



EMAR 21 EDITION 2.0

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

EMAR 21 - CERTIFICATION OF MILITARY AIRCRAFT AND RELATED PRODUCTS, PARTS AND APPLIANCES, AND DESIGN AND PRODUCTION ORGANISATIONS

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The table below provides the EMAR 21 approval status:

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Note:

The Terms and Definitions used across EMARs are laid down in EMAD 1. Terms and Definitions used only in context of this EMAR are defined in EMAR 21.1.

Commission Regulation (EU) 2019/897 introduced new paragraphs (points) in Section B, causing inconsistency with the numbering used for military specific requirements in Section B - Subpart J. The DPAG proposed military specific requirements that have no equivalent in the Commission Regulations to be marked as 21.A.MXXX. Thus, certain consistency with the numbering used in EMAR 21 Edition 1.3 can be maintained.

As requested through consultation, EMAR 21.B.M500 was added as a new requirement.

EMAR 21 REVISION STATUS

COMMISSION REGULATIONS REVIEWED

The table below details the Implementing Rules (Commission Regulations) reviewed and considered by the MAWA Design and Production Advisory Group for EMAR 21 Edition 2.0:

Commission Regulation reviewed	Date	Subject
Regulation (EU) No 748/2012	3 August 2012	Recast, repealing Regulation (EC) 1702/2003
Regulation (EU) No 7/2013	8 January 2013	1 st amendment, engine emissions
Regulation (EU) No 69/2014	27 January 2014,	2 nd amendment, operational suitability data
Regulation (EU) 2015/1039	30 June 2015,	3 rd amendment, flight testing
Regulation (EU) 2016/5	5 January 2016	4 th amendment, environmental protection
Regulation (EU) 2019/897	12 March 2019	5 th amendment, risk-based compliance verification, environmental protection requirements
Regulation (EU) 2020/570	28 January 2020	6 th amendment, Corrections, alignment with latest amendment of Regulation (EU) 1341/2014

Note: To access the Regulation (EU), please click on the hyperlinks provided above.

REVISION HISTORY

Edition	Approval date	Reason for Document Revision
EMAR 21 Section A	18 April 2012	considering Regulation (EC) 1702/2003, Section A
EMAR 21 Edition 1.0	23 January 2013	review of Regulation (EC) 1702/2003, Section B
EMAR 21 Edition 1.1	23 September 2014	considering amendments to Regulation (EC) 1702/2003, up to Regulation (EC) 1194/2009
EMAR 21 Edition 1.2	4 October 2016	considering Regulation (EC) 748/2012, including amendments 7/2013 and 69/2014
EMAR 21 Edition 1.3	1 February 2018	clarification for TSO (Subpart O) and non EMAR approved organisations
EMAR 21 Edition 2.0	30 March 2021	considering amendments to Regulation (EC) 748/2012, up to Regulation (EC) 2020/570

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GENERAL

21.1 General

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- (a) When reference is given to 'design organisation' the following shall apply:
1. An organisation responsible for the design of products, parts and appliances or for changes or repairs thereto shall demonstrate its capability in compliance with national military airworthiness regulation being in accordance with this EMAR, further referred to as EMAR 21. In the case that governmental organisations undertake design activities with any other organisation responsible for the design of products, parts, and appliances or for changes or repairs thereto, they shall be treated as a single organisation when demonstrating their capability in accordance with EMAR 21.
 2. By way of derogation from (1), an organisation whose principal place of business is in a non-participating Member State, or where a participating Member State (pMS) has not yet transposed this EMAR in their national military airworthiness regulations, may demonstrate its capability by holding a certificate or similar approval issued by an authority of that State for the product, part and appliance for which it applies, provided:
 - (i) that State is providing oversight as State of Design; and
 - (ii) through Recognition (EMAD-R) it can be determined that the national airworthiness system of that State includes the same independent level of checking of compliance as provided by EMAR 21, either through an equivalent system of approvals of organisations or through direct involvement of the authority of that State.
- (b) All references to 'aircraft' throughout this EMAR mean 'military aircraft', defined as those that follow special laws and regulations and are designed with specific characteristics for military operations.
- (c) 'Authority' shall be, unless otherwise specified in this EMAR;
1. the Authority in charge of the type certification process:
 - (i) for a multinational programme, the Military Airworthiness Authorities of the participating Nations/States; or
 - (ii) for a national programme, the Military Airworthiness Authority of this Nation/State,
 2. The Authority in charge of the production/design organisation approval:
 - (i) for a multinational programme, the Military Airworthiness Authorities of the participating Nations/States; or
 - (ii) for a national programme, the Military Airworthiness Authority of this Nation/State,
 3. the Authority in charge to issue the military permit to fly
 4. the registration Authority in charge to issue the Certificate of Airworthiness; or
 5. for unregistered aircraft, the Authority which prescribed the identification marks.

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- (d) 'Applicant' shall be:
1. the contractor which should comply with this EMAR; or
 2. any organisation (including MODs) which must obtain from an Authority a type certificate, a restricted type certificate, a supplemental type certificate, an MTSO authorisation, a major change or a major repair design approval based on this EMAR. It should be included herein the certificate of airworthiness, as mentioned in EMAR 21.A.172, and Military Permit to Fly /Flight Conditions, as mentioned in EMAR 21.A.703.
 3. any organisation or operator or its representative which applies for an airworthiness certificate under Subpart H of this EMAR.
- (e) 'Certification' means 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.
- (f) '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)
- (g) '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).
- (h) All references to 'certificates' throughout this EMAR mean 'military certificates' (Although credit can be taken from any prior Civil Certificate issued by a recognised Civil Authority).
- (i) All references to 'organisation approvals' throughout this EMAR mean 'organisational approvals accepted or issued by military authorities'.
- (j) Where this EMAR requires specific EMAR forms to be used, equivalent forms approved by the Authority are permitted.
- (k) "Operational Suitability Data (OSD)" means data, which are part of an aircraft type-certificate, restricted type- certificate or supplemental type-certificate, consisting of all of the following:
- (i) the minimum syllabus of pilot type rating training, including determination of type rating;
 - (ii) the definition of scope of the aircraft validation source data to support the objective qualification of simulators or the provisional data to support their interim qualification;
 - (iii) the minimum syllabus of maintenance certifying staff type rating training, including determination of type rating;
 - (iv) determination of type or variant for cabin crew and type specific data for cabin crew;
 - (v) the master minimum equipment list.

SECTION A TECHNICAL REQUIREMENTS

SUBPART A - GENERAL PROVISIONS

21.A.1 Scope

EMAR 21 Edition 2.0

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

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

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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 person or organisation, provided the holder of, or applicant for, that certificate can show that it has made an agreement with the other person or organisation such as to ensure that the holder's obligations are and will be properly discharged.

21.A.3A Failures, malfunctions and defects

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

The holder of a type-certificate, restricted type-certificate, supplemental type-certificate, Military Technical Standard Order (MTSO) 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, MTSO 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, MTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this EMAR, shall 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, MTSO 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.

(c) Investigation of Reported Occurrences.

1. When an occurrence reported under paragraph (b), or under EMAR 21.A.129(f)(2) or 21.A.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, MTSO 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, MTSO 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.

21.A.3B Airworthiness Directives

EMAR 21 Edition 1.3

- (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, MTSO 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.

21.A.4 Coordination between design and production

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Each holder of a type-certificate, restricted type-certificate, supplemental type-certificate, MTSO authorisation, approval of a change to type-certificate 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 EMAR 21.A.122, 21A.130(b)(3) and (4), 21.A.133 or 21.A.165(c)(2) and (3) as appropriate; and
- (b) The proper support of the continued airworthiness of the product, part or appliance.

SUBPART B – MILITARY TYPE CERTIFICATES AND MILITARY RESTRICTED TYPE CERTIFICATES

21.A.11 Scope

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This Subpart establishes the procedure for issuing type-certificates for products and restricted type-certificates for aircraft, and establishes the rights and obligations of the applicants for, and holders of, those certificates.

21.A.13 Eligibility

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

21.A.14 Demonstration of capability

EMAR 21 Edition 2.0

- (a) An applicant for a type-certificate or restricted type-certificate shall demonstrate its capability by holding a design organisation approval, issued by the Authority in accordance with EMAR 21 Subpart J.
- (b) By way of derogation from (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, under the following:
 - 1. products with simple or limited scope of design.
 - 2. starting phase toward a design organisation approval or limited duration of design activities.
 - 3. products for which the major part of the type-certification activities have already been accepted by the Authority concerned.
 - 4. (Reserved)
- (c) (Reserved)
- (d) By way of derogation from (a), any governmental organisation applying for a type-certificate or restricted type-certificate may demonstrate its capability by having an agreement in place, accepted by the Authority, in accordance with EMAR 21.A.2 with a design organisation which has access to the type design data. The agreement shall include detailed statements how the actions and obligations are delegated to enable the governmental organisation, in cooperation with the contracted organisation, to comply with the requirements of EMAR 21 Subpart J, including demonstration of compliance with EMAR 21.A.44.

21.A.15 Application

EMAR 21 Edition 2.0

- (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 a type-certificate or restricted type-certificate shall include, as a minimum, preliminary descriptive data of the product, the intended use of the product and the kind of operations for which certification is requested. In addition, it shall include, or be supplemented after the initial application, a certification programme for the demonstration of compliance in accordance with EMAR 21.A.20, consisting of:
 - 1. a detailed description of the type design, including all the configurations to be certified;
 - 2. the proposed operating characteristics and limitations;
 - 3. the intended use of the product and the kind of operations for which certification is requested;
 - 4. a proposal for the initial type-certification basis, operational suitability data certification basis and environmental protection requirements, prepared in accordance with the requirements and options specified in EMAR 21.B.80, 21.B.82 and 21.B.85;
 - 5. a proposal for a breakdown of the certification programme into meaningful groups of compliance demonstration activities and data, including a proposal for the means of compliance and related compliance documents;
 - 6. a proposal for the assessment of the meaningful groups of compliance demonstration activities and data, addressing the likelihood of an unidentified non-compliance with the type-certification basis, operational suitability data certification basis or environmental protection requirements and the potential impact of that non-compliance on product safety or environmental protection. The proposed assessment shall take into account at least the elements set out in (1) to (4) of EMAR 21.B.100(a). Based on this assessment, the application shall include a proposal for the involvement of the Authority in the verification of the compliance demonstration activities and data; and
 - 7. a project schedule including major milestones.
- (c) After its initial submission to the Authority, the certification programme shall be updated by the applicant when there are changes to the certification project affecting any of the points 1 to 7 of (b).
- (d) An application for a type-certificate or restricted type-certificate for an aircraft shall include, or be supplemented after the initial application, an application supplement for approval of the operational suitability data.
- (e) An application for a type-certificate or restricted type-certificate shall be valid for five years, unless the Authority agrees at the time of application that its product requires a longer time period for the applicant to demonstrate and declare compliance.
- (f) In the case where a type-certificate or restricted type-certificate has not been issued, or it is evident that it will not be issued, within the time agreed in point (e), the applicant shall apply for an extension of the validity of the application and comply with any changes to the type-certification basis, operational suitability data certification basis and environmental protection requirements, as established and notified by the Authority in accordance with EMAR 21.B.80,

21.B.82 and 21.B.85 for a new date that is in compliance with the time period established under (e).

21.A.19 Changes requiring a new type-certificate

EMAR 21 Edition 2.0

Any person or organisation 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.

21.A.20 Demonstration of compliance with the type certification basis, operational suitability data certification basis and environmental protection requirements

EMAR 21 Edition 2.0

- (a) Following the acceptance of the certification programme by the Authority, the applicant shall demonstrate compliance with the type-certification basis, operational suitability data certification basis and environmental protection requirements, as established and notified to the applicant by the Authority in accordance with EMAR 21.B.80, 21.B.82, 21.B.85, and shall provide the Authority with the means by which such compliance has been demonstrated.
- (b) The applicant shall report to the Authority any difficulty or event encountered during the process of demonstration of compliance that may have an appreciable effect on the risk assessment under EMAR 21.A.15(b)(6) or on the certification programme, or may otherwise necessitate a change to the level of involvement of the Authority previously notified to the applicant in accordance with EMAR 21.B.100(c).
- (c) The applicant shall record justification of compliance within compliance documents as referred to in the certification programme.
- (d) After completion of all demonstrations of compliance in accordance with the certification programme, including any inspections and tests in accordance with EMAR 21.A.33, and after all flight tests in accordance with EMAR 21.A.35, the applicant shall declare that:
 1. it has demonstrated compliance with the type-certification basis, operational suitability data certification basis and environmental protection requirements, as established and notified by the Authority, following the certification programme as accepted by the Authority; and
 2. no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested.
- (e) The applicant shall submit to the Authority the declaration of compliance provided for in (d). Where the applicant holds an appropriate design organisation approval, the declaration of compliance shall be made in accordance with EMAR 21 Subpart J and submitted to the Authority.

21.A.21 Requirements for the issuance of a type-certificate or restricted type-certificate

EMAR 21 Edition 2.0

- a) In order to be issued a product type-certificate or, when the aircraft does not meet the essential requirements referred to in the Basic Framework Document an aircraft restricted type-certificate, the applicant shall:
1. demonstrate its capability in accordance with EMAR 21.A.14;
 2. comply with EMAR 21.A.20;
 3. demonstrate that the engine and propeller, if installed in the aircraft:
 - (A) have a type-certificate issued or determined in accordance with this EMAR; or
 - (B) have been demonstrated to be in compliance with the aircraft type-certification basis established and the environmental protection requirements designated and notified by the Authority as necessary to ensure the safe flight of the aircraft.
- (b) By derogation from (a)(2), at the applicant's request included in the declaration referred to in 21.A.20(d), the applicant is entitled to have the aircraft type-certificate or restricted type-certificate issued before the applicant has demonstrated compliance with the operational suitability data certification basis, provided that the applicant demonstrates such compliance before the date at which those data are to be actually used.

21.A.31 Type design

EMAR 21 Edition 2.0

- (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;
 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
 4. any other data allowing by comparison the determination of the airworthiness and, if relevant, the environmental characteristics of later products of the same type.
- (b) Each type design shall be adequately identified.

21.A.33 Inspections and tests

EMAR 21 Edition 2.0

- (a) (Reserved)
- (b) Before each test is undertaken during the demonstration of compliance required by EMAR 21.A.20, the applicant shall have verified:
1. for the test specimen, that:

- (i) the materials and processes adequately conform to the specifications for the proposed type design;
 - (ii) the parts of the products adequately conform to the drawings in the proposed type design; and
 - (iii) the manufacturing processes, construction and assembly adequately conform to those specified in the proposed type design; and
- 2. for the test and measuring equipment to be used for the test, that those are adequate for the test and appropriately calibrated.
- (c) On the basis of the verifications carried out in accordance with (b), the applicant shall issue a statement of conformity listing any potential non-conformity, together with a justification that this will not affect the test results, and shall allow the Authority to make an inspection it considers necessary to check the validity of that statement.
- (d) The applicant shall allow the Authority to:
 - 1. review any data and information related to the demonstration of compliance; and
 - 2. witness or carry out any test, including any flight and ground test, or inspection conducted for the purpose of the demonstration of compliance.
- (e) For all the tests and inspections witnessed or carried out by the Authority in accordance with (d)(2):
 - 1. the applicant shall submit to the Authority a statement of conformity provided for in (c); and
 - 2. no change that affects the validity of the statement of conformity shall be made to the test specimen, or the test and measuring equipment, between the time the statement of conformity provided for in (c) was issued and the time the test specimen is presented to the Authority for test.

