GM 21.A.157 Investigations – Arrangements

The arrangements made by the applicant for, or holder of an approval under Part 21 Section A Subpart G should allow the competent authority to make investigations that include the complete production organisation including partners, sub-contractors and suppliers, whether they are in the State of the applicant or not.

The investigation may include; audits, enquiries, questions, discussions and explanations, monitoring, witnessing, inspections, checks, flight and ground tests and inspection of completed products, parts or appliances produced under the POA.

In order to maintain its confidence in the standards achieved by a POA holder or applicant the competent authority may make an investigation of a sample product part or appliance and its associated records, reports and certifications.

The arrangements should enable the organisation to give positive assistance to the competent authority and co-operate in performing the investigation during both initial assessment and for the subsequent surveillance to maintain the POA.

Co-operation in performing investigation means that the competent authority has been given full and free access to the facilities and to any information relevant to demonstrate compliance to Part 21 Section A Subpart G requirements, and assistance (personnel support, records, reports, computer data, etc., as necessary).

Assistance to the competent authority includes all appropriate means associated with the facilities of the production organisation to allow the competent authority to perform these investigations, such as the availability of a meeting room, office and personnel support, documentation and data, and communication facilities, all properly and promptly available as necessary.

The competent authority seeks to have an open relationship with the organisation and suitable liaison personnel should be nominated to facilitate this, including suitable representative(s) to accompany competent authority staff during visits not only at the organisations own facilities but also at sub-contractors, partners or suppliers.

GM No. 1 to 21.A.158(a) Uncontrolled non-compliance with applicable design data

An uncontrolled non-compliance with applicable design data is a non-compliance:

- that can not be discovered through systematic analysis; or
- that prevents identification of affected products, parts, appliances, or material.

GM No. 2 to 21.A.158(a) Examples of level one findings

Examples of level one findings are non-compliances with any of the following points, that could affect the safety of the aircraft:

21.A.139, 21.A.145, 21.A.147, 21.A.148, 21.A.151, 21.A.163, 21.A.165(b), (c), (d), (e), (f) and (g).

It should be anticipated that a non-compliance with these points is only considered a level one finding when objective evidence has been found that this finding is an uncontrolled non-compliance that could affect the safety of the aircraft.

In addition, the failure to arrange for investigations under 21.A.157, in particular to obtain access to facilities, after denial of one written request should be classified as a level one finding.

GM 21.A.159(a)(3) Evidence of a lack of satisfactory control

A positive finding by the competent authority of:

1 an uncontrolled non-compliance with type design data affecting the airworthiness of product part or appliance

2 an incident/accident identified as caused by POA holder

3 non-compliance with the POE and its associated procedures which could affect conformity of manufactured items to design data

4 insufficient competence of certifying staff

5 insufficient resources in respect of facilities, tools and equipment

6 insufficient means to ensure good production work standards

7 a lack of effective and timely response to prevent a recurrence of any of point 1 to 6.

AMC No 1 to 21.A.163(c) Computer generated signature and electronic exchange of the EASA Form 1

1 Submission to the competent authority

Any POA holder/applicant intending to implement an electronic signature procedure to issue EASA Form 1 and/or to exchange electronically such data contained on the EASA Form 1, should document it and submit it to the competent authority as part of the documents attached with its exposition.

2 Characteristics of the electronic system generating the EASA Form 1

The electronic system should:

- guarantee secure access for each certifying staff;
- ensure integrity and accuracy of the data certified by the signature of the Form and be able to show evidence of the authenticity of the EASA Form 1 (recording and record keeping) with suitable security, safeguards and backups;
- be active only at the location where the part is being released with an EASA Form 1;
- not permit to sign a blank form;
- provide a high degree of assurance that the data has not been modified after signature (if modification is necessary after issuance, i.e. re-certification of a part), a new form with a new number and reference to the initial issuance should be made); and
- provide for a 'personal' electronic signature, identifying the signatory. The signature should be generated only in the presence of the signatory.

An electronic signature means data in electronic form which are attached to or logically associated with other electronic data and which serve as a method of authentication and should meet the following criteria:

- it is uniquely linked to the signatory;
- it is capable of identifying the signatory;
- it is created using means that the signatory can maintain under their sole control.

The electronic signature is defined as an electronically generated value based on a cryptographic algorithm and appended to data in a way to enable the verification of the data's source and integrity.

POA holders/applicants are reminded that additional national and/or European requirements may need to be satisfied when operating electronic systems. 'Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures', as last amended may constitute a reference.

The electronic system should be based on a policy and management structure (confidentiality, integrity and availability), such as:

- administrators, signatories;
- scope of authorisation, rights;
- password and secure access, authentication, protections, confidentiality;
- track changes;
- minimum blocks to be completed, completeness of information;
- archives;
- etc.

The electronic system generating the EASA Form 1 may contain additional data such as:

- manufacturer code;
- customer identification code;
- workshop report;
- inspection results;
- etc.

3 Characteristics of the computer generated signature

To facilitate understanding and acceptance of the EASA Form 1 released with an electronic signature, the following statement should be in Block 13b: 'Electronic Signature on File'.

In addition to this statement, it is accepted to print or display a signature in any form such as a representation of the hand-written signature of the person signing (i.e. scanned signature) or their name.

When printing the electronic form, the EASA Form 1 should meet the general format as specified in Appendix I to Part 21. A watermark-type 'PRINTED FROM ELECTRONIC FILE' should be printed on the document.

When the electronic file contains a hyperlink to data, required to determine the airworthiness of the item(s), the data associated to the hyperlink, when printed, should be in a legible format and be identified as a reference from the EASA Form 1.

Additional information not required by the EASA Form 1 completion instructions may be added to the printed copies of EASA Form 1 as long as the additional data do not prevent a person from filling out, issuing, printing, or reading any portion of the EASA Form 1. This additional data should be provided only in block 12 unless it is necessary to include it in another block to clarify the content of that block.

4. Electronic exchange of the electronic EASA Form 1

The electronic exchange of the electronic EASA Form 1 should be accomplished on a voluntary basis. Both parties (issuer and receiver) should agree on electronic transfer of the EASA Form 1.

For that purpose, the exchange needs to include:

- all data of the EASA Form 1, including data referenced from the EASA Form 1;
- all data required for authentication of the EASA Form 1.

In addition, the exchange may include:

- data necessary for the electronic format;
- additional data not required by the EASA Form 1 completion instructions, such as manufacturer code, customer identification code.

The system used for the exchange of the electronic EASA Form 1 should provide:

- a high level of digital security; the data should be protected, unaltered or uncorrupted;
- traceability of data back to its source should be possible.

Trading partners wishing to exchange EASA Form 1 electronically should do so in accordance with these means of compliance stated in this document. It is recommended that they use an established, common, industry method such as Air Transport Association (ATA) Spec 2000 Chapter 16.

The applicant(s) is/are reminded that additional national and/or European requirements may need to be satisfied when operating the electronic exchange of the electronic EASA Form 1.

The receiver should be capable of regenerating the EASA Form 1 from the received data without alteration; if not the system should revert back to the paper system.

When the receiver needs to print the electronic form, refer to the subparagraph 3 above.

