

EUROPEAN MILITARY AIRWORTHINESS REQUIREMENTS

EMAR 21 SECTION A

CERTIFICATION OF; MILITARY AIRCRAFT AND RELATED PRODUCTS, PARTS AND APPLIANCES, AND DESIGN AND PRODUCTION ORGANISATIONS

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21.1 General

For the purpose of this EMAR:

All references to "aircrafts" throughout this EMAR means "military aircrafts", defined as those that follow special laws and regulations and are designed with specific characteristics for military operations.

- 'Authority' shall be, unless otherwise specified in this EMAR:
- 1- The Authority in charge of the type certification process:
 - (a) For a multinational programme, the military airworthiness Authorities of the participating Nations/States; or
 - (b) For a national programme, the military airworthiness Authority of this Nation/State,
- 2- The Authority in charge of the production/design organisation approval:
 - (a) For a multinational programme, the military airworthiness Authorities of the participating Nations/States; or
 - (b) For a national programme, the military airworthiness Authority of this Nation/State,
- 3- The registration Authority in charge to issue the Certificate of Airworthiness; or
- 4- For unregistered aircraft, the Authority which prescribed the identification marks and issued the flight permit."-
- 'Applicant' shall be:
 - (a) The contractor which should comply with this EMAR; or
 - (b) Any organisation (including MODs) which must obtain from an Authority a type-certificate, a restricted type-certificate, a supplemental type-certificate, an EMTSO authorisation, a major change or a major repair design approval based on this EMAR. It should be include herein the certificate of airworthiness, as mentioned in 21A.172, and Permit to Fly /Flight Conditions, as mentioned in 21A.703.
 - (c) Any organisation or operator or its representative which applies for an airworthiness certificate under Subpart H of this EMAR.

'Certification' (means "fit for flight"). The process of recognition that a product, part or appliance, organisation or person complies with the applicable airworthiness requirements followed by the declaration of compliance.

- "continued (design) airworthiness" means all tasks to be carried out to verify that the conditions under which a type-certificate or a supplemental type-certificate has been granted continue to be fulfilled at any time during its period of validity (Type Design)
- "continuing (preservation of) airworthiness" means all of the processes ensuring that, at any time in its operating life, the aircraft complies with the airworthiness requirements in force and is in a condition for safe operation (Maintenance).
- All references to "certificates" throughout this EMAR means "military certificates" (Although credit can be taken from any prior Civil Certificate issued by a recognised Civil Authority).
- All references to "organisation approvals" throughout this EMAR means "organisational approvals accepted or issued by military authorities".
- Where this EMAR requires specific EMAR forms to be used, equivalent forms approved by the Authority are permitted.

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SECTION A

REQUIREMENTS FOR APPLICANTS AND OBLIGATIONS AND PRIVILEGES

SUBPART A — GENERAL PROVISIONS

21A.1 Scope

This Section establishes general provisions governing the obligations and privileges of the applicant for, and holder of, any certificate issued or to be issued in accordance with this Section.

21A.2 Undertaking by another organisation than the applicant for, or holder of, a certificate

The actions and obligations required to be undertaken by the holder of, or applicant for, a certificate for a product, part or appliance under this Section may be undertaken on its behalf by any other organisation, provided the holder of, or applicant for, that certificate can show that it has made an agreement with the other organisation such as to ensure that the holder's obligations are and will be properly discharged.

21A.3 Failures, malfunctions and defects

(a) System for Collection, Investigation and Analysis of Data.

The holder of a type-certificate, restricted type-certificate, supplemental type-certificate, European Military Technical Standard Order (EMTSO) authorisation, major repair design approval or any other relevant approval deemed to have been issued under this EMAR shall have a system for collecting, investigating and analysing reports of and information related to failures, malfunctions, defects or other occurrences which cause or might cause adverse effects on the airworthiness of the product, part or appliance covered by the type-certificate, restricted type-certificate, supplemental type-certificate, EMTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this EMAR. Information about this system shall be made available to all known operators of the product, part or appliance and, on request, to any person authorised under other associated EMARs.

(b) Reporting to the Authority.

- 1. The holder of a type-certificate, restricted type-certificate, supplemental type-certificate, EMTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this EMAR shall make appropriate arrangements report to the issuing/approving Authority any failure, malfunction, defect or other occurrence of which it is aware related to a product, part or appliance covered by the type-certificate, restricted type-certificate, supplemental type-certificate, EMTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this EMAR, and which has resulted in or may result in an unsafe condition.
- 2. These reports shall be made in a form and manner established by the Authority, as soon as practicable and in any case dispatched not later than 72 hours after the identification of the possible unsafe condition, unless exceptional circumstances prevent this.

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- (c) Investigation of Reported Occurrences.
 - 1. When an occurrence reported under paragraph (b), or under 21A.129(f)(2) or 21A.165(f)(2) results from a deficiency in the design, or a manufacturing deficiency, the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, EMTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this EMAR, or the manufacturer (Production Organisation) as appropriate, shall investigate the reason for the deficiency and report to the Authority the results of its investigation and any action it is taking or proposes to take to correct that deficiency.
 - 2. If the Authority finds that an action is required to correct the deficiency, the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, EMTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this EMAR, or the manufacturer as appropriate, shall submit the relevant data to the Authority.

21A.3B Airworthiness directives

- (a) An airworthiness directive means a document issued or adopted by the Authority which mandates actions to be performed on an aircraft to restore an acceptable level of safety, when evidence shows that the safety level of this aircraft may otherwise be compromised.
- (b) The Authority shall issue an airworthiness directive when:
 - 1. An unsafe condition has been determined by the Authority to exist in an aircraft, as a result of a deficiency in the aircraft, or an engine, propeller, part or appliance installed on this aircraft; and
 - 2. That condition is likely to exist or develop in other aircraft, including engine, propeller, part or appliance installed on those aircraft that may be affected by this unsafe condition.
- (c) When an airworthiness directive has to be issued by the Authority to correct the unsafe condition referred to in paragraph (b), or to require the performance of an inspection, the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, major repair design approval, EMTSO authorisation or any other relevant approval deemed to have been issued under this EMAR, shall:
 - 1. Propose the appropriate corrective action and/or required inspections and submit details of these proposals to the Authority for approval;
 - 2. Following the approval by the Authority of the corrective action and/or required inspections referred to under subparagraph (1), make available to all known operators or owners of the product, part or appliance and, on request, to any person required to comply with the airworthiness directive, appropriate descriptive data and accomplishment instructions.
- (d) An airworthiness directive shall contain at least the following information:
 - 1. An identification of the unsafe condition:
 - 2. An identification of the affected aircraft; operating and maintenance associated documentation;
 - 3. The action(s) required;
 - 4. The compliance time for the required action(s);
 - 5. The date of entry into force.

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21A.4 Coordination between design and production

Each holder of a type-certificate, restricted type-certificate, supplemental type-certificate, EMTSO authorisation, approval of a change to type design or approval of a repair design, shall ensure collaboration between the design organisation and the production organisation as necessary to achieve:

- (a) The satisfactory coordination of design and production required by 21A.122 or 21A.133 or 21A.165(c)(2) as appropriate: and
- (b) The proper support of the continued airworthiness of the product, part or appliance.

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SUBPART B — MILITARY TYPE-CERTIFICATES AND MILITARY RESTRICTED TYPE-CERTIFICATES

21A.11 Scope

This Subpart establishes the procedure for issuing Type-Certificates (TCs) for products and Restricted Type-Certificates (RTCs) for aircraft, and establishes the rights and obligations of the applicants for, and holders of, those certificates.

21A.13 Eligibility

Any organisation that has demonstrated, or is in the process of demonstrating, its capability in accordance with 21A.14 shall be eligible as an applicant for a type-certificate or a restricted type-certificate under the conditions laid down in this Subpart.

21A.14 Demonstration of capability

- (a) Any organisation applying for a type-certificate or restricted type-certificate shall demonstrate its capability by holding a military design organisation approval (MDOA), issued by the Authority in accordance with Subpart J.
- (b) By way of derogation from paragraph (a), as an alternative procedure to demonstrate its capability, an applicant may seek Authority agreement for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with this EMAR, in accordance with procedures defined in Subpart Z.

21A.15 Application

- (a) An application for a type-certificate or restricted type-certificate shall be made in a form and manner established by the Authority.
- (b) An application for an aircraft type-certificate or restricted type-certificate shall be accompanied by a three-view drawing of that aircraft and preliminary basic data, including the proposed operating characteristics and limitations.
- (c) An application for an engine or propeller type-certificate shall be accompanied by a general arrangement drawing, a description of the design features, the operating characteristics, and the proposed operating limitations, of the engine, or propeller.

21A.16A Airworthiness Codes

The Authority may approve the applicable airworthiness codes as a standard means to show compliance of products, parts and appliances with the essential requirements of Annex A to the Basic Framework Document. Such codes shall be sufficiently detailed and specific to indicate to applicants the conditions under which certificates will be issued.

21A.16B Special conditions

- (a) The Authority shall approve any special detailed technical specifications, named special conditions, for a product, if the related airworthiness codes do not contain adequate or appropriate safety standards for the product, because:
 - 1. The product has novel or unusual design features relative to the design practices on which the applicable airworthiness codes are based; or
 - 2. The intended use of the product is unconventional; or
 - 3. Experience from other similar products in service or products having similar design features, has shown that unsafe conditions may develop; or

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- 4. Airworthiness codes do not exist for the concerned product function.
- (b) The special conditions contain such safety standards as the Authority finds necessary to establish a level of safety equivalent to that established in the applicable airworthiness codes or a level of safety acceptable if airworthiness codes do not exist for the concerned product.

21A.17A Type-certification basis

- (a) The type-certification basis to be notified for the issuance of a type-certificate or a restricted type-certificate shall consist of:
 - 1. The applicable airworthiness codes established according to 21A.16A unless:
 - i. Otherwise specified by the Authority; or
 - ii. Compliance with later effective amendments is elected by the applicant or under paragraph (d).
 - 2. Any special condition prescribed in accordance with 21A.16B(a).
 - 3. The tailoring of the criteria in EMACC when appropriate airworthiness codes are not available
- (b) (Reserved)
- (c) (Reserved)
- (d) If an applicant elects to comply with an amendment to the airworthiness codes that is effective after the filing of the application for a type-certificate, the applicant shall also comply with any other amendment that the Authority finds is directly related.

21A.17B Certification Program Plan

The applicant shall propose to the Authority a Certification Program Plan (CPP) that must include the Means of Compliance. The CPP shall be approved by the Authority before the compliance demonstration commences and updated as necessary during the certification process.

21A.18 Designation of applicable environmental protection requirements

(Currently not applicable)

21A.19 Changes requiring a new type-certificate

Any applicant proposing to change a product, shall apply for a new type-certificate if the Authority finds that the change in design, configuration, power, thrust, or mass is so extensive that a substantially complete investigation of compliance with the applicable type-certification basis is required.

21A.20 Compliance with the type-certification basis and environmental protection requirements (where applicable)

- (a) The applicant for a type-certificate or a restricted type-certificate shall show compliance with the applicable type-certification basis and environmental protection requirements (where applicable) and shall provide to the Authority the means by which such compliance has been shown, according to the CPP established under 21A.17B.
- (b) The applicant shall declare that it has shown compliance with all applicable type-certification basis and environmental protection requirements (where applicable), according to the CPP established under 21A.17B.

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(c) Where the applicant holds an appropriate design organisation approval, the declaration of paragraph (b) shall be made according to the provisions of Subpart J.

21A.21 Issue of a type-certificate

The applicant shall be entitled to have a product type-certificate issued by the Authority after:

- (a) Demonstrating its capability in accordance with 21A.14;
- (b) Submitting the declaration referred to in 21A.20 (b); and
- (c) It is shown that:
 - 1. The product to be certificated meets the applicable type-certification basis and environmental protection requirements (where applicable) designated in accordance with 21A.17A and 21A.18 (where applicable);
 - 2. Any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety;
 - 3. No feature or characteristic makes it unsafe for the uses for which certification is requested; and
 - 4. The type-certificate applicant has expressly stated that it is prepared to comply with 21A.44.
- (d) The an aircraft type-certificate, the engine or propeller or both, if installed in the aircraft, have a type-certificate issued or determined in accordance with this EMAR.