21.A.35 Flight Tests

EMAR 21 Edition 2.0

- (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; 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)
- (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.

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

EMAR 21 Edition 2.0

The type-certificate and restricted type-certificate shall include the type design, the operating limitations, the type-certificate data sheet for airworthiness and emissions, the applicable type-certification basis and environmental protection requirements with which the Authority records compliance, and any other conditions or limitations prescribed for the product in the applicable airworthiness codes and environmental protection requirements. The aircraft type-certificate and restricted type-certificate shall include in addition the applicable operational suitability data certification basis, the operational suitability data and the type-certificate data sheet for noise. The aircraft type-certificate and restricted type-certificate data sheet shall include the record of CO2 emissions compliance and the engine type-certificate data sheet shall include the record of exhaust emissions compliance, as established in accordance with EMAR 21.B.85.

21.A.M42 Integration

EMAR 21 Edition 2.0

The aircraft MTC Holder shall be responsible for the integration of Products, Weapons and other systems onto the aircraft, except for approvals under Subpart E.

21.A.44 Obligations of the holder

EMAR 21 Edition 2.0

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

- (a) undertake the obligations laid down in EMAR 21.A.3A, 21.A.3B, 21.A.4, 21.A.55, 21.A.57, 21.A.61 and 21.A.62; and, for this purpose, shall continue to meet the qualification requirements for eligibility of 21.A.14; and
- (b) specify the marking in accordance with EMAR 21 Subpart Q.

21.A.47 Transferability

EMAR 21 Edition 2.0

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

21.A.51 Duration and continued validity

EMAR 21 Edition 2.0

- (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.

21.A.55 Record keeping

EMAR 21 Edition 2.0

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, continued validity of the operational suitability data and compliance with applicable environmental protection requirements of the product.

21.A.57 Manuals

EMAR 21 Edition 2.0

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, the applicable operational suitability data certification basis and environmental protection requirements for the product, and provide copies, on request, to the Authority.

21.A.61 Instructions for continuing airworthiness

EMAR 21 Edition 2.0

- (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 person or organisation 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 flight-hours/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 person or organisation 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.

21.A.62 Availability of operational suitability data

EMAR 21 Edition 2.0

The holder of the type-certificate or restricted type-certificate shall make available:

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- (a) at least one set of complete operational suitability data prepared in accordance with the applicable operational suitability certification basis, to all known operators of the aircraft, before the operational suitability data must be used by a training organisation or operator; and
 - (b) any change to the operational suitability data to all known operators of the aircraft; and
 - (c) on request, the relevant data referred to in (a) and (b) above, to:
 - 1. the competent authority responsible for verifying conformity with one or more elements of this set of operational suitability data; and
 - 2. any person or organisation required to comply with one or more elements of this set of operational suitability data.

(SUBPART C - NOT APPLICABLE)

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

21.A.90A Scope

EMAR 21 Edition 2.0

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

Rationale for military specific content:

n/a

Reason for changes compared to the previous version:

n/a

Equivalent foreign regulation reference and deviations from it:

EASA reference: Regulation (EU) No 69/2014

– no deviations

21.A.90B Reserved

EMAR 21 Edition 2.0

(reserved)

21.A.91 Classification of changes to a type-certificate

EMAR 21 Edition 2.0

Changes to a type-certificate are classified as minor and major. A 'minor change' has no appreciable effect on the mass, balance, structural strength, reliability, operational characteristics, operational suitability data, or other characteristics affecting the airworthiness of the product or its environmental characteristics. Without prejudice to EMAR 21.A.19, all other changes are 'major changes' under this Subpart. Major and minor changes shall be approved in accordance with EMAR 21.A.95 or EMAR 21.A.97 as appropriate, and shall be adequately identified.

21.A.92 Eligibility

EMAR 21 Edition 2.0

- (a) Only the type-certificate holder may apply for approval of a major change to a type-certificate under this Subpart; all other applicants for a major change to a type-certificate shall apply under EMAR 21 Subpart E.
- (b) Any person or organisation may apply for approval of a minor change to a type-certificate under this Subpart.

21.A.93 Application

EMAR 21 Edition 2.0

- (a) An application for approval of a change to a type-certificate shall be made in a form and manner established by the Authority.
- (b) An application shall include, or be supplemented after the initial application with, a certification programme for the demonstration of compliance in accordance with EMAR 21.A.20, consisting of:
1. a description of the change identifying:
 - (i) the configuration(s) of the product in the type-certificate upon which the change is to be made;
 - (ii) all areas of the product in the type-certificate, including the approved manuals, that are changed or affected by the change; and
 - (iii) when the change affects the operational suitability data, any necessary changes to the operational suitability data;
 2. an identification of any reinvestigations necessary to demonstrate compliance of the change and areas affected by the change with the type-certification basis, operational suitability data certification basis and environmental protection requirements; and
 3. for a major change to a type-certificate:
 - (i) a proposal for the initial type-certification basis, operational suitability data certification basis and environmental protection requirements, prepared in accordance with the requirements and options specified in EMAR 21.A.101;
 - (ii) a proposal for a breakdown of the certification programme into meaningful groups of compliance demonstration activities and data, including a proposal for the means of compliance and related compliance documents;
 - (iii) a proposal for the assessment of the meaningful groups of compliance demonstration activities and data, addressing the likelihood of an unidentified non-compliance with the type-certification basis, operational suitability data certification basis or environmental protection requirements and the potential impact of that non-compliance on product safety or environmental protection. The proposed assessment shall take into account at least the elements set out in (1) – (4) of EMAR 21.B.100(a). Based on this assessment, the application shall include a proposal for the Authority's involvement in the verification of the compliance demonstration activities and data; and
 - (iv) a project schedule including major milestones.
- (c) An application for a change to a type-certificate shall be valid for five years unless the Authority agrees at the time of application on a longer time period. In the case where the change has not been approved, or it is evident that it will not be approved, within the time limit provided for in this point, the applicant shall apply for an extension of the validity of the application and comply with the type-certification basis, operational suitability data certification basis and environmental protection requirements, as established by the Authority in accordance with EMAR 21.A.101 and notified in accordance with EMAR 21.B.105.

21.A.95 Requirements for approval of a minor change

EMAR 21 Edition 2.0

- (a) Minor changes in a type-certificate shall be classified and approved by:
1. the Authority; or
 2. an approved design organisation within the scope of its privileges provided for in (1) and (2) of EMAR 21.A.263(c), as recorded in the terms of approval.
- (b) A minor change to a type-certificate shall only be approved:
1. when it has been demonstrated that the change and areas affected by the change comply with the type-certification basis and the environmental protection requirements incorporated by reference in the type-certificate;
 2. in the case of a change affecting the operational suitability data, when it has been demonstrated that the necessary changes to the operational suitability data comply with the operational suitability data certification basis incorporated by reference in the type-certificate;
 3. when compliance with the type-certification basis that applies in accordance with (1) has been declared and the justifications of compliance have been recorded in the compliance documents; and
 4. when no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested.
- (c) By derogation from (b)(1), airworthiness codes which became applicable after those incorporated by reference in the type-certificate can be used for approval of a minor change, provided they do not affect the demonstration of compliance.
- (d) By derogation from (a), at the applicant's request included in the declaration referred to in EMAR 21.A.20(d), a minor change to an aircraft type-certificate may be approved before compliance with the operational suitability data certification basis has been demonstrated, provided that the applicant demonstrates such compliance before the date at which those data are actually used.
- (e) The applicant shall submit to the Authority the substantiation data for the change and a statement that compliance has been demonstrated in accordance with (b).
- (f) An approval of a minor change to a type-certificate shall be limited to the specific configuration(s) in the type-certificate to which the change relates.

21.A.97 Requirements for approval of a major change

EMAR 21 Edition 2.0

- (a) Major changes to a type-certificate shall be classified and approved by:
1. the Authority; or
 2. an approved design organisation within the scope of its privileges provided for in (1) and (8) of EMAR 21.A.263(c), as recorded in the terms of approval.
- (b) A major change to a type-certificate shall only be approved:

1. when it has been demonstrated that the change and areas affected by the change comply with the type certification basis and environmental protection requirements, as established by the Authority in accordance with EMAR 21.A.101;
 2. in the case of a change affecting the operational suitability data, when it has been demonstrated that the necessary changes to the operational suitability data meet the operational suitability data certification basis, as established by the Authority in accordance with EMAR 21.A.101; and
 3. when compliance with (1) and (2) has been demonstrated in accordance with EMAR 21.A.20, as applicable to the change.
- (c) By derogation from (2) and (3) of (b), at the applicant's request included in the declaration referred to in EMAR 21.A.20(d), a major change to an aircraft type-certificate may be approved before compliance with the operational suitability data certification basis has been demonstrated, provided that the applicant demonstrates such compliance before the date at which those data are actually used.
- (d) An approval of a major change to a type-certificate shall be limited to the specific configuration(s) in the type-certificate to which the change relates.

21.A.101 Type-certification basis, operational suitability data certification basis and environmental protection requirements for a major change to a type-certificate

EMAR 21 Edition 2.0

- (a) A major change to a type-certificate and areas affected by the change shall comply with either the airworthiness codes applicable to the changed product on the date of the application for the change or airworthiness codes which became applicable after that date in accordance with (f) below. The validity of the application shall be determined in accordance with EMAR 21.A.93(c). In addition, the changed product shall comply with the environmental protection requirements designated by the Authority in accordance with EMAR 21.B.85.
- (b) By derogation from (a), an earlier amendment to an airworthiness code referred to in (a), and to any other airworthiness requirement which is directly related may be used in any of the following situations, unless the earlier amendment became applicable before the date at which the corresponding airworthiness codes incorporated by reference in the type-certificate became applicable:
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 airworthiness codes incorporated by reference in the type-certificate for the product. Changes meeting one of the following criteria shall automatically be 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 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 (a) would not contribute materially to the level of safety of the changed product or is impractical.
- (c) (Reserved)
- (d) If the Authority finds that the airworthiness codes applicable on 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 by the Authority in accordance with EMAR 21.B.75, to provide a level of safety equivalent to that established in the airworthiness codes applicable on the date of the application for the change.
- (e) By derogation from (a), (b) and (c), the change and areas affected by the change may comply with an alternative to an airworthiness code designated by the Authority if proposed by the applicant, provided that the Authority finds that the alternative provides a level of safety which is:
1. in the case of a type-certificate:
 - (i) equivalent to that of the airworthiness codes designated by the Authority under (a), (b) or (c) above; or
 - (ii) compliant with the essential requirements of the Basic Framework Document.
 2. in the case of a restricted type-certificate, adequate with regard to the intended use.
- (f) If an applicant chooses to comply with airworthiness requirements set out in an amendment that becomes applicable after submitting the application for a change to a type-certificate, the change and areas affected by the change shall also comply with any other airworthiness code or requirement which is directly related.
- (g) When the application for a change to a type-certificate for an aircraft includes, or is supplemented after the initial application to include, changes to the operational suitability data, the operational suitability data certification basis shall be established in accordance with (a)-(f).

21.A.105 Record keeping

EMAR 21 Edition 2.0

- (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, continued validity of the operational suitability data and compliance with applicable environmental protection requirements 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.

21.A.107 Instructions for continuing airworthiness

EMAR 21 Edition 2.0

- (a) The holder of a minor change approval to a type-certificate 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 person or organisation 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 person or organisation required to comply with any of those instructions.

21.A.108 Availability of operational suitability data

EMAR 21 Edition 2.0

In the case of a change affecting the operational suitability data, the holder of the minor change approval shall make available

- (a) at least one set of changes to the operational suitability data prepared in accordance with the applicable operational suitability certification basis, to all known operators of the changed aircraft, before the operational suitability data must be used by a training organisation or operator; and
- (b) any further change to the affected operational suitability data, to all known operators of the changed aircraft; and
- (c) on request, the relevant parts of the changes in (a) and (b) above, to:
 - 1. the competent authority responsible for verifying conformity with one or more elements of the affected operational suitability data; and
 - 2. any person or organisation required to comply with one or more elements of this set of operational suitability data.

21.A.109 Obligations and MPA marking

EMAR 21 Edition 2.0

The holder of a minor change approval to a type-certificate shall:

- (a) undertake the obligations laid down in EMAR 21.A.4, 21.A.105, 21.A.107 and EMAR 21.A.108; and
- (b) specify the marking, including MPA (herein 'Military Part Approval') letters, in accordance with EMAR 21.A.804.

SUBPART E - MILITARY SUPPLEMENTAL TYPE-CERTIFICATES

21.A.111 Scope

EMAR 21 Edition 2.0

This Subpart establishes the procedure for the approval of major changes to the type-certificate under supplemental type-certificate procedures, and establishes the rights and obligations of the applicants for, and holders of, those certificates. In this Subpart, the references to type-certificates include type-certificates and restricted type-certificates.

21.A.112A Eligibility

EMAR 21 Edition 2.0

Any person or organisation that has demonstrated, or is in the process of demonstrating, its capability in accordance with EMAR 21.A.112B may apply for a supplemental type-certificate (STC) in accordance with the conditions laid down in this Subpart.

21.A.112B Demonstration of capability

EMAR 21 Edition 2.0

- (a) An applicant for a supplemental type-certificate shall demonstrate its capability by holding a design organisation approval, issued by the Authority in accordance with EMAR 21 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.
- (c) (reserved)
- (d) By way of derogation from paragraph (a), any government organisation applying for a supplemental type-certificate may demonstrate its capability in accordance with EMAR 21.A.2 and EMAR 21.A.14(d), including a demonstration of compliance with EMAR 21.A.118A.

21.A.113 Application for a supplemental type-certificate

EMAR 21 Edition 2.0

- (a) An application for a supplemental type-certificate shall be made in a form and manner established by the Authority.
- (b) When applying for a supplemental type-certificate, the applicant shall:
 - (i) include in the application the information required by EMAR 21.A.93(b);
 - (ii) specify whether the certification data has been or will be prepared completely by the applicant or on the basis of an arrangement with the owner of the type-certification data.
- (c) EMAR 21.A.93(c) applies to the requirements for the time limits of the application effectivity as well as the requirements related to the need to update the type-certification basis, operational suitability data certification basis and environmental protection requirements, when the change has not been approved or it is evident that it will not be approved within the time limit established.

