhaust emission requirements. Notwithstanding all other provisions of this section, and irrespective of the date of application, no airworthiness certificate is issued, on and after the dates specified in CASR Part 34 for the airplanes specified therein, unless the airplane complies with the applicable requirements.
- (h) New aircraft manufactured under the provisions of Section 21.6(b). An applicant for a standard airworthiness certificate for a new aircraft manufactured under the provisions of Section 21.6(b) is entitled to a standard airworthiness certificate if—
 - (1) The applicant presents evidence to the DGCA that the aircraft conforms to a type design approved under a type certificate or supplemental type certificate and to applicable Airworthiness Directives;
 - (2) The aircraft has been inspected in accordance with the performance rules for a 100-hour inspections set forth in CASR 43 Section 43.15 and found airworthy by a person specified in paragraph (d)(2) of this section; and
 - (3) The DGCA finds after inspection, that the aircraft conforms to the type design, and is in condition for safe operation.

21.185 Issue of Airworthiness Certificates for Restricted Category Aircraft.

- (a) Aircraft manufactured under a production certificate or type certificate. An applicant for the original issue of a restricted category airworthiness certificate for an aircraft type certificated in the restricted category, that was not previously type certificated in any other category, must comply with the appropriate provisions of Sec. 21.183.
- (b) Other aircraft. An applicant for a restricted category airworthiness certificate for an aircraft type certificated in the restricted category, that was previously type certificated in another category, is entitled to an airworthiness certificate if the aircraft has been inspected by the DGCA and found by him to be in a good state of preservation and repair and in a condition for safe operation.
- (c) Import aircraft. An applicant for the original issue of a restricted category airworthiness certificate for an import aircraft type certificated in the restricted category only in accordance with Sec. 21.29 is entitled to an airworthiness certificate if the country in which the aircraft was manufactured certifies, and the DGCA finds, that the aircraft conforms to the type design and is in a condition for safe operation.
- (d) Noise requirements. For propeller driven small airplanes (except airplanes designed for "agricultural aircraft operations," or for dispensing firefighting materials) that have not had any flight time before the applicable date specified in, CASR Part 36 and notwithstanding the other provisions of this section, no original restricted category airworthiness certificate is issued under this section unless the DGCA finds that the type design complies with the applicable noise requirements of CASR Part 36 in addition to the

applicable airworthiness requirements of this section. For import airplanes, compliance with this paragraph is shown if the country in which the airplane was manufactured certifies, and the DGCA finds, that the applicable requirements of CASR Part 36 (or the applicable airplane noise requirements of the country in which the airplane was manufactured and any other requirements the DGCA may prescribe to provide noise levels no greater than those provided by compliance with the applicable requirements of CASR Part 36 and paragraph (c) of this section are complied with.

21.187 Issue of Multiple Airworthiness Certification.

- (a) An applicant for an airworthiness certificate in the restricted category, and in one or more other categories, is entitled to the certificate, if -
 - (1) He shows compliance with the requirements for each category, when the aircraft is in the configuration for that category; and
 - (2) He shows that the aircraft can be converted from one category to another by removing or adding equipment by simple mechanical means.
- (b) The operator of an aircraft certificated under this section shall have the aircraft inspected by the DGCA, or by a certificated mechanic with an appropriate airframe rating, to determine airworthiness each time the aircraft is converted from the restricted category to another category for the carriage of passengers for compensation or hire, unless the DGCA finds this unnecessary for safety in a particular case.
- (c) The aircraft complies with the applicable requirements of CASR Part 34.

21.189 Issue of airworthiness certificate for limited category aircraft.

- (a) An applicant for an airworthiness certificate for an aircraft in the limited category is entitled to the certificate when—
 - (1) He shows that the aircraft has been previously issued a limited category type certificate and that the aircraft conforms to that type certificate; and
 - (2) The DGCA finds, after inspection (including a flight check by the applicant), that the aircraft is in a good state of preservation and repair and is in a condition for safe operation.
- (b) The DGCA prescribes limitations and conditions necessary for safe operation.

21.190 Issue of a special airworthiness certificate for a light-sport.

- (a) Purpose. The DGCA issues a special airworthiness certificate in the light-sport category to operate a light-sport aircraft, other than a gyroplane.
- (b) Eligibility. To be eligible for a special airworthiness certificate in the light-sport category:
 - (1) An applicant must provide the DGCA with—
 - (i) The aircraft's operating instructions;
 - (ii) The aircraft's maintenance and inspection procedures;
 - (iii) The manufacturer's statement of compliance as described in paragraph (c) of this section; and
 - (iv) The aircraft's flight training supplement.

- (2) The aircraft must not have been previously issued a standard, primary, restricted, limited, or provisional airworthiness certificate, or an equivalent airworthiness certificate issued by a foreign civil aviation authority.
 - (3) The aircraft must be inspected by the DGCA and found to be in a condition for safe operation.
- (c) Manufacturer's statement of compliance for light-sport category aircraft. The manufacturer's statement of compliance required in paragraph (b)(1)(iii) of this section must—
- (1) Identify the aircraft by make and model, serial number, class, date of manufacture, and consensus standard used;
 - (2) State that the aircraft meets the provisions of the identified consensus standard;
 - (3) State that the aircraft conforms to the manufacturer's design data, using the manufacturer's quality assurance system that meets the identified consensus standard;
 - (4) State that the manufacturer will make available to any interested person the following documents that meet the identified consensus standard:
 - (i) The aircraft's operating instructions.
 - (ii) The aircraft's maintenance and inspection procedures.
 - (iii) The aircraft's flight training supplement.
 - (5) State that the manufacturer will monitor and correct safety-of-flight issues through the issuance of safety directives and a continued airworthiness system that meets the identified consensus standard;
 - (6) State that at the request of the DGCA, the manufacturer will provide unrestricted access to its facilities; and
 - (7) State that the manufacturer, in accordance with a production acceptance test procedure that meets an applicable consensus standard has—
 - (i) Ground and flight tested the aircraft;
 - (ii) Found the aircraft performance acceptable; and
 - (iii) Determined that the aircraft is in a condition for safe operation.
- (d) Light-sport aircraft manufactured outside the Republic of Indonesia. For aircraft manufactured outside of the Republic of Indonesia to be eligible for a special airworthiness certificate in the light-sport category, an applicant must meet the requirements of paragraph (b) of this section and provide to the DGCA evidence that the aircraft is eligible for an airworthiness certificate, flight authorization, or other similar certification in its country of manufacture.