21A.23 Issue of a restricted type-certificate

- (a) For an aircraft that does not meet the provisions of 21A.21(c), the applicant shall be entitled to have a restricted type-certificate issued by the Authority after:
 - 1. Complying with the appropriate type-certification basis established by the Authority ensuring adequate safety with regard to the intended use of the aircraft, and with the applicable environmental protection requirements (where applicable);
 - 2. Expressly stating that it is prepared to comply with 21A.44.
- (b) The engine or propeller installed in the aircraft, or both, shall:
 - 1. Have a type-certificate issued or determined in accordance with this EMAR; or
 - 2. Have been shown to be in compliance with the type-certification basis necessary to ensure safe flight of the aircraft.

21A.31 Type design

- (a) The type design shall consist of:
 - 1. 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 applicable type-certification basis and environmental protection requirements (where applicable);
 - 2. Information on materials and processes and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product;
 - 3. An approved airworthiness limitations section of the instructions for continuing airworthiness as defined by the applicable airworthiness codes; and

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- 4. Any other data necessary to allow by comparison, the determination of the airworthiness, the characteristics of noise, fuel venting, and exhaust emissions (where applicable) of later products of the same type.
- (b) Each type design shall be adequately identified.

21A.33 Investigation and tests

- (a) The applicant shall perform all inspections and tests necessary to show compliance with the applicable type-certification basis and environmental protection (where applicable).
- (b) Before each test required by paragraph (a) is undertaken, the applicant shall have determined:
 - 1. For the test specimen:
 - i. That materials and processes adequately conform to the specifications for the proposed type design;
 - ii. That parts of the products adequately conform to the drawings in the proposed type design;
 - iii. That the manufacturing processes, construction and assembly adequately conform to those specified in the proposed type design; and
 - 2. That the test equipment and all measuring equipment used for tests are adequate for the test and are appropriately calibrated.
- (c) The applicant shall allow the Authority to make any inspection necessary to check compliance with paragraph (b).
- (d) The applicant shall allow the Authority to review any report and make any inspection and to perform or witness any flight and ground test necessary to check the validity of the declaration of compliance submitted by the applicant under 21A.20(b) and to determine that no feature or characteristic makes the product unsafe for the uses for which certification is requested.
- (e) For tests performed or witnessed by the Authority under paragraph (d):
 - 1. The applicant shall submit to the Authority a statement of compliance with paragraph (b); and
 - 2. No change relating to the test that would affect the statement of compliance may be made to a product, part or appliance between the time compliance with paragraph (b) is shown and the time it is presented to the Authority for test.

21A.35 Flight Tests

- (a) Flight testing for the purpose of obtaining a type-certificate shall be conducted in accordance with conditions for such flight testing approved by the Authority.
- (b) The applicant shall make all flight tests that the Authority finds necessary:
 - 1. To determine compliance with the applicable type-certification basis, and environmental protection requirements (where applicable); and
 - 2. To determine whether there is reasonable assurance that the aircraft, its parts and appliances are reliable and function properly.
- (c) (Reserved)
- (d) (Reserved)

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- (e) (Reserved)
- (f) The flight tests prescribed in subparagraph (b)(2) shall include:
 - 1. For aircraft incorporating turbine engines of a type not previously used in type-certificated aircraft, at least 300 hours of operation or as agreed by the Authority, with a full complement of engines that conform to a type-certificate; and
 - 2. For all other aircraft, at least 150 hours of operation or as agreed by the Authority.

21A.41 Type-certificate and restricted type-certificate

The type-certificate and restricted type-certificate are both considered to include the type design, the operating limitations, the type-certificate data sheet for airworthiness, the applicable type-certification basis and environmental protection requirements (where applicable) with which the Authority records compliance, and any other conditions or limitations prescribed for the product in the applicable airworthiness requirements and environmental protection requirements (where applicable).

21A.44 Obligations of the holder

Each holder of a type-certificate or restricted type-certificate shall:

- (a) Undertake the obligations laid down in 21A.3, 21A.3B, 21A.4, 21A.55, 21A.57 and 21A.61; and, for this purpose, shall continue to meet the requirements of 21A.14; and
- (b) Specify the marking in accordance with Subpart Q.

21A.47 Transferability

Transfer of a type-certificate or restricted type-certificate may only be made to an organisation that is able to undertake the obligations under 21A.44, and, for this purpose, has demonstrated its ability to qualify under the criteria of 21A.14.

21A.51 Duration and continued validity

- (a) A type-certificate and restricted type-certificate shall be issued for an unlimited duration. They shall remain valid subject to:
 - 1. The holder remaining in compliance with this EMAR; and
 - 2. The certificate not being surrendered or revoked under the applicable administrative procedures established by the Authority.
- (b) Upon surrender or revocation, the type-certificate and restricted type-certificate shall be returned to the Authority.
- (c) The type-certificate or restricted type-certificate holder must inform the Authority, as soon as practicable, when it is no longer able to meet the type-certificate or the restricted type-certificate holder responsibilities defined by this EMAR, for one or several types of product.

21A.55 Record keeping

All relevant design information, drawings and test reports, including inspection records for the product tested, shall be held by the type-certificate or restricted type-certificate holder at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness and compliance with applicable environmental protection requirements (where applicable) of the product.

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21A.57 Manuals

The holder of a type-certificate or restricted type-certificate shall produce, maintain and update master copies of all manuals required by the applicable type-certification basis and environmental protection requirements (where applicable) for the product, and provide copies, on request, to the Authority.

21A.61 Instructions for continuing airworthiness

- (a) The holder of the type-certificate or restricted type-certificate shall furnish at least one set of complete instructions for continuing airworthiness, comprising descriptive data and accomplishment instructions prepared in accordance with the applicable type-certification basis, to each known operator of one or more aircraft, engine or propeller upon its delivery or upon issue of the first certificate of airworthiness for the affected aircraft, whichever occurs later and thereafter make those instructions available on request to any other operator required to comply with any of the terms of those instructions. The availability of some manual or portion of the instructions for continuing airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flighthours/cycles.
- (b) In addition, changes to the instructions for continuing airworthiness shall be made available to all known operators of the product and shall also be provided on request to any other operator required to comply with any of those instructions. A programme showing how changes to the instructions for continuing airworthiness are distributed shall be submitted to the Authority.

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SUBPART C - (NOT APPLICABLE)

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SUBPART D — CHANGES TO MILITARY TYPE-CERTIFICATES AND MILITARY RESTRICTED TYPE-CERTIFICATES

21A.90 Scope

This Subpart establishes the procedure for the approval of changes to type designs and type-certificates, and establishes the obligations and privileges of the applicants for, and holders of, those approvals. In this Subpart, references to type-certificates include type-certificate and restricted type-certificate.

21A.91 Classification of changes in type design

Changes in type design are classified as minor and major. A 'minor change' is one that has no appreciable effect on the mass, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product and consider where applicable, environmental characteristics such as noise, fuel venting and exhaust emission. Without prejudice to 21A.19, all other changes are 'major changes' under this Subpart. Major and minor changes shall be approved in accordance with 21A.95 or 21A.97 as appropriate, and shall be adequately identified.

21A.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 organisation may apply for approval of a minor change to a type design under this Subpart.

21A.93 Application

An application for approval of a change to a type design shall be made in a form and manner established by the Authority and shall include:

- (a) A description of the change identifying:
 - 1. All parts of the type design and the approved manuals affected by the change; and
 - 2. The airworthiness codes and environmental protection requirements (where applicable) with which the change has been designed to comply in accordance with 21A.101.
- (b) Identification of any re-investigations necessary to show compliance of the changed product with the applicable airworthiness codes and environmental protection requirements (where applicable).

21A.95 Minor changes

Minor changes in a type design shall be classified and approved either:

- (a) By the Authority; or
- (b) By an appropriately approved design organisation under a procedure agreed with the Authority.

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21A.97 Major changes

- (a) An applicant for approval of a major change shall:
 - 1. Submit to the Authority substantiating data together with any necessary descriptive data for inclusion in the type design;
 - 2. Show that the changed product complies with applicable airworthiness codes and environmental protection requirements (where applicable), as specified in 21A.101;
 - 3. Declare that it has shown compliance with the applicable type-certification basis and environmental protection requirements (where applicable) and shall provide to the Authority the basis on which such a declaration is made;
 - 4. Where the applicant holds an appropriate design organisation approval, make the declaration of subparagraph (a)(3) according to the provisions of Subpart J;
 - 5. Comply with 21A.33 and, where applicable, 21A.35.
- (b) Approval of a major change in a type design is limited to that or those specific configuration(s) in the type design upon which the change is made.

21A.101 Designation of applicable Airworthiness codes and environmental protection requirements (where applicable)

- (a) An applicant for a change to a type-certificate shall demonstrate that the changed product complies with the airworthiness codes that are applicable to the changed product and that are in effect at the date of the application for the change, and with the applicable environmental protection requirements (where applicable) laid down in 21A.18.
- (b) By derogation from paragraph (a), an applicant may show that the changed product complies with an earlier amendment of an airworthiness code defined in paragraph (a), and of any other requirement the Authority finds is directly related. However, the earlier amended airworthiness code may not precede the corresponding airworthiness code incorporated by reference in the type-certificate. The applicant may show compliance with an earlier amendment of an airworthiness code for any of the following:
 - 1. A change that the Authority finds not to be significant. In determining whether a specific change is significant, the Authority considers the change in context with all previous relevant design changes and all related revisions to the applicable type-certification basis incorporated in the type-certificate for the product. Changes that meet one of the following criteria are automatically considered significant:
 - i. The general configuration or the principles of construction are not retained.
 - ii. The assumptions used for certification of the product to be changed do not remain valid.
 - 2. Each area, system, part or appliance that the Authority finds is not affected by the change.
 - 3. Each area, system, part or appliance that is affected by the change, for which the Authority finds that compliance with the airworthiness codes described in paragraph (a) would not contribute materially to the level of safety of the changed product or would be impractical.
- (c) (Reserved)

- (d) If the Authority finds that the airworthiness codes in effect at the date of the application for the change do not provide adequate standards with respect to the proposed change, the applicant shall also comply with any special conditions, and amendments to those special conditions, prescribed under the provisions of 21A.16B, to provide a level of safety equivalent to that established in the airworthiness codes in effect at the date of the application for the change.
- (e) (Reserved)

21A.103 Issue of approval

- (a) The applicant shall be entitled to have a major change to a type design approved by the Authority after:
 - 1. Submitting the declaration referred to in 21A.97(a)(3); and
 - 2. It is shown that:
 - The changed product meets the applicable airworthiness codes and environmental protection requirements (where applicable) as specified in 21A.101;
 - ii. Any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and
 - iii. No feature or characteristic makes the product unsafe for the uses for which certification is requested.
- (b) A minor change to a type design shall only be approved in accordance with 21A.95 if it is shown that the changed product meets the applicable airworthiness codes, as specified in 21A.101.

21A.105 Record keeping

- (a) For each change, all relevant design information, drawings and test reports, including inspection records for the changed product tested, shall be held by the applicant at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness and compliance with applicable environmental protection requirements (where applicable) of the changed product.
- (b) Unless otherwise laid down by the Authority, the records must be retained for at least two years after the removal of service of the last aircraft of the type certified.

21A.107 Instructions for continuing airworthiness

- (a) The holder of a minor change approval to type design shall furnish at least one set of the associated variations, if any, to the instructions for continuing airworthiness of the product on which the minor change is to be installed, prepared in accordance with the applicable type-certification basis, to each known operator of one or more aircraft, engine, or propeller incorporating the minor change, upon its delivery, or upon issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those variations in instructions available, on request, to any other operator required to comply with any of the terms of those instructions.
- (b) In addition, changes to those variations of the instructions for continuing airworthiness shall be made available to all known operators of a product incorporating the minor change and shall be made available, on request, to any organisation required to comply with any of those instructions.

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21A.109 Obligations and EMPA marking

The holder of a minor change approval to type design shall:

- (a) Undertake the obligations laid down in 21A.4, 21A.105 and 21A.107; and
- (b) Specify the marking, including EMPA (herein 'European Military Part Approval') letters, in accordance with 21A.804.

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SUBPART E — MILITARY SUPPLEMENTAL TYPE-CERTIFICATES

21A.111 Scope

This Subpart establishes the procedure for the approval of major changes to the type design under supplemental type-certificate procedures, and establishes the obligations and privileges of the applicants for, and holders of, those certificates.