AMC No 2 to 21.A.163(c) Completion of the EASA Form 1

EASA Form 1 Block 8 'Part Number'

The part number as it appears on the item, is usually defined in the design data; however in the case of a kit of parts, media containing software or any other specific condition of supply may be defined in production data developed from design data. Information about the contents of the kit or media may be given in block 12 or in a separate document cross-referenced from block 12.

EASA Form 1 Block 12 'Remarks'

Examples of conditions which would necessitate statements in block 12 are:

- When the certificate is used for prototype purposes the following statement must be entered at the beginning of block 12:

  'NOT ELIGIBLE FOR INSTALLATION ON IN-SERVICE TYPE-CERTIFICATED AIRCRAFT'.

- Re-certification of items from 'prototype' (conformity only to non-approved data) to 'new' (conformity to approved data and in a condition for safe operation) once the applicable design data is approved.

  The following statement must be entered in block 12:

  RE-CERTIFICATION OF ITEMS FROM 'PROTOTYPE' TO 'NEW':

  THIS DOCUMENT CERTIFIES THE APPROVAL OF THE DESIGN DATA *[insert TC/STC number, revision level]*, DATED *[insert date if necessary for identification of revision status]*, TO WHICH THIS ITEM (THESE ITEMS) WAS (WERE) MANUFACTURED.

- When a new certificate is issued to correct error(s) the following statement must be entered in block 12:

  'THIS CERTIFICATE CORRECTS THE ERROR(S) IN BLOCK(S) *[enter block(s) corrected]* OF THE CERTIFICATE *[enter original tracking number]* DATED *[enter original issuance date]* AND DOES NOT COVER CONFORMITY/ CONDITION/RELEASE TO SERVICE'.

Examples of data to be entered in this block as appropriate:

- For complete engines, a statement of compliance with the applicable emissions requirements current at the date of manufacture of the engine.
- For ETSO articles, state the applicable ETSO number.
- Modification standard.
- Compliance or non-compliance with airworthiness directives or Service Bulletins.
- Details of repair work carried out, or reference to a document where this is stated.
- Shelf life data, manufacture date, cure date, etc.
- Information needed to support shipment with shortages or re-assembly after delivery.
- References to aid traceability, such as batch numbers.

AMC 21.A.163(d) Privileges – Maintenance

The applicant may apply for terms of approval, which cover maintenance of a new aircraft that it has manufactured, as necessary to keep it in an airworthy condition, but not beyond the point at which the applicable operational rules require maintenance to be performed by an approved maintenance organisation. If the production organisation intends to maintain the aircraft beyond that point, it would have to apply for and obtain an appropriate maintenance approval.

When the competent authority is satisfied that the procedures required by 21.A.139 are satisfactory to control maintenance activities so as to ensure that the aircraft is airworthy, this capability will be stated in the terms of approval.

MAINTENANCE OF AIRCRAFT

Examples of such maintenance activities are:

- Preservation, periodic inspection visits, etc.
- Embodiment of a Service Bulletin.
- Application of airworthiness directives.
- Repairs.
- Maintenance tasks resulting from special flights.
- Maintenance tasks to maintain airworthiness during flight training, demo flights and other non-revenue flights.
  Any maintenance activities must be recorded in the Aircraft Log Book. It must be signed by certifying staff for attesting the conformity of the work to the applicable airworthiness data.

In some cases the Aircraft Log Book is not available, or the production organisation prefers to use a separate form (for instance for a large work package or for delivery of the aircraft to the customer). In these cases, production organisations must use EASA Form 53 which must subsequently become part of the aircraft maintenance records.

MAINTENANCE OF COMPONENTS OUTSIDE THE POA CAPABILITY

Such maintenance activity outside the capability of the Aircraft POA holder may still be accomplished under the production approval of the original release organisation. In such circumstances the engine(s), propeller(s), parts and appliances will require re-release in accordance with GM 21.A.163(c) (EASA Form 1).

Records relevant to continued airworthiness or retirement lives, such as engine runs, flight hours, landings, etc., which affect part retirement of maintenance schedules must be specified on any re-release.

As an alternative the engine, propeller, part or appliance may be maintained by the holder of an approval in accordance with Part 145, classified and released as ‘used’.

AMC 21.A.163(e) Procedure for the issue of a permit to fly including approval of the flight conditions

1 INTENT

This acceptable means of compliance provides means to develop a procedure for the issue of a permit to fly including approval of the flight conditions.

Each POA applicant or holder must develop its own internal procedure following this AMC, in order to obtain the privilege of 21.A.163(e) to issue permits to fly for an aircraft under procedures agreed with its competent authority for production, when the production organisation itself is controlling under its POA the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight.

2 PROCEDURE FOR THE ISSUE OF A PERMIT TO FLY

2.1 Content

The procedure must address the following points:

- as relevant, in accordance with 21.A.710(b), the approval of flight conditions;
- conformity with approved conditions;
- issue of the permit to fly under the POA privilege;

- authorised signatories;
- interface with the local authority for the flight.

2.2 Approval of the flight conditions (when relevant)

The procedure must include the process to establish and justify the flight conditions, in accordance with 21.A.708 and how compliance with 21.A.710(c) is established, and include the EASA Form 18B as defined in AMC 21.A.709(b) for the approval under the POA privilege.

2.3 Conformity with approved conditions

The procedure must indicate how conformity with approved conditions is made, documented and attested by an authorised person.

2.4 Issue of the permit to fly under the POA privilege

The procedure must describe the process to prepare the EASA Form 20b and how compliance with 21.A.711(c) and (e) is established before signature of the permit to fly.

2.5 Authorised signatories

The person(s) authorised to sign the permit to fly under the privilege of 21.A.163(e) must be identified (name, signature and scope of authority) in the procedure, or in an appropriate document linked to the Production Organisation Exposition.

2.6 Interface with the local authority for the flight

The procedure must include provisions describing the communication with the local authority for compliance with the local requirements which are outside the scope of the conditions of 21.A.708(b) (see 21.A.711(e)).

GM 21.A.165(a) Obligations of the holder – Basic working document

Compliance with the production organisation exposition (POE) is a prerequisite for obtaining and retaining a production organisation approval.

The organisation should make the POE available to its personnel where necessary for the performance of their duties. A distribution list should therefore be established. Where the POE mainly refers to separate manuals or procedures, the distribution of the POE could be limited.

The organisation should ensure that personnel have access to and are familiar with that part of the content of the POE or the referenced documents, which covers their activities.

Monitoring of compliance with the POE is normally the responsibility of the quality assurance function.

GM No. 1 to 21.A.165(c) Obligations of the holder – Conformity of prototype models and test specimens

21.A.33 requires determination of conformity of prototype models and test specimens to the applicable design data. The EASA Form 1 may be used as a conformity certificate as part of the assistance a POA holder provides to a design approval holder/applicant.

GM No. 2 to 21.A.165(c) Obligations of holder – Conformity with type design

Individual configurations are often based on the needs of the customer and improvements or changes which may be introduced by the type-certificate holder. There are also likely to be unintentional divergencies (concessions or non-conformances) during the manufacturing process. All these changes should have been approved by the design approval holder, or when necessary by the Agency.