21.191 Experimental Certificates.

Experimental certificates are issued for the following purposes:

- (a) Research and development. Testing new aircraft design concepts, new aircraft equipment, new aircraft installations, new aircraft operating techniques, or new uses for aircraft.
- (b) Showing compliance with regulations. Conducting flight tests and other operations to show compliance with the airworthiness regulations including

flights to show compliance for issuance of type and supplemental type certificates, flights to substantiate major design changes, and flights to show compliance with the function and reliability requirements of the regulations.

- (c) Crew training. Training of the applicant's flight crews.
- (d) Exhibition. Exhibiting the aircraft's flight capabilities, performance, or unusual characteristics at air shows, motion picture, television, and similar productions, and the maintenance of exhibition flight proficiency, including (for persons exhibiting aircraft) flying to and from such air shows and productions.
- (e) Air racing. Participating in air races, including (for such participants) practicing for such air races and flying to and from racing events.
- (f) Market surveys. Use of aircraft for purposes of conducting market surveys, sales demonstrations, and customer crew training only as provided in Sec. 21.195.
- (g) Operating amateur built aircraft. Operating an aircraft the major portion of which has been fabricated and assembled by persons who undertook the construction project solely for their own education or recreation.
- (h) Operating light-sport aircraft. Operating a light-sport aircraft that—
 - (1) Has not been issued a Republic of Indonesia or foreign airworthiness certificate and does not meet the provisions of CASR part 103 sec. 103.1.
 - (2) Has been assembled—
 - (i) From an aircraft kit for which the applicant can provide the information required by Section 21.193(e); and
 - (ii) In accordance with manufacturer's assembly instructions that meet an applicable consensus standard; or
 - (3) Has been previously issued a special airworthiness certificate in the light-sport category under section 21.190.

21.193 Experimental Certificates: General.

An applicant for an experimental certificate must submit the following information:

- (a) A statement, in a form and manner prescribed by the DGCA setting forth the purpose for which the aircraft is to be used.
- (b) Enough data (such as photographs) to identify the aircraft.
- (c) Upon inspection of the aircraft, any pertinent information found necessary by the DGCA to safeguard the general public.
- (d) In the case of an aircraft to be used for experimental purposes -
 - (1) The purpose of the experiment;
 - (2) The estimated time or number of flights required for the experiment;
 - (3) The areas over which the experiment will be conducted; and
 - (4) Except for aircraft converted from a previously certificated type without appreciable change in the external configuration, three view drawings or three view dimensioned photographs of the aircraft.

- (e) In the case of a light-sport aircraft assembled from a kit to be certificated in accordance with section 21.191(h)(2), an applicant must provide the following:
- (1) Evidence that an aircraft of the same make and model was manufactured and assembled by the aircraft kit manufacturer and issued a special airworthiness certificate in the light-sport category.
 - (2) The aircraft's operating instructions.
 - (3) The aircraft's maintenance and inspection procedures.
 - (4) The manufacturer's statement of compliance for the aircraft kit used in the aircraft assembly that meets sec. 21.190(c), except that instead of meeting sec. 21.190(c)(7), the statement must identify assembly instructions for the aircraft that meet an applicable consensus standard.
 - (5) The aircraft's flight training supplement.

21.195 Experimental Certificates: Aircraft to be used for Market Surveys, Sales Demonstrations, and Customer Crew Training.

- (a) A manufacturer of aircraft manufactured within the Republic of Indonesia may apply for an experimental certificate for an aircraft that is to be used for market surveys, sales demonstrations, or customer crew training.
- (b) A manufacturer of aircraft engines who has altered a type certificated aircraft by installing different engines, manufactured by him within the Republic of Indonesia, may apply for an experimental certificate for that aircraft to be used for market surveys, sales demonstrations, or customer crew training, if the basic aircraft, before alteration, was type certificated in the normal, acrobatic, commuter, or transport category.
- (c) A person who has altered the design of a type certificated aircraft may apply for an experimental certificate for the altered aircraft to be used for market surveys, sales demonstrations, or customer crew training if the basic aircraft, before alteration, was type certificated in the normal, utility, acrobatic, or transport category.
- (d) An applicant for an experimental certificate under this section is entitled to that certificate if, in addition to meeting the requirements of Sec. 21.193 -
 - (1) He has established an inspection and maintenance program for the continued airworthiness of the aircraft; and
 - (2) He shows that the aircraft has been flown for at least 50 hours, or for at least 5 hours if it is a type certificated aircraft which has been modified.

21.197 Special flight permits.

- (a) A special flight permit may be issued for an aircraft that may not currently meet applicable airworthiness requirements but is capable of safe flight, for the following purposes:
 - (1) Flying the aircraft to a base where repairs, alterations, or maintenance are to be performed, or to a point of storage.
 - (2) Delivering or exporting the aircraft.
 - (3) Production flight testing new production aircraft.
 - (4) Evacuating aircraft from areas of impending danger.

- (5) Conducting customer demonstration flights in new production aircraft that have satisfactorily completed production flight tests.
- (b) A special flight permit may also be issued to authorize the operation of an aircraft at a weight in excess of its maximum certificated takeoff weight for flight beyond the normal range over water, or over land areas where adequate landing facilities or appropriate fuel is not available. The excess weight that may be authorized under this paragraph is limited to the additional fuel, fuel carrying facilities, and navigation equipment necessary for the flight.
- (c) [To be determined]

21.199 Issue of special flight permits.

- (a) An applicant for a special flight permit must submit a statement in a form and manner prescribed by the DGCA, indicating -
 - (1) The purpose of the flight.
 - (2) The proposed itinerary.
 - (3) The crew required to operate the aircraft and its equipment, e.g., pilot, copilot, navigator, etc.
 - (4) The ways, if any, in which the aircraft does not comply with the applicable airworthiness requirements.
 - (5) Any restriction the applicant considers necessary for safe operation of the aircraft.
 - (6) Any other information considered necessary by the DGCA for the purpose of prescribing operating limitations.
- (b) The DGCA may make, or require the applicant to make appropriate inspections or tests necessary for safety.