21A.112A Eligibility

Any Organisation that has demonstrated, or is in the process of demonstrating, its capability under 21A.112B shall be eligible as an applicant for a Supplemental Type-Certificate (STC) under the conditions laid down in this Subpart.

21A.112B Demonstration of capability

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

21A.113 Application for a supplemental type-certificate

- (a) An application for a supplemental type-certificate shall be made in a form and manner established by the Authority.
- (b) An application for a supplemental type-certificate shall include the descriptions and identification required by 21A.93. In addition, such an application shall include a justification that the information on which those identifications are based is adequate either from the applicant's own resources, or through an arrangement with the type-certificate holder.

21A.114 Showing of compliance

Any applicant for a supplemental type-certificate shall comply with 21A.97.

21A.115 Issue of a supplemental type-certificate

The applicant shall be entitled to have a supplemental type-certificate issued by the Authority after:

- (a) Complying with 21A.103(a);
- (b) Demonstrating its capability in accordance with 21A.112B:
- (c) Where, under 21A.113(b), the applicant has entered into an arrangement with the type-certificate holder,
 - 1. The type-certificate holder has advised that it has no technical objection to the information submitted under 21A.93; and
 - 2. The type-certificate holder has agreed to collaborate with the supplemental type-certificate holder to ensure discharge of all obligations for continued airworthiness of the changed product through compliance with 21A.44 and 21A.118A.

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21A.116 Transferability

A supplemental type-certificate shall only be transferred to an organisation that is able to undertake the obligations of 21A.118A and for this purpose has demonstrated its ability to qualify under the criteria of 21A.112B.

21A.117 Changes to that part of a product covered by a supplemental type-certificate

- (a) Minor changes to that part of a product covered by a supplemental type-certificate shall be classified and approved in accordance with Subpart D.
- (b) Each major change to that part of a product covered by a supplemental type-certificate shall be approved as a separate supplemental type-certificate in accordance with this Subpart.
- (c) By way of derogation from paragraph (b), a major change to that part of a product covered by a supplemental type-certificate submitted by the supplemental type-certificate holder itself may be approved as a change to the existing supplemental type-certificate.

21A.118A Obligations and EMPA marking

Each holder of a supplemental type-certificate shall:

- (a) Undertake the obligations:
 - 1. Laid down in 21A.3, 21A.3B, 21A.4, 21A.105, 21A.119 and 21A.120;
 - 2. Implicit in the collaboration with the type-certificate holder under 21A.115(c)(2); and for this purpose continue to meet the criteria of 21A.112B.
- (b) Specify the marking, including EMPA letters, in accordance with 21A.804.

21A.118B Duration and continued validity

- (a) A supplemental type-certificate shall be issued for an unlimited duration. It shall remain valid subject to:
 - 1. The holder remaining in compliance with this EMAR; and
 - 2. The certificate not being surrendered or revoked under the applicable administrative procedures established by the Authority.
- (b) Upon surrender or revocation, the supplemental type-certificate shall be returned to the Authority.
- (c) The supplemental type-certificate holder shall inform the Authority, as soon as practicable, when it is no longer able to meet the supplemental type-certificate holder responsibilities defined by this EMAR, for one or several types of product. In this case, it shall provide access to the Authority with all the information necessary for the latter to ensure, or have ensured, the continued airworthiness of the type design of the concerned products.

21A.119 Manuals

The holder of a supplemental type-certificate shall produce, maintain, and update master copies of variations in the manuals required by the applicable type-certification basis and environmental protection requirements (where applicable) for the product, necessary to cover the changes introduced under the supplemental type-certificate, and furnish copies of these manuals to the Authority, on request.

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21A.120 Instructions for continuing airworthiness

- (a) The holder of the supplemental type-certificate for an aircraft, engine, or propeller, shall furnish at least one set of the associated variations to the instructions for continuing airworthiness, prepared in accordance with the applicable type-certification basis, to each known operator of one or more aircraft, engine, or propeller incorporating the features of the supplemental type-certificate, upon its delivery, or upon issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those variations in instructions available, on request, to any other operator required to comply with any of the terms of those instructions. Availability of some manual or portion of the variations to the instructions for continuing airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight-hours/cycles.
- (b) In addition, changes to those variations of the instructions for continuing airworthiness shall be made available to all known operators of a product incorporating the supplemental type-certificate and shall be made available, on request, to any operators required to comply with any of those instructions. A programme showing how changes to the variations to the instructions for continuing airworthiness are distributed shall be submitted to the Authority.

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SUBPART F — PRODUCTION WITHOUT MILITARY PRODUCTION ORGANISATION APPROVAL

21A.121 Scope

- (a) This Subpart establishes the procedure for demonstrating the conformity with the applicable design data of a product, part and appliance that is intended to be manufactured without a production organisation approval under Subpart G.
- (b) This Subpart establishes the rules governing the obligations of the manufacturer of a product, part or appliance being manufactured under this Subpart.

21A.122 Eligibility

Any organisation may apply to show conformity of individual products, parts or appliances under this Subpart, if:

- (a) It holds or has applied for an approval covering the design of that product, part or appliance; or
- (b) It has ensured satisfactory coordination between production and design, through an appropriate arrangement with the applicant for, or holder of, an approval of such a design.

21A.124 Application

- (a) Each application for an agreement to the showing of conformity of individual products, parts and appliances under this Subpart shall be made in a form and manner established by the Authority.
- (b) Such application shall contain:
 - 1. Evidence which demonstrate, where applicable, that:
 - i. The issuance of a production organisation approval under Subpart G would be inappropriate; or
 - ii. The certification or approval of a product, part or appliance under this Subpart is needed pending the issuance of a production organisation approval under Subpart G.
 - 2. An outline of the information required by 21A.125A(b).

21A.125A Issue of a letter of agreement

The applicant shall be entitled to have a letter of agreement issued by the Authority agreeing to the showing of conformity of individual products, parts and appliances under this Subpart, after:

- (a) Having established a production inspection system that ensures that each product, part or appliance conforms to the applicable design data and is in condition for safe operation.
- (b) Providing a manual that contains:
 - 1. A description of the production inspection system required under paragraph (a);
 - 2. A description of the means for making the determinations of the production inspection system; and

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- 3. A description of the tests of 21A.127 and 21A.128, and the names of persons authorised for the purpose of 21A.130(a).
- (c) Demonstrating that it is able to provide assistance in accordance with 21A.3 and 21A.129(d).

21A.125B Findings

- (a) When objective evidence is found showing non-compliance of the holder of a letter of agreement with the applicable requirements of this EMAR, the finding shall be classified as follows:
 - 1. A level one finding is any non-compliance with this EMAR which could lead to uncontrolled non-compliances with applicable design data and which could affect the safety of the aircraft.
 - 2. A level two finding is any non-compliance with this EMAR 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).
- (c) After receipt of notification of findings (according to 21B.143 when issued):
 - 1. In case of a level one finding, the holder of the letter of agreement shall demonstrate corrective action to the satisfaction of the Authority 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 Authority 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 Authority may extend the six month period subject to a satisfactory corrective action plan agreed by the Authority;
 - 3. A level three finding shall not require immediate action by the holder of the letter of agreement. If appropriate, the Authority will specify a compliance time.
- (d) In case of level one or level two findings, the letter of agreement may be subject to a partial or full limitation, suspension and revocation (under 21B.145 when issued). The holder of the letter of agreement shall provide confirmation of receipt of the notice of limitation, suspension or revocation of the letter of agreement in a timely manner.

21A.125C Duration and continued validity

- (a) The letter of agreement shall be issued for a limited duration not exceeding one year, or as agreed by the Authority. It shall remain valid unless:
 - 1. The holder of the letter of agreement fails to demonstrate compliance with the applicable requirements of this Subpart; or
 - 2. There is evidence that the manufacturer cannot maintain satisfactory control of the manufacture of products, parts, or appliances under the agreement; or
 - 3. The manufacturer no longer meets the requirements of 21A.122; or
 - 4. The letter of agreement has been surrendered, revoked (under 21B.145 when issued), or has expired.
- (b) Upon surrender, revocation or expiry, the letter of agreement shall be returned to the Authority.

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21A.126 Production inspection system

- (a) The production inspection system required under 21A.125A(a) shall provide a means for determining that:
 - 1. Incoming materials, and bought or subcontracted parts, used in the finished product are as specified in the applicable design data;
 - 2. Incoming materials, and bought or subcontracted parts, are properly identified;
 - 3. Processes, manufacturing techniques and methods of assembly affecting the quality and safety of the finished product are accomplished in accordance with specifications accepted by the Authority;
 - 4. Design changes, including material substitutions, have been approved under Subpart D or E and controlled before being incorporated in the finished product.
- (b) The production inspection system required by 21A.125A (a), shall also be such as to ensure that:
 - 1. Parts in process are inspected for conformity with the applicable design data at points in production where accurate determinations can be made;
 - 2. Materials subject to damage and deterioration are suitably stored and adequately protected;
 - 3. Current design drawings are readily available to manufacturing and inspection personnel, and used when necessary;
 - 4. Rejected materials and parts are segregated and identified in a manner that precludes installation in the finished product;
 - 5. Materials and parts that are withheld because of departures from design data or specifications, and that are to be considered for installation in the finished product, are subjected to an approved engineering and manufacturing review procedure. Those materials and parts determined by this procedure to be serviceable shall be properly identified and re-inspected if rework or repair is necessary. Materials and parts rejected by this procedure shall be marked and disposed of to ensure that they are not incorporated in the final product;
 - 6. Records produced under the production inspection system are maintained, identified with the completed product or part where practicable, and retained by the manufacturer in order to provide the information necessary to ensure the continued airworthiness of the product.

21A.127 Tests: aircraft

- (a) Each manufacturer, of an aircraft manufactured under this Subpart, shall establish an approved production ground and flight test procedure and check-off forms, and in accordance with those forms, test each aircraft produced, as a means of establishing relevant aspects of compliance with 21A.125A(a).
- (b) Each production test procedure shall include at least the following:
 - 1. A check on handling qualities;
 - 2. A check on flight performance (using normal aircraft instrumentation);
 - 3. A check on the proper functioning of all aircraft equipment and systems;
 - 4. A determination that all instruments are properly marked, and that all placards and required flight manuals are installed after flight test;

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- 5. A check of the operational characteristics of the aircraft on the ground;
- 6. A check on any other items peculiar to the aircraft being tested.

21A.128 Tests: engines and propellers

Each manufacturer of engines or propellers, manufactured under this Subpart, shall subject each engine, or variable pitch propeller, to an acceptable functional test as specified in the type-certificate holder's documentation, to determine if it operates properly throughout the range of operation for which it is type-certificated, as a means of establishing relevant aspects of compliance with 21A.125A(a).

21A.129 Obligations of the manufacturer

Each manufacturer of a product, part or appliance being manufactured under this Subpart shall:

- (a) Make each product, part or appliance available for inspection by the Authority;
- (b) Maintain at the place of manufacture the technical data and drawings necessary to determine whether the product conforms to the applicable design data;
- (c) Maintain the production inspection system that ensures that each product conforms to the applicable design data and is in condition for safe operation;
- (d) Provide assistance to the holder of the type-certificate, restricted type-certificate or design approval in dealing with any continuing airworthiness actions that are related to the products, parts or appliances that have been produced;
- (e) Establish and maintain an internal occurrence reporting system in the interest of safety, to enable the collection and assessment of occurrence reports in order to identify adverse trends or to address deficiencies, and to extract reportable occurrences. This system shall include evaluation of relevant information relating to occurrences and the promulgation of related information;
- (f) 1. Report to the holder of the type-certificate, restricted type-certificate or design approval, all cases where products, parts or appliances have been released by the manufacturer and subsequently identified to have deviations from the applicable design data, and investigate with the holder of the type-certificate, restricted type-certificate or design approval to identify those deviations which could lead to an unsafe condition;
 - 2. Report to the Authority the deviations which could lead to an unsafe condition identified according to subparagraph (1). Such reports shall be made in a form and manner established by the Authority under 21A.3(b)(2) or accepted by the Authority;
 - 3. Where the manufacturer acts as supplier to another production organisation, report also to that other organisation all cases where it has released products, parts or appliances to that organisation and subsequently identified them to have possible deviations from the applicable design data.