GM No. 3 to 21.A.165(c) Obligations of the holder – Condition for safe operation

Before issue of the Statement of Conformity to the competent authority of the Member State of registry, the holder of a production organisation approval should make an investigation so as to be satisfied in respect of each of the items listed below. The documented results of this investigation should be kept on file by the POA holder. Certain of these items may be required to be provided (or made available) to the operator or owner of the aircraft (and in some cases the competent authority of the Member State of registry):

1. Equipment or modifications which do not meet the requirements of the State of manufacture but have been accepted by the competent authority of the importing country.
2. Identification of products, parts or appliances which:
   - are not new;
   - are furnished by the buyer or future operator (including those identified in 21.A.801 and 21.A.805).
3. Technical records which identify the location and serial numbers of components that have special traceability requirements for continued airworthiness purposes including those identified in 21.A.801 and 21.A.805.
4. Log book and a modification record book for the aircraft as required by the Agency.
5. Log books for products identified in 21.A.801 installed as part of the type design as required by the Agency.
6. A weight and balance report for the completed aircraft.
7. A record of missing items or defects which do not affect airworthiness these for example could be furnishing or BFE (Items may be recorded in a technical log or other suitable arrangement such that the operator and Agency are formally aware).
8. Product support information required by other implementing rules and associated CS or GM, such as a Maintenance Manual, a Parts Catalogue, or MMEL all of which are to reflect the actual build standard of the particular aircraft. Also an Electrical load analysis and a wiring diagram.
9. Records which demonstrate completion of maintenance tasks appropriate to the test flight flying hours recorded by the aircraft. These records should show the relationship of the maintenance status of the particular aircraft to the manufacturers recommended maintenance task list and the MRB document/report.
10. Details of the serviceability state of the aircraft in respect of a) the fuel and oil contents, b) provision of operationally required emergency equipment such as life rafts, etc.
11. Details of the approved interior configuration if different from that approved as part of the type design.
12. An approved Flight Manual which conforms to the build standard and modification state of the particular aircraft shall be available.
13. Show that inspections for foreign objects at all appropriate stages of manufacture have been satisfactorily performed.
14. The registration has been marked on the exterior of the aircraft as required by national legislation. Where required by national legislation fix a fireproof owners nameplate.
15. Where applicable there should be a certificate for noise and for the aircraft radio station.
16. The installed compass and or compass systems have been adjusted and compensated and a deviation card displayed in the aircraft.
17. Software criticality list.
18. A record of rigging and control surface movement measurements.
19. Details of installations which will be removed before starting commercial air transport operations (e.g., ferry kits for fuel, radio or navigation).

20. Where maintenance work has been performed under the privilege of 21.A.163(d) issue a release to service that includes a statement that the aircraft is in a condition for safe operation.

21. List of all applicable Service Bulletins and airworthiness directives that have been implemented.

GM No. 4 to 21A.165(c) Airworthiness Release or Conformity Certificate

The EASA Form 1, when used as a release certificate as addressed in 21.A.165(c)(2) and (3), may be issued in two ways:

- As an airworthiness release, only when by virtue of the arrangement described in 21.A.133(b) and (c), it can be determined that the part conforms to the approved design data and is in a condition for safe operation.

- As a conformity certificate, only when by virtue of the arrangement described in 21.A.133(b) and (c), it can be determined that the part conforms to applicable design data which is not (yet) approved, for a reason that is indicated in Block 12. Parts released with an EASA Form 1 as a conformity certificate are not eligible for installation in a type-certificated aircraft.

The EASA Form 1 should only be used for conformity release purposes when it is possible to indicate the reason that prevents its issue as for airworthiness release purposes.

GM 21.A.165(d) and (h) Obligations of the holder – Recording and archiving system

Records within a production environment satisfy two purposes. Firstly, they are required, during the production process to ensure that products, parts, or appliances are in conformity with the controlling data throughout the manufacturing cycle. Secondly, certain records of milestone events are needed to subsequently provide objective evidence that all prescribed stages of the production process have been satisfactorily completed and that compliance with the applicable design data has been achieved.

Therefore, the approved production organisation should implement a system for the compilation and retention of records during all stages of manufacture, covering short-term and long-term records appropriate to the nature of the product and its production processes.

The management of such information should be subject to appropriate procedures in the Quality System required by 21.A.139.

All forms of recording media are acceptable (paper, film, magnetic, ...) provided they can meet the required duration for archiving under the conditions provided.

The related organisation procedures should:

- Identify records to be kept.

- Describe the organisation of and responsibility for the archiving system (location, compilation, format) and conditions for access to the information (e.g., by product, subject).

- Control access and provide effective protection from deterioration or accidental damage.

- Ensure continued readability of the records.

- Demonstrate to the competent authority proper functioning of the records system.

- Clearly identify the persons involved in conformity determination.

- Define an archiving period for each type of data taking into account importance in relation to conformity determination subject to the following:

    a Data which supports conformity of a product, part, or appliance should be kept for not less than three years from the issue date of the related Statement of Conformity or Authorised Release Certificate.

b Data considered essential for continuing airworthiness should be kept throughout the operational life of the product, part or appliance.

- Ensure that the recording and record-keeping system used by the partners, supplier and sub-contractors meet the objective of conformity of the product, part or appliance with the same level of confidence as for their own manufacture. They should define in each case who is to retain the record data (organisation or partner, supplier or sub-contractor). They should also define method for surveillance of the recording/record keeping system of the partners, suppliers or sub-contractors.

Subpart J — Design organisation approval

GM No. 1 to 21.A.239(a) Design assurance system

1. Purpose

This GM outlines some basic principles and objectives of 21.A.239(a).

2. Definitions

2.1 The design assurance system is the organisational structure, responsibilities, procedures and resources to ensure the proper functioning of the design organisation.

2.2 The design assurance means all those planned and systematic actions necessary to provide adequate confidence that the organisation has the capability

- to design products or parts in accordance with the applicable CS and environmental protection requirements,
- to demonstrate and verify the compliance with these CS and environmental protection requirements, and
- to demonstrate to the Agency this compliance.

2.3 The 'Type Investigation' means the tasks of the organisation in support of the type-certificate, supplemental type-certificate or other design approval processes necessary to demonstrate and verify and to maintain compliance with the applicable CS and environmental protection requirements.

3. Design Assurance

The complete process, starting with the CS and environmental protection requirements and product specifications and culminating with the issuing of a type-certificate, is shown in the diagram on Figure 1. This identifies the relationship between the design, the Type Investigation and design assurance processes.

Effective design assurance demands a continuing evaluation of factors that affect the adequacy of the design for intended applications, in particular that the product, or part, complies with applicable CS and environmental protection requirements and will continue to comply after any change.

Two main aspects should therefore be considered:

- How the planned and systematic actions are defined and implemented, from the very beginning of design activities up to continued airworthiness activities;
- How these actions are regularly evaluated and corrective actions implemented as necessary.