SUBPART I PROVISIONAL AIRWORTHINESS CERTIFICATES

21.211 Applicability.

This subpart prescribes procedural requirements for the issue of provisional airworthiness certificates.

21.213 Eligibility.

- (a) A manufacturer who is a Republic of Indonesia citizen may apply for a Class I or Class II provisional airworthiness certificate for aircraft manufactured by him within the Republic of Indonesia.
- (b) Any holder of an air carrier operating certificate who is a Republic of Indonesia citizen may apply for a Class II provisional airworthiness certificate for transport category aircraft that meet either of the following:
 - (1) The aircraft has a current Class II provisional type certificate or an amendment thereto.
 - (2) The aircraft has a current provisional amendment to a type certificate that was preceded by a corresponding Class II provisional type certificate.
- (c) An aircraft engine manufacturer who is a Republic of Indonesia citizen and who has altered a type certificated aircraft by installing different type certificated engines, manufactured by him within the Republic of Indonesia, may apply for a Class I provisional airworthiness certificate for that aircraft, if the basic aircraft, before alteration, was type certificated in the normal, utility, acrobatic, commuter, or transport category.

21.215 Application.

Application for provisional airworthiness certificates must be submitted to the DGCA. The application must be accompanied by the pertinent information specified in this subpart.

21.217 Duration.

Unless sooner surrendered, superseded, revoked, or otherwise terminated, provisional airworthiness certificates are effective for the duration of the corresponding provisional type certificate, amendment to a provisional type certificate, or provisional amendment to the type certificate.

21.219 Transferability.

Class I provisional airworthiness certificates are not transferable. Class II provisional airworthiness certificates may be transferred to an air carrier eligible to apply for a certificate under Sec. 21.213(b).

21.221 Class I Provisional Airworthiness Certificates.

- (a) Except as provided in Sec. 21.225, an applicant is entitled to a Class I provisional airworthiness certificate for an aircraft for which a Class I provisional type certificate has been issued if -

- (1) He meets the eligibility requirements of Sec. 21.213 and he complies with this section; and
 - (2) The DGCA finds that there is no feature, characteristic or condition of the aircraft that would make the aircraft unsafe when operated in accordance with the limitations established in Sec. 21.81(e) and 21.81(h).
- (b) The manufacturer must hold a provisional type certificate for the aircraft.
 - (c) The manufacturer must submit a statement that the aircraft conforms to the type design corresponding to the provisional type certificate and has been found by him to be in safe operating condition under all applicable limitations.
 - (d) The aircraft must be flown at least five hours by the manufacturer.
 - (e) The aircraft must be supplied with a provisional aircraft flight manual or other document and appropriate placards containing the limitations established by Secs. 21.81(e) and 21.81(h).

21.223 Class II Provisional Airworthiness Certificates.

- (a) Except as provided in Sec. 21.225, an applicant is entitled to a Class II provisional airworthiness certificate for an aircraft for which a Class II provisional type certificate has been issued if -
 - (1) He meets the eligibility requirements of Sec. 21.213 and he complies with this section; and
 - (2) The DGCA finds that there is no feature, characteristic, or condition of the aircraft that would make the aircraft unsafe when operated in accordance with the limitations established in Sec. 21.81(h), 21.83(h), and 21.83(k).
- (b) The applicant must show that a Class II provisional type certificate for the aircraft has been issued to the manufacturer.
- (c) The applicant must submit a statement by the manufacturer that the aircraft has been manufactured under a quality control system adequate to ensure that the aircraft conforms to the type design corresponding with the provisional type certificate.
- (d) The applicant must submit a statement that the aircraft has been found by him to be in a safe operating condition under the applicable limitations.
- (e) The aircraft must be flown at least five hours by the manufacturer.
- (f) The aircraft must be supplied with a provisional aircraft flight manual containing the limitations established by Sec. 21.81(h), 21.83(h), and 21.83(k).

21.225 Provisional Airworthiness Certificates Corresponding with Provisional Amendments to Type Certificates.

- (a) An applicant is entitled to a Class I or a Class II provisional airworthiness certificate, for an aircraft, for which a provisional amendment to the type certificate has been issued, if -

- (1) He meets the eligibility requirements of Sec. 21.213 and he complies with this section; and
 - (2) The DGCA finds that there is no feature, characteristic, or condition of the aircraft, as modified in accordance with the provisionally amended type certificate, that would make the aircraft unsafe when operated in accordance with the applicable limitations established in Secs. 21.81(h), 21.83(k) and 21.85(g).
- (b) The applicant must show that the modification was made under a quality control system adequate to ensure that the modification conforms to the provisionally amended type certificate.
 - (c) The applicant must submit a statement that the aircraft has been found by him to be in a safe operating condition under the applicable limitations.
 - (d) The aircraft must be flown at least five hours by the manufacturer.
 - (e) The aircraft must be supplied with a provisional aircraft flight manual or other document and appropriate placards containing the limitations required by Secs. 21.81(h), 21.83(k) and 21.85(g).

SUBPART J DESIGN ORGANIZATION APPROVAL

21.231 Applicability and definition.

This subpart establishes the procedure for the approval of design organizations and rules governing the rights and obligations of applicants for, and holders of, such approvals.

Design Organization means an organization responsible for the design of products, parts and article or for changes or repairs thereto shall demonstrate its capability in accordance with applicable CASR.

21.233 Eligibility

Any natural or legal person (organization) shall be eligible as an applicant for an approval under this subpart.

Each applicant shall perform demonstration of capability to obtain:

(a) Type Certificate,

- (1) Any organization applying for a type-certificate or restricted type-certificate shall demonstrate its capability by holding a design organization approval, issued by the DGCA in accordance with Subpart J.
- (2) By way of derogation from paragraph (a)(1) of this section, as an alternative procedure to demonstrate its capability, an applicant may seek the agreement of the DGCA for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with applicable CASR, when the product is one of the following:
 - (i) A primary category aircraft;
 - (ii) An engine or propeller installed in primary category aircraft;
 - (iii) A piston engine;
 - (iv) A fixed or adjustable pitch propeller.