21A.130 Statement of Conformity

(a) Each manufacturer of a product, part or appliance manufactured under this Subpart shall raise a Statement of Conformity, an EMAR Form 52 (or equivalent), for complete aircraft, or EMAR Form 1 (or equivalent), for other products, parts or appliances (see Appendix). This statement shall be signed by an authorised person who holds a responsible position in the manufacturing organisation.

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- (b) A statement of conformity shall include:
 - 1. For each product, part or appliance a statement that the product, part or appliance conforms to the approved design data and is in condition for safe operation;
 - 2. For each aircraft, a statement that the aircraft has been ground and flight checked in accordance with 21A.127(a); and
 - 3. For each engine, or variable pitch propeller, a statement that the engine or propeller has been subjected by the manufacturer to a final functional test, in accordance with 21A.128, and additionally in case of engines, a determination according to data provided by the engine type-certificate holder that each completed engine is in compliance with the applicable emissions requirements (where applicable) current at the date of manufacture of the engine.
 - (c) Each manufacturer of such a product, part or appliance shall present a current statement of conformity, for validation by the Authority:
 - 1. Upon the initial transfer by it of the ownership of such a product, part or appliance; or
 - 2. Upon application for the original issue of an aircraft certificate of airworthiness; or
 - 3. Upon application for the original issue of an airworthiness release document for an engine, a propeller, a part or appliance.
- (d) The Authority shall validate by counter-signature the Statement of Conformity if it finds after inspection that the product, part or appliance conforms to the applicable design data and is in condition for safe operation.

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SUBPART G — MILITARY PRODUCTION ORGANISATION APPROVAL

21A.131 Scope

This Subpart establishes:

- (a) The procedure for the issuance of a military production organisation approval (MPOA), for a production organisation showing conformity of products, parts and appliances with the applicable design data;
- (b) The rules governing obligations and privileges of the applicant for, and holders of, such approvals.

21A.133 Eligibility

Any organisation shall be eligible as an applicant for an approval under this Subpart. The applicant shall:

- (a) Justify that, for a defined scope of work, an approval under this Subpart is appropriate for the purpose of showing conformity with a specific design; and
- (b) Hold or have applied for an approval of that specific design; or
- (c) Have ensured, through an appropriate arrangement with the applicant for, or holder of, an approval of that specific design, satisfactory coordination between production and design.

21A.134 Application

Each application for a production organisation approval shall be made to the Authority in a form and manner established by that Authority, and shall include an outline of the information required by 21A.143 and the terms of approval requested to be issued under 21A.151.

21A.135 Issue of production organisation approval

An organisation shall be entitled to have a production organisation approval issued by the Authority when it has demonstrated compliance with the applicable requirements under this Subpart.

21A.139 Quality System

- (a) The production organisation shall demonstrate that it has established and is able to maintain a quality system. The quality system shall be documented. This quality system shall be such as to enable the organisation to ensure that each product, part or appliance produced by the organisation or by its partners, or supplied from or subcontracted to outside parties, conforms to the applicable design data and is in condition for safe operation, and thus exercise the privileges set forth in 21A.163.
- (b) The quality system shall contain:
 - 1. As applicable within the scope of approval, control procedures for:
 - Document issue, approval, or change;
 - ii. Vendor and subcontractor assessment audit and control;
 - iii. Verification that incoming products, parts, materials, and equipment, including items supplied new or used by buyers of products, are as specified in the applicable design data;

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- iv. Identification and traceability;
- v. Manufacturing processes;
- vi. Inspection and testing, including production flight tests;
- vii. Calibration of tools, jigs, and test equipment;
- viii. Non-conforming item control;
- ix. Airworthiness coordination with the applicant for, or holder of, the design approval;
- x. Records completion and retention;
- xi. Personnel competence and qualification;
- xii. Issue of airworthiness release documents:
- xiii. Handling, storage and packing;
- xiv. Internal quality audits and resulting corrective actions;
- xv. Work within the terms of approval performed at any location other than the approved facilities;
- xvi. Work carried out after completion of production but prior to delivery, to maintain the aircraft in a condition for safe operation;
- xvii. Issue of permit to fly and approval of associated flight conditions.

The control procedures shall include specific provisions for any critical parts.

2. An independent quality assurance function to monitor compliance with, and adequacy of, the documented procedures of the quality system. This monitoring shall include a feedback system to the person or group of persons referred to in 21A.145(c)(2) and ultimately to the manager referred to in 21A.145 (c)(1) to ensure, as necessary, corrective action.

21A.143 Production organisation Exposition (POE)

- (a) The organisation shall submit to the Authority a POE providing the following information:
 - 1. A statement signed by the accountable manager confirming that the production organisation exposition and any associated manuals which define the approved organisation's compliance with this Subpart will be complied with at all times:
 - 2. The title(s) and names of managers accepted by the Authority in accordance with 21A.145(c)(2);
 - 3. The duties and responsibilities of the manager(s) as required by 21A.145(c)(2) including matters on which they may deal directly with the Authority on behalf of the organisation;
 - 4. An organisational chart showing associated chains of responsibility of the managers as required by 21A.145(c)(1) and (2);
 - 5. A list of certifying staff as referred to in 21A.145(d);
 - 6. A general description of man-power resources;
 - 7. A general description of the facilities located at each address specified in the production organisation's certificate of approval;
 - 8. A general description of the production organisation's scope of work relevant to the terms of approval;

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- 9. The procedure for the notification of organisational changes to the Authority;
- 10. The amendment procedure for the production organisation exposition;
- 11. A description of the quality system and the procedures as required by 21A.139(b)(1);
- 12. A list of those outside parties referred to in 21A.139(a).
- (b) The production organisation exposition shall be amended as necessary to remain an upto-date description of the organisation, and copies of any amendments shall be supplied to the Authority.

21A.145 Approval requirements

The production organisation shall demonstrate, on the basis of the information submitted in accordance with 21A.143 that:

- (a) With regard to general approval requirements, facilities, working conditions, equipment and tools, processes and associated materials, number and competence of staff, and general organisation are adequate to discharge obligations under 21A.165.
- (b) With regard to all necessary airworthiness data:
 - 1. The production organisation is in receipt of such data from the Authority, and from the holder of, or applicant for, the type-certificate, restricted type-certificate or design approval, to determine conformity with the applicable design data;
 - 2. The production organisation has established a procedure to ensure that airworthiness data are correctly incorporated in its production data; and
 - 3. Such data are kept up to date and made available to all personnel who need access to such data to perform their duties.
- (c) With regard to management and staff:
 - 1. A manager has been nominated by the production organisation, and is accountable to the Authority. His or her responsibilities within the organisation shall consist of ensuring that all production is performed to the required standards and that the production organisation is continuously in compliance with the data and procedures identified in the exposition referred to in 21A.143;
 - 2. A person or group of persons have been nominated by the production organisation to ensure that the organisation is in compliance with the requirements of this EMAR, and are identified, together with the extent of their authority. Such person(s) shall act under the direct authority of the accountable manager referred to in subparagraph (1). The person(s) nominated shall be able to show the appropriate knowledge, background and experience to discharge their responsibilities; and
 - 3. Staff at all levels have been given appropriate authority to be able to discharge their allocated responsibilities and that there is full and effective coordination within the production organisation in respect of airworthiness matters.

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- (d) With regard to certifying staff, authorised by the production organisation to sign the documents issued under 21A.163 under the scope or terms of approval:
 - 1. The knowledge, background (including other functions in the organisation), and experience of the certifying staff are appropriate to discharge their allocated responsibilities;
 - 2. The production organisation maintains a record of all certifying staff which shall include details of the scope of their authorisation;
 - 3. Certifying staff are provided with evidence of the scope of their authorisation.

21A.147 Changes to the approved production organisation

- (a) After the issue of a production organisation approval, each change to the approved production organisation that is significant to the showing of conformity or to the airworthiness of the product, part or appliance, particularly changes to the quality system, shall be approved by the Authority. An application for approval shall be submitted in writing to the Authority and the organisation shall demonstrate to the Authority before implementation of the change that it will continue to comply with this Subpart.
- (b) The Authority shall establish the conditions under which a production organisation approved under this Subpart may operate during such changes unless the Authority determines that the approval should be suspended.

21A.148 Changes of location

A change of the location of the manufacturing facilities of the approved production organisation shall be deemed of significance and therefore shall comply with 21A.147.

21A.149 Transferability

Except as a result of a change in ownership, which is deemed significant for the purposes of 21A.147, a production organisation approval is not transferable unless approved by the Authority.

21A.151 Terms of approval

The terms of approval shall identify the scope of work, the products or the categories of parts and appliances, or both, for which the holder is entitled to exercise the privileges under 21A.163. Those terms shall be issued as part of a production organisation approval.

21A.153 Changes to the terms of approval

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

21A.157 Investigations

A production organisation shall make arrangements that allow the Authority to make any investigations, including investigations of partners and subcontractors, necessary to determine compliance and continued compliance with the applicable requirements of this Subpart.

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21A.158 Findings

- (a) When objective evidence is found showing non-compliance of the holder of a production organisation approval with the applicable requirements of this EMAR, the finding shall be classified as follows:
 - 1. A level one finding is any non-compliance with this EMAR which could lead to uncontrolled non-compliances with applicable design data and which could affect the safety of the aircraft;
 - 2. A level two finding is any non-compliance with this EMAR 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).
- (c) After receipt of notification of findings issued by the Authority (according to 21B.225 when issued):
 - 1. In case of a level one finding, the holder of the production organisation approval shall demonstrate corrective action to the satisfaction of the Authority 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 Authority 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 Authority may extend the six months period subject to a satisfactory corrective action plan agreed by the Authority;
 - 3. A level three finding shall not require immediate action by the holder of the production organisation approval. If appropriate, the Authority will specify a compliance time.
- (d) In case of level one or level two findings, the production organisation approval may be subject to a partial or full limitation, suspension or revocation (under 21B.245 when issued). The holder of the production organisation approval shall provide confirmation of receipt of the notice of limitation, suspension or revocation of the production organisation approval in a timely manner.

21A.159 Duration and continued validity

- (a) A production organisation approval can be issued for a limited period. It shall remain valid unless:
 - 1. The production organisation fails to demonstrate compliance with the applicable requirements of this Subpart; or
 - 2. The Authority is prevented by the holder or any of its partners or subcontractors to perform the investigations in accordance with 21A.157; or
 - 3. There is evidence that the production organisation cannot maintain satisfactory control of the manufacture of products, parts or appliances under the approval; or
 - 4. The production organisation no longer meets the requirements of 21A.133; or
 - 5. The certificate has been surrendered or revoked (under 21B.245 when issued); or
 - 6. The production organisation has not carried out production activities in the scope of the term of the approval for a period specified by the Authority.
- (b) Upon surrender or revocation, the certificate shall be returned to the Authority.

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21A.163 Privileges

Pursuant to the terms of approval issued under 21A.135 and if national regulations allow, the holder of a production organisation approval may:

- (a) Perform production activities under this EMAR;
- (b) In the case of complete aircraft and upon presentation of a Statement of Conformity EMAR Form 52 under 21A.174, obtain an aircraft certificate of airworthiness without further showing;
- (c) In the case of other products, parts or appliances issue authorised release certificates EMAR Form 1 without further showing;
- (d) Maintain a new aircraft that it has produced and issue a certificate of release to service EMAR Form 53 in respect of that maintenance; or
- (e) Under procedures agreed with its Authority, as defined at 21.1(c), for an aircraft it has produced and when the production organisation itself is controlling under its MPOA, the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight, to issue a permit to fly in accordance with 21A.711(c) including approval of the flight conditions in accordance with 21A.710(b).