21.A.115 Requirements for approval of major changes in the form of a supplemental type-certificate

EMAR 21 Edition 2.0

- (a) Supplemental type-certificates shall be issued by:
1. the Authority; or
 2. an approved design organisation within the scope of its privileges provided for in (1) and (9) of EMAR 21.A.263(c), as recorded in the terms of approval.
- (b) A supplemental type-certificate shall only be issued when:
1. the applicant has demonstrated its capability in accordance with EMAR 21.A.112B;
 2. it has been demonstrated that the change to a type-certificate and areas affected by the change comply with the type-certification basis and the environmental protection requirements, as established by the Authority in accordance with EMAR 21.A.101;
 3. in the case of a supplemental type-certificate affecting the operational suitability data, it has been demonstrated that the necessary changes to the operational suitability data meet the operational suitability data certification basis, as established by the Authority in accordance with EMAR 21.A.101;
 4. compliance with (2) and (3) has been demonstrated in accordance with EMAR 21.A.20, as applicable to the change; and
 5. in case the applicant has specified that it provided certification data on the basis of an arrangement with the owner of the type-certification data in accordance with EMAR 21.A.113(b):
 - (i) the type-certificate holder has indicated that it has no technical objection to the information submitted under EMAR 21.A.93; and
 - (ii) 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 EMAR 21.A.44 and 21.A.118A.
- (c) By derogation from (3) and (4) of (b), at the applicant's request included in the declaration referred to in EMAR 21.A.20(d), the applicant is entitled to have a supplemental type-certificate for an aircraft issued before the applicant has demonstrated compliance with the operational suitability data certification basis, provided that the applicant demonstrates such compliance before the date at which those data are to be actually used.
- (d) A supplemental type-certificate shall be limited to the specific configuration(s) in the type-certificate to which the related major change relates.

21.A.116 Transferability

EMAR 21 Edition 2.0

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

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

EMAR 21 Edition 1.3

- (a) Minor changes to that part of a product covered by a supplemental type-certificate shall be classified and approved in accordance with EMAR 21 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.

21.A.118A Obligations and MPA marking

EMAR 21 Edition 2.0

Each holder of a supplemental type-certificate shall:

- (a) undertake the obligations:
 - 1. laid down in EMAR 21.A.3A, 21.A.3B, 21.A.4, 21.A.105, 21.A.119, 21.A.120A and EMAR 21.A.120B;
 - 2. implicit in the collaboration with the type-certificate holder under EMAR 21.A.115(b)(5); and for this purpose continue to meet the criteria of EMAR 21.A.112B.
- (b) specify the marking, including MPA letters, in accordance with EMAR 21.A.804(a).

21.A.118B Duration and continued validity

EMAR 21 Edition 2.0

- (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.

21.A.119 Manuals

EMAR 21 Edition 2.0

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, the applicable operational suitability data certification basis and environmental protection requirements 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.

21.A.120A Instructions for continuing airworthiness

EMAR 21 Edition 2.0

- (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 person or organisation 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 person or organisation 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.

21.A.120B Availability of operational suitability data

EMAR 21 Edition 2.0

In the case of a change affecting the operational suitability data, the holder of the supplemental type-certificate shall make available:

- (a) at least one set of changes to the operational suitability data prepared in accordance with the applicable operational suitability certification basis, to all known operators of the changed aircraft, before the operational suitability data must be used by a training organisation or an operator; and
- (b) any further change to the affected operational suitability data, to all known operators of the changed aircraft; and
- (c) on request, the relevant parts of the changes in (a) and (b) above, to:
 - 1. the competent authority responsible for verifying conformity with one or more elements of the affected operational suitability data; and
 - 2. any person or organisation required to comply with one or more elements of this set of operational suitability data.

SUBPART F - PRODUCTION WITHOUT MILITARY PRODUCTION ORGANISATION APPROVAL

21.A.121 Scope

EMAR 21 Edition 1.3

- (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 EMAR 21 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.

21.A.122 Eligibility

EMAR 21 Edition 2.0

Any person or 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.

21.A.124 Application

EMAR 21 Edition 1.3

- (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 demonstrates, 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 EMAR 21 Subpart G.
 - 2. an outline of the information required by EMAR 21.A.125A(b).

21.A.125A Issue of a letter of agreement

EMAR 21 Edition 2.0

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

21.A.125B Findings

EMAR 21 Edition 2.0

- (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 EMAR 21.B.125:
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 three months. In certain circumstances and subject to the nature of the finding the Authority may extend the three 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.
- (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 EMAR 21.B.145. 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.

21.A.125C Duration and continued validity

EMAR 21 Edition 1.3

- (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 EMAR 21.A.122; or
 4. the letter of agreement has been surrendered, revoked under EMAR 21.B.145, or has expired.
- (b) Upon surrender, revocation or expiry, the letter of agreement shall be returned to the Authority.

21.A.126 Production inspection system

EMAR 21 Edition 1.3

- (a) The production inspection system required under EMAR 21.A.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 EMAR 21.A.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.

21.A.127 Tests: aircraft

EMAR 21 Edition 1.3

- (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 EMAR 21.A.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;
 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.

21.A.128 Tests: engines and propellers

EMAR 21 Edition 1.3

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 EMAR 21.A.125A(a).

21.A.129 Obligations of the manufacturer

EMAR 21 Edition 2.0

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 continued 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 EMAR 21.A.3A(b)(2);
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.

21.A.130 Statement of conformity

EMAR 21 Edition 2.0

- (a) Each manufacturer of a product, part or appliance manufactured under this Subpart shall raise a statement of conformity, an EMAR Form 52, for complete aircraft, or EMAR Form 1, for other products, parts or appliances. This statement shall be signed by an authorised person who holds a responsible position in the manufacturing organisation.
- (b) A statement of conformity shall include all of the below:
 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 EMAR 21.A.127(a);
 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 EMAR 21.A.128;
 4. additionally, in the case of environmental requirements:
 - (i) a statement that the completed engine is in compliance with the applicable engine exhaust emissions requirements on the date of manufacture of the engine, and
 - (ii) a statement that the completed aircraft is in compliance with the applicable CO₂ emissions requirements on the date its first certificate of airworthiness is issued.
- (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.

SUBPART G - MILITARY PRODUCTION ORGANISATION APPROVAL FOR PRODUCTS, PARTS AND APPLIANCES

21.A.131 Scope

EMAR 21 Edition 2.0

This Subpart establishes:

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

21.A.133 Eligibility

EMAR 21 Edition 2.0

Any person or 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.

21.A.134 Application

EMAR 21 Edition 1.3

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 EMAR 21.A.143 and the terms of approval requested to be issued under EMAR 21.A.151.

21.A.135 Issue of production organisation approval

EMAR 21 Edition 1.3

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.

21.A.139 Quality System

EMAR 21 Edition 1.3

- (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 EMAR 21.A.163.
- (b) The quality system shall contain:

1. as applicable within the scope of approval, control procedures for:
 - (i) 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;
 - (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 military 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 EMAR 21.A.145(c)(2) and ultimately to the manager referred to in EMAR 21.A.145(c)(1) to ensure, as necessary, corrective action.

21.A.143 Production Organisation Exposition

EMAR 21 Edition 2.0

- (a) The organisation shall submit to the Authority a production organisation exposition 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 EMAR 21.A.145(c)(2);

3. the duties and responsibilities of the manager(s) as required by EMAR 21.A.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 EMAR 21.A.145(c)(1) and (2);
 5. a list of certifying staff as referred to in EMAR 21.A.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;
 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 EMAR 21.A.139(b)(1);
 12. a list of those outside parties referred to in EMAR 21.A.139(a).
 13. if flight tests are to be conducted, a flight test operations manual defining the organisation's policies and procedures in relation to flight test. The flight test operations manual shall include:
 - (i) a description of the organisation's processes for flight test, including the flight test organisation involvement into the permit to fly issuance process;
 - (ii) crewing policy, including composition, competency, currency and flight time limitations, where applicable;
 - (iii) procedures for the carriage of persons other than crew members and for flight test training, when applicable;
 - (iv) a policy for risk and safety management and associated methodologies;
 - (v) procedures to identify the instruments and equipment to be carried;
 - (vi) a list of documents that need to be produced for flight test.
- (b) The production organisation exposition shall be amended as necessary to remain an up-to-date description of the organisation, and copies of any amendments shall be supplied to the Authority.

21.A.145 Approval requirements

EMAR 21 Edition 2.0

The production organisation shall demonstrate, on the basis of the information submitted in accordance with EMAR 21.A.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 EMAR 21.A.165.
- (b) with regard to all necessary airworthiness and environmental 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, including any exemption granted against the CO₂ production cut-off requirements, to determine conformity with the applicable design data;
 2. the production organisation has established a procedure to ensure that airworthiness and environmental 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 EMAR 21.A.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 (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 and environmental data matters.
- (d) with regard to certifying staff, authorised by the production organisation to sign the documents issued under EMAR 21.A.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.

21.A.147 Changes to the approved production organisation

EMAR 21 Edition 2.0

- (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 and environmental characteristics 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.

21.A.148 Changes of location

EMAR 21 Edition 1.3

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

21.A.149 Transferability

EMAR 21 Edition 1.3

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

21.A.151 Terms of approval

EMAR 21 Edition 1.3

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 EMAR 21.A.163. Those terms shall be issued as part of a production organisation approval.

21.A.153 Changes to the terms of approval

EMAR 21 Edition 1.3

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.

21.A.157 Investigations

EMAR 21 Edition 1.3

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.

21.A.158 Findings

EMAR 21 Edition 2.0

- (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 according to EMAR 21.B.225:

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 three months. In certain circumstances and subject to the nature of the finding the Authority may extend the three 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.
- (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 EMAR 21.B.245. 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.

21.A.159 Duration and continued validity

EMAR 21 Edition 2.0

- (a) A production organisation approval shall be issued for an unlimited duration, unless otherwise specified by the authority. 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 EMAR 21.A.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 EMAR 21.A.133; or
 5. the certificate has been surrendered or revoked under EMAR 21.B.245;
- (b) Upon surrender or revocation, the certificate shall be returned to the Authority.

21.A.163 Privileges

EMAR 21 Edition 2.0

Pursuant to the terms of approval issued under EMAR 21.A.135, 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 EMAR 21.A.174, obtain an aircraft certificate of airworthiness and a noise certificate, where applicable, 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, 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 military permit to fly in accordance with EMAR 21.A.711(c) including approval of the flight conditions in accordance with EMAR 21.A.710(b).

21.A.165 Obligations of the holder

EMAR 21 Edition 2.0

The holder of a production organisation approval shall:

- (a) ensure that the production organisation exposition furnished in accordance with EMAR 21.A.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 conformity to approved design data and condition for safe operation;
 - 3. additionally, in the case of environmental requirements determine that:
 - (i) the completed engine is in compliance with the applicable engine exhaust emissions requirements on the date of manufacture of the engine; and
 - (ii) the completed aircraft is in compliance with the applicable CO₂ emissions requirements on the date its first certificate of airworthiness is issued.
 - 4. determine that other products, parts or appliances conform to the applicable data before issuing an EMAR Form 1 as 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 (1). Such reports shall be made in a form and manner established by the Authority under EMAR 21.A.3A(b)(2);
 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 EMAR 21.A.163(e), determine the conditions under which a military permit to fly can be issued; and
- (k) where applicable, under the privilege of EMAR 21.A.163(e), establish compliance with EMAR 21.A.711(c) and (e) before issuing a military permit to fly to an aircraft.

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

21.A.171 Scope

EMAR 21 Edition 1.3

This Subpart establishes the procedure for issuing airworthiness certificates.

21.A.172 Eligibility

EMAR 21 Edition 2.0

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

21.A.173 Classification

EMAR 21 Edition 2.0

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;
- (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; or
 2. which have been shown to the Authority to comply with specific airworthiness specifications ensuring adequate safety.

21.A.174 Application

EMAR 21 Edition 2.0

- (a) Pursuant to EMAR 21.A.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 EMAR 21.A.163(b); or
 - issued under EMAR 21.A.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 Authority of the State of registry.
3. with regard to used aircraft:
- (i) originating from an EMAR compliant environment, a military airworthiness review certificate issued in accordance with EMAR M;
 - (ii) in any other case:
 - 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 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 EMAR 21.B.327;
 - a recommendation for the issuance of a certificate of airworthiness or restricted certificate of airworthiness and a military airworthiness review certificate following an airworthiness review in accordance with EMAR M.
- (c) Unless otherwise agreed, the statements referred to in (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.

21.A.175 Language

EMAR 21 Edition 1.3

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.

21.A.177 Amendment or modification

EMAR 21 Edition 1.3

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

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

EMAR 21 Edition 2.0

- (a) Where ownership of an aircraft has changed:
- 1. if it remains on the same register in the same State, 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 on a different register in the same State or in another State applying this EMAR, 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 military airworthiness review certificate issued under EMAR M; and
 - (ii) when satisfying EMAR 21.A.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, or issued only with the formal agreement of the Authority of the State of registry to which it is transferred.

21.A.180 Inspections

EMAR 21 Edition 1.3

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.

21.A.181 Duration and continued validity

EMAR 21 Edition 2.0

- (a) An airworthiness certificate shall be issued for an unlimited duration. It shall remain valid subject to:
 1. compliance with the applicable type-design and continuing airworthiness requirements; and
 2. the aircraft remaining on the same register; and
 3. the type-certificate or restricted type-certificate under which it is issued not being previously invalidated under EMAR 21.A.51; and
 4. the certificate not being surrendered or revoked under EMAR 21.B330.
- (b) Upon surrender or revocation, the certificate shall be returned to the Authority of the State of registry.

21.A.182 Aircraft identification

EMAR 21 Edition 1.3

Each applicant for an airworthiness certificate under this Subpart shall demonstrate that its aircraft is identified in accordance with EMAR 21 Subpart Q.

SUBPART I - NOISE CERTIFICATES

21.A.201 Scope

EMAR 21 Edition 2.0

This Subpart establishes the procedure for issuing noise certificates.

21.A.203 Eligibility

EMAR 21 Edition 2.0

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

21.A.204 Application

EMAR 21 Edition 2.0

- (a) Pursuant to EMAR 21.A.203, an application for a noise certificate shall be made in a form and manner established by the Authority of the State of registry.
- (b) Each application shall include:
 1. with regard to new aircraft:
 - (i) a statement of conformity:
 - issued under EMAR 21.A.163(b); or
 - issued under EMAR 21.A.130 and validated by the Authority; or
 - for an imported aircraft, any acceptable evidence that the aircraft conforms to a design approved by the Authority of the State of registry; and
 - (ii) the noise information determined in accordance with the applicable noise requirements;
 2. with regard to used aircraft:
 - (i) the noise information determined in accordance with the applicable noise requirements; and
 - (ii) historical records to establish the production, modification, and maintenance standard of the aircraft.
- (c) Unless otherwise agreed, the evidence referred to in (b)(1) shall be issued no more than 60 days before presentation of the aircraft to the Authority of the State of registry.