(b) Supplemental Type Certificate,

- (1) Any organization applying for a supplemental type-certificate shall demonstrate its capability by holding a design organization approval, issued by the DGCA in accordance with Subpart J.
- (2) By way of derogation from paragraph (b)(1) of this section, as an alternative procedure to demonstrate its capability, an applicant may seek the agreement of the DGCA for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with Subpart E.

(c) Alteration and/or Repair,

- (1) An applicant for alteration and/or repair design approval shall demonstrate its capability by holding a design organization approval, issued by the DGCA in accordance with Subpart J.
- (2) By way of derogation from paragraph (c)(1) of this section, as an alternative procedure to demonstrate its capability, an applicant may

seek DGCA agreement for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with this Subpart.

(d) TSO Authorization for Auxiliary Power Unit

Any applicant for a TSO authorization shall demonstrate its capability for design of Auxiliary Power Unit, by holding a design organization approval, issued by the Agency in accordance with Subpart J.

21.234 Application.

Each application for a design organization approval shall be made in a form and manner established by the DGCA and shall include an outline of the information required by section 21.243, and the terms of approval requested to be issued under section 21.251.

21.235 Issue of Design Organization Approval.

An organization shall be entitled to have a design organization approval issued by the DGCA when it has demonstrated compliance with the applicable requirements under this Subpart.

21.236 Classification of Design Organization Approval.

- (a) Design Organization Approval Class A is eligible to perform design and compliance relating to minor repair and minor alteration.
- (b) Design Organization Approval Class B is eligible to perform DOA Class A, and also design and compliance relating to major repair and major alteration.
- (c) Design Organization Approval Class C is eligible to perform DOA Class B, and also design and compliance relating to Supplemental Type Certificate under CASR Part 21 Subpart F and/or TSO Authorization for Auxiliary Power Unit (APU) under CASR Part 21 Subpart O.
- (d) Design Organization Approval Class D is eligible to perform DOA Class C, and also design and compliance relating to Type Certificate and/or Amendment to Type Certificate under CASR Part 21 Subpart B, C and D.

21.237 [Reserved]

21.239 Design assurance system.

- (a) The design organization shall demonstrate that it has established and is able to maintain a design assurance system for the control and supervision of the design, and of design changes, of products, parts and appliances covered by the application. This design assurance system shall be such as to enable the organization:
 - (1) To ensure that the design of the products, parts and appliances or the design change thereof, comply with the applicable type-certification basis and environmental protection requirements; and
 - (2) To ensure that its responsibilities are properly discharged in accordance with:
 - (i) The appropriate provisions of this Part; and

- (ii) The terms of approval issued under section 21.251.
- (3) To independently monitor the compliance with, and adequacy of, the documented procedures of the system. This monitoring shall include a feed-back system to a person or a group of persons having the responsibility to ensure corrective actions.
- (b) The design assurance system shall include an independent checking function of the showings of compliance on the basis of which the organization submits compliance statements and associated documentation to the DGCA.
- (c) The design organization shall specify the manner in which the design assurance system accounts for the acceptability of the parts or appliances designed or the tasks performed by partners or subcontractor according to methods which are the subject of written procedures.

21.243 Data.

- (a) The design organization shall furnish a manual to the DGCA describing, directly or by cross-reference, the organization, the relevant procedures and the products or changes to products to be designed.
- (b) Where any parts or appliances or any changes to the products are designed by partner organizations or subcontractors, the manual shall include a statement of how the design organization is able to give, for all parts and appliances, the assurance of compliance required by section 21.239(b), and shall contain, directly or by cross-reference, descriptions and information on the design activities and organization of those partners or subcontractors, as necessary to establish this statement.
- (c) The manual shall be amended as necessary to remain an up-to-date description of the organization, and copies of amendments shall be supplied to the DGCA.
- (d) The design organization shall furnish a statement of the qualifications and experience of the management staff and other persons responsible for making decisions affecting airworthiness and environmental protection in the organization.
- (e) The design organization shall have a system for collecting, investigating and analyzing reports of and information related to failures, malfunctions, defects or other occurrences which cause or might cause adverse effects on the continuing airworthiness of the product, part or appliance covered by the type-certificate, restricted type-certificate, supplemental type-certificate, TSO Authorization, major repair design approval or any other relevant approval deemed to have been issued under this Part. Information about this system shall be made available to all known operators of the product, part or appliance and, on request, to any person authorized under other applicable Regulations.

21.245 Approval requirements.

The design organization shall demonstrate, on the basis of the information submitted in accordance with section 21.243 that, in addition to complying with section 21.239:

- (a) Designate a DOA employee as the accountable manager whose responsibility is to ensure showing compliance.

- (b) The staffs in all technical departments are of sufficient numbers and experience and have been given appropriate authority to be able to discharge their allocated responsibilities and that these, together with the accommodation, facilities and equipment are adequate to enable the staff to achieve the airworthiness, noise, fuel venting and exhaust emissions objectives for the product.
- (c) There is full and efficient coordination between departments and within departments in respect of airworthiness and environmental protection matters.

21.247 Changes in design assurance system.

After the issue of a design organization approval, each change to the design assurance system that is significant to the showing of compliance or to the airworthiness and environmental protection of the product shall be approved by the DGCA. An application for approval shall be submitted in writing to the DGCA and the design organization shall demonstrate to the DGCA, on the basis of submission of proposed changes to the handbook, and before implementation of the change, that it will continue to comply with this subpart after implementation.

21.249 Transferability.

Except as a result of a change in ownership, which is deemed significant for the purposes of section 21.247, a design organization approval is not transferable.

21.251 Terms of approval.

The terms of approval shall identify the types of design work, the categories of products, parts and appliances for which the design organization holds a design organization approval, and the functions and duties that the organization is approved to perform in regard to the airworthiness and characteristics of noise, fuel venting and exhaust emissions of products. For design organization approval covering type-certification or TSO authorization for Auxiliary Power Unit (APU), the terms of approval shall contain in addition the list of products or APU. Those terms shall be issued as part of a design organization approval.