21A.165 Obligations of the holder

The holder of a production organisation approval shall:

- (a) Ensure that the production organisation exposition furnished in accordance with 21A.143 and the documents to which it refers, are used as basic working documents within the organisation;
- (b) Maintain the production organisation in conformity with the data and procedures approved for the production organisation approval;
- (c) 1. Determine that each completed aircraft conforms to the type design and is in condition for safe operation prior to submitting Statements of Conformity to the Authority; or
 - 2. Determine that other products, parts or appliances are complete and conform to the approved design data and are in condition for safe operation before issuing EMAR Form 1 to certify airworthiness, and additionally in case of engines, determine according to data provided the engine type-certificate holder that each completed engine is in compliance with the applicable emissions requirements as defined in 21A.18(b), current at the date of manufacture of the engine, to certify emissions compliance.; or
 - 3. Determine that other products, parts or appliances conform to the applicable data before issuing EMAR Form 1as a conformity certificate.
- (d) Record all details of work carried out:
- (e) Establish and maintain an internal occurrence reporting system in the interest of safety, to enable the collection and assessment of occurrence reports in order to identify adverse trends or to address deficiencies, and to extract reportable occurrences. This system shall include evaluation of relevant information relating to occurrences and the promulgation of related information;
- (f) 1. Report to the holder of the type-certificate or design approval, all cases where products, parts or appliances have been released by the production organisation and subsequently identified to have possible deviations from the applicable design data, and investigate with the holder of the type-certificate, or design approval in order to identify those deviations which could lead to an unsafe condition;

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- 2. Report to the Authority the deviations which could lead to an unsafe condition identified according to subparagraph (1). Such reports shall be made in a form and manner established by the Authority under 21A.3(b)(2) or accepted by the Authority;
- 3. Where the holder of the production organisation approval is acting as a supplier to another production organisation, report also to that other organisation all cases where it has released products, parts or appliances to that organisation and subsequently identified them to have possible deviations from the applicable design data.
- (g) Provide assistance to the holder of the type-certificate or design approval in dealing with any continuing airworthiness actions that are related to the products, parts or appliances that have been produced;
- (h) Establish an archiving system incorporating requirements imposed on its partners, suppliers and subcontractors, ensuring conservation of the data used to justify conformity of the products, parts or appliances. Such data shall be held at the disposal of the Authority and be retained in order to provide the information necessary to ensure the continued airworthiness of the products, parts or appliances;
- (i) Where, under its terms of approval, the holder issues a certificate of release to service, determine that each completed aircraft has been subjected to necessary maintenance and is in condition for safe operation, prior to issuing the certificate;
- (j) Where applicable, under the privilege of 21A.163(e), determine the conditions under which a permit to fly can be issued; and
- (k) Where applicable, under the privilege of 21A.163(e), establish compliance with 21A.711(b) and (d) before issuing a permit to fly to an aircraft.

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SUBPART H — MILITARY CERTIFICATES OF AIRWORTHINESS AND MILITARY RESTRICTED CERTIFICATES OF AIRWORTHINESS

21A.171 Scope

This Subpart establishes the procedure for issuing airworthiness certificates.

21A.172 Eligibility

Any organisation or operator under whose name an aircraft is registered or will be registered in a Participating State ('State of registry'), or its representative, shall be eligible as an applicant for an airworthiness certificate for that aircraft under this Subpart.

21A.173 Classification

Airworthiness certificates shall be classified as follows:

- (a) Certificates of airworthiness shall be issued to aircraft which conform to a type-certificate that has been issued in accordance with this EMAR (or if appropriate and if national regulations allow, based upon a Civil Type Certificate issued by a recognised Civil Authority);
- (b) Restricted certificates of airworthiness shall be issued to aircraft:
 - 1. Which conform to a restricted type-certificate that has been issued in accordance with this EMAR.
 - 2. (Reserved)

21A.174 Application

- (a) Pursuant to 21A.172, an application for an airworthiness certificate shall be made in a form and manner established by the Authority of the State of registry.
- (b) Each application for a certificate of airworthiness or restricted certificate of airworthiness shall include:
 - 1. The class of airworthiness certificate applied for;
 - 2. With regard to new aircraft:
 - i. A statement of conformity:
 - Issued under 21A.163(b); or
 - Issued under 21A.130 and validated by the Authority; or
 - For an imported aircraft, any acceptable evidence to support that the aircraft conforms to a design approved by the Authority of the State of registry.
 - ii. A weight and balance report with a loading schedule;
 - iii. The flight manual and any other manuals required by the airworthiness Authority of the State of registry.
 - 3. With regard to used aircraft:
 - i. Originating from a State applying EMAR, an airworthiness review certificate issued in accordance with EMAR M;
 - ii. Originating from another State:

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- A statement by the Authority of the State where the aircraft is, or was, registered, reflecting the airworthiness status of the aircraft on its register at time of transfer;
- A weight and balance report with a loading schedule;
- The flight manual and any other manuals required by the airworthiness Authority of the State of registry;
- Historical records to establish the production, modification, and maintenance standard of the aircraft, including all limitations associated with a restricted certificate of airworthiness under 21A.184(c);
- A recommendation for the issuance of a certificate of airworthiness or restricted certificate of airworthiness and an airworthiness review certificate following an airworthiness review in accordance with EMAR M
- (c) Unless otherwise agreed, the statements referred to in subparagraphs (b)(2)(i) and (b)(3)(ii) shall be issued no more than 60 days before presentation of the aircraft to the airworthiness Authority of the State of registry.

21A.175 Language

The manuals, placards, listings, and instrument markings and other necessary information required by applicable airworthiness codes shall be presented in a language acceptable to the Authority of the State of registry.

21A.177 Amendment or modification

An airworthiness certificate may be amended or modified only by the Authority of the State of registry.

21A.179 Transferability and re-issuance within States applying EMARs

- (a) Where national regulations allow ownership (either nationally or to another State/Nation) of an aircraft to be changed:
 - 1. If it remains in the same State of registry, the certificate of airworthiness, or the restricted certificate of airworthiness conforming to a restricted type-certificate only, shall be transferred together with the aircraft;
 - 2. If the aircraft is registered in another State applying EMARs, the certificate of airworthiness, or the restricted certificate of airworthiness conforming to a restricted type-certificate only, shall be issued:
 - i. Upon presentation of the former certificate of airworthiness and of a valid airworthiness review certificate issued under EMAR M; and
 - ii. When satisfying 21A.175.
- (b) Where ownership of an aircraft has changed, and the aircraft has a restricted certificate of airworthiness not conforming to a restricted type-certificate, the airworthiness certificates shall be transferred together with the aircraft provided the aircraft remains on the same register, only with the formal agreement of the Authority of the State of registry to which it is transferred.

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21A.180 Inspections

The holder of the airworthiness certificate shall provide access to the aircraft for which that airworthiness certificate has been issued upon request by the Authority of the State of registry.

21A.181 Duration and continued validity

- (a) An airworthiness certificate may be issued for an unlimited duration. It shall remain valid subject to:
 - 1. Compliance with the applicable type-design, airworthiness directives and instructions for continuing airworthiness; and
 - 2. The aircraft remaining on the same register;
 - 3. The type-certificate or restricted type-certificate under which it is issued not being previously invalidated under 21A.51; and
 - 4. The certificate not being surrendered or revoked by the Authority of the State of registry.
- (b) Upon surrender or revocation, the certificate shall be returned to the Authority of the State of registry.

21A.182 Aircraft identification

Each applicant for an airworthiness certificate under this Subpart shall demonstrate that its aircraft is identified in accordance with Subpart Q.

21A.183 Issue of certificates of airworthiness

(a) (Reserved)

21A.184 Issue of restricted certificates of airworthiness

- (a) (Reserved)
- (b) (Reserved)
- (c) (Reserved)

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SUBPART I — NOISE CERTICATES (TO BE ADDED LATER IF REQUIRED)

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SUBPART J — MILITARY DESIGN ORGANISATION APPROVAL

21A.231 Scope

This Subpart establishes the procedure for the approval of design organisations and rules governing the obligations and privileges of applicants for, and holders of, such approvals.

21A.233 Eligibility

At the discretion of the Authority, any organisation shall be eligible as an applicant for an approval under this Subpart:

- (a) In accordance with 21A.14, 21A.112B, 21A.432B or 21A.602B; or
- (b) For approval of minor changes or minor repair design, when requested for the purpose of obtaining privileges under 21A.263.

21A.234 Application

Each application for a design organisation approval shall be made in a form and manner established by the Authority, or an alternative acceptable to the Authority, and shall include an outline of the information required by 21A.243, and the terms of approval requested to be issued under 21A.251.

21A.235 Issue of Military design organisation approval

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

21A.239 Design assurance system

- (a) The design organisation 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 organisation:
 - 1. To ensure that the design of the products, parts and appliances or the design change or repair solution thereof, comply with the applicable type-certification basis and environmental protection requirements (where applicable); and
 - 2. To ensure that its responsibilities are properly discharged in accordance with:
 - i. The appropriate provisions of this EMAR; and
 - ii. The terms of approval issued under 21A.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 organisation submits compliance statements and associated documentation to the Authority.
- (c) The design organisation 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.

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21A.243 Design organisation exposition (DOE)

- (a) The design organisation shall furnish a DOE to the Authority describing, directly or by cross-reference, the organisation, 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 organisations or subcontractors, the DOE shall include a statement of how the design organisation is able to give, for all parts and appliances, the assurance of compliance required by 21A.239(b), and shall contain, directly or by cross-reference, descriptions and information on the design activities and organisation of those partners or subcontractors, as necessary to establish this statement.
- (c) The DOE shall be amended as necessary to remain an up-to-date description of the organisation, and copies of amendments shall be supplied to the Authority.
- (d) The design organisation 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 (where applicable) in the organisation.

21A.245 Approval requirements

The design organisation shall demonstrate, on the basis of the information submitted in accordance with 21A.243 that, in addition to complying with 21A.239:

- (a) The staff 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;
- (b) There is full and efficient coordination between departments and within departments in respect of airworthiness and environmental protection (where applicable) matters.

21A.247 Changes in design assurance system

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

21A.249 Transferability

A design organisation approval is not transferable unless approved by the Authority.

21A.251 Terms of approval

The terms of approval shall identify the types of design work, categories of products, parts and appliances for which the design organisation holds a design organisation approval, and the functions and duties that the organisation is approved to perform in regard to the airworthiness of products. For design organisation approval covering type-certification or EMTSO authorisation 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 organisation approval.

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21A.253 Changes to the terms of approval

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

21A.257 Investigations

- (a) The design organisation shall make arrangements that allow the Authority to make any investigations, including investigations of partners and subcontractors, necessary to determine compliance and continued compliance with the applicable requirements of this Subpart.
- (b) The design organisation shall allow the Authority 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 21A.239(b).

21A.258 Findings

- (a) When objective evidence is found showing non-compliance of the holder of a design organisation approval with the applicable requirements of this EMAR, the finding shall be classified as follows:
 - 1. A level one finding is any non-compliance with this EMAR 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 EMAR 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).
- (c) After receipt of notification of findings under the applicable administrative procedures established by the Authority,
 - 1. In case of a level one finding, the holder of the design organisation approval shall demonstrate corrective action to the satisfaction of the Authority 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 Authority 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 Authority may extend the six month period subject to a satisfactory corrective action plan agreed by the Authority.
 - 3. A level three finding shall not require immediate action by the holder of the design organisation approval. If appropriate, the Authority will specify a compliance time.
- (d) In case of level one or level two findings, the design organisation approval may be subject to a partial or full suspension or revocation under the applicable administrative procedures established by the Authority. The holder of the design organisation approval shall provide confirmation of receipt of the notice of suspension or revocation of the design organisation approval in a timely manner.

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21A.259 Duration and continued validity

- (a) A design organisation approval can be issued for a limited period. It shall remain valid for that duration unless:
 - 1. The design organisation fails to demonstrate compliance with the applicable requirements of this Subpart; or
 - 2. The Authority is prevented by the holder or any of its partners or subcontractors to perform the investigations in accordance with 21A.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 Authority.
- (b) Upon surrender or revocation, the certificate shall be returned to the Authority.

21A.263 Privileges

The Authority may grant the following privileges, if national regulations allow:

- (a) The holder of a design organisation approval shall be entitled to perform design activities under this EMAR and within its scope of approval;
- (b) Subject to 21A.257(b), the Authority shall accept without further verification the following compliance documents submitted by the applicant for the purpose of obtaining:
 - 1. The approval of flight conditions required for a permit to fly; or
 - 2. A type-certificate or approval of a major change to a type design; or
 - 3. A supplemental type-certificate; or
 - 4. A EMTSO authorisation under 21A.602B(b)(1); or
 - 5. A major repair design approval.
- (c) The holder of a design organisation 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 MDOA nr. [Authority].21J.[xyz];
 - 4. To approve documentary changes to the aircraft flight manual, and issue such changes containing the following statement: 'Revision nr. xx to AFM ref. yyy, is approved under the authority of MDOA nr. [Authority].21J.[xyz];
 - 5. To approve the design of major repairs to products for which it holds the type-certificate or the supplemental type-certificate;

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- 6. To approve the conditions under which a permit to fly can be issued in accordance with 21A.710(a)(2):
 - i. Except for initial flights of:
 - A new type of aircraft; or
 - An aircraft modified by a change that is, or would be, classified as a significant major change or significant STC; or
 - An aircraft whose flight and/or piloting characteristics may have been significantly modified; or
 - An aircraft dedicated to open a non-conventional flight envelope.
 - ii. Except for permits to fly to be issued for the purpose of 21A.701(o).
- 7. To issue a permit to fly in accordance with 21A.711(b) for an aircraft it has designed or modified, and when the design organisation itself is controlling under its MDOA the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight.