21.A.207 Amendment or modification

EMAR 21 Edition 2.0

A noise certificate may be amended or modified only by the Authority of the State of registry.

21.A.209 Transferability and re-issuance within States applying this EMAR

EMAR 21 Edition 2.0

Where ownership of an aircraft has changed:

- (a) if the aircraft remains on the same register, the noise certificate shall be transferred together with the aircraft; or
- (b) if the aircraft moves to the register of another State applying this EMAR, the noise certificate shall be issued upon presentation of the former noise certificate.

21.A.210 Inspections

EMAR 21 Edition 2.0

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

21.A.211 Duration and continued validity

EMAR 21 Edition 2.0

- (a) A noise certificate shall be issued for an unlimited duration. It shall remain valid subject to:
 - 1. compliance with the applicable type-design, environmental protection and continuing airworthiness requirements; and
 - 2. the aircraft remaining on the same register; and
 - 3. the type-certificate or restricted type-certificate under which it is issued not being previously invalidated under EMAR 21.A.51;
 - 4. the certificate not being surrendered or revoked under EMAR 21.B.430.
- (b) Upon surrender or revocation, the certificate shall be returned to the Authority of the State of registry.

SUBPART J - MILITARY DESIGN ORGANISATION APPROVAL

21.A.231 Scope

EMAR 21 Edition 2.0

This Subpart establishes the procedure for the approval of design organisations and rules governing the rights and obligations of applicants for, and holders of, such approvals. In this Subpart, the references to type-certificates include type-certificates and restricted type-certificates.

21.A.233 Eligibility

EMAR 21 Edition 2.0

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

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

21.A.234 Application

EMAR 21 Edition 2.0

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

21.A.235 Issue of design organisation approval

EMAR 21 Edition 2.0

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.

21.A.239 Design assurance system

EMAR 21 Edition 2.0

- (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 thereof, comply with the applicable type-certification basis, the applicable operational suitability data certification basis and environmental protection requirements; and
 - 2. to ensure that its responsibilities are properly discharged in accordance with:
 - (i) the appropriate provisions of this EMAR; and
 - (ii) the terms of approval issued under EMAR 21.A.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.

21.A.243 Handbook (Design Organisation Exposition)

EMAR 21 Edition 2.0

- (a) The design organisation shall furnish a handbook to the Authority describing, directly or by cross-reference, the organisation, the relevant procedures and the products, or changes to products to be designed. If flight tests are to be conducted, a flight test operations manual defining the organisation's policies and procedures in relation to flight test shall be furnished. The flight test operations manual shall include:
1. a description of the organisation's processes for flight test, including the flight test organisation involvement into the permit to fly issuance process;
 2. crewing policy, including composition, competency, currency and flight time limitations, as required by the Authority;
 3. procedures for the carriage of persons other than crew members and for flight test training, when applicable;
 4. a policy for risk and safety management and associated methodologies;
 5. procedures to identify the instruments and equipment to be carried;
6. a list of documents that need to be produced for flight test.
- (b) Where any parts or appliances, or any changes to the products are designed by partner organisations or subcontractors, the handbook shall include a statement of how the design organisation is able to give, for all parts and appliances, the assurance of compliance required by EMAR 21.A.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 handbook 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 in the organisation.

21.A.245 Approval requirements

EMAR 21 Edition 2.0

The design organisation shall demonstrate, on the basis of the information submitted in accordance with EMAR 21.A.243 that, in addition to complying with EMAR 21.A.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, operational suitability and environmental protection objectives for the product;
- (b) there is full and efficient coordination between departments and within departments in respect of airworthiness, operational suitability and environmental protection matters.

21.A.247 Changes in design assurance system

EMAR 21 Edition 2.0

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, operational suitability and environmental protection 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 handbook, and before implementation of the change, that it will continue to comply with this Subpart after implementation.

21.A.249 Transferability

EMAR 21 Edition 1.3

Except as a result of a change in ownership, which is deemed significant for the purposes of EMAR 21.A.247, a design organisation approval is not transferable.

21.A.251 Terms of approval

EMAR 21 Edition 2.0

The terms of approval shall identify the types of design work, the 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, operational suitability and environmental characteristics of products. For design organisation approvals covering type-certification or Military Technical Standard Order MTSO authorisation for Auxiliary Power Units (APUs), the terms of approval shall contain in addition the list of products or APUs. Those terms shall be issued as part of a design organisation approval.

21.A.253 Changes to the terms of approval

EMAR 21 Edition 1.3

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.

21.A.257 Investigations

EMAR 21 Edition 1.3

- (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 EMAR 21.A.239(b).

21.A.258 Findings

EMAR 21 Edition 2.0

- (a) When, during the investigations referred to in EMAR 21.A.257 and EMAR 21.B.100, objective evidence is found demonstrating 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 that may 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 that 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 a design organisation approval shall demonstrate to the satisfaction of the Authority that it has taken adequate corrective action within a period of no more than 21 working days after written confirmation of the finding;
 2. in case of level two findings, the holder of a design organisation approval shall demonstrate to the satisfaction of the Authority that it has taken adequate corrective action within a time period set by the Authority which is appropriate to the nature of the finding and is initially not more than three months. The Authority may extend the initial time period where it considers that the nature of the finding allows such extension and where the applicant has submitted a corrective action plan which the Authority finds satisfactory; and
 3. a level three finding shall not require immediate action by the holder of the design organisation approval.
- (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.

21.A.259 Duration and continued validity

EMAR 21 Edition 2.0

- (a) A design organisation approval shall be issued for an unlimited duration, unless otherwise specified by the Authority. 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 EMAR 21.A.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.

21.A.263 Privileges

EMAR 21 Edition 2.0

- (a) (Reserved)
- (b) (Reserved)
- (c) A holder of a design organisation approval shall be entitled, within the scope of its terms of approval, as established by the Authority, and under the relevant procedures of the design assurance system:
1. to classify changes to a type-certificate or to a supplemental type-certificate and repairs as 'major' or 'minor';
 2. to approve minor changes to type-certificates or to supplemental type-certificates and minor repairs;
 3. (Reserved)
 4. (Reserved)
 5. to approve certain major repair designs under Subpart M to products or auxiliary power units (APUs);
 6. to approve for certain aircraft the flight conditions under which a military permit to fly can be issued in accordance with EMAR 21.A.710(a)(2), except for permits to fly to be issued for the purpose of EMAR 21.A.701(a)(15);
 7. to issue a military permit to fly in accordance with EMAR 21.A.711(b) for an aircraft it has designed or modified, or for which it has approved, in accordance with EMAR 21.A.263(c)(6), the flight conditions under which the military permit to fly can be issued, and when the holder of a design organisation approval itself:
 - (i) controls the configuration of the aircraft, and
 - (ii) attests conformity with the design conditions approved for the flight.
 8. to approve certain major changes to a type-certificate under Subpart D; and
 9. to issue certain supplemental type-certificates under Subpart E and approve certain major changes to those certificates.
- (d) For a military product derived from a civil type certified product, the holder of a MDOA shall be entitled, within its terms of approval and under the relevant procedures of the design assurance system:

1. to declare the applicability, through validation of no impact to the military certification basis and the intended use, of the following when it is has already been approved by a recognized civil airworthiness authority:
 - (i) a modification; or
 - (ii) an instruction for continuing airworthiness; or
 - (iii) revisions to the flight manual; or
 - (iv) revisions to the maintenance manual.
2. to approve the following, when it is has already been approved by a recognized civil airworthiness authority and when it has been declared to be applicable to the military product:
 - (i) a major modification; or
 - (ii) revisions to the flight manual; or
 - (iii) revisions to the approved sections of the maintenance manual.

21.A.265 Obligations of the holder

EMAR 21 Edition 2.0

The holder of a design organisation approval shall, within the scope of its terms of approval, as established by the Authority:

- (a) maintain the handbook required under EMAR 21.A.243 in conformity with the design assurance system;
- (b) ensure that this handbook or relevant procedures included by cross-reference are used as a basic working document within the organisation;
- (c) determine that the design of products, or changes or repairs thereto comply with applicable specifications and requirements and have no unsafe features;
- (d) provide the Authority with statements and associated documentation confirming compliance with (c), except for approval processes carried out in accordance with EMAR.A.263(c);
- (e) provide to the Authority data and information related to the required actions under EMAR 21.A.3B;
- (f) determine, in accordance with EMAR 21.A.263(c)(6), the flight conditions under which a military permit to fly can be issued; and
- (g) establish, in accordance with EMAR 21.A.263(c)(7), compliance with (b) and (e) of EMAR 21.A.711 before issuing a military permit to fly for an aircraft.
- (h) designate data and information issued under the authority of the approved design organisation within the scope of its terms of approval as established by the Authority with the following statement: "The technical content of this document is approved under the authority of the MDOA ref. [3-letter designation of country].[Military Authority].21J.[XXXX]".

SUBPART K - PARTS AND APPLIANCES

21.A.301 Scope

EMAR 21 Edition 1.3

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

21.A.303 Compliance with applicable requirements

EMAR 21 Edition 2.0

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 EMAR 21 Subpart B, D or E for the product in which it is to be installed; or
- (b) where applicable, under the MTSO authorisation procedures of EMAR 21 Subpart O; or
- (c) in the case of standard parts, in accordance with officially recognised Standards.

21.A.305 Approval of parts and appliances

EMAR 21 Edition 2.0

In all cases where the approval of a part or appliance is explicitly required by Law or Authority measures, the part or appliance shall comply with the applicable technical standards and airworthiness codes as referred to in Subpart O.

21.A.307 Release of parts and appliances for installation

EMAR 21 Edition 2.0

A part or appliance shall be eligible for installation in a type-certificated product when it is in a condition for safe operation, and it is:

- (a) accompanied by an authorised release certificate (EMAR Form 1), certifying that the item was manufactured in conformity to approved design data and is marked in accordance with EMAR 21 Subpart Q; or
- (b) a standard part; or
- (c) (reserved)
- (d) by way of derogation from (a), accompanied by a Certificate of Conformity or equivalent release documentation certifying that the item was manufactured in conformity to applicable design data such as the technical and performance standards identified in the approved type-design of the type-certified product, and
 1. it is not a critical part, not required for type-certification or by applicable rules governing the intended operations; and
 2. it has been demonstrated to the Authority that the item will not adversely affect the airworthiness of the aircraft; and
 3. the Certificate of Conformity or equivalent release documentation, identifying the part and manufacturer, is acceptable to the Authority; and

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4. the part is marked with a name, trademark, or symbol identifying the manufacturer and part designation in accordance with the applicable design data.

(SUBPART L - NOT APPLICABLE)

SUBPART M - REPAIRS

21.A.431A Scope

EMAR 21 Edition 2.0

- (a) This Subpart establishes the procedure for the approval of a repair design of a product, part or appliance and establishes the rights and obligations of the applicants for, and holders of, those approvals.
- (b) This Subpart defines standard repairs that are not subject to an approval process under this Subpart.
- (b) A 'repair' means elimination of damage and/or restoration to an airworthy condition following initial release to service by the manufacturer of any product, part or appliance.
- (c) The 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 MTSO article other than an Auxiliary Power Unit (APU) shall be treated as a change to the MTSO design and shall be processed in accordance with EMAR 21.A.611.
- (f) In this Subpart, the references to type-certificates include type-certificates and restricted type-certificates.

21.A.431B Standard repairs

EMAR 21 Edition 2.0

- (a) Standard repairs are repairs:
 - 1. in relation to products, as accepted by the Authority; and
 - 2. that follow design data included in airworthiness codes or equivalent standards issued or accepted by the Authority, containing acceptable methods, techniques and practices for carrying out and identifying standard repairs, including the associated instructions for continuing airworthiness; and
 - 3. that are not in conflict with type-certificate holders data.
- (b) EMAR 21.A.432A to 21.A.451 are not applicable to standard repairs.

21.A.432A Eligibility

EMAR 21 Edition 2.0

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

21.A.432B Demonstration of capability

EMAR 21 Edition 2.0

- (a) An applicant for a major repair design approval shall demonstrate its capability by holding a design organisation approval, issued by the Authority in accordance with EMAR 21 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.
- (c) (reserved)
- (d) By way of derogation from paragraph (a), any government organisation applying for a major repair design approval may demonstrate its capability in accordance with EMAR 21.A.2 and EMAR 21.A.14(d), including a demonstration of compliance with EMAR 21.A.451.

21.A.432C Application for a repair design approval

EMAR 21 Edition 2.0

- (a) An application for a repair design approval shall be made in a form and manner established by the Authority.
- (b) An application for a major repair design approval shall include, or be supplemented after the initial application, a certification programme containing:
 - 1. a description of the damage and repair design identifying the configuration of the type design upon which the repair is made;
 - 2. an identification of all areas of the type design and the approved manuals that are changed or affected by the repair design;
 - 3. an identification of any reinvestigations necessary to demonstrate compliance of the repair design and areas affected by the repair design with the type-certification basis incorporated by reference in, as applicable, either the type-certificate, the supplemental type-certificate or the APU MTSO authorisation;
 - 4. any proposed amendments to the type-certification basis incorporated by reference in, as applicable, either the type-certificate, the supplemental type-certificate or the APU MTSO authorisation;
 - 5. a proposal for a breakdown of the certification programme into meaningful groups of compliance demonstration activities and data, including the means and process proposed to be followed to demonstrate compliance with EMAR 21.A.433(a)(1) and references to related compliance documents;
 - 6. a proposal for the assessment of the meaningful groups of compliance demonstration activities and data, addressing the likelihood of an unidentified non-compliance with the type-certification basis and the potential impact of that non-compliance on product safety. The proposed assessment shall take into account at least the elements set out in (1) to (4) of EMAR 21.B.100(a). Based on this assessment, the application shall include a proposal for the Authority's involvement in the verification of the compliance demonstration activities and data; and
 - 7. the specification whether the certification data is prepared completely by the applicant or on the basis of an arrangement with the owner of the type-certification data.

21.A.433 Requirements for a repair design

EMAR 21 Edition 2.0

- (a) A repair design shall only be approved:
1. when it has been demonstrated, following the certification programme referred to in EMAR 21.A.432C(b), that the repair design complies with the type-certification basis incorporated by reference in, as applicable, either the type-certificate, the supplemental type-certificate or the APU MTSO authorisation, as well as with any amendments established and notified by the Authority in accordance with EMAR 21.B.450;
 2. when compliance with the type-certification basis that applies in accordance with (a)(1) has been declared and the justifications of compliance have been recorded in the compliance documents;
 3. when no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested; and
 4. where the applicant has specified that it provided certification data on the basis of an arrangement with the owner of the type-certification data in accordance with EMAR 21.A.432C(b)(7):
 - (i) when the holder has indicated that it has no technical objection to the information submitted under (a)(2); and
 - (ii) when the holder has agreed to collaborate with the repair design approval holder to ensure discharge of all obligations for continued airworthiness of the changed product through compliance with EMAR 21.A.451.
- (b) The applicant shall submit to the Authority the declaration referred to in (a)(2) and, on request by the Authority, all necessary substantiation data.