21.253 Changes to the terms of approval.

Each change to the terms of approval shall be approved by the DGCA. An application for a change to the terms of approval shall be made in a form and manner established by the DGCA. The design organization shall comply with the applicable requirements of this Subpart.

21.257 Inspections.

- (a) The design organization shall make arrangements that allow the DGCA to make any inspections, including inspections of partners and subcontractors, necessary to determine compliance and continued compliance with the applicable requirements of this Subpart.
- (b) The design organization shall allow the DGCA to review any report and make any inspection and perform or witness any flight and ground test necessary to check the validity of the compliance statements submitted by the applicant under section 21.239(b).

21.258 Findings.

- (a) When objective evidence is found showing non-compliance of the holder of a design organization approval with the applicable requirements of this Part, the finding shall be classified as follows:
 - (1) A level one finding is any non-compliance with this Part which could lead to uncontrolled non-compliances with applicable requirements and which could affect the safety of the aircraft.
 - (2) A level two finding is any non-compliance with this Part which is not classified as level one.
- (b) A level three finding is any item where it has been identified, by objective evidence, to contain potential problems that could lead to a non-compliance under paragraph (a) of this section.
- (c) After receipt of notification of findings under the applicable administrative procedures established by the DGCA,
 - (1) In case of a level one finding, the holder of the design organization approval shall demonstrate corrective action to the satisfaction of the DGCA within a period of no more than 21 working days after written confirmation of the finding;
 - (2) In case of level two findings, the corrective action period granted by the DGCA shall be appropriate to the nature of the finding but in any case initially shall not be more than six months. In certain circumstances and subject to the nature of the finding the DGCA may extend the six month period subject to a satisfactory corrective action plan agreed by the DGCA.
 - (3) A level three finding shall not require immediate action by the holder of the design organization approval.
- (d) In case of level one or level two findings, the design organization approval may be subject to a partial or full suspension or revocation under the applicable administrative procedures established by the DGCA. The holder of the design organization approval shall provide confirmation of receipt of the notice of suspension or revocation of the design organization approval in a timely manner.

21.259 Duration and continued validity.

- (a) A design organization approval shall be issued and valid for five years unless:
 - (1) The design organization fails to demonstrate compliance with the applicable requirements of this Subpart; or
 - (2) The DGCA is prevented by the holder or any of its partners or subcontractors to perform the inspections in accordance with section 21.257; or
 - (3) There is evidence that the design assurance system cannot maintain satisfactory control and supervision of the design of products or changes thereof under the approval; or
 - (4) The certificate has been surrendered or revoked under the applicable administrative procedures established by the DGCA.
- (b) Upon surrender or revocation, the certificate shall be returned to the DGCA.

- (c) The validity of the certificate can not be renewed unless all findings during audit in accordance with section 21.257 as it is prescribed in the section 21.258 have been closed, and have no valid approval of modification during previous time period.

21.263 Privileges.

- (a) The holder of a design organization approval shall be entitled to perform design activities under this Part and within its scope of approval.
- (b) Subject to section 21.257(b), compliance documents submitted by the applicant for the purpose of obtaining approval in accordance with section 21.236.
- (c) The holder of a design organization approval shall be entitled, within its terms of approval and under the relevant procedures of the design assurance system:
 - (1) To classify changes to type design and repairs as 'major' or 'minor'.
 - (2) To approve minor changes to type design and minor repairs.
 - (3) To issue information or instructions containing the following statement: 'The technical content of this document is approved under the authority of DOA nr. [DGCA]. J. [xyz].'
 - (4) To approve documentary changes to the aircraft flight manual, and issue such changes containing the following statement: 'Revision nr. xxx to AFM ref. yyy, is approved under the authority of DOA nr.[DGCA].J.[xyz].'
 - (5) To approve the design of major repairs to products for which it holds the type-certificate or the supplemental type-certificate.

21.265 Obligations of the holder.

The holder of a design organization approval shall:

- (a) Maintain the handbook in conformity with the design assurance system;
- (b) Ensure that this handbook is used as a basic working document within the organization;
- (c) Determine that the design of products, or changes or repairs thereof, as applicable, comply with applicable requirements and have no unsafe feature;
- (d) Except for minor changes or repairs approved under the privilege of section 21.263, provide to the DGCA statements and associated documentation confirming compliance with paragraph (c);
- (e) Provide to the DGCA information or instructions related to required actions under section 21.3.

SUBPART K PART MANUFACTURER APPROVALS

21.301 Applicability.

This subpart prescribes-

- (a) procedural requirements for issuance PMAs, and
- (b) Rules governing holder of PMAs.

21.303 Application.

- (a) An application for a Parts Manufacturer Approval is made to the DGCA and must include the following:
 - (1) The identity of the product on which the part is to be installed.
 - (2) The name and address of the manufacturing facilities at which these parts are to be manufactured.
 - (3) The design of the part, which consists of -
 - (i) Drawings and specifications necessary to show the configuration of the part; and
 - (ii) Information on dimensions, materials, and processes necessary to define the structural strength of the part.
 - (4) The design of critical part shall has a design assurance system such as:
 - (i) To ensure that the design of the products, parts and appliances or the design change thereof, comply with the applicable type-certification basis and environmental protection requirements; and
 - (ii) To ensure that its responsibilities are properly discharged in accordance with the appropriate provisions of this Part.
 - (iii) To independently monitor the compliance with, and adequacy of, the documented procedures of the system. This monitoring shall include a feed-back system to a person or a group of persons having the responsibility to ensure corrective actions.
 - (iv) The design assurance system shall include an independent checking function of the showings of compliance.
 - (v) The system shall specify the manner in which the design assurance system accounts for the acceptability of the parts or appliances designed or the tasks performed by partners or subcontractor according to methods which are the subject of written procedures.
 - (5) Test reports and computations necessary to show that the design of the part meets the airworthiness requirements of applicable CASR. Test reports and computations must be applicable to the product on which the part is to be installed, unless the applicant shows that the design of the part is identical to the design of a part that is covered under a type certificate. If the design of the part was obtained by a licensing agreement, evidence of that agreement must be furnished.
 - (6) An applicant for a PMA based on test reports and computations must provide a statement certifying that the applicant has complied with the airworthiness standard requirements.
- (b) Each applicant for a Parts Manufacturer Approval must make all inspections and tests necessary to determine -

- (1) Compliance with the applicable airworthiness requirements;
- (2) That materials conform to the specifications in the design;
- (3) That the part conforms to the drawings in the design; and
- (4) That the fabrication processes, construction, and assembly conform to those specified in the design.