21A.265 Obligations of the holder

The holder of a design organisation approval shall:

- (a) Maintain the DOE in conformity with the design assurance system;
- (b) Ensure that this DOE is used as a basic working document within the organisation;
- (c) Determine that the design of products, or changes or repairs thereof, as applicable, comply with applicable airworthiness requirements and have no unsafe feature;
- (d) Except for minor changes or repairs approved under the privilege of 21A.263, provide to the Authority statements and associated documentation confirming compliance with paragraph (c);
- (e) Provide to the Authority information or instructions related to required actions under 21A.3B;
- (f) Where applicable, under the privilege of 21A.263(c)(6), determine the conditions under which a permit to fly can be issued; and
- (g) Where applicable, under the privilege of 21A.263(c)(7), establish compliance with 21A.711(b) and (d) before issuing a Military permit to fly (EMAR Form 20b when issued) to an aircraft.

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SUBPART K — PARTS AND APPLIANCES

21A.301 Scope

This Subpart establishes the procedure relating to the approval of parts and appliances.

21A.303 Compliance with applicable requirements

The showing of compliance of parts and appliances to be installed in a type-certificated product shall be made:

- (a) In conjunction with the type-certification procedures of Subpart B, D or E for the product in which it is to be installed; or
- (b) Where applicable, under the EMTSO authorisation procedures of Subpart O; or
- (c) In the case of standard parts, in accordance with officially recognised Standards.

21A.305 Approval of parts and appliances

In all cases where the approval of a part or appliance is explicitly required by this EMAR or Authority procedures, the part or appliance shall comply with the applicable EMTSO or with the specifications recognised as equivalent by the Authority in the particular case.

21A.307 Release of parts and appliances for installation

No part or appliance (except a standard part), shall be eligible for installation in a type-certificated product unless it is:

- (a) Accompanied by an authorised release certificate (EMAR Form 1 when issued), certifying airworthiness; and
- (b) Marked in accordance with Subpart Q.

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SUBPART L — (NOT APPLICABLE)

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SUBPART M — REPAIRS

21A.431 Scope

- (a) This Subpart establishes the procedure for the approval of repair design, and establishes the obligations and privileges of the applicants for, and holders of, those approvals.
- (b) A 'repair' means elimination of damage and/or restoration to an airworthy condition following initial release into service by the manufacturer of any product, part or appliance.
- (c) Elimination of damage by replacement of parts or appliances without the necessity for design activity shall be considered as a maintenance task and shall therefore require no approval under this EMAR.
- (d) A repair to an EMTSO article shall be treated as a change to the EMTSO design and shall be processed in accordance with 21A.611.

21A.432A Eligibility

- (a) Any organisation that has demonstrated, or is in the process of demonstrating, its capability under 21A.432B shall be eligible as an applicant for a major repair design approval under the conditions laid down in this Subpart.
- (b) Any organisation shall be eligible to apply for approval of a minor repair design.

21A.432B Demonstration of capability

- (a) An applicant for a major repair design approval shall demonstrate its capability by holding a military design organisation approval (MDOA), issued by the Authority in accordance with Subpart J.
- (b) By way of derogation from paragraph (a), as an alternative procedure to demonstrate its capability, an applicant may seek Authority agreement for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with Subpart Z.

21A.433 Repair design

- (a) The applicant for approval of a repair design shall:
 - 1. Show compliance with the type-certification basis and environmental protection requirements (where applicable) incorporated by reference in the type-certificate or supplemental type-certificate, as applicable, or those in effect on the date of application (for repair design approval), plus any amendments to the type-certification basis the Authority finds necessary to establish a level of safety equal to that established by the type-certification basis incorporated by reference in the type-certificate or supplemental type-certificate;
 - 2. Submit all necessary substantiation data, when requested by the Authority;
 - 3. Declare compliance with the type-certification basis and environmental protection requirements (where applicable) of subparagraph (a)(1).
- (b) Where the applicant is not the type-certificate or supplemental type-certificate holder, as applicable, the applicant may comply with the requirements of paragraph (a) through the use of its own resources or through an arrangement with the type-certificate or supplemental type-certificate holder as applicable.

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21A.435 Classification of repairs

- (a) A repair may be 'major' or 'minor'. The classification shall be made in accordance with the criteria of 21A.91 for a change in the type design.
- (b) A repair shall be classified 'major' or 'minor' under paragraph (a) either:
 - 1. By the Authority; or
 - 2. By an appropriately approved design organisation under a procedure agreed with the Authority.

21A.437 Issue of a repair design approval

When it has been declared and has been shown that the repair design meets the applicable type-certification basis and environmental protection requirements (where applicable) of 21A.433(a)(1), it shall be approved:

- (a) By the Authority; or
- (b) By an appropriately approved organisation that is also the type-certificate or the supplemental type-certificate holder, under a procedure agreed with the Authority; or
- (c) For minor repairs only, by an appropriately approved design organisation under a procedure agreed with the Authority.

21A.439 Production of repair parts

Parts and appliances to be used for the repair shall be manufactured in accordance with production data based upon all the necessary design data as provided by the repair design approval holder:

- (a) Under Subpart F; or
- (b) By an organisation appropriately approved in accordance with Subpart G; or
- (c) By an appropriately approved maintenance organisation.

21A.441 Repair embodiment

- (a) The embodiment of a repair shall be made by an appropriately approved maintenance organisation, or by a production organisation appropriately approved in accordance with Subpart G, under 21A.163 privilege.
- (b) The design organisation shall transmit to the organisation performing the repair all the necessary installation instructions.

21A.443 Limitations

A repair design may be approved subject to limitations, in which case the repair design approval shall include all necessary instructions and limitations. These instructions and limitations shall be transmitted by the repair design approval holder to the operator in accordance with a procedure agreed with the Authority.

21A.445 Unrepaired damage

- (a) When a damaged product, part or appliance, is left unrepaired, and is not covered by previously approved data, the evaluation of the damage for its airworthiness consequences may only be made:
 - 1. By the Authority; or

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2. By an appropriately approved design organisation under a procedure agreed with the Authority.

Any necessary limitations shall be processed in accordance with the procedures of 21A.443.

(b) Where the organisation evaluating the damage under paragraph (a) is neither the Authority nor the type-certificate or supplemental type-certificate holder, this organisation shall justify that the information on which the evaluation is based is adequate either from its organisation's own resources or through an arrangement with the type-certificate or supplemental type-certificate holder, or manufacturer, as applicable.

21A.447 Record keeping

For each repair, all relevant design information, drawings, test reports, instructions and limitations possibly issued in accordance with 21A.443, justification for classification and evidence of the repair design approval, shall:

- (a) Be held by the repair design approval holder at the disposal of the Authority; and
- (b) Be retained by the repair design approval holder in order to provide the information necessary to ensure the continued airworthiness of the repaired products, parts or appliances.

21A.449 Instructions for continuing airworthiness

- (a) The holder of the repair design approval shall furnish at least one complete set of those changes to the instructions for continuing airworthiness which result from the design of the repair, comprising descriptive data and accomplishment instructions prepared in accordance with the applicable requirements, to each operator of aircraft incorporating the repair. The repaired product, part or appliance may be released back into service before the changes to those instructions have been completed, but this shall be for a limited service period, and in agreement with the Authority. Those changes to the instructions shall be made available on request to any other operator required to comply with any of the terms of those changes to the instructions. The availability of some manual or portion of the changes to the instructions for continuing airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight hours/cycles.
- (b) If updates to those changes to the instructions for continuing airworthiness are issued by the holder of the repair design approval after the repair has been first approved, these updates shall be furnished to each operator and shall be made available on request to any other operator required to comply with any of the terms of those changes to the instructions. A programme showing how updates to the changes to the instructions for continuing airworthiness are distributed shall be submitted to the Authority.

21A.451 Obligations and EMPA marking

- (a) Each holder of a major repair design approval shall:
 - 1. Undertake the obligations:
 - i. Laid down in 21A.3, 21A.3B, 21A.4, 21A.439, 21A.441, 21A.443, 21A.447 and 21A.449;
 - ii. Implicit in the collaboration with the type-certificate or supplemental type-certificate holder, or both, under 21A.433 (b), as appropriate.

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- 2. Specify the marking, including EMPA ('European Military Part Approval') letters, in accordance with 21A.804(a).
- (b) Except for type-certificate holders for which 21A.44 applies, the holder of a minor repair design approval shall:
 - 1. Undertake the obligations laid down in 21A.4, 21A.447 and 21A.449; and
 - 2. Specify the marking, including EMPA letters, in accordance with 21A.804(a).

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SUBPART N —(NOT APPLICABLE)

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SUBPART O — EUROPEAN MILITARY TECHNICAL STANDARD ORDER AUTHORISATIONS

21A.601 Scope

- (a) This Subpart establishes the procedure for issuing European Military Technical Standard Order (EMTSO) authorisations and the rules governing the obligations and privileges of applicants for, or holders of, such authorisations.
- (b) For the purpose of this Subpart:
 - 1. 'Article' means any part and appliance (including Government Furnished Equipment) to be used on military aircraft;
 - 2. 'European Military Technical Standard Order' (referred to in this EMAR as 'EMTSO') is a detailed airworthiness specification issued by the Authority to ensure compliance with the essential airworthiness requirements of the Basic Framework Document, and is a minimum performance standard for specified articles:
 - 3. An article produced under an EMTSO authorisation is an approved article for the purpose of Subpart K.

21A.602A Eligibility

Any organisation that produces or is preparing to produce an EMTSO article, and that has demonstrated, or is in the process of demonstrating, its capability under 21A.602B shall be eligible as an applicant for an EMTSO authorisation.

21A.602B Demonstration of capability

Any applicant for an EMTSO authorisation shall demonstrate its capability as follows:

- (a) For production, by holding a production organisation approval, issued in accordance with Subpart G, or through compliance with Subpart F procedures; and
- (b) For design:
 - 1. For an Auxiliary Power Unit, by holding a design organisation approval, issued by the Authority in accordance with Subpart J;
 - 2. For all other articles, by using procedures setting out the specific design practices, resources and sequence of activities necessary to comply with this EMAR.

21A.603 Application

- (a) An application for an EMTSO authorisation shall be made in a form and manner established by the Authority and shall include an outline of the information required by 21A.605.
- (b) When a series of minor changes in accordance with 21A.611 is anticipated, the applicant shall set forth in its application the basic model number of the article and the associated part numbers with open brackets after it to denote that suffix change letters or numbers (or combinations of them) will be added from time to time.

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21A.604 EMTSO Authorisation for an Auxiliary Power Unit (APU)

With regard to EMTSO authorisation for an Auxiliary Power Unit:

- (a) 21A.15, 21A.16B, 21A.17, 21A.20, 21A.21, 21A.31, 21A.33, 21A.44 shall apply by way of derogation from 21A.603, 21A.606(c), 21A.610 and 21A.615, except that an EMTSO authorisation shall be issued in accordance with 21A.606 instead of the type-certificate;
- (b) Subpart D or Subpart E of this EMAR is applicable for the approval of design changes by way of derogation from 21A.611. When Subpart E is used, a separate EMTSO authorisation shall be issued instead of a supplemental type-certificate.

21A.605 Data requirements

The applicant shall submit the following documents, to the Authority:

- (a) A statement of compliance certifying that the applicant has met the requirements of this Subpart;
- (b) A Declaration of Design and Performance (DDP);
- (c) One copy of the technical data required in the applicable EMTSO;
- (d) The exposition (or a reference to the exposition) referred to in 21A.143 for the purpose of obtaining an appropriate production organisation approval under Subpart G or the manual (or a reference to the manual) referred to in 21A.125A(b) for the purpose of manufacturing under Subpart F without production organisation approval;
- (e) For an APU, the Design Organisation Exposition (DOE), or a reference to the DOE, referred to in 21A.243 for the purpose of obtaining an appropriate design organisation approval under Subpart J;
- (f) For all other articles, the procedures referred to in 21A.602B(b)(2).