21.A.435 Classification and approval of repair designs

EMAR 21 Edition 2.0

- (a) A repair design shall be classified as either “major” or “minor” in accordance with the criteria set out in EMAR 21.A.91 for a change to the type-certificate.
- (b) A repair design shall be classified and approved by:
1. by the Authority; or
 2. an approved design organisation within the scope of its privileges provided for in (1), (2) and (5) of EMAR 21.A.263(c), as recorded in the terms of approval.

21.A.439 Production of repair parts

EMAR 21 Edition 1.3

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 EMAR 21 Subpart F; or
- (b) by an organisation appropriately approved in accordance with EMAR 21 Subpart G; or
- (c) by an appropriately approved maintenance organisation.

21.A.441 Repair embodiment

EMAR 21 Edition 2.0

- (a) The embodiment of a repair shall be made in accordance with EMAR 145, or by a production organisation appropriately approved in accordance with EMAR 21 Subpart G, in accordance with the privilege provided for in EMAR 21.A.163(d).
- (b) The design organisation shall transmit to the organisation performing the repair all the necessary installation instructions.

21.A.443 Limitations

EMAR 21 Edition 1.3

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.

21.A.445 Unrepaired damage

EMAR 21 Edition 1.3

- (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
 - 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 EMAR 21.A.443.

- (b) Where the organisation evaluating the damage under paragraph (a) is neither the Authority nor the type-certificate or supplemental type-certificate or APU MTSO authorisation 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, supplemental type-certificate or APU MTSO authorisation holder, or manufacturer, as applicable.

21.A.447 Record-keeping

EMAR 21 Edition 1.3

For each repair, all relevant design information, drawings, test reports, instructions and limitations possibly issued in accordance with EMAR 21.A.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.

21.A.449 Instructions for continuing airworthiness

EMAR 21 Edition 2.0

- (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 person 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 person 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.

21.A.451 Obligations and MPA marking

EMAR 21 Edition 2.0

- (a) Each holder of a major repair design approval shall:
1. undertake the obligations:
 - (i) laid down in EMAR 21.A.3A, 21.A.3B, 21.A.4, 21.A.439, 21.A.441, 21.A.443, 21.A.447 and 21.A.449;
 - (ii) implicit in the collaboration with the type-certificate or supplemental type-certificate and with the APU MTSO authorisation holder under EMAR 21.A.433(b), as appropriate.
 2. specify the marking, including MPA ('Military Part Approval') letters, in accordance with EMAR 21.A.804(a).
- (b) Except for type-certificate holders or APU authorisation holders for which EMAR 21.A.44 applies, the holder of a minor repair design approval shall:
1. undertake the obligations laid down in EMAR 21.A.4, 21.A.447 and 21.A.449; and
 2. specify the marking, including MPA letters, in accordance with EMAR 21.A.804(a).

(SUBPART N - NOT APPLICABLE)

SUBPART O - MILITARY TECHNICAL STANDARD ORDER AUTHORISATIONS

21.A.601 Scope

EMAR 21 Edition 2.0

This Subpart establishes the procedure for issuing Military Technical Standard Order (MTSO) authorisations and the rules governing the rights and obligations of applicants for, or holders of, such authorisations.

21.A.602A Eligibility

EMAR 21 Edition 2.0

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

21.A.602B Demonstration of capability

EMAR 21 Edition 1.3

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

- (a) for production, by holding a production organisation approval, issued in accordance with EMAR 21 Subpart G, or through compliance with EMAR 21 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 EMAR 21 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.

21.A.603 Application

EMAR 21 Edition 1.3

- (a) An application for an MTSO authorisation shall be made in a form and manner established by the Authority and shall include an outline of the information required by EMAR 21.A.605.
- (b) When a series of minor changes in accordance with EMAR 21.A.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.

21.A.604 MTSO authorisation for an Auxiliary Power Unit (APU)

EMAR 21 Edition 2.0

With regard to MTSO authorisation for an APU:

- (a) by way of derogation from EMAR 21.A.603, 21.A.610 and 21.A.615, the following requirements shall apply: EMAR 21.A.15, 21.A.20, 21.A.21, 21.A.31, 21.A.33, 21.A.44, 21.B75 and 21.B.80.

However, a MTSO authorization shall be issued in accordance with EMAR 21.A.606 instead of a type-certificate;

- (b) by way of derogation from EMAR 21.A.611, the requirements of EMAR 21 Subpart D shall apply to the approval of design changes by the APU MTSO authorization holder and design changes from other applicants classified as a minor change, and the requirements of EMAR 21 Subpart E shall apply to the approval of design changes by other applicants classified as a major change. Where the requirements of Subpart E apply, a separate MTSO authorisation shall be issued instead of a supplemental type-certificate; and
- (c) the requirements of EMAR 21 Subpart M shall apply to the approval of repair designs.

21.A.605 Data requirements

EMAR 21 Edition 2.0

- (a) The applicant shall submit to the Authority the following documents:
 1. a certification programme for the MTSO authorisation, setting out the means to demonstrate compliance with EMAR 21.A.606(b);
 2. a statement of compliance certifying that the applicant has met the requirements of this Subpart;
 3. a Declaration of Design and Performance (DDP), stating that the applicant has demonstrated that the article complies with the technical standards and airworthiness specifications in accordance with the certification programme;
 4. a copy of the technical data required in the applicable technical standards and airworthiness specifications;
 5. the exposition (or a reference to the exposition) referred to in EMAR 21.A.143 for the purpose of obtaining an appropriate production organisation approval under EMAR 21 Subpart G or the manual (or a reference to the manual) referred to in EMAR 21.A.125A(b) for the purpose of manufacturing under EMAR 21 Subpart F without production organisation approval;
 6. for an APU, the handbook, or a reference to the handbook, referred to in EMAR 21.A.243 for the purpose of obtaining an appropriate design organisation approval under EMAR 21 Subpart J;
 7. for all other articles, the procedures, or a reference to the procedures, referred to in EMAR 21.A.602B(b)(2).
- (b) The applicant shall report to the Authority any difficulty or event encountered during the approval process that may significantly impact the ETSO authorisation.

21.A.606 Requirements for the issuance of an MTSO authorisation

EMAR 21 Edition 2.0

In order to be issued a MTSO authorization, the applicant shall:

- (a) demonstrate its capability in accordance with EMAR 21.A.602B;

- (b) demonstrate that the article complies with the technical conditions of the applicable technical standards and airworthiness specifications or with deviations therefrom approved in accordance with EMAR 21.A.610, if any;
- (c) comply with the requirements of this Subpart; and
- (d) declare that no feature or characteristic has been identified that may make the article unsafe for the uses for which certification is requested.

21.A.607 MTSO authorisation privileges

EMAR 21 Edition 1.3

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

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

EMAR 21 Edition 1.3

- (a) The DDP shall contain at least the following information:
 1. information corresponding to EMAR 21.A.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 applicable technical standards and airworthiness specifications;
 4. reference to relevant test reports;
 5. reference to the appropriate Maintenance, Overhaul and Repair Manuals;
 6. the levels of compliance, where various levels of compliance are allowed by the applicable technical standards and airworthiness specifications;
 7. list of deviations accepted in accordance with EMAR 21.A.610.
- (b) The DDP shall be endorsed with the date and signature of the holder of the MTSO authorisation, or its authorised representative.

21.A.609 Obligations of holders of MTSO authorisations

EMAR 21 Edition 2.0

The holder of an MTSO authorisation under this Subpart shall:

- (a) manufacture each article in accordance with EMAR 21 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 MTSO authorisation has been issued, a current file of complete technical data and records in accordance with EMAR 21.A.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 EMAR 21.A.807;
- (f) comply with EMAR 21.A.3A, 21.A.3B and 21.A.4;
- (g) continue to meet requirement EMAR 21.A.602B.

21.A.610 Approval for deviation

EMAR 21 Edition 1.3

- (a) Each manufacturer who requests approval to deviate from any performance requirements of applicable technical standards and airworthiness specifications 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.

21.A.611 Design changes

EMAR 21 Edition 2.0

- (a) The holder of the MTSO 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 EMAR 21.A.603(b).
- (b) Any design change by the holder of the MTSO authorisation that is extensive enough to require a substantially complete investigation to determine compliance with the applicable technical standards and airworthiness specifications 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 EMAR 21.A.603.
- (c) No design change by any person or organisation, other than the holder of the MTSO authorisation who submitted the statement of compliance for the article, is eligible for approval under this EMAR 21 Subpart O unless the person or organisation seeking the approval applies under EMAR 21.A.603 for a separate MTSO authorisation.

21.A.613 Record-keeping

EMAR 21 Edition 1.3

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.

21.A.615 Inspection by the Authority

EMAR 21 Edition 1.3

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

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

21.A.619 Duration and continued validity

EMAR 21 Edition 1.3

- (a) An MTSO authorisation shall be issued for an unlimited duration. It shall remain valid unless:
 - 1. the conditions required when MTSO authorisation was granted are no longer being observed; or
 - 2. the obligations of the holder specified in EMAR 21.A.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.

21.A.621 Transferability

EMAR 21 Edition 1.3

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

SUBPART P - MILITARY PERMIT TO FLY

21.A.701 Scope

EMAR 21 Edition 2.0

- (a) Military 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 and for the following purposes:
1. development;
 2. showing compliance with regulations or airworthiness codes;
 3. design organisations or production organisations crew training;
 4. production flight testing of new production aircraft;
 5. flying aircraft under production between production facilities;
 6. flying the aircraft for customer acceptance;
 7. delivering or exporting the aircraft;
 8. flying the aircraft for Authority acceptance;
 9. market survey, including customer's crew training;
 10. exhibition and air show;
 11. flying the aircraft to a location where maintenance or airworthiness review are to be performed, or to a place of storage;
 12. 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;
 13. (Reserved)
 14. flying aircraft meeting the applicable airworthiness requirements before conformity to the environmental requirements has been found;
 15. for individual aircraft or types for which a certificate of airworthiness or restricted certificate of airworthiness is not appropriate;
 16. flying an aircraft for troubleshooting purposes or to check the functioning of one or more systems, parts or appliances after maintenance.
- (b) This Subpart establishes the procedure for issuing military permits to fly and approving associated flight conditions and establishes the rights and obligations of the applicants for, and holders of, those permits and approvals for flight conditions.

21.A.703 Eligibility

EMAR 21 Edition 2.0

- (a) Any person or organisation shall be eligible as an applicant for a military permit to fly except for a military permit to fly requested for the purpose of EMAR 21.A.701(a)(15) where the applicant shall be the owner.

- (b) Any person or organisation shall be eligible for application for the approval of the flight conditions.

21.A.705 Authority of the State

EMAR 21 Edition 2.0

For the purpose of this Subpart, the 'Authority' shall be:

- (a) the Authority of the State of registry; or
- (b) for unregistered aircraft, the Authority designated by the State which prescribed the identification marks.

21.A.707 Application for military permit to fly

EMAR 21 Edition 1.3

- (a) Pursuant to EMAR 21.A.703 and when the applicant has not been granted the privilege to issue a military permit to fly, an application for a military permit to fly shall be made to the Authority in a form and manner established by that Authority.
- (b) Each application for a military permit to fly shall include:
1. the purpose(s) of the flight(s), in accordance with EMAR 21.A.701;
 2. the ways in which the aircraft does not comply with the applicable airworthiness requirements;
 3. the flight conditions approved in accordance with EMAR 21.A.710.
- (c) Where the flight conditions are not approved at the time of application for a military permit to fly, an application for approval of the flight conditions shall be made in accordance with EMAR 21.A.709.

21.A.708 Flight Conditions

EMAR 21 Edition 2.0

Flight conditions include:

- (a) the configuration(s) for which the military 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. any conditions or restrictions put on the flight crew to fly the aircraft required by the Authority;
 3. the restrictions regarding carriage of persons other than flight crew;
 4. the operating limitations, specific procedures or technical conditions to be met;
 5. the specific flight test programme (if applicable);
 6. the specific continuing airworthiness arrangements including maintenance instructions 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.

21.A.709 Application for approval of flight conditions

EMAR 21 Edition 1.3

- (a) Pursuant to EMAR 21.A.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 in a form and manner established by the 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 EMAR 21.A.708(b).

21.A.710 Approval of flight conditions

EMAR 21 Edition 2.0

- (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; or
 - 2. an appropriately approved design organisation, under the privilege of EMAR 21.A.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, or the appropriately approved organisation that will also issue the military permit to fly.
- (c) Before approving the flight conditions, the Authority or the approved organisation must be satisfied that the aircraft is capable of safe flight under the specified conditions and restrictions. The Authority may make or require the applicant to make any necessary inspections or tests for that purpose.

21.A.711 Issue of a military permit to fly

EMAR 21 Edition 2.0

- (a) A permit to fly (EMAR Form 20a) may be issued by the Authority under the conditions specified in EMAR 21.B.525.
- (b) An appropriately approved design organisation may issue a military permit to fly (EMAR Form 20b) under the privilege granted under EMAR 21.A.263(c)(7), when the flight conditions referred to in 21.A.708 have been approved in accordance with 21.A.710.
- (c) An appropriately approved production organisation may issue a military permit to fly (EMAR Form 20b) under the privilege granted under EMAR 21.A.163(e), when the flight conditions referred to in 21.A.708 have been approved in accordance with 21.A.710.

- (d) An appropriately approved continuing airworthiness management organisation may issue a permit to fly (EMAR Form 20b) under the privilege granted under EMAR M.A.711, when the flight conditions referred to in EMAR 21.A.708 have been approved in accordance with EMAR 21.A.710.
- (e) The military permit to fly shall specify the purpose(s) and any conditions and restrictions, which have been approved in accordance with EMAR 21.A.710.
- (f) For permits issued under subparagraph (b), (c) or (d), a copy of the military permit to fly and associated flight conditions shall be submitted to the Authority at the earliest opportunity but not later than three days from the permit being issued.
- (g) Upon evidence that any of the conditions specified in EMAR 21.A.723(a) are not met for a military permit to fly that an organisation has issued pursuant to subparagraph (b), (c) or (d), that organisation shall revoke that military permit to fly immediately and inform without delay the Authority.

21.A.713 Changes

EMAR 21 Edition 1.3

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

21.A.715 Language

EMAR 21 Edition 1.3

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.

21.A.719 Transferability

EMAR 21 Edition 2.0

- (a) A military permit to fly is not transferable.
- (b) (reserved)

21.A.721 Inspections

EMAR 21 Edition 1.3

The holder of, or the applicant for, a military permit to fly shall provide access to the aircraft concerned at the request of the Authority.