21.305 Organization.

Each applicant for or holder of a PMA must provide the DGCA with a document describing how its organization will ensure compliance with the provisions of this subpart. At a minimum, the document must describe assigned responsibilities and delegated authority, and the functional relationship of those responsible for quality to management and other organizational components.

21.307 Quality system.

Each applicant for or holder of a PMA must establish a quality system that meets the requirements of sec 21.137.

21.308 Quality manual.

Each applicant for or holder of a PMA must provide a manual describing its quality system to the DGCA for approval. The manual must be in the Bahasa Indonesia or English language and retrievable in a form acceptable to the DGCA.

21.309 Location of or change to manufacturing facilities.

- (a) An applicant may obtain a PMA for manufacturing facilities located outside of the Republic of Indonesia if the DGCA finds no undue burden in administering the applicable regulation
- (b) The PMA holder must obtain DGCA approval before making any changes to the location of any of its manufacturing facilities.
- (c) The PMA holder must immediately notify the DGCA, in writing within 10 days, of any change to the manufacturing facilities that may affect the inspection, conformity, or airworthiness of its PMA article.

21.310 Inspection and test.

- (a) Each applicant for or holder of a PMA must allow the DGCA to inspect its quality system, facilities, technical data, and any manufactured articles and witness any tests, including any inspections or tests at a supplier facility, necessary to determine compliance with this part.
- (b) Unless otherwise authorized by the DGCA, the applicant or holder—
 - (1) May not present any article to the DGCA for an inspection or test unless compliance with Section 21.303(b)(2) through (4) has been shown for that article; and
 - (2) May not make any change to an article between the time that compliance with Section 21.303(b)(2) through (4) is shown for that article and the time that the article is presented to the DGCA for the inspection or test.

21.311 Issuance.

The DGCA issues a PMA after finding that the applicant complies with the requirements of this subpart and the design complies with the requirements of CASR applicable to the product on which the article is to be installed.

21.313 Duration.

A PMA is effective for two years unless surrendered, withdrawn, or the DGCA otherwise terminates it.

21.314 Transferability.

The holder of a PMA may not transfer the PMA.

21.316 Responsibility of holder.

Each holder of a PMA must—

- (a) Amend the document required by sec. 21.305 as necessary to reflect changes in the organization and provide these amendments to the DGCA;
- (b) Maintain the quality system in compliance with the data and procedures approved for the PMA;
- (c) Ensure that each PMA article conforms to its approved design and is in a condition for safe operation;
- (d) Mark the PMA article for which an approval has been issued. Marking must be in accordance with CASR part 45, including any critical parts;
- (e) Identify any portion of the PMA article (e.g., sub-assemblies, component parts, or replacement articles) that leave the manufacturer's facility as DGCA approved with the manufacturer's part number and name, trademark, symbol, or other DGCA approved manufacturer's identification;
- (f) Have access to design data necessary to determine conformity and airworthiness for each article produced under the PMA;
- (g) Retain each document granting PMA and make it available to the DGCA upon request; and
- (h) Make available to the DGCA information regarding all delegation of authority to suppliers.

21.319 Design changes.

- (a) Classification of design changes.
 - (1) A “minor change” to the design of an article produced under a PMA is one that has no appreciable effect on the approval basis.
 - (2) A “major change” to the design of an article produced under a PMA is any change that is not minor.
- (b) Approval of design changes.
 - (1) Minor changes to the basic design of a PMA may be approved using a method acceptable to the DGCA.

- (2) The PMA holder must obtain DGCA approval of any major change before including it in the design of an article produced under a PMA.

21.320 Changes in quality system.

After the issuance of a PMA—

- (a) Each change to the quality system is subject to review by the DGCA; and
- (b) The holder of the PMA must immediately notify the DGCA, in writing, of any change that may affect the inspection, conformity, or airworthiness of its article.

SUBPART L EXPORT AIRWORTHINESS APPROVALS

21.321 Applicability.

This subpart prescribes -

- (a) Procedural requirements for the issue of export airworthiness approvals; and
- (b) Rules governing the holders of those approvals.

21.325 Export Airworthiness Approvals.

- (a) Export airworthiness approval for an aircraft is issued in the form of Export Certificates of Airworthiness. This certificate does not authorize the operation of aircraft.
- (b) Export airworthiness approval an aircraft engine, propeller, or articles issued in the form prescribed by DGCA.
- (c) Export airworthiness approval may be issued for a product or article located outside of the ROI, if DGCA finds no undue burden in administering the applicable regulations.

21.327 Application.

Any person may apply for export airworthiness approval. Each applicant must apply in a form and manner prescribed by the DGCA.

21.329 Issuance of Export Certificate of Airworthiness.

- (a) A person may obtain from the DGCA an export certificate of airworthiness for an aircraft if—
 - (1) A new or used aircraft manufactured under subpart F or G of this part meets the airworthiness requirements under subpart H of this part for a—
 - (i) Standard airworthiness certificate; or
 - (ii) Special airworthiness certificate in the “primary” or “restricted” category; or
 - (2) A new or used aircraft not manufactured under subpart F or G of this part has a valid—
 - (i) Standard airworthiness certificate; or
 - (ii) Special airworthiness certificate in “primary” or “restricted” category
- (b) An aircraft need not meet a requirement specified in paragraph (a) of this section, as applicable, if—
 - (1) The importing country or jurisdiction accepts, in a form and manner acceptable to the DGCA, a deviation from that requirement; and
 - (2) The export certificate of airworthiness lists as an exception any difference between the aircraft to be exported and its type design.