21A.606 Issue of EMTSO authorisation

The applicant shall be entitled to have an EMTSO authorisation issued by the Authority after:

- (a) Demonstrating its capability in accordance with 21A.602B;
- (b) Demonstrating that the article complies with the technical conditions of the applicable EMTSO, and submitting the corresponding statement of compliance; and
- (c) Showing that it is able to comply with 21A.3(b) and (c).

21A.607 EMTSO authorisation privileges

The holder of an EMTSO authorisation is entitled to produce and to mark the article with the appropriate EMTSO marking.

21A.608 Declaration of Design and Performance (DDP)

- (a) The DDP shall contain at least the following information:
 - 1. Information corresponding to 21A.31(a) and (b), identifying the article and its design and testing standard.
 - 2. The rated performance of the article, where appropriate, either directly or by reference to other supplementary documents.
 - 3. A statement of compliance certifying that the article has met the appropriate EMTSO.
 - 4. Reference to relevant test reports.

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- 5. Reference to the appropriate Maintenance, Overhaul and Repair Manuals.
- 6. The levels of compliance, where various levels of compliance are allowed by the EMTSO.
- 7. List of deviations accepted in accordance with 21A.610.
- (b) The DDP shall be endorsed with the date and signature of the holder of the EMTSO authorisation, or its authorised representative.

21A.609 Obligations of holders of EMTSO authorisations

The holder of an EMTSO authorisation under this Subpart shall:

- (a) Manufacture each article in accordance with Subpart G or Subpart F that ensures that each completed article conforms to its design data and is safe for installation;
- (b) Prepare and maintain, for each model of each article for which an EMTSO authorisation has been issued, a current file of complete technical data and records in accordance with 21A.613:
- (c) Prepare, maintain and update master copies of all manuals required by the applicable airworthiness specifications for the article;
- (d) Make available to users of the article and to the Authority on request those maintenance, overhaul and repair manuals necessary for the usage and maintenance of the article, and changes to those manuals;
- (e) Mark each article in accordance with 21A.807;
- (f) Comply with 21A.3(b), (c), 21A.3B and 21A.4; and
- (g) Continue to meet the certification requirements of 21A.602B.

21A.610 Approval for deviation

- (a) Each manufacturer who requests approval to deviate from any performance standard of an EMTSO shall demonstrate that the standards from which a deviation is requested are compensated for by factors or design features providing an equivalent level of safety.
- (b) The request for approval to deviate, together with all pertinent data, shall be submitted to the Authority.

21A.611 Design changes

- (a) The holder of the EMTSO authorisation may make minor design changes (any change other than a major change) without further authorisation by the Authority. In this case, the changed article keeps the original model number (part number changes or amendments shall be used to identify minor changes) and the holder shall forward to the Authority any revised data that are necessary for compliance with 21A.603(b).
- (b) Any design change by the holder of the EMTSO authorisation that is extensive enough to require a substantially complete investigation to determine compliance with an EMTSO is a major change. Before making such a change, the holder shall assign a new type or model designation to the article and apply for a new authorisation under 21A.603.
- (c) No design change by any organisation, other than the holder of the EMTSO authorisation who submitted the statement of compliance for the article, is eligible for approval under this Subpart O unless the organisation seeking the approval applies under 21A.603 for a separate EMTSO authorisation.

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21A.613 Record keeping

Further to the record keeping requirements appropriate to, or associated with, the quality system, all relevant design information, drawings and test reports, including inspection records for the article tested, shall be held at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness of the article and of the type-certificated product in which it is fitted.

21A.615 Inspection by the Authority

Upon a request of the Authority, each applicant for, or holder of an EMTSO authorisation for an article shall allow the Authority to:

- (a) Witness any tests;
- (b) Inspect the technical data files on that article.

21A.619 Duration and continued validity

- (a) An EMTSO authorisation shall be issued for an unlimited duration. It shall remain valid unless:
 - 1. The conditions required when EMTSO authorisation was granted are no longer being observed; or
 - 2. The obligations of the holder specified in 21A.609 are no longer being discharged; or
 - 3. The article has proved to give rise to unacceptable hazards in service; or
 - 4. The authorisation has been surrendered or revoked under the applicable administrative procedures established by the Authority.
- (b) Upon surrender or revocation, the certificate shall be returned to the Authority.

21A.621 Transferability

Except for a change in ownership of the holder, which shall be regarded as a change of significance, and shall therefore comply with 21A.147 and 21A.247 as applicable, an EMTSO authorisation issued under this EMAR is not transferable.

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SUBPART P — MILITARY PERMIT TO FLY

21A.701 Scope

Permits to fly shall be issued in accordance with this Subpart to aircraft that do not meet, or have not been shown to meet, applicable airworthiness requirements but are capable of safe flight under defined conditions. The permit to fly shall be issued in accordance with national regulation and the process defined under 21A.711.

Examples of where a permit to fly may be required are:

- (a) Development;
- (b) Showing compliance with regulations or airworthiness codes;
- (c) Design organisations or production organisations crew training;
- (d) Production flight testing of new production aircraft;
- (e) Flying aircraft under production between production facilities;
- (f) Flying the aircraft for customer acceptance;
- (g) Delivering or exporting the aircraft;
- (h) Flying the aircraft for Authority acceptance;
- (i) Market survey, including customer's crew training;
- (j) Exhibition and air show;
- (k) Flying the aircraft to a location where maintenance or airworthiness review are to be performed, or to a place of storage;
- (I) Flying 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;
- (m) (Reserved)
- (n) Flying aircraft meeting the applicable airworthiness requirements before conformity to the environmental requirements (where applicable) has been found:
- (o) For individual aircraft or types for which a certificate of airworthiness or restricted certificate of airworthiness is not appropriate.

21A.703 Eligibility

At the discretion of the Authority, any organisation shall be eligible as an applicant for a permit to fly under the conditions laid down in this Subpart. The Applicant for a permit to fly is also eligible for application for the approval of the flight conditions.

21A.705 (Reserved)

21A.707 Application for permit to fly

(a) Pursuant to 21A.703 and when the applicant has not been granted the privilege to issue a permit to fly, an application for a permit to fly shall be made to the Authority, defined in 21.1 (b), (c), (d) or (e), in a form and manner established by that Authority.

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- (b) Each application for a permit to fly shall include:
 - 1. The purpose(s) of the flight(s), in accordance with 21A.701;
 - 2. The ways in which the aircraft does not comply with the applicable airworthiness requirements;
 - 3. The flight conditions approved in accordance with 21A.710.
- (c) Where the flight conditions are not approved at the time of application for a permit to fly, an application for approval of the flight conditions shall be made in accordance with 21A.709.

21A.708 Flight conditions

Flight conditions include:

- (a) The configuration(s) for which the permit to fly is requested;
- (b) Any condition or restriction necessary for safe operation of the aircraft, including:
 - 1. The conditions or restrictions put on itineraries or airspace, or both, required for the flight(s);
 - 2. The conditions and restrictions put on the flight crew to fly the aircraft;
 - 3. The restrictions regarding carriage of persons other than flight crew;
 - 4. The operating limitations, specific procedures or technical conditions to be met (which may include the restrictions regarding carriage/release/firing of weapons);
 - 5. The specific flight test programme (if applicable);
 - 6. The specific continuing airworthiness arrangements and the regime under which they will be performed.
- (c) The substantiation that the aircraft is capable of safe flight under the conditions or restrictions of subparagraph (b);
- (d) The method used for the control of the aircraft configuration, in order to remain within the established conditions.

21A.709 Application for approval of flight conditions

- (a) Pursuant to 21A.707(c) and when the applicant has not been granted the privilege to approve the flight conditions, an application for approval of the flight conditions shall be made:
 - 1. When approval of the flight conditions is related to the safety of the design, to the Authority ,defined in 21.1(a) or (b), in a form and manner established by that Authority; or
 - 2. When approval of the flight conditions is not related to the safety of the design, to the Authority, defined in 21.1(b), (c), (d) or (e), in a form and manner established by that Authority.
- (b) Each application for approval of the flight conditions shall include:
 - 1. The proposed flight conditions;
 - 2. The documentation supporting these conditions; and
 - 3. A declaration that the aircraft is capable of safe flight under the conditions or restrictions of paragraph 21A.708(b).

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21A.710 Approval of flight conditions

- (a) When approval of the flight conditions is related to the safety of the design, the flight conditions shall be approved by:
 - 1. The Authority, defined in 21.1(a) or (b); or
 - 2. An appropriately approved design organisation, under the privilege of 21A.263(c)(6).
- (b) When approval of the flight conditions is not related to the safety of the design, the flight conditions shall be approved by the Authority, defined in 21.1(c), (d) or (e), or the appropriately approved organisation that will also issue the permit to fly.
- (c) Before approving the flight conditions, the Authority, defined in 21.1(all) or the approved organisation must be satisfied that the aircraft is capable of safe flight under the specified conditions and restrictions. The Authority, defined in 21.1(all), may make or require the applicant to make any necessary inspections or tests for that purpose.

21A.711 Issue of a permit to fly

- (a) The Authority shall issue a permit to fly:
 - 1. Upon presentation of the data required by 21A.707;
 - 2. When the conditions of 21A.708 have been approved in accordance with 21A.710; and
 - 3. When the Authority, through its own investigations, which may include inspections, or through procedures agreed with the applicant, is satisfied that the aircraft conforms to the design defined under 21A.708 before flight.
- (b) An appropriately approved design organisation may issue a permit to fly (EMAR Form 20b or MFTP equivalent) under the privilege granted under 21A.263(c)(7), when the conditions of 21A.708 have been approved in accordance with 21A.710.
- (c) An appropriately approved production organisation may issue a permit to fly (EMAR Form 20b or MFTP equivalent) under the privilege granted under 21A.163(e), when the conditions of 21A.708 have been approved in accordance with 21A.710.
- (d) The permit to fly shall specify the purpose(s) and any conditions and restrictions approved under 21A.710.
- (e) For permits issued under subparagraph (b) or (c), a copy of the permit to fly shall be submitted to the Authority.
- (f) Upon evidence that any of the conditions specified in 21A.723(a) are not met for a permit to fly that an organisation has issued pursuant to subparagraph (b) or (c), that organisation shall revoke that permit to fly.

21A.713 Changes

- (a) Any change that invalidates the flight conditions or associated substantiation established for the permit to fly shall be approved in accordance with 21A.710. When relevant, an application shall be made in accordance with 21A.709.
- (b) A change affecting the content of the permit to fly requires the issuance of a new permit to fly in accordance with 21A.711.

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21A.715 Language

The manuals, placards, listings, and instrument markings and other necessary information required by applicable type-certification basis shall be presented in a language acceptable to the Authority, defined in 21.1(all).

21A.719 Transferability

(a) A permit to fly is not transferable.

21A.721 Inspections

The holder of, or the applicant for, a permit to fly shall provide access to the aircraft concerned at the request of the Authority, defined in 21.1(all).

21A.723 Duration and continued validity

- (a) A permit to fly shall be issued for a stated period of validity and shall remain valid subject to:
 - 1. Compliance with the conditions and restrictions of 21A.711(d) associated to the permit to fly;
 - 2. The permit to fly not being surrendered or revoked (under 21B.530);
 - 3. The aircraft remaining on the same register.
- (b) (Reserved)
- (c) Upon surrender or revocation, the permit to fly shall be returned to the Authority, defined in 21.1(all).

21A.725 Renewal of permit to fly

Renewal of the permit to fly shall be processed as a change in accordance with 21A.713.

21A.727 Obligations of the holder of a permit to fly

The holder of a permit to fly shall ensure that all the conditions and restrictions associated with the permit to fly are satisfied and maintained.

21A.729 Record keeping

- (a) All documents produced to establish and justify the flight conditions shall be held by the holder of the approval of the flight conditions at the disposal of the Authority, defined in 21.1(all) and shall be retained in order to provide the information necessary to ensure the continued airworthiness of the aircraft.
- (b) All documents associated to the issue of permits to fly under the privilege of approved organisations, including inspection records, documents supporting the approval of flight conditions and the permit to fly itself, shall be held by the related approved organisation at the disposal of the Authority, defined in 21.1(all), and shall be retained in order to provide the information necessary to ensure the continued airworthiness of the aircraft.