21.A.723 Duration and continued validity

EMAR 21 Edition 2.0

- (a) A military permit to fly shall be issued for a maximum of 12 months, unless otherwise specified by the Authority, and shall remain valid subject to:

1. compliance with the conditions and restrictions of EMAR 21.A.711(e) associated to the military permit to fly;
 2. the military permit to fly not being surrendered or revoked (under EMAR 21.B.530);
 3. the aircraft remaining on the same register.
- (b) (reserved)
- (c) Upon surrender or revocation, the military permit to fly shall be returned to the Authority.

21.A.725 Renewal of military permit to fly

EMAR 21 Edition 1.3

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

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

EMAR 21 Edition 1.3

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

21.A.729 Record keeping

EMAR 21 Edition 1.3

- (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 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 military permit to fly itself, shall be held by the related approved organisation at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness of the aircraft.

SUBPART Q - IDENTIFICATION OF PRODUCTS, PARTS AND APPLIANCES

21.A.801 Identification of products

EMAR 21 Edition 2.0

- (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 person or organisation that manufactures an aircraft or engine under EMAR 21 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 person or organisation that manufactures a propeller, propeller blade, or propeller hub under EMAR 21 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).

21.A.803 Handling of identification data

EMAR 21 Edition 2.0

- (a) No person shall remove, change, or place identification information referred to in EMAR 21.A.801(a) on any aircraft, engine, propeller, propeller blade, or propeller hub, or in EMAR 21.A.807(a) on an APU, without the approval of the Authority.
- (b) No person shall remove or install any identification plate referred to in EMAR 21.A.801, or in 21.A.807 for an APU, without the approval of the Authority.
- (c) By way of derogation from paragraphs (a) and (b), any person or 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 EMAR 21.A.801(a) on any aircraft, engine, propeller, propeller blade, or propeller hub, or in EMAR 21.A.807(a) on an APU; or
 2. remove an identification plate referred to in EMAR 21.A.801, or 21.A.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.

21.A.804 Identification of parts and appliances

EMAR 21 Edition 1.3

- (a) Each part or appliance shall be marked permanently and legibly with:
1. a name, trademark, or symbol identifying the manufacturer in a manner identified by the applicable design data; and
 2. the part number, as defined in the applicable design data; and
 3. the letters MPA (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 MTSO 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.

21.A.805 Identification of critical parts

EMAR 21 Edition 1.3

In addition to the requirement of EMAR 21.A.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.

21.A.807 Identification of MTSO articles

EMAR 21 Edition 1.3

- (a) Each holder of an MTSO authorisation under EMAR 21 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 MTSO 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 EMAR 21 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.

SECTION B PROCEDURES FOR AUTHORITIES

SUBPART A - GENERAL PROVISIONS

21.B.5 Scope

EMAR 21 Edition 2.0

- (a) This Section establishes the procedures for the Authority when exercising its tasks and responsibilities concerned with the issuance, maintenance, amendment, suspension and revocation of certificates, approvals and authorisations referred to in this EMAR.
- (b) Airworthiness codes, acceptable means of compliance and guidance material to be applied in the context of this EMAR shall be developed or declared as acceptable by the Authority.

21.B.20 Obligations of the Authority

EMAR 21 Edition 1.3

(reserved)

21.B.25 Requirements for the organisation of the Authority

EMAR 21 Edition 1.3

- (a) General:

The Member State shall designate the Authority(ies) with allocated responsibilities for the implementation of EMAR 21 Section A, with documented procedures, organisation structure and staff.
- (b) Resources:
 1. the number of staff shall be sufficient to perform the allocated tasks;
 2. the Authority shall appoint a manager, or managers, who are responsible for the execution of the related task(s) within the authority, including communication with other military airworthiness authorities, as appropriate.
- (c) Qualification and training:

All staff shall be appropriately qualified and have sufficient knowledge, experience and training to perform their allocated task.

21.B.30 Documented procedures

EMAR 21 Edition 1.3

- (a) The Authority shall establish documented procedures to describe its organisation, means and methods to fulfil the requirements of this EMAR. The procedures shall be kept up to date and serve as the basic working documents within that authority for all related activities.
- (b) (reserved)

21.B.35 Changes in organisation and procedures

EMAR 21 Edition 1.3

- (a) The Authority shall notify any significant change in its organisation and documented procedures in accordance with EMAD R.

- (b) The Authority shall update its documented procedures relating to any change to regulations in a timely manner to ensure effective implementation.

21.B.40 Resolution of disputes

EMAR 21 Edition 1.3

- (a) The Authority shall establish a process for the resolution of disputes within its documented organisational procedures.
- (b) (reserved)

21.B.45 Reporting / coordination

EMAR 21 Edition 2.0

- (a) The Authority shall ensure coordination, as applicable, with other related certification, investigation, approval or authorisation teams of that Authority and any other relevant Authority, such as Authorities with recognition arrangements in place, to ensure efficient exchange of information relevant for safety of the products, parts and appliances.
- (b) (reserved)

21.B.55 Record keeping

EMAR 21 Edition 1.3

The Authority shall keep, or maintain access to, the appropriate records related to the certificates, approvals and authorisations it has granted in accordance with this EMAR or respective national regulations.

21.B.60 Airworthiness Directives

EMAR 21 Edition 2.0

- (a) The Authority shall establish documented procedures to describe its organisation, means and methods to issue or adopt mandatory 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) An Authority shall issue Airworthiness Directives under EMAR 21 Section A, 21.A.3B to address unsafe conditions resulting from:
1. a deficiency in the approved design, or
 2. non-conformities of aircraft with the approved design likely to exist or develop in other aircraft, due to manufacturing or maintenance deficiencies, when the Airworthiness Directive results in a design approval, such as:
 - (i) approval of non-conformities, subject to conditions, such as limitations or additional inspections.
 - (ii) inspection, replacement or modification, within a specified time frame, of non-conformities, to bring them back into conformity with the approved design.
- (c) The Authority shall establish documented procedure to describe means and method to identify and disseminate all applicable Airworthiness Directives, and keep and maintain access to all

known (national) operators or owners of the product and, to any person or organisation required to comply with the Airworthiness Directive.

- (d) When the Authority receives an Airworthiness Directive issued by another recognized Airworthiness Authority, affecting products, parts or appliances under the responsibility of that Authority, it shall disseminate that Airworthiness Directive in accordance with internal procedures referred to in (a) and (c) in order to maintain the acceptable level of safety.

SUBPART B - MILITARY TYPE CERTIFICATES AND MILITARY RESTRICTED TYPE CERTIFICATES

21.B.70 Airworthiness Codes

EMAR 21 Edition 2.0

The Authority shall approve the use of airworthiness codes and other detailed specifications, including codes and specifications for airworthiness, operational suitability data and environmental protection, that may be used to demonstrate compliance of products, parts and appliances with the relevant essential requirements set out in the Basic Framework Document. Such codes and specifications shall be sufficiently detailed and specific to indicate to applicants the conditions under which certificates are to be issued, amended or supplemented.

21.B.75 Special Conditions

EMAR 21 Edition 2.0

- (a) The Authority shall prescribe special detailed technical specifications, named 'special conditions', for a product if the related airworthiness codes and specifications 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;
 2. the intended use of the product is unconventional;
 3. experience from other similar products in service or products having similar design features or newly identified hazards have shown that unsafe conditions may develop; or
 4. applicable airworthiness codes do not exist for the concerned product class or do not address the requested kind of operations.
- (b) Special conditions contain such safety standards as the Authority finds necessary in order to establish a level of safety equivalent to that of the applicable airworthiness codes or a level of safety acceptable if airworthiness codes do not exist for the concerned product.

21.B.80 Type-certification basis for a type-certificate or restricted type-certificate

EMAR 21 Edition 2.0

The Authority shall establish the type-certification basis and notify it to the applicant for a type-certificate or restricted type-certificate. The type-certification basis shall consist of:

- (a) the airworthiness codes designated by the Authority from those applicable to the product at the date of application for that certificate, unless:
1. the applicant chooses to comply, or is required to comply with EMAR 21.A.15(f), with airworthiness codes which became applicable after the date of the application. In that case, the Authority shall include in the type-certification basis any other airworthiness codes or other detailed specifications that are directly related; or

2. the Authority accepts any alternative to a designated airworthiness code that cannot be complied with, for which compensating factors have been found that provide an equivalent level of safety; or
 3. the Authority accepts or prescribes other means that:
 - (i) in the case of a type-certificate, demonstrate compliance with the essential requirements of the Basic Framework Document; or
 - (ii) in the case of a restricted type-certificate, provide a level of safety adequate with regard to the intended use; and
- (b) any special condition prescribed by the Authority in accordance with point 21.B.75(a).
- (c) dedicated airworthiness requirements and means of compliance established by tailoring of the criteria in the European Military Airworthiness Certification Criteria (EMACC) addressing products or kind of operations that are not covered under (a).

21.B.82 Operational suitability data certification basis for an aircraft type-certificate or restricted type-certificate

EMAR 21 Edition 2.0

The Authority shall establish the operational suitability data certification basis and notify it to the applicant for an aircraft type-certificate or restricted type-certificate. The operational suitability data certification basis shall consist of:

- (a) the airworthiness codes for operational suitability data designated by the Authority out of those applicable to the aircraft at the date of the application or at the date of the application supplement for operational suitability data, whichever date is later, unless:
 1. the applicant chooses to comply, or in accordance with EMAR 21.A.15(f) is required to comply with airworthiness codes which became applicable after the date of the application; if an applicant chooses to comply with an airworthiness code which became applicable after the date of the application, the Authority shall include in the type-certification basis any other airworthiness code that is directly related; or
 2. the Authority accepts or prescribes alternative means to demonstrate compliance with the relevant essential requirements of the Basic Framework Document.
- (b) any special condition prescribed by the Authority in accordance with EMAR 21.B.75(a).

21.B.85 Designation of applicable environmental protection requirements for a type-certificate or restricted type-certificate

EMAR 21 Edition 2.0

The applicable environmental protection requirements shall be established when certifying a product, taking account of the military operational need.

- (a) The Authority shall designate and notify to the applicant for a type-certificate or restricted type-certificate for an aircraft, for a supplemental type-certificate or for a major change to a type-certificate or to supplemental type-certificate the applicable noise requirements, if any.

- (b) The Authority shall designate and notify to the applicant referred to in (a) the applicable emission requirements for preventions of intentional fuel venting for aircraft, if any.
- (c) The Authority shall designate and notify to the applicant referred to in (a) the applicable smoke, gaseous and particulate matter engine emission requirements, if any.
- (d) The Authority shall designate and notify to the applicant referred to in point (a) the applicable aeroplane CO₂ emission requirements, if any.

21.B.100 Level of involvement

EMAR 21 Edition 2.0

- (a) The Authority shall determine its involvement in the verification of the compliance demonstration activities and data related to the application for a type-certificate, restricted type-certificate, major change approval, supplemental type certificate, major repair design approval or MTSO authorisation for APU. It shall do so on the basis of an assessment of meaningful groups of compliance demonstration activities and data of the certification programme. That assessment shall address:
 - the likelihood of an unidentified non-compliance with the type-certification basis, operational suitability data certification basis or environmental protection requirements; and
 - the potential impact of that non-compliance on product safety or environmental protection,and consider at least the following elements:
 1. novel or unusual features of the certification project, including operational, organisational and knowledge management aspects;
 2. complexity of the design and/or demonstration of compliance;
 3. criticality of the design or technology and the related safety and environmental risks, including those identified on similar designs; and
 4. performance and experience of the design organisation of the applicant in the domain concerned.
- (b) For the approval of a minor repair design, minor change or MTSO authorisation other than for APU, the Authority shall determine its involvement at the level of the entire certification project, taking into account any novel or unusual features, complexity of the design and/or demonstration of compliance, criticality of the design or technology, as well as the performance and experience of the applicant's design organisation.
- (c) The Authority shall notify its level of involvement to the applicant and it shall update its level of involvement when this is warranted by information which has an appreciable impact on the risk previously assessed pursuant to (a) or (b). The Authority shall notify the applicant about the change in the level of involvement.

21.B.103 Issuance of a type-certificate or restricted type-certificate

EMAR 21 Edition 2.0

- (a) The Authority shall issue an aircraft, engine or propeller type-certificate or an aircraft restricted type-certificate, provided that:
1. the applicant has complied with EMAR 21.A.21;
 2. the Authority, through verifications of the demonstration of compliance in accordance with its involvement determined pursuant to EMAR 21.B.100, has not found any non-compliance with the type-certification basis, the operational suitability data certification basis where applicable in accordance with EMAR 21.B.82, and applicable environmental protection requirements in accordance with EMAR 21.B.85; and
 3. no feature or characteristic has been identified that may make the product unsafe for the uses for which the certification is requested.
- (b) By derogation from (a), at the applicant's request included in the declaration referred to in EMAR 21.A.20(d), the Authority may issue an aircraft type-certificate before compliance with the operational suitability data certification basis has been demonstrated, provided that the applicant demonstrates such compliance before the date at which those data are to be actually used.

(SUBPART C – NOT APPLICABLE)

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

21.B.105 Type-certification basis, environmental protection requirements and operational suitability data certification basis for a major change to a type-certificate

EMAR 21 Edition 2.0

The Authority shall establish the applicable type-certification basis, the environmental protection requirements, and in the case of a change affecting the operational suitability data, the operational suitability data certification basis established in accordance with EMAR 21.A.101 and notify them to the applicant for a major change to a type-certificate.

21.B.107 Issuance of an approval of a change to a type-certificate

EMAR 21 Edition 2.0

- (a) The Authority shall issue an approval of a change to a type-certificate provided that:
1. the applicant for an approval has complied with:
 - (i) EMAR 21.A.95 for a minor change; or
 - (ii) EMAR 21.A.97 for a major change;
 2. the Authority, through its verification of the demonstration of compliance in accordance with the level of its involvement determined pursuant to (a) or (b) of EMAR 21.B.100 has not found any non-compliance with the type-certification basis, operational suitability data certification basis where applicable in accordance with EMAR 21.B.82, and applicable environmental protection requirements in accordance with EMAR 21.B.85; and
 3. no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested.
- (b) In the case of a change affecting the operational suitability data, by derogation from points (1) and (2) of (a), at the applicant's request included in the declaration referred to in EMAR 21.A.20(d), the Authority may approve a change to an aircraft type-certificate before compliance with the operational suitability data certification basis has been demonstrated, provided that the applicant demonstrates such compliance before the date at which those data are to be actually used.
- (c) The approval of the changes to the operational suitability data shall be included in the approval of the change to the type-certificate.
- (d) The approval of a change to a type-certificate shall be limited to the specific configuration(s) in the type-certificate to which the change relates.

SUBPART E - MILITARY SUPPLEMENTAL TYPE-CERTIFICATES

21.B.109 Type-certification basis, environmental protection requirements and operational suitability data certification basis for a supplemental type-certificate

EMAR 21 Edition 2.0

The Authority shall establish the applicable type-certification basis, the environmental protection requirements, and in the case of a change affecting the operational suitability data, the operational suitability data certification basis established in accordance with EMAR 21.A.101 and notify them to the applicant for a supplemental type-certificate.