21.331 Issuance of export airworthiness approvals for aircraft engines, propellers, and articles.

- (a) A person may obtain from the DGCA an export airworthiness approval to export a new aircraft engine, propeller, or article that is manufactured under this part if it conforms to its approved design and is in a condition for safe operation.
- (b) A new aircraft engine, propeller, or article need not meet a requirement of paragraph (a) of this section if—
 - (1) The importing country or jurisdiction accepts, in a form and manner acceptable to the DGCA, a deviation from that requirement; and
 - (2) The export airworthiness approval lists as an exception any difference between the aircraft engine, propeller, or article to be exported and its approved design.
- (c) A person may obtain from the DGCA an export airworthiness approval to export a used aircraft engine, propeller, or article if it conforms to its approved design and is in a condition for safe operation.
- (d) A used aircraft engine or propeller need not meet a requirement of paragraph (c) of this section if—
 - (1) The importing country or jurisdiction accepts, in a form and manner acceptable to the DGCA, a deviation from that requirement; and
 - (2) The export airworthiness approval lists as an exception any difference between the used aircraft engine or propeller to be exported and its approved design.

21.335 Responsibilities of Exporters.

Unless otherwise agreed to by the importing country or jurisdiction, each exporter must—

- (a) Forward to the importing country or jurisdiction all documents specified by that country or jurisdiction;
- (b) Preserve and package products and articles as necessary to protect them against corrosion and damage during transit or storage and state the duration of effectiveness of such preservation and packaging;
- (c) Remove or cause to be removed any temporary installation incorporated on an aircraft for the purpose of export delivery and restore the aircraft to the approved configuration upon completion of the delivery flight;
- (d) Secure all proper foreign entry clearances from all the countries or jurisdictions involved when conducting sales demonstrations or delivery flights; and
- (e) When title to an aircraft passes or has passed to a foreign purchaser—
 - (1) Request cancellation of the ROI registration and airworthiness certificates from the DGCA, giving the date of transfer of title, and the name and address of the foreign owner;
 - (2) Return the Registration and Airworthiness Certificates to the DGCA; and
 - (3) Provide a statement to the DGCA certifying that the ROI Nationality and Identification mark have been removed from the aircraft in compliance with CASR 45.33.

SUBPART M [To be determined]

**SUBPART N ACCEPTANCE OF AIRCRAFT ENGINES, PROPELLERS,
ARTICLES FOR IMPORT**

21.500 Acceptance of Aircraft Engines and Propellers.

An aircraft engine or propeller manufactured in a foreign country meets the requirements for acceptance under this subpart if—

- (a) The holder or licensee of a ROI type certificate for that product furnishes with each such aircraft engine or propeller imported into Republic of Indonesia, an export airworthiness approval issued by the country of manufacturer certifying that the individual aircraft engine or propeller—
 - (1) Conforms to its ROI type certificate and is in condition for safe operation; and
 - (2) Has been subjected by the manufacturer to a final operational check.
- (b) That product is marked in accordance with CASR part 45.

21.502 Acceptance of Articles.

- (a) An article manufactured in a foreign country which the Republic of Indonesia accepts of those materials, parts, or appliances for import, is considered to meet the requirements for acceptance in this CASR when the country of manufacture issues an export airworthiness approval certifying that the individual article meets those requirements, unless the DGCA finds, based on the technical data submitted under paragraph(b) of this section, that the article is otherwise not consistent with the intent of this CASR.
- (b) An importer for acceptance of an article must, upon request, submit to the DGCA any technical data respecting that article.

SUBPART O TECHNICAL STANDARD ORDER AUTHORIZATIONS

21.601 Applicability and Definitions.

- (a) This subpart prescribes -
- (1) Procedural requirements for the issue of Technical Standard Order authorizations;
 - (2) Rules governing the holders of Technical Standard Order authorizations; and
 - (3) Procedural requirements for the issuance of a letter of Technical Standard Order design approval.
- (b) For the purpose of this subpart -
- (1) A Technical Standard Order (referred to in this subpart as "TSO") is issued by the DGCA and is a minimum performance standard for specified articles (for the purpose of this subpart, articles means materials, parts, processes, or appliances) used on civil aircraft.
 - (2) A TSO authorization is an DGCA design and production approval issued to the manufacturer of an article which has been found to meet a specific TSO.
 - (3) A letter of TSO design approval is a DGCA design approval for an article which has been found to meet a specific TSO in accordance with the procedures of Sec. 21.621.
 - (4) An article manufactured under an TSO authorization, a DGCA letter of acceptance as described in Sec. 21.613 (b), or an article manufactured under a letter of TSO design approval described in Sec. 21.621 is an approved article for the purpose of meeting the regulations of this CASR that require the article to be approved; and
 - (5) An article manufacturer is the person who controls the design and quality of the article produced (or to be produced, in the case of an application), including the parts of them and any processes or services related to them that are procured from an outside source.
- (c) The DGCA does not issue an TSO authorization if the manufacturing facilities for the product are located outside of the Republic of Indonesia, unless the DGCA finds that the location of the manufacturer's facilities places no undue burden on the DGCA in administering applicable regulations.

21.603 Application.

- (a) An applicant for a TSO authorization must apply in the form and manner prescribed by the DGCA. The applicant must include the following documents in the application:
- (1) A statement of conformance certifying that the applicant has met the requirements of this subpart and that the article concerned meets the applicable TSO that is effective on the date of application for that article.
 - (2) One copy of the technical data required in the applicable TSO.
- (b) If the applicant anticipates a series of minor changes in accordance with Sec.21.619, the applicant may set forth in its application the basic model number of the article and the part number of the components with open

brackets after it to denote that suffix change letters or numbers (or combinations of them) will be added from time to time.

- (c) If the application is deficient, the applicant must, when requested by the DGCA, provide any additional information necessary to show compliance with this part. If the applicant fails to provide the additional information within 30 days after the DGCA's request, the DGCA denies the application and notifies the applicant.