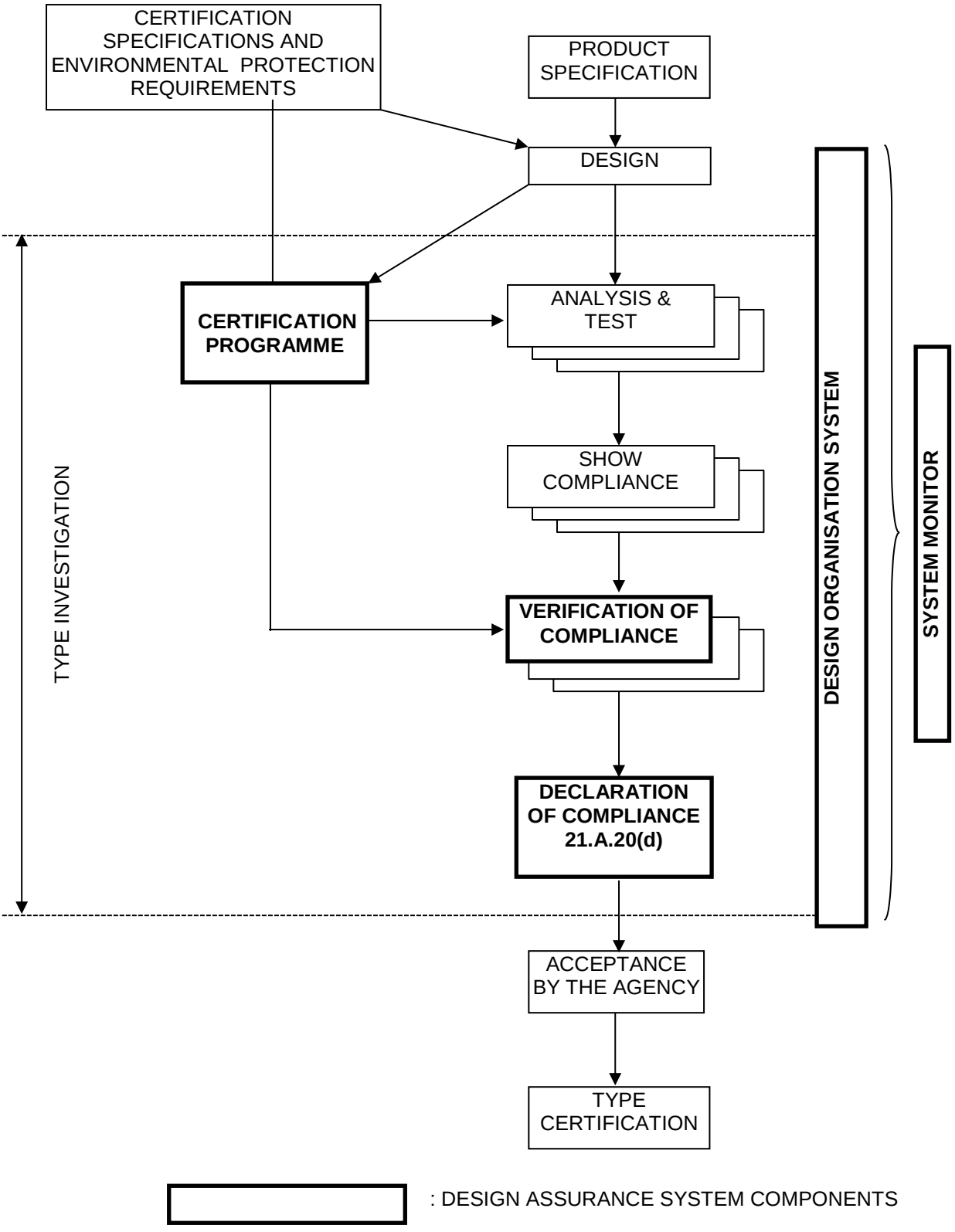


Figure 1 - RELATIONSHIPS BETWEEN DESIGN, DESIGN ASSURANCE AND TYPE INVESTIGATION

3.1 Planned and Systematic Actions

For design organisations carrying out Type Investigation of products, the planned and systematic actions should cover the following tasks and procedures should be defined accordingly:

3.1.1 General

a. To issue or, where applicable, supplement or amend the handbook in accordance with 21.A.243, in particular to indicate the initiation of design activities on a product.

b. To assure that all instructions of the Handbook are adhered to.

c. To conduct Type Investigation.

d. To nominate staff as 'compliance verification engineers' responsible to approve compliance documents as defined in paragraph 3.1.3.

e. To nominate personnel belonging to the Office of Airworthiness responsible as defined in paragraph 3.1.4.

f. In the case of an applicant for a supplemental type-certificate, to obtain the agreement of the type-certificate holder for the proposed supplemental type-certificate to the extent defined in 21.A.115.

g. To ensure full and complete liaison between the type design organisation and related organisations having responsibility for products manufactured to the type-certificate.

h. To provide the assurance to the Agency that prototype models and test specimens adequately conform to the type design (see 21.A.33(b)(1)).

3.1.2 Chief Executive and Head of design organisation (or his or her Deputy)

a. The Chief Executive should provide the necessary resources for the proper functioning of the design organisation.

b. The Head of the design organisation, or an authorised representative, should sign a declaration of compliance (see 21.A.20(d) and 21.A.97(a)(3)) with the applicable CS and environmental protection requirements after verification of satisfactory completion of the Type Investigation. In accordance with 21.A.20(e) and 21.A.97(a)(4), his or her signature on the declaration of compliance confirms that the procedures as specified in the handbook have been followed (see also GM 21.A.A265(b)).

c. The functions of Chief Executive and Head of the design organisation may be performed by the same person.

3.1.3 Compliance Verification

a. Approval by signing of all compliance documents, including test programmes and data, necessary for the verification of compliance with the applicable CS and environmental protection requirements as defined in the certification programme.

b. Approval of the technical content (completeness, technical accuracy...), including any subsequent revisions, of the manuals approved by the Agency (Aircraft Flight Manual, the Airworthiness Limitations section of the Instructions for Continued Airworthiness and the Certification Maintenance Requirements (CMR) document, where applicable).

3.1.4 Office of Airworthiness

a. Liaison between the design organisation and the Agency with respect to all aspects of the certification programme.

b. Ensuring that a handbook is prepared and updated as required in 21.A.243.

c. Co-operation with the Agency in developing procedures to be used for the type certification process.

d. Issuing of guidelines for documenting compliance.

e. Co-operation in issuing guidelines for the preparation of the manuals required by the applicable implementing rules, Service Bulletins, drawings, specifications, and standards.

f. Ensuring procurement and distribution of applicable CS and environmental protection requirements and other specifications.

g. Co-operating with the Agency in proposing the type-certification basis

h. Interpretation of CS and environmental protection requirements and requesting decisions of the Agency in case of doubt.

i. Advising of all departments of the design organisation in all questions regarding airworthiness, environmental protection approvals and certification.

j. Preparation of the certification programme and co-ordination of all tasks related to Type Investigation in concurrence with the Agency.

k. Regular reporting to the Agency about Type Investigation progress and announcement of scheduled tests in due time.

l. Ensuring co-operation in preparing inspection and test programmes needed for demonstration of compliance.

m. Establishing the compliance checklist and updating for changes.

n. Checking that all compliance documents are prepared as necessary to demonstrate compliance with all CS and environmental protection requirements, as well as for completeness, and signing for release of the documents.

o. Checking the required type design definition documents described in 21.A.31 and ensuring that they are provided to the Agency for approval when required.

p. Preparation, if necessary, of a draft for a type-certificate data sheet and/or type-certificate data sheet modification.

q. Providing verification to the head of the design organisation that all activities required for Type Investigation have been properly completed.

r. Approving the classification of changes in accordance with 21.A.91 and granting the approval for minor changes in accordance with 21.A.95(b).

s. Monitoring of significant events on other aeronautical products as far as relevant to determine their effect on airworthiness of products being designed by the design organisation.

t. Ensuring co-operation in preparing Service Bulletins and the Structural Repair Manual, and subsequent revisions, with special attention being given to the manner in which the contents affect airworthiness and environmental protection and granting the approval on behalf of the Agency.

u. Ensuring the initiation of activities as a response to a failure (accident/incident/in-service occurrence) evaluation and complaints from the operation and providing of information to the Agency in case of airworthiness impairment (continuing airworthiness).

v. Advising the Agency with regard to the issue of airworthiness directives in general based on Service Bulletins.

w. Ensuring that the manuals approved by the Agency, including any subsequent revisions (the Aircraft Flight Manual, MMEL, the Airworthiness Limitations section of the Instructions for Continued Airworthiness and the Certification Maintenance Requirements (CMR) document, where applicable) are checked

to determine that they meet the respective requirements, and that they are provided to the Agency for approval.