21.B.111 Issuance of a supplemental type-certificate

EMAR 21 Edition 2.0

- (a) The Authority shall issue a supplemental type-certificate, provided that:
1. the applicant has complied with EMAR 21.A.115(b);
 2. the Authority, through its verification of the demonstration of compliance in accordance with the level of involvement established pursuant to EMAR 21.B.100(a), has not found any non-compliance with the type-certification basis, operational suitability data certification basis where applicable in accordance with EMAR 21.B.82, and applicable environmental protection requirements in accordance with EMAR 21.B.85; and
 3. no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested.
- (b) In the case of a supplemental type-certificate affecting the operational suitability data, by derogation from points (1) and (2) of (a), at the applicant's request included in the declaration referred to in EMAR 21.A.20(d), the Authority may issue a supplemental type-certificate before compliance with the operational suitability data certification basis has been demonstrated, provided that the applicant demonstrates such compliance before the date at which those data are to be actually used.
- (c) The approval of the changes to the operational suitability data shall be included in the supplemental type-certificate.
- (d) The supplemental type-certificate shall be limited to the specific configuration(s) in the type-certificate to which the related major change relates.

SUBPART F - PRODUCTION WITHOUT MILITARY PRODUCTION ORGANISATION APPROVAL

21.B.120 Investigation

EMAR 21 Edition 2.0

- (a) The Authority shall appoint an investigation team for each applicant for, or holder of, a letter of agreement to conduct all relevant tasks related to this letter of agreement, consisting of a team-leader to manage and lead the investigation team and, if required, one or more team members. The team-leader reports to the manager responsible for the activity, as defined in EMAR 21.B.25(b)(2).
- (b) The Authority shall perform sufficient investigation activities to justify recommendations for the issuance, maintenance, amendment, suspension or revocation of the letter of agreement.
- (c) The Authority shall prepare procedures for the investigation of applicants for, or holders of, a letter of agreement as part of the documented procedures covering at least the following elements:
 - 1. evaluation of applications received;
 - 2. determination of investigation team;
 - 3. investigation preparation and planning;
 - 4. evaluation of the documentation (manual, procedures, etc.);
 - 5. auditing and inspection;
 - 6. follow up of corrective actions; and
 - 7. recommendation for issuance, amendment, suspension or revocation of the letter of agreement.

21.B.125 Findings

EMAR 21 Edition 1.3

- (a) When during audits or by other means, objective evidence is found by the Authority showing non-compliance of the holder of a letter of agreement with the applicable requirements of Section A of this EMAR, this finding shall be classified in accordance with EMAR 21.A.125B(a).
- (b) The Authority shall take the following actions:
 - 1. for level one findings, immediate action shall be taken by the Authority to limit, suspend or revoke the letter of agreement in whole or in part, depending upon the extent of the finding, until successful corrective action has been completed by the organisation;
 - 2. for level two findings, the Authority shall grant a corrective action period appropriate to the nature of the finding that shall not to be more than three months. In certain circumstances, at the end of this period and subject to the nature of the finding, the Authority can extend the three months period subject to a satisfactory corrective action plan.
- (c) Action shall be taken by the Authority to suspend the letter of agreement in whole or in part in case of failure to comply within the timescale granted by the Authority.

21.B.130 Issue of a letter of agreement

EMAR 21 Edition 1.3

- (a) When satisfied that the manufacturer is in compliance with the applicable requirements of EMAR 21 Section A, Subpart F, the Authority shall issue a letter of agreement to the showing of conformity of individual products, parts or appliances (EMAR Form 65) without undue delay.
- (b) The letter of agreement shall contain the scope of the agreement, a termination date and, where applicable, the appropriate limitations relating to the authorisation.
- (c) The duration of the letter of agreement is not to exceed one year, or as agreed with the manufacturer.

21.B.135 Maintenance of the letter of agreement

EMAR 21 Edition 1.3

The Authority shall maintain the letter of agreement as long as:

- (a) the manufacturer is properly using the EMAR Form 52 as a Statement of Conformity for complete aircraft, and the EMAR Form 1 for products other than complete aircraft, parts and appliances; and
- (b) inspections performed by the Authority before validation of the EMAR Form 52 or the EMAR Form 1, as per EMAR 21.A.130(c) did not reveal any findings of non-compliance against the requirements or the procedures as contained in the manual provided by the manufacturer, or against the conformity of the respective products, parts or appliances. These inspections shall check at least that:
 - 1. the agreement covers the product, part or appliance being validated, and remains valid;
 - 2. the manual described in EMAR 21.A.125A(b) and its change status referred to in the letter of agreement is used as the basic working document by the manufacturer. Otherwise, the inspection shall not continue and therefore the release certificates shall not be validated;
 - 3. production has been carried out under the conditions prescribed in the letter of agreement and satisfactorily performed;
 - 4. inspections and tests (including flight tests, if appropriate), as per EMAR 21.A.130(b)(2) and/or (b)(3), have been carried out under the conditions prescribed in the letter of agreement and satisfactorily performed;
 - 5. the inspections by the Authority described or addressed in the letter of agreement have been performed and found acceptable;
 - 6. the statement of conformity complies with EMAR 21.A.130, and the information provided does not prevent its validation; and
- (c) any termination date for the letter of agreement has not been reached.

21.B.140 Amendment of the letter of agreement

EMAR 21 Edition 1.3

- (a) The Authority shall investigate, as appropriate, in accordance with EMAR 21.B.120 any amendment of the letter of agreement.

- (b) When the Authority is satisfied that the requirements of EMAR 21 Section A, Subpart F continue to be complied with, it shall amend the letter of agreement accordingly.

21.B.145 Limitation, suspension and revocation of the letter of agreement

EMAR 21 Edition 1.3

- (a) The limitation, suspension or revocation of the letter of agreement shall be communicated in writing to the holder of the letter of agreement. The Authority shall state the reasons for the limitation, suspension or revocation and inform the holder of the letter of agreement of its right to appeal.
- (b) When the letter of agreement has been suspended it shall only be reinstated after compliance with EMAR 21 Section A Subpart F has been re-established.

21.B.150 Record-keeping

EMAR 21 Edition 1.3

- (a) The Authority shall establish a system of record-keeping that allows adequate traceability of the process to issue, maintain, amend, suspend or revoke each individual letter of agreement.
- (b) The records shall at least contain:
1. the documents provided by the applicant for, or holder of, a letter of agreement;
 2. the documents established during investigation and inspection, in which the activities and the final results of the elements defined in EMAR 21.B.120 are stated, including findings and corrective actions established in accordance with EMAR 21.B.125;
 3. the letter of agreement, including changes; and
 4. minutes of the meetings with the manufacturer.
- (c) The records shall be archived for a minimum retention period of six years after termination of the letter of agreement.
- (d) The Authority shall also maintain records of all statements of conformity (EMAR Form 52) and authorised release certificates (EMAR Form 1) that it has validated.

SUBPART G - MILITARY PRODUCTION ORGANISATION APPROVAL

21.B.220 Investigation

EMAR 21 Edition 2.0

- (a) The Authority shall appoint a production organisation approval team for each applicant, or holder of, a production organisation approval to conduct all relevant tasks related to this production organisation approval, consisting of a team leader to manage and lead the approval team and, if required, one or more team members. The team leader reports to the manager responsible for the activity as defined in EMAR 21.B.25(b)(2).
- (b) The Authority shall perform sufficient investigation activities to justify recommendations for the issuance, maintenance, amendment, suspension or revocation of the approval.
- (c) The Authority shall prepare procedures for the investigation of a production organisation that has applied for an approval, as part of the documented procedures, covering at least the following elements:
 - 1. evaluation of applications received;
 - 2. determination of production organisation approval team;
 - 3. investigation preparation and planning;
 - 4. evaluation of the documentation (production organisation exposition, procedures, etc.);
 - 5. auditing;
 - 6. follow up of corrective actions;
 - 7. recommendation for issuance, amendment, suspension or revocation of a production organisation approval;
 - 8. continued surveillance.

21.B.225 Findings

EMAR 21 Edition 1.3

- (a) When during audits or by other means objective evidence is found by the Authority, showing non-compliance of the holder of a production organisation approval with the applicable requirements of Section A, this finding shall be classified in accordance with EMAR 21.A.158(a).
- (b) The Authority shall take the following actions:
 - 1. for level one findings, immediate action shall be taken by the Authority to limit, suspend or revoke the production organisation approval, in whole or in part, depending upon the extent of the finding, until successful corrective action has been completed by the organisation;
 - 2. for level two findings, the Authority shall grant a corrective action period appropriate to the nature of the finding that shall not to be more than three months. In certain circumstances, at the end of this period and subject to the nature of the finding, the Authority can extend the three months period subject to a satisfactory corrective action plan.

- (c) Action shall be taken by the Authority to suspend the approval in whole or in part, in case of failure to comply within the timescale granted by the Authority.

21.B.230 Issue of certificate

EMAR 21 Edition 1.3

- (a) When satisfied that the production organisation is in compliance with the applicable requirements of EMAR 21 Section A, Subpart G, the Authority shall issue a Production Organisation Approval (EMAR Form 55) without undue delay.
- (b) The reference number shall be included on the EMAR Form 55 in a manner specified by the Authority.

21.B.235 Continued surveillance

EMAR 21 Edition 1.3

- (a) In order to justify the maintenance of the production organisation approval the Authority shall perform continued surveillance:
1. to verify that the production organisation approval holder's quality system complies with EMAR 21 Section A, Subpart G;
 2. to verify that the organisation of the production organisation approval holder operates in accordance with the production organisation exposition;
 3. to verify the effectiveness of the production organisation exposition procedures; and
 4. to monitor by sample the standards of the product, part or appliance.
- (b) Continued surveillance shall be performed in accordance with EMAR 21.B.220.
- (c) The Authority shall provide through planned continued surveillance that a production organisation approval is completely reviewed for compliance with this EMAR during a period of 24 months. The continued surveillance may be made up of several investigation activities during this period. The number of audits may vary depending upon the complexity of the organisation, the number of sites and the criticality of the production. The holder of a production organisation approval shall be subject to continued surveillance activity by the Authority at least once every year.

21.B.240 Amendment of a production organisation approval

EMAR 21 Edition 1.3

- (a) The Authority shall monitor any minor change through the continued surveillance activities.
- (b) The Authority shall investigate as appropriate in accordance with EMAR 21.B.220 any significant change of a production organisation approval or application by the holder of a production organisation approval for an amendment of the scope and terms of approval.
- (c) When the Authority is satisfied that the requirements of EMAR 21 Section A, Subpart G continue to be complied with, it shall amend the production organisation approval accordingly.

21.B.245 Suspension and revocation of a production organisation approval

EMAR 21 Edition 1.3

- (a) In case of a level one or level two finding, the Authority shall partly or fully limit, suspend or revoke a production organisation approval as follows:
1. in case of a level one finding the production organisation approval shall be immediately limited or suspended. If the holder of the production organisation approval fails to comply with EMAR 21.A.158(c)(1), the production organisation approval shall be revoked;
 2. in case of a level two finding, the Authority shall decide on any restriction to the scope of approval, by temporary suspension of the production organisation approval or parts thereof. If the holder of a production organisation approval fails to comply with EMAR 21.A.158(c)(2), the production organisation approval shall be revoked.
- (b) The limitation, suspension or revocation of the production organisation approval shall be communicated in writing to the holder of the production organisation approval. The Authority shall state the reasons for the suspension or revocation and inform the holder of the production organisation approval of its right to appeal.
- (c) When a production organisation approval has been suspended it shall only be reinstated after compliance with EMAR 21 Section A, Subpart G has been re-established.

21.B.260 Record-keeping

EMAR 21 Edition 1.3

- (a) The Authority shall establish a system of record-keeping that allows adequate traceability of the process to issue, maintain, amend, suspend or revoke each individual production organisation approval.
- (b) The records shall at least contain:
1. the documents provided by the applicant for, or holder of, a production organisation approval certificate;
 2. the documents established during the investigation, in which the activities and the final results of the elements defined in EMAR 21.B.220 are stated, including findings and corrective actions established in accordance with EMAR 21.B.225;
 3. the continued surveillance programme, including records of investigations performed;
 4. the production organisation approval certificate, including changes;
 5. the minutes of the meetings with the holder of the production organisation approval.
- (c) The records are to be archived for a minimum retention period of six years.

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

21.B.320 Investigation

EMAR 21 Edition 1.3

- (a) The Authority of registry shall perform sufficient investigation activities for an applicant for, or holder of, an airworthiness certificate to justify the issuance, maintenance, amendment, suspension or revocation of the certificate.
- (b) The Authority of registry shall prepare evaluation procedures covering at least the following elements:
 - 1. evaluation of eligibility of the applicant;
 - 2. evaluation of the eligibility of the application;
 - 3. classification of airworthiness certificates;
 - 4. evaluation of the documentation received with the application;
 - 5. inspection of aircraft;
 - 6. determination of necessary conditions, restrictions or limitations to the airworthiness certificates.

21.B.325 Issue of airworthiness certificates

EMAR 21 Edition 2.0

- (a) The Authority of registry shall issue or change a Certificate of Airworthiness (EMAR Form 25) without undue delay when it is satisfied that the requirements of EMAR 21.B.326 and the applicable requirements of EMAR 21 Section A of Subpart H are met.
- (b) The Authority of registry shall issue or change a Restricted Certificate of Airworthiness (EMAR Form 24) without undue delay when it is satisfied that the requirements of EMAR 21.B.327 and the applicable requirements of EMAR 21 Section A of Subpart H are met.
- (c) For any new aircraft or used aircraft originating from a state not implementing EMAR, in addition to the appropriate airworthiness certificate referred to in point (a) or (b), the authority of the State of registry shall issue an initial Military Airworthiness Review Certificate (EMAR Form 15a).

21.B.326 Certificate of airworthiness

EMAR 21 Edition 2.0

The Authority of registry shall issue a certificate of airworthiness for:

- (a) new aircraft:
 - 1. upon presentation of the documentation required by EMAR 21.A.174(b)(2);

2. where the Authority of registry is satisfied that the aircraft conforms to an approved design and is in a condition for safe operation. This may include inspections by the Authority of registry;
 3. where the Authority is satisfied that the aircraft is in compliance with applicable CO₂ emissions requirements on the date on which the certificate of airworthiness is first issued.
- (b) used aircraft:
1. upon presentation of the documentation required by EMAR 21.A.174(b)(3) demonstrating that:
 - (i) the aircraft conforms to a type design approved under a type-certificate and any supplemental type-certificate, change or repair approved in accordance with this EMAR;
 - (ii) the applicable Airworthiness Directives have been complied with;
 - (iii) the aircraft has been inspected in accordance with the applicable provisions of EMAR M; and
 - (iv) the aircraft was in compliance with applicable CO₂ emissions requirements on the date on which the certificate of airworthiness was first issued;
 2. where the Authority of registry is satisfied that the aircraft conforms to an approved design and is in a condition for safe operation. This may include inspections by the Authority of registry.
 3. where the Authority is satisfied that the aircraft is in compliance with applicable CO₂ emissions requirements on the date on which the certificate of airworthiness is first issued.