21.605 Organization.

Each applicant for or holder of a TSO authorization must provide the DGCA with a document describing how the applicant's organization will ensure compliance with the provisions of this subpart. At a minimum, the document must describe assigned responsibilities and delegated authority, and the functional relationship of those responsible for quality to management and other organizational components.

21.607 Quality system.

Each applicant for or holder of a TSO authorization must establish a quality system that meets the requirements of Sec. 21.137.

21.608 Quality manual.

Each applicant for or holder of a TSO authorization must provide a manual describing its quality system to the DGCA for approval. The manual must be in the Bahasa Indonesia or English language and retrievable in a form acceptable to the DGCA.

21.609 Location of or change to manufacturing facilities.

- (a) An applicant may obtain a TSO authorization for manufacturing facilities located outside of the ROI if the DGCA finds no undue burden in administering the applicable regulation.
- (b) The TSO authorization holder must obtain DGCA approval before making any changes to the location of any of its manufacturing facilities.
- (c) The TSO authorization holder must immediately notify the DGCA, in writing, of any change to the manufacturing facilities that may affect the inspection, conformity, or airworthiness of its product or article.

21.610 Inspections and tests.

Each applicant for or holder of a TSO authorization must allow the DGCA to inspect its quality system, facilities, technical data, and any manufactured articles and witness any tests, including any inspections or tests at a supplier facility, necessary to determine compliance with this applicable CASR.

21.611 Issuance.

If the DGCA finds that the applicant complies with the requirements of this applicable CASR, the DGCA issues a TSO authorization to the applicant (including all TSO deviations granted to the applicant).

21.613 Duration.

- (a) A TSO authorization or letter of TSO design approval is effective for two years until surrendered, withdrawn, or otherwise terminated by the DGCA.
- (b) If a TSO is revised or canceled, the holder of an affected DGCA letter of acceptance of a statement of conformance, TSO authorization, or letter of TSO design approval may continue to manufacture articles that meet the original TSO without obtaining a new acceptance, authorization, or approval but must comply with applicable CASR.

21.614 Transferability.

The holder of a TSO authorization or letter of TSO design approval may not transfer the TSO authorization or letter of TSO design approval.

21.616 Responsibility of holder.

Each holder of a TSO authorization must—

- (a) Amend the document required by Sec 21.605 as necessary to reflect changes in the organization and provide these amendments to the DGCA
- (b) Maintain a quality system in compliance with the data and procedures approved for the TSO authorization;
- (c) Ensure that each manufactured article conforms to its approved design, is in a condition for safe operation, and meets the applicable TSO;
- (d) Mark the TSO article for which an approval has been issued. Marking must be in accordance with CASR part 45, including any critical parts;
- (e) Identify any portion of the TSO article (e.g., sub-assemblies, component parts, or replacement articles) that leave the manufacturer's facility as DGCA approved with the manufacturer's part number and name, trademark, symbol, or other DGCA approved manufacturer's identification;
- (f) Have access to design data necessary to determine conformity and airworthiness for each article produced under the TSO authorization. The manufacturer must retain this data until it no longer manufactures the article. At that time, copies of the data must be sent to the DGCA ;
- (g) Retain its TSO authorization and make it available to the DGCA upon request; and
- (h) Make available to the DGCA information regarding all delegation of authority to suppliers

21.618 Approval for deviation.

- (a) Each manufacturer who requests approval to deviate from any performance standard of a TSO must show that factors or design features providing an equivalent level of safety compensate for the standards from which a deviation is requested.
- (b) The manufacturer must send requests for approval to deviate, together with all pertinent data, to the appropriate aircraft certification office. If the article is manufactured under the authority of a foreign country or jurisdiction, the

manufacturer must send requests for approval to deviate, together with all pertinent data, through the civil aviation authority of that country or jurisdiction to the DGCA.

21.619 Design changes.

- (a) Minor changes by the manufacturer holding a TSO authorization. The manufacturer of an article under an authorization issued under this part may make minor design changes (any change other than a major change) without further approval by the DGCA. In this case, the changed article keeps the original model number (part numbers may be used to identify minor changes) and the manufacturer must forward to the appropriate aircraft certification office, any revised data that are necessary for compliance with Sec 21.603(b).
- (b) Major changes by the manufacturer holding a TSO authorization. Any design change by the manufacturer extensive enough to require a substantially complete investigation to determine compliance with a TSO is a major change. Before making a major change, the manufacturer must assign a new type or model designation to the article and apply for an authorization under Sec. 21.603.
- (c) Changes by persons other than the manufacturer. No design change by any person (other than the manufacturer who provided the statement of conformance for the article) is eligible for approval under this part unless the person seeking the approval is a manufacturer and applies under Sec. 21.603(a) for a separate TSO authorization. Persons other than a manufacturer may obtain approval for design changes under part 43 or under the applicable airworthiness regulations.

21.620 Changes in quality system.

After the issuance of a TSO authorization—

- (a) Each change to the quality system is subject to review by the DGCA; and
- (b) The holder of the TSO authorization must immediately notify the DGCA, in writing, of any change that may affect the inspection, conformity, or airworthiness of its article.

21.621 Issue of letters of TSO design approval: Import articles.

- (a) The DGCA may issue a letter of TSO design approval for an article—
 - (1) Designed and manufactured in a foreign country to the export provisions of an agreement with ROI for the acceptance of these articles for import; and
 - (2) For import into ROI if—
 - (i) The State of Design certifies that the article has been examined, tested, and found to meet the applicable TSO or the applicable performance standards of the State of Design and any other performance standards the DGCA may prescribe to provide a level of safety equivalent to that provided by the TSO; and
 - (ii) The manufacturer has provided to the DGCA one copy of the technical data required in the applicable performance standard through its State of Design.

- (b) The DGCA issues the letter of TSO design approval that lists any deviation granted under Sec.21.618.

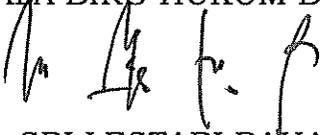
MENTERI PERHUBUNGAN
REPUBLIK INDONESIA,

ttd.

IGNASIUS JONAN

Salinan sesuai dengan aslinya

KEPALA BIRO HUKUM DAN KSLN,



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