3.1.5 Maintenance and Operating Instructions

a. Ensuring the preparation and updating of all maintenance and operating instructions (including Services Bulletins) needed to maintain airworthiness (continuing airworthiness) in accordance with relevant CS. For that purpose, the applicant should:

- establish the list of all documents it is producing to comply with the Appendix referred to in CS 23.1529, CS 25.1529, CS 27.1529, CS 29.1529, CS-E 25 or CS-P 40 (NPA P-3);
- define procedures and organisation to produce and issue these documents, using where applicable and so elected 21.A.263(c)(3) privilege.

b. In accordance with 21.A.57, 21.A.61, 21.A.107, 21.A.119, 21.A.120 and 21.A.449, ensuring that these documents are provided to all affected operators and all involved authorities.

3.2 Continued effectiveness of the design assurance system. The organisation should establish the means by which the continuing evaluation (system monitoring) of the design assurance system will be performed in order to ensure that it remains effective.

GM No. 2 to 21.A.239(a) Design assurance system for minor changes to type design or minor repairs to products

1. Purpose

This GM outlines some basic principles and objectives in order to comply with 21.A.239(a) for organisations designing only minor changes to type design or minor repairs to products.

2. Design assurance system

The design assurance system should include the following:

- an organisational structure to:
  - control the design
  - demonstrate compliance with applicable CS and environmental protection requirements
  - independently check demonstrations of compliance
  - liaise with the Agency
  - continuously evaluate the design organisation
  - control sub-contractors
- procedures and responsibilities associated with the functions listed above, taking due account of Part 21 requirements applicable to design and approval of minor changes to type design or minor repairs to products.

AMC 21.A.239(a)(3) Design assurance system - Independent system monitoring

The system monitoring function required by 21.A.239(a)(3) may be undertaken by the existing quality assurance organisation when the design organisation is part of a larger organisation.

AMC 21.A.239(b) Design assurance system - Independent checking function of the demonstration of compliance

1. The independent checking function of the demonstration of compliance should consist of the verification by a person not creating the compliance data. Such person may work in conjunction with the individuals who prepare compliance data.

2. The verification should be shown by signing compliance documents, including test programmes and data.

3. For a product, there is normally only one compliance verification engineer nominated for each relevant subject. A procedure should cover the non-availability of nominated persons and their replacement when necessary.

4. For STC cases, when compliance statement and associated documentation are produced by the TC holder, and when these data are approved under the system of the authority of TC holder, then the STC applicant does not need to provide, within its own DOA, the independent checking function required in 21.A.239(b) for these data.

GM 21.A.239(c) Design assurance system

In meeting the requirements of 21.A.239(c) the applicant for a design organisation approval under Subpart J may adopt the following policy:

1 The satisfactory integration of the Partner/Sub-contractor and applicant's design assurance systems should be demonstrated for the activities covered under the applicant's terms of approval.

2 In the event that a Partner/Sub-contractor holds a design organisation approval (DOA), then in accordance with 21.A.239(c), the applicant may take this into account in demonstrating the effectiveness of this integrated system.

3 When any Partner/Sub-contractor does not hold a DOA then the applicant will need to establish to its own satisfaction and the satisfaction of the Agency, the adequacy of that partner's/sub-contractor's design assurance system in accordance with 21.A.243(b).

AMC No. 1 to 21.A.243(a) Data requirements

The handbook should provide the following information for each product covered by the design organisation approval.

1. A description of the tasks which can be performed under the approval, according to the following classification:

   a. General areas, like subsonic turbojet aeroplanes, turbopropeller aeroplanes, small aeroplanes, rotorcraft.

   b. Technologies handled by the organisation (composite, wood or metallic construction, electronic systems, etc.)

   c. A list of types and models for which the design approval has been granted and for which privileges may be exercised, supported by a brief description for each product.

   d. For repair design, classification and (if appropriate) approval activities it is necessary to specify the scope of activity in terms of structures, systems, engines, etc.

2. A general description of the organisation, its main departments, their functions and the names of those in charge; a description of the line management and of functional relationships between the various departments.

3. A description of assigned responsibilities and delegated authority of all parts of the organisation which, taken together, constitute the organisation's design assurance system together with a chart indicating the functional and hierarchical relationship of the design assurance system to Management and to other parts of the organisation; also the chains of responsibilities within the design assurance system, and the control of the work of all partners and sub-contractors.

4. A general description of the way in which the organisation performs all the design functions in relation to airworthiness and environmental protection approvals including:

   a. The procedures followed and forms used in the Type Investigation process to ensure that the design of, or the change to the design of, the product as applicable is identified and documented, and complies with the applicable CS and environmental protection requirements, including specific requirements for import by importing authorities

b. The procedures for classifying design changes as ‘major’ or ‘minor’ and for the approval of minor changes.

c. The procedures for classifying and approving unintentional deviations from the approved design data occurring in production (concessions or non-conformance’s).

d. The procedure for classifying and obtaining approval for repairs.

5 A general description of the way in which the organisation performs its functions in relation to the continuing airworthiness of the product it designs, including co-operation with the production organisation when dealing with any continuing airworthiness actions that are related to production of the product, part or appliance, as applicable.

6. A description of the human resources, facilities and equipment, which constitutes the means for design, and where appropriate, for ground and flight testing.

7. An outline of a system for controlling and informing the Staff of the organisation of current changes in engineering drawings, specifications and design assurance procedures.

8. A description of the recording system for:

a. The type design, including relevant design information, drawings and test reports, including inspection records of test specimens.

b. The means of compliance.

c. The compliance documentation (compliance check list, reports...).

9. A description of the record keeping system to comply with 21.A.55 and 21.A.105.

10. A description of the means by which the organisation monitors and responds to problems affecting the airworthiness of its product during design, production and in service in particular to comply with 21.A.3 (see also GM No. 1 to 21.A.239, paragraphs 3.1.4(s) and (u)).

11. The names of the design organisation authorised signatories. Nominated persons with specific responsibilities such as mentioned in 21.A.33 and 21.A.35 should be listed.

12. (Reserved).

13. A clear definition of the tasks, competence and areas of responsibility of the Office of Airworthiness.

14. A description of the procedures for the establishment and the control of the maintenance and operating instructions (see 21.A.57, 21.A.61, 21.A.107, 21.A.119, 21.A.120 and 21.A.449).