21.B.327 Restricted certificate of airworthiness

EMAR 21 Edition 2.0

- (a) The Authority of registry shall issue a restricted certificate of airworthiness for:
1. new aircraft:
 - (i) upon presentation of the documentation required by EMAR 21.A.174(b)(2);
 - (ii) when the Authority of registry is satisfied that the aircraft conforms to an approved design under a restricted type-certificate or in accordance with specific airworthiness specifications, and is in a condition for safe operation. This may include inspections by the Authority of registry.
 2. used aircraft:
 - (i) upon presentation of the documentation required by EMAR 21.A.174(b)(3) demonstrating that:
 - (A) The aircraft conforms to a design approved under a restricted-type certificate or in accordance with specific airworthiness specifications and any supplemental type-certificate change or repair approved in accordance with this EMAR; and
 - (B) the applicable Airworthiness Directives have been complied with; and

- (C) the aircraft has been inspected in accordance with the applicable provisions of EMAR M.
 - (ii) when the Authority of registry is satisfied that the aircraft conforms to the approved design and is in a condition for safe operation. This may include inspections by the Authority of registry.
- (b) For an aircraft that cannot comply with the essential requirements referred to in the Basic Framework Document and which is not eligible for a restricted type-certificate, the Authority shall, as necessary to take account of deviations from these essential requirements:
 - 1. issue and check compliance with specific airworthiness specifications ensuring adequate safety with regard to the intended use; and
 - 2. specify limitations for use of this aircraft.
- (c) Limitations for use will be associated with restricted certificates of airworthiness, including airspace restrictions, as necessary to take account of deviations from essential requirements for airworthiness laid down in the Basic Framework Document.

21.B.330 Suspension and revocation of certificates of airworthiness and restricted certificates of airworthiness

EMAR 21 Edition 1.3

- (a) Upon evidence that any of the conditions specified in EMAR 21.A.181(a) is not met, the Authority of registry shall suspend or revoke an airworthiness certificate.
- (b) Upon issuance of the notice of suspension or revocation of a certificate of airworthiness or restricted certificate of airworthiness the Authority of registry shall state the reasons for the suspension or revocation and inform the holder of the certificate on its right to appeal.

21.B.345 Record-keeping

EMAR 21 Edition 1.3

- (a) The Authority of registry shall establish a system of record-keeping that allows adequate traceability of the process to issue, maintain, amend, suspend or revoke each individual airworthiness certificate.
- (b) The records shall at least contain:
 - 1. the documents provided by the applicant;
 - 2. the documents established during the investigation, in which the activities and the final results of the elements defined in EMAR 21.B.320(b) are stated; and
 - 3. a copy of the certificate, including amendments.
- (c) The records shall be archived for a minimum retention period of six years after leaving that national register.

SUBPART I – NOISE CERTIFICATES

21.B.420 Investigation

EMAR 21 Edition 2.0

- (a) The Authority of registry shall perform sufficient investigation activities for an applicant for, or holder of, a noise certificate to justify the issuance, maintenance, amendment, suspension or revocation of the certificate.
- (b) The Authority of registry shall prepare evaluation procedures as part of the documented procedures covering at least the following elements:
 - 1. evaluation of eligibility;
 - 2. evaluation of the documentation received with the application;
 - 3. inspection of aircraft.

21.B.425 Issue of noise certificates

EMAR 21 Edition 2.0

The Authority of registry shall, as applicable, issue, or amend noise certificates without undue delay when it is satisfied that the applicable requirements of Section A, Subpart I are met.

21.B.430 Suspension and revocation of a noise certificate

EMAR 21 Edition 2.0

- (a) Upon evidence that some of the conditions specified in EMAR 21.A.211(a) are not met, the Authority of registry shall suspend or revoke a noise certificate.
- (b) Upon issuance of the notice of suspension and revocation of a noise certificate the competent authority of the Member State of registry shall state the reasons for the suspension and revocation and shall inform the holder of the certificate on its right to appeal.

21.B.445 Record-keeping

EMAR 21 Edition 2.0

- (a) The Authority of registry shall establish a system of record-keeping with minimum retention criteria that allows adequate traceability of the process to issue, maintain, amend, suspend or revoke each individual noise certificate.
- (b) The records shall at least contain:
 - 1. the documents provided by the applicant;
 - 2. documents established during the investigation, in which the activities and the final results of the elements defined in point 21.B.420(b) are stated;
 - 3. a copy of the certificate including amendments.
- (c) The records shall be archived for a minimum retention period of six years after leaving that national register.

SUBPART J - MILITARY DESIGN ORGANISATION APPROVAL

21.B.M460 Investigation

EMAR 21 Edition 2.0

- (a) The Authority shall appoint a design organisation approval team for each applicant, or holder of, a design organisation approval to conduct all relevant tasks related to this design organisation approval, consisting of a team leader to manage and lead the approval team and, if required, one or more team members. The team leader reports to the manager responsible for the activity as defined in EMAR 21.B.25(b)(2).
- (b) The Authority shall perform sufficient investigation activities to justify the issuance, maintenance, amendment, suspension or revocation of the approval.
- (c) The Authority shall prepare procedures for the investigation of a design organisation approval, as part of the documented procedures, covering at least the following elements:
 - 1. evaluation of applications received;
 - 2. determination of design organisation approval team;
 - 3. investigation preparation and planning;
 - 4. evaluation of the documentation (design organisation exposition, procedures, etc.);
 - 5. auditing;
 - 6. follow up of corrective actions;
 - 7. issuance, amendment, suspension or revocation of design organisation approval;
 - 8. continued surveillance.

21.B.M465 Findings

EMAR 21 Edition 2.0

- (a) When during audits or by other means objective evidence is found by the Authority, showing non-compliance of the holder of a design organisation approval with the applicable requirements of Section A, this finding shall be classified in accordance with EMAR 21.A.258(a).
- (b) The Authority shall take the following actions:
 - 1. for level one findings, immediate action shall be taken by the Authority to limit, suspend or revoke the design organisation approval, in whole or in part, depending upon the extent of the finding, until successful corrective action has been completed by the organisation;
 - 2. for level two findings, the Authority shall grant a corrective action period appropriate to the nature of the finding that is not to be more than three months. In certain circumstances, at the end of this period and subject to the nature of the finding, the Authority can extend the three months period subject to a satisfactory corrective action plan.
- (c) Action shall be taken by the Authority to suspend the approval in whole or in part, in case of failure to comply within the timescale granted by the Authority.

21.B.M470 Issue of certificate

EMAR 21 Edition 2.0

- (a) When satisfied that the design organisation is in compliance with the applicable requirements of EMAR 21 Section A, Subpart J, the Authority shall issue a Design Organisation Approval without undue delay.
- (b) The reference number shall be included on the Approval document in a manner specified by the Authority.

21.B.M475 Continued surveillance

EMAR 21 Edition 2.0

- (a) In order to justify the maintenance of the design organisation approval the Authority shall perform continued surveillance:
 - 1. to verify that the design organisation approval holder's design assurance system complies with EMAR 21 Section A, Subpart J;
 - 2. to verify that the organisation of the design organisation approval holder operates in accordance with the design organisation exposition;
 - 3. to verify the effectiveness of the design organisation exposition procedures; and
 - 4. to monitor by sample the information coming from approval processes of design data.
- (b) Continued surveillance shall be performed in accordance with EMAR 21.B.460.
- (c) The Authority shall provide through planned continued surveillance that a design organisation approval is completely reviewed for compliance with this EMAR during a period of 36 months. The continued surveillance may be made up of several investigation activities during this period. The number of audits may vary depending upon the complexity of the organisation, the number of sites and the criticality of the design activities. The holder of a design organisation approval shall be subject to continued surveillance activity by the Authority at least once every year.

21.B.M480 Amendment of a design organisation approval

EMAR 21 Edition 2.0

- (a) The Authority shall monitor any minor change through the continued surveillance activities.
- (b) The Authority shall investigate as appropriate in accordance with EMAR 21.B.460 any significant change of a design organisation approval or application by the holder of a design organisation approval for an amendment of the scope and terms of approval.
- (c) When the Authority is satisfied that the requirements of EMAR 21 Section A, Subpart J continue to be complied with, it shall amend the design organisation approval accordingly.

21.B.M485 Suspension and revocation of a design organisation approval

EMAR 21 Edition 2.0

- (a) In case of a level one or level two finding, the Authority shall partly or fully limit, suspend or revoke a design organisation approval as follows:

1. In case of a level one finding the design organisation approval shall be immediately limited or suspended. If the holder of the design organisation approval fails to comply with EMAR 21.A.258(c)(1), the design organisation approval shall be revoked;
 2. In case of a level two finding, the Authority shall decide on any restriction to the scope of approval, by temporary suspension of the design organisation approval or parts thereof. If the holder of a design organisation approval fails to comply with EMAR 21.A.258(c)(2), the design organisation approval shall be revoked.
- (b) The limitation, suspension or revocation of the design organisation approval shall be communicated in writing to the holder of the design organisation approval. The Authority shall state the reasons for the suspension or revocation and inform the holder of the design organisation approval of its right to appeal.
- (c) When a design organisation approval has been suspended it shall only be reinstated after compliance with EMAR 21 Section A, Subpart J has been re-established.

21.B.M490 Record-keeping

EMAR 21 Edition 2.0

- (a) The Authority shall establish a system of record keeping that allows adequate traceability of the process to issue, maintain, amend, suspend or revoke each individual design organisation approval.
- (b) The records shall at least contain:
1. The documents provided by the applicant for, or holder of, a design organisation approval certificate;
 2. The documents established during the investigation, in which the activities and the final results of the elements defined in EMAR 21.B.460 are stated, including findings and corrective actions established in accordance with EMAR 21.B.465;
 3. The continued surveillance programme, including records of investigations performed;
 4. The design organisation approval certificate, including changes;
 5. The minutes of the meetings with the holder of the design organisation approval.
- (c) The records shall be archived for a minimum retention period of six years.

SUBPART K - PARTS AND APPLIANCES

Administrative procedures established by the Authority shall apply.

(SUBPART L - NOT APPLICABLE)

SUBPART M - REPAIRS

21.B.450 Type-certification basis and environmental protection requirements for a repair design approval

EMAR 21 Edition 2.0

The Authority shall designate any amendments to the type-certification basis incorporated by reference in, as applicable, either the type-certificate, the supplemental type-certificate or the APU MTSO authorisation, which the Authority considers necessary for maintaining a level of safety equal to that previously established and notify them to the applicant for a repair design.

21.B.453 Issuance of a repair design approval

EMAR 21 Edition 2.0

- (a) The Authority shall issue an approval of a major repair design, provided that:
1. the applicant has demonstrated its capability in accordance with EMAR 21.A.432B;
 2. the applicant has complied with EMAR 21.A.433;
 3. the Authority, through its verification of the demonstration of compliance in accordance with the level of involvement established pursuant to EMAR 21.B.100(a), has not found any non-compliance with the type-certification basis and applicable environmental protection requirements in accordance with EMAR 21.B.85; and
 4. no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested.
- (b) The Authority shall issue an approval of a minor repair design, provided that the applicant has complied with points (2) and (4) of (a) and provided that the Authority, through its verifications of the demonstration of compliance in accordance with the level of involvement pursuant to EMAR 21.B.100(b), has not found any non-compliance with the type-certification basis and applicable environmental protection requirements in accordance with EMAR 21.B.85.

(SUBPART N - NOT APPLICABLE)

SUBPART O - EUROPEAN MILITARY TECHNICAL STANDARD ORDER AUTHORISATIONS

21.B.M500 MTSO – applicable technical standards and airworthiness specifications

EMAR 21 Edition 2.0

Administrative procedures established by the Authority shall apply for issuing or adopting minimum performance and airworthiness standards for Technical Standard Order articles, that are acceptable as technical standards and airworthiness specifications referred to in EMAR 21.A.605(a)(3).

21.B.480 Issuance of an MTSO authorisation

EMAR 21 Edition 2.0

The Authority shall issue an MTSO authorisation, provided that:

- (a) the applicant has complied with EMAR 21.A.606;
- (b) the Authority, through its verifications of the demonstration of compliance in accordance with the level of involvement pursuant to EMAR 21.B.100(b), has not found any non-compliance with the technical conditions of the applicable technical standards and airworthiness specifications or with deviations therefrom approved in accordance with EMAR 21.A.610, if any; and
- (c) no feature or characteristic has been identified that may make the article unsafe for the uses for which certification is requested.

SUBPART P - MILITARY PERMIT TO FLY

21.B.520 Investigation

EMAR 21 Edition 1.3

- (a) The Authority shall perform sufficient investigation activities to justify the issuance or revocation of the military permit to fly.
- (b) The Authority shall prepare evaluation procedures covering at least the following elements:
 - 1. evaluation of the eligibility of the applicant;
 - 2. evaluation of the eligibility of the application;
 - 3. evaluation of the documentation received with the application;
 - 4. inspection of the aircraft;
 - 5. approval of the flight conditions in accordance with EMAR 21.A.710.

21.B.525 Issue of a military permit to fly

EMAR 21 Edition 1.3

The Authority shall issue a military permit to fly (EMAR Form 20a):

- (a) upon presentation of the data required by EMAR 21.A.707; and
- (b) when the flight conditions referred to in EMAR 21.A.708 have been approved in accordance with EMAR 21.A.710; and
- (c) 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 EMAR 21.A.708 before flight.

21.B.530 Revocation of permits to fly

EMAR 21 Edition 1.3

- (a) Upon evidence that any of the conditions specified in EMAR 21.A.723(a) are not met for a military permit to fly it has issued, the Authority shall revoke that military permit to fly.
- (b) Upon issuance of the notice of revocation of a military permit to fly the Authority shall state the reasons for the revocation and inform the holder of the military permit to fly on the right to appeal.

21.B.545 Record-keeping

EMAR 21 Edition 1.3

- (a) The Authority shall establish a system of record keeping that provides adequate traceability of the process for the issue and revocation of each individual military permit to fly.
- (b) The records shall at least contain:
 - 1. the documents provided by the applicant;
 - 2. the documents established during the investigation, in which the activities and the final results of the elements defined in EMAR 21.B.520(b) are stated; and

3. a copy of the military permit to fly.
- (c) The records shall be archived for a minimum retention period of six years after the permit ceases to be valid.

SUBPART Q - IDENTIFICATION OF PRODUCTS, PARTS AND APPLIANCES

Administrative procedures established by the Authority shall apply.