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SUBPART Q — IDENTIFICATION OF PRODUCTS, PARTS AND APPLIANCES

21A.801 Identification of products

- (a) The identification of products shall include the following information:
 - 1. Manufacturer's name;
 - 2. Product designation;
 - 3. Manufacturer's Serial number; and
 - 4. Any other information the Authority finds appropriate.
- (b) Any organisation that manufactures an aircraft or engine under Subpart G or Subpart F shall identify that aircraft or engine by means of a fireproof plate that has the information specified in paragraph (a) marked on it by etching, stamping, engraving, or other approved method of fireproof marking. The identification plate shall be secured in such a manner that it is accessible and legible, and will not likely be defaced or removed during normal service, or lost or destroyed in an accident.
- (c) Any organisation that manufactures a propeller, propeller blade, or propeller hub under Subpart G or Subpart F shall identify it by means of a plate, stamping, engraving, etching or other approved method of fireproof identification that is placed on it on a non-critical surface, contains the information specified in paragraph (a), and will not likely be defaced or removed during normal service or lost or destroyed in an accident.
- (d) (Reserved)

21A.803 Handling of identification data

- (a) No person shall remove, change, or place identification information referred to in 21A.801(a) on any aircraft, engine, propeller, propeller blade, or propeller hub, or in 21A.807(a) on an APU, without the approval of the Authority.
- (b) No person shall remove or install any identification plate referred to in 21A.801, or in 21A.807 for an APU, without the approval of the Authority.
- (c) By way of derogation from paragraphs (a) and (b), any organisation performing maintenance work under the applicable associated implementing rules may, in accordance with methods, techniques and practices established by the Authority:
 - 1. Remove, change, or place the identification information referred to in 21A.801(a) on any aircraft, engine, propeller, propeller blade, or propeller hub, or in 21A.807(a) on an APU; or
 - 2. Remove an identification plate referred to in 21A.801, or 21A.807 for an APU, when necessary during maintenance operations.
- (d) No person shall install an identification plate removed in accordance with subparagraph (c)(2) on any aircraft, engine, propeller, propeller blade, or propeller hub other than the one from which it was removed.

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21A.804 Identification of parts and appliances

- (a) Each manufacturer of a part or appliance shall permanently and legibly mark the part or appliance with:
 - 1. A name, trademark, or symbol identifying the manufacturer; and
 - 2. The part number, as defined in the applicable design data; and
 - 3. The letters EMPA (European Military Part Approval) for parts or appliances produced in accordance with approved design data not belonging to the type-certificate holder of the related product, except for EMTSO articles.
- (b) By way of derogation from paragraph (a), if the Authority agrees that a part or appliance is too small or that it is otherwise impractical to mark a part or appliance with any of the information required by paragraph (a), the authorised release document accompanying the part or appliance or its container shall include the information that could not be marked on the part.

21A.805 Identification of critical parts

In addition to the requirement of 21A.804, each manufacturer of a part to be fitted on a type-certificated product which has been identified as a critical part shall permanently and legibly mark that part with a part number and a serial number.

21A.807 Identification of EMTSO articles

- (a) Each holder of an EMTSO authorisation under Subpart O shall permanently and legibly mark each article with the following information:
 - 1. The name and address of the manufacturer:
 - 2. The name, type, part number or model designation of the article:
 - 3. The serial number or the date of manufacture of the article or both; and
 - 4. The applicable EMTSO number.
- (b) By way of derogation from paragraph (a), if the Authority agrees that a part is too small or that it is otherwise impractical to mark a part with any of the information required by paragraph (a), the authorised release document accompanying the part or its container shall include the information that could not be marked on the part.
- (c) Each person who manufactures an APU under Subpart G or Subpart F shall identify that APU by means of a fire-proof plate that has the information specified in paragraph (a) marked on it by etching, stamping, engraving, or other approved method of fireproof marking. The identification plate shall be secured in such a manner that it is accessible and legible, and will not likely be defaced or removed during normal service, or lost or destroyed in an accident.

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SUBPART Z - ALTERNATIVE PROCEDURES TO MDOA

Note: Sub-Part Z will be retained for a transition period until it is subsumed into the appropriate Section(s) when TF2 has determined how this Section is to be used and which organisations it shall be used for.

21A.901 Eligibility for alternative procedures

Design organisations approved under Subpart J ("Subpart J MDOA") should be the normal approach for type-certification, supplemental type-certification, approval of major changes to type design or approval of major repair design, except when agreed otherwise by the Authority in accordance with 21A.14, 21A.112B and 21A.432B.

The acceptance of alternative procedures, as defined in 21A.903, should be limited where the Authority finds it more appropriate for the conduct of type-certification, supplemental type-certification, approval of changes to type design and approval of repair design.

21A.903 Alternative Procedures

Alternative procedures are an acceptable means to demonstrate design capability in the cases described in 21A.14, 21A.112B or 21A.432B. This concept is the implementation, in the context of specific projects, of procedures required in Subpart J MDOA, to ensure that the applicant will perform relevant activities as expected by the Authority, but without the requirements on the organisation itself that can be found in Subpart J. The establishment of these alternative procedures may be seen as a starting phase for a Subpart J MDOA, allowing at a later stage, at the discretion of the applicant, to move towards a full Subpart J MDOA by the addition of the missing elements.

21A.905 Scope

- (a) As alternative to MDOA, a manual of procedures must set out specific design practices, resources and sequence of activities relevant for the specific projects, taking account of this EMAR.
- (b) These procedures must be concise and limited to the information needed for quality and proper control of activities by the applicant/holder, and by the Authority.

21A.907 Management of the type-certification process (including supplemental type-certificate)

- (a) For a particular project, at the beginning of the process, the applicant must propose to the Authority for acceptance a certification programme that includes:
 - 1. Part 1 Procedures for the management of the certification programme:
 - i. Creation and update all along the certification process to integrate the progress of the activities, distribution; and
 - ii. The milestones of the project development up to the type-certification or approval of the major change.
 - 2. Part 2 The attribution of responsibilities, as follows:
 - i. The names of the persons having specific responsibilities in the frame of the certification programme;

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- ii. The description of their tasks, responsibilities and associated competences; and
- iii. Scope of authority of signatories.
- 3. Part 3 The certification requirements applicable to the project, corresponding interpretations, and the equivalence of safety or other specific cases related to the applicable requirements;
- 4. Part 4 Working methods for showing of compliance and providing to the Authority the means by which such compliance has been shown. This includes all or part of the following, depending on the complexity of the product:
 - i. The means by which compliance will be shown (means of compliance), in relation with the requirements and/or their detailed interpretation;
 - ii. The technical criteria associated with the means of compliance;
 - iii. Milestones specific to particular technical areas in relation with the general planning of the project;
 - iv. The decision process, especially the key points where an Authority decision is needed before further action;
 - v. The flow of information to the Authority;
 - vi. The configuration control, especially of the test specimen used to show compliance;
 - vii. The organisation of the work for the interfaces or multidisciplinary subjects;
 - viii. Those compliance documents that will be subject to verification by the Authority;
 - ix. The establishment of the compliance documentation, including the time schedule and availability to the Authority; and
 - x. The control of the time schedule, for the accomplishment of the tasks in due time.

The applicant must submit all revisions of the certification programme to the Authority, for acceptance.

- (b) The applicant must establish procedures for creating compliance documents in such a way that:
 - 1. The kind of document and the technical objectives for each document are determined at the beginning of the process;
 - 2. The production of the documents is carefully managed all along the process, in accordance with the milestones defined in the certification programme:
 - 3. The various issues of a document are controlled;
 - 4. Each document must contain:
 - i. The reference of the requirements covered by the document;
 - ii. The data showing compliance and a statement by the applicant declaring compliance with these requirements;
 - iii. A numbering system that identifies the compliance documents, which must be defined in order to have an adequate link with the certification programme.

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- 5. Except as otherwise agreed with the Authority, all compliance documents must be produced before issuance of the final statement of compliance required by 21A.20(b) or 21A.97(a)(3) (where applicable).
- (c) There are no privileges associated with alternative procedures, however the Authority will decide on the extent of its involvement in the verification of compliance documents. This involvement may vary according to the Authority knowledge of the applicant from previous and on-going activities and the resulting assessment of competence, and must be addressed in the certification programme.

21A.909 Management of design changes

- (a) To obtain an approval for changes to type design, repairs and production deviations from the approved design data, the applicant must provide procedures acceptable to the Authority for classification and approval of changes to type design (see paragraphs (b) and (c)), and repairs and production deviations from the approved design data (see paragraph (d)).
- (b) Procedure for Classification

1. Content.

The procedure must address the following points:

- i. Identification of changes to type design;
- ii. Airworthiness classification;
- iii. Changes to type design initiated by subcontractors;
- iv. Documents to justify the classification; and
- v. Authorised signatories.

Criteria used for classification must be in compliance with 21A.91 and corresponding interpretations.

2. Identification of changes to type design.

The procedure must indicate how the following are identified:

- i. Major changes to type design;
- ii. Those minor changes to type design where additional work is necessary to show compliance with the certification requirements; and
- iii. Other minor changes to type design requiring no further showing of compliance.

3. Airworthiness classification.

The procedure must show how the effects on airworthiness are analysed, from the very beginning, by reference to the applicable requirements.

If no specific requirements are applicable to the change, the above review must be carried out at the level of the part or system where the change is integrated and where specific requirements are applicable.

4. Control of changes to type design initiated by subcontractors.

The procedure must indicate, directly or by cross-reference to written procedures, how changes to type design initiated by subcontractors are controlled.

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5. Documents to justify the classification.

All decisions of classification of changes to type design must be documented and approved by the Authority. It may be in the format of meeting notes or register.

6. Authorised signatories.

The procedure shall identify the persons authorised to sign the proposed classification before release to the Authority for approval.

(c) Procedure for approval of changes to type design.

1. Content.

The procedure must address the following points:

- Compliance documentation;
- ii. Approval process; and
- iii. Authorised signatories.

2. Compliance documentation.

For major changes and those minor changes to type design where additional work to show compliance with the applicable airworthiness requirements is necessary, compliance documentation must be established following guidelines of 21A.907(b).

3. Approval process.

- i. For the approval of major changes to type design, a certification programme as defined in 21A.907(a) must be established;
- ii. For major changes and those minor changes to type design where additional work to show compliance with the applicable airworthiness requirements is necessary, the procedure should define a document to support the approval process;
- iii. This document must include at least:
 - Identification and brief description of the change and its classification;
 - Applicable requirements;
 - Reference to the compliance documents;
 - Effects, if any, on limitations and on the approved documentation; and
 - Authorised signatory.
- iv. For the other minor changes, the procedure must define a means:
 - To identify the change; and
 - To present the change to the Authority for approval.

4. Authorised signatories.

The procedure must identify the persons authorised to sign the change before release to the Authority for approval.

(d) Repairs and production deviations from the approved design data.

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A procedure following the principles of 21A.909(b) and (c) must be established for the classification and approval of repairs and unintentional deviations from the approved design data occurring in production (concessions or non-conformances). For repairs, the procedure must be established in accordance with Subpart M.

21A.911 Issue of Approved Data to Operators

(a) General

The issue of approved data is intended to provide operators with all data necessary to undertake the specified task.

Information or instructions may be issued in a format of a Service Bulletin (or equivalent), or in Structural Repair Manuals, Maintenance Manuals, Engine and Propeller Manuals, or other.

The preparation of this data involves design, production and inspection. The three aspects should be properly addressed and a procedure should exist.

(b) Procedure

The procedure for issue of approved data to operators shall address the following points:

- 1. Preparation;
- 2. Verification of technical consistency with corresponding approved change(s), repair(s) or approved data, including applicability, description, effects on airworthiness, especially when limitations are changed;
- 3. Verification of the feasibility in practical applications;
- 4. Information or instructions prepared by subcontractors or vendors; and
- 5. Identification of persons authorised to sign before release of information and instructions to the Authority for approval.

(c) Statement

The information and instructions shall contain a statement showing Authority approval.

21A.913 Obligations and marking

The applicant shall establish the necessary procedures to show to the Authority how it will fulfil the obligations required under 21A.44, 21A.118A or 21A.451 of this EMAR and marking requirements under 21.A.804, as appropriate.

21A.915 Control of design subcontractors

The applicant shall establish the necessary procedures to show to the Authority how it will control design subcontractors.

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