15. A description of the means by which the continuing evaluation (system monitoring) of the design assurance system will be performed in order to ensure that it remains effective.

AMC No. 2 to 21.A.243(a) Data requirements - Model content of handbook for organisations designing minor changes to type design or minor repairs to products

Part 1. Organisation

1.1 Objective of handbook and binding statement

1.2 Responsible person for administration of handbook

1.3 Amendment procedure

1.4 List of effective pages

1.5 Distribution list

1.6 Presentation of design organisation (including locations)

1.7 Scope of work (with identification of type and models of products)

1.8 Organisation charts

1.9 Human resources

1.10 Management staff

1.11 Certifying personnel (see GM No. 2 to 21.A.243(d), paragraph 2)

1.12 Independent system monitoring

Part 2. Procedures

2.1 Management of changes to type design and design of repairs

- configuration control
- classification
- approval of minor changes to type design and minor repairs

2.2 Control of design sub-contractors

2.3 Collecting/Investigating of failures, malfunctions and defects

2.4 Co-ordination with production

2.5 Documentation control

- in relations with the changes and repairs
- in relation with failures/malfunctions and defects (i.e. Services Bulletins)

2.6 Record keeping

GM No. 1 to 21.A.243(d) Statement of qualifications and experience

1. Purpose

This GM provides guidelines on the following points:

- Who are the persons covered by 21.A.243(d)?
- What is requested from the applicant for these persons?

2. Who are the persons?

Three different types of functions are named or implicitly identified in the requirements of Part 21 Subpart J or in associated AMC and GM, using qualified and experienced personnel:

- the Chief Executive [see GM No. 1 to 21.A.239(a), para. 3.1.2, GM 21.A.249, GM 21.A.265(b)]
- the other management staff:
  - the Head of the design organisation [see GM No. 1 to 21.A.239(a), para.3.1.2, GM No. 1 21.A.245, para.4.1, GM 21.A.265(b)]
  - the Chief of the Office of Airworthiness, or [see GM No. 1 to 21.A.245, para. 4.2]
  - the Chief of the independent monitoring function of the design assurance system [see 21.A.239(a)(3) and AMC No. 1 to 21.A.243(a), para.2]
- the personnel making decisions affecting airworthiness and environmental protection:
  - compliance verification engineers [see GM No. 1 to 21.A.239(a), para.3.1.3; AMC 21.A.239(b)]
  - personnel of the Office of Airworthiness making decisions affecting airworthiness and environmental protection, especially those linked with the 21.A.263 privileges (signing documents for release, approving classification of changes and repairs, and granting the approval of minor changes and minor repairs, granting the approval of SBs, and minor revisions to the aircraft flight manual) [see GM No. 1 to 21.A.239(a), para. 3.1.4]

3. Kind of statement

3.1 Chief Executive

The Chief Executive should provide the necessary resources for the proper functioning of the design organisation.

A statement of the qualification and experience of the Chief Executive is normally not required.

3.2 Other management staff

The person or persons nominated should represent the management structure of the organisation and be responsible through the Head of design organisation to the Chief Executive for the execution of all functions as specified in Part 21, Subpart J. Depending on the size of the organisation, the functions may be subdivided under individual managers.

The nominated managers should be identified and their credentials furnished to the Agency on EASA Form 4-DOA (see EASA website:

http://easa.europa.eu/certification/application-forms.php) in order that they may be seen to be appropriate in terms of relevant knowledge and satisfactory experience related to the nature of the design activities as performed by the organisation.

The responsibilities and the tasks of each individual manager should be clearly defined, in order to prevent uncertainties about the relations, within the organisation. Responsibilities of the managers should be defined in a way that all responsibilities are covered.

3.3 Personnel making decisions affecting airworthiness and environmental protection

For these personnel, no individual statement is required. The applicant should show to the Agency that there is a system to select, train, maintain and identify them for all tasks where they are necessary.

The following guidelines for such a system are proposed:

- These personnel should be identified in the handbook, or in a document linked to the handbook. This, and the corresponding procedures, should enable them to carry out the assigned tasks and to properly discharge associated responsibilities.
- The needs, in terms of quantity of these personnel to sustain the design activities, should be identified by the organisation.
- These personnel should be chosen on the basis of their knowledge, background and experience.
- When necessary, complementary training should be established, to ensure sufficient background and knowledge in the scope of their authorization. The minimum standards for new personnel to qualify in the functions should be established. The training should lead to a satisfactory level of knowledge of the procedures relevant for the particular role.
- Training policy forms part of the design assurance system and its appropriateness forms part of investigation by the Agency within the organisation approval process and subsequent surveillance of persons proposed by the organisation.
- This training should be adapted in response to experience gained within the organisation
- The organisation should maintain a record of these personnel which includes details of the scope of their authorisation. The personnel concerned should be provided with evidence of the scope of their authorisation.
- The following minimum information should be kept on record:
  a) Name
  b) Date of birth
  c) Experience and training
  d) Position in organisation
  e) Scope of the authorisation
  f) Date of first issue of the authorisation
  g) If appropriate, date of expiry of the authorisation
  h) Identification number of the authorisation.

The record may be kept in any format and should be controlled.

- Persons authorised to access the system should be maintained at a minimum to ensure that records cannot be altered in an unauthorised manner or that such confidential records do not become accessible to unauthorised persons.
- Personnel should be given access to their own record.
- Under the provision of 21.A.257 the Agency has a right of access to the data held in such a system.
- The organisation should keep the record for at least two years after a person has ceased employment with the organisation or withdrawal of the authorisation, whichever is the sooner.

GM No. 2 to 21.A.243(d) Data requirements - Statement of the qualification and experience- Organisations designing minor changes to type design or minor repairs to products

For organisations designing minor changes to type design or minor repairs to products, the statement of the qualifications and experience required by 21.A.243(d) should be addressed as follows :

1. The nominated managers should be identified and their credentials submitted to the Agency on EASA Form 4 - DOA (see EASA website: http://easa.europa.eu/certification/application-forms.php) in order that they may be seen to be appropriate in terms of relevant knowledge and satisfactory experience related to the nature of the design activities as performed by the organisation.

2. The persons responsible to:

   - classify changes to type design or repairs
   - verify compliance [21.A.239(b)]
   - approve minor changes to type design and minor repairs [21.A.263(c)(2)]
   - issue information or instructions [21.A.263(c)(3)]

   should be selected by the organisation in accordance with a procedure and criteria agreed with the Agency.

GM No. 1 to 21.A.245 Requirements for approval

See 21.A.245

1 *General.* The data submitted in accordance with 21.A.243 should show that sufficient skilled personnel are available and suitable technical and organisational provisions have been made for carrying out the Type Investigation defined by GM No. 1 to 21.A.239(a), paragraph 2.3.

2 *Personnel.* The applicant should show that the personnel available to comply with 21.A.245(a) are, due to their special qualifications and number, able to provide assurance of the design or modification of a product, as well as the compilation and verification of all data needed to meet the applicable CS and environmental protection requirements while taking into account the present state of the art and new experience.

3 *Technical.* The applicant should have access to:

a. Workshops and production facilities which are suitable for manufacturing prototype models and test specimens.

b. Accommodation and test facilities which are suitable for carrying out tests and measurements needed to demonstrate compliance with the CS and environmental protection requirements. The test facilities may be subjected to additional technical conditions related to the nature of tests performed.

4 *Organisation.* The data submitted in accordance with 21.A.243 should show that:

4.1 The Head of the design organisation for which an application for approval has been made, has the direct or functional responsibility for all departments of the organisation which are responsible for the design of the product. If the departments responsible for design are functionally linked, the Head of the design organisation still carries the ultimate responsibility for compliance of the organisation with Part 21Subpart J.

4.2 An Office of Airworthiness, or equivalent function, has been established and staffed on a permanent basis to act as the focal point for co-ordinating airworthiness and environmental protection matters (see GM No. 1 to 21.A.239 (a) paragraph 3.1.4); it reports directly to the Head of the design organisation or is integrated into an independent quality assurance organisation reporting to the Head of the design organisation.

4.3 [Reserved]

4.4 Responsibilities for all tasks related to Type Investigations are assigned in such a way that gaps in authority are excluded.

4.5 The responsibility for a number of tasks as in paragraph 4.4 may be assigned to one person especially in the case of simple projects.

4.6 Co-ordination between technical departments and the persons in charge of the system monitoring required by 21.A.239(a)(3) has been established :

a. to ensure quick and efficient reporting and resolution of difficulties encountered using the handbook and associated procedures

b. to maintain the design assurance system

c. to optimise auditing activities.

GM No. 2 to 21.A.245 Requirements for approval - Organisations designing minor changes to type design or minor repairs to products

The data submitted in accordance with 21.A.243 should show that:

1. The manager responsible for design has the direct or functional responsibility for all departments of the organisation which are involved in the design of minor changes to type design or minor repairs to products.

2. Person(s) have been nominated to liaise with the Agency and to co-ordinate airworthiness and environmental protection matters. Their position in the organisation should allow direct report to the manager responsible for design.

3. Responsibilities for all tasks related to the design and approval of minor changes to type design or minor repairs to products are assigned to ensure that all areas are covered

4. The responsibility for a number of tasks as in paragraph 3 may be assigned to one person especially in the case of simple projects.

GM 21.A.247 Significant changes in the design assurance system

In addition to a change in ownership (see 21.A.249), the following changes to the design assurance system should be considered as 'significant' to the demonstration of compliance or to the airworthiness or environmental protection of the products:

1. Organisation

- Relocation to new premises (see also GM 21.A.249)
- Change in the industrial organisation (partnership, suppliers, design work sharing) unless it can be shown that the independent checking function of the demonstration of compliance is not affected
- Change in the parts of the organisation that contribute directly to the airworthiness or environmental protection (independent checking function, office of airworthiness [or equivalent])
- Change to the independent monitoring principles (see 21.A.239(a)(3))

2. Responsibilities

- Change of the management staff
  - the Head of the design organisation [GM No. 1 to 21.A.239(a), para.3.1.2, GM No. 1 to 21.A.245, para.4.1, GM 21.A.265(b)]
  - the Chief of the Office of Airworthiness [GM No. 1 to 21.A.245, para. 4.2]

- the Chief of the independent monitoring function of the design assurance system [21.A.239(a)(3) and AMC No. 1 to 21.A.243(a), para.2]

- New distribution of responsibilities affecting airworthiness or environmental protection
- For organisations designing minor changes to type design or minor repairs to products, change of the persons identified in GM No. 2 to 21.A.243(d).

3. Procedures

Change to the principles of procedures related to :

- the type certification
- the classification of changes and repairs as ‘ major ‘ or ‘ minor ‘ [21.A.263(c)(1)]
- the treatment of major changes and major repairs
- the approval of the design of minor changes and minor repairs [21.A.263(c)(2)]
- the issue of information and instructions under the privilege of 21.A.263(c)(3)
- the approval of minor revisions to the Aircraft Flight Manual [21.A.263(c)(4)]
- the approval of the design of major repairs [21.A.437 or 21.A.263(c)(5)]
- continued airworthiness (see 21.A.3)
- the configuration control, when airworthiness or environmental protection is affected
- the acceptability of design tasks undertaken by partners or sub-contractors [21.A.239(c)].

4. Resources

- Substantial reduction in number and/or experience of staff (see 21.A.245(a)).

GM 21.A.249 Transferability

1. Transfer of the approval would normally only be agreed in cases where the organisation itself remains substantially unchanged.
2. An acceptable transfer situation could be for example a change of company name (supported by the appropriate certificate from the National Companies Registration Office or equivalent) but with no changes to site address or Chief Executive. However, if the same legal entity were to relocate to new premises with a new Chief Executive and/or new departmental heads, then a substantial investigation by the Agency would be necessary such that the change would be classified as a re-approval.
3. In the event of receivership there may be good technical justification for continuation of the approval provided that the company continues to function in a satisfactory manner. It is likely that at a later stage the approval might be surrendered by the receiver or transferred to another legal entity in which case the former paragraphs apply.

GM No. 1 to 21.A.251 Terms of approval

1. The terms of approval are stated on the certificate of approval issued by the Agency. The certificate states the scope of work and the products, changes or repairs thereof, with the appropriate limitations for which the approval has been granted. For design organisation approval covering type certification or ETSO authorisation for APU, the list of product types covered by the design assurance system should be included.
2. Approval of a change in the terms of approval in accordance with 21.A.253 will be confirmed by an appropriate amendment of the certificate of approval.
3. The certificate references the handbook of the approved design organisation, provided in accordance with 21.A.243. This handbook defines the tasks which may be performed under the approval.
4. Scopes of work are, for example, ‘subsonic turbojet aeroplanes’, ‘turbopropeller aeroplanes’, ‘small aeroplanes’, ‘rotorcraft’... Technologies are quoted in the scope of work when it is considered by the Agency as a limitation for the design organisation approval.

5. For repair design activities, the certificate states the scope of work with the appropriate limitations for which the approval has been granted.

GM No. 2 to 21.A.251 Terms of approval - Organisations designing minor changes to type design or minor repairs to products

Terms of approval issued for organisations designing minor changes to type design or minor repairs to products should contain:

1. Scope of work

   This design organisation approval has been granted for:

   - designing minor changes to type design or minor repairs to [aircraft, engine, propeller] in accordance with the applicable CS and environmental protection requirements,
   - demonstrating and verifying the compliance with these CS and environmental protection requirements.

2. Category of products

   Any other indication if the Agency has found a limitation related to aircraft systems or technologies and reducing the scope as defined in paragraph 1.

3. Privileges

   The holder of this approval is entitled to:

   List of the privileges granted with the approval, pursuant to 21.A.263(c)(1), (2) and (3).

GM 21.A.257(a) Investigations

Arrangements that allow the Agency to make investigations include the complete design organisation including partners, sub-contractors and suppliers, whether they are in the State of the applicant or not, assisting and co-operating with the Agency in performing inspections and audits conducted during initial assessment and subsequent surveillance.

Assistance to the Agency includes all appropriate means associated with the facilities of the design organisation to allow the Agency to perform these inspections and audits, such as a meeting room and office support.

GM 21.A.263(b) DOA privilege related to compliance documents

A compliance document is the end result of a certification process, where the demonstration of compliance is recorded. For each specific certification process, the Agency is involved in the process itself at an early stage, especially through the establishment of the certification programme. The inspections or tests under 21.A.257(b) may be performed at various stages of the whole certification process, not necessarily when the compliance document is presented.

Therefore, according to the scheduled level of involvement, the Agency should agree with the DOA holder documents to be accepted without further Agency verification under the DOA privilege of 21.A.263(b).

AMC 21.A.263(b)(1) Compliance documents with conditions related to engine or propeller without a type-certificate or with unapproved changes and fitted on aircraft for which a permit to fly is requested

The establishment of flight conditions may include conditions related to engines/propellers without a type-certificate or with unapproved changes and fitted on the aircraft for which a permit to fly is requested. These conditions (i.e. installation, operating, maintenance conditions or limitations) are defined by the organisation responsible for the design of the engine/propeller and provided to the organisation responsible for the design of the aircraft.

When the organisation responsible for the design of the engine/propeller has a DOA, the establishment and substantiation of these conditions must be done under the relevant DOA procedures. For that purpose, the associated documentation must be processed like any other compliance document. It must be provided to the organisation responsible for the design of the aircraft that will use it for the establishment of the aircraft flight conditions.

AMC No. 1 to 21.A.263(c)(1) Procedure for the classification of changes to type design and repairs as minor and major

1. INTENT

This acceptable means of compliance provides means to develop a procedure for the classification of changes to type design and repairs.

Each DOA applicant must develop its own internal classification procedure following this AMC, in order to obtain the associated 21.A.263(c)(1) privilege.

2. PROCEDURE FOR THE CLASSIFICATION OF CHANGES TO TYPE DESIGN AND REPAIRS

2.1 Content

The procedure must address the following points:

- the identification of changes to type design or repairs
- classification
- justification of the classification
- authorised signatories
- supervision of changes to type design or repairs initiated by sub-contractors.

For changes to type design, criteria used for classification must be in compliance with 21.A.91 and GM 21.A.91.

For repairs, criteria used for classification must be in compliance with 21.A.435 and GM 21.A.435.

2.2 Identification of changes to type design or repairs

The procedure must indicate how the following are identified:

- major changes to type design or major repairs
- those minor changes to type design or minor repairs where additional work is necessary to demonstrate compliance with the CS and environmental protection requirements
- other minor changes to type design or minor repairs requiring no further demonstration of compliance.

2.3 Classification

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

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

2.4 Justification of the classification

All decisions of classification of changes to type design or repairs as ‘major’ or ‘minor’ must be recorded and, for those which are not straightforward, also documented. These records must be easily accessible to the Agency for sample check.

2.5 Authorised signatories

All classifications of changes to type design or repairs must be accepted by an appropriate authorised signatory.

The procedure must indicate the authorised signatories for the various products listed in the terms of approval.

For those changes or repairs that are handled by sub-contractors, as described under paragraph 2.6, it must be described how the DOA holder manages its classification responsibility.

2.6 Supervision of changes to type design or repairs initiated by sub-contractors

The procedure must indicate, directly or by cross-reference to written procedures, how changes to type design or repairs may be initiated and classified by sub-contractors and are controlled and supervised by the DOA holder.

AMC No. 2 to 21.A.263(c)(1) Privileges - Organisations designing minor changes to type design or minor repairs to products : classification procedure

1. Content

The procedure must address the following points:

- configuration control rules, especially the identification of changes to type design or repairs
- classification, in compliance with 21.A.91 and GM 21.A.91 for changes and GM 21.A.435 for repairs
- justification of the classification
- authorised signatories.

2. Identification of changes to type design or repairs

The procedure must indicate how the following minor changes to type design or minor repairs are identified:

- those minor design changes to type design or minor repairs where additional substantiation data is necessary to demonstrate compliance with the CS or environmental protection requirements
- other minor design changes to type design or minor repairs requiring no further demonstration of compliance.

3. Classification

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

If no specific requirements are applicable to the change or the repair, the above review must be done at the level of the part or system where the change or repair is integrated and where specific CS or environmental protection requirements are applicable.

For repair, see also GM 21.A.435.

4. Justification of the classification

All decisions of classification of changes to type design or repairs as ‘minor‘ must be recorded and, for those which are not straightforward, also documented. These records must be easily accessible to the Agency for sample check.

It may be in the format of meeting notes or register.

5. Authorised signatories

All classifications of changes to type design or repairs must be accepted by an appropriate authorised signatory.

The procedure must indicate the authorised signatories for the various products listed in the terms of approval.

AMC No. 1 to 21.A.263(c)(2) Procedure for the approval of minor changes to type design or minor repairs

1. INTENT

This acceptable means of compliance provides means to develop a procedure for the approval of minor changes to type design or minor repairs.

Each DOA applicant must develop its own internal procedures following this AMC, in order to obtain the associated privilege under 21.A.263(c)(2).

2. PROCEDURE FOR THE APPROVAL OF MINOR CHANGES TO TYPE DESIGN OR MINOR REPAIRS

2.1 Content

The procedure must address the following points:

- compliance documentation
- approval under the DOA privilege
- authorised signatories
- supervision of minor changes to type design or minor repairs handled by sub-contractors.

2.2 Compliance documentation

For those minor changes to type design or minor repairs where additional work to demonstrate compliance with the applicable CS and environmental protection requirements is necessary, compliance documentation must be established and independently checked as required by 21.A.239(b).

The procedure must describe how the compliance documentation is produced and checked.

2.3 Approval under the DOA privilege

2.3.1 For those minor changes to type design or minor repairs where additional work to demonstrate compliance with the applicable CS and environmental protection requirements is necessary, the procedure must define a document to formalise the approval under the DOA privilege.

This document must include at least:

- identification and brief description of the change or repair and reasons for change or repair
- applicable CS or environmental protection requirements and methods of compliance
- reference to the compliance documents
- effects, if any, on limitations and on the approved documentation
- evidence of the independent checking function of the demonstration of compliance
- evidence of the approval under the privilege of 21.A.263(c)(2) by an authorised signatory
- date of the approval.

For repairs, see AMC 21.A.433(a).

2.3.2 For the other minor changes to type design or minor repairs, the procedure must define a means to identify the change or repair and reasons for the change or repair, and to formalise its approval by the appropriate engineering authority under an authorised signatory. This function may be delegated by the Office of Airworthiness but must be controlled by the Office of Airworthiness, either directly or through appropriate procedures of the DOA holder's design assurance system.

2.4 Authorised signatories

The persons authorised to sign for the approval under the privilege of 21.A.263(c)(2) must be identified (name, signature and scope of authority) in appropriate documents that maybe linked to the handbook.

2.5 Supervision of minor changes to type design or minor repairs handled by sub-contractors

For the minor changes to type design or minor repairs described in 2.3.2, that are handled by sub-contractors, the procedure must indicate, directly or by cross-reference to written

procedures how these minor changes to type design or minor repairs are approved at the sub-contractor level and the arrangements made for supervision by the DOA holder.

AMC No. 2 to 21.A.263(c)(2) Privileges - Organisations designing minor changes to type design or minor repairs to products : procedure for the approval of minor changes to type design or minor repairs

1. Content

The procedure must address the following points:

- compliance documentation
- approval under the DOA privilege
- authorised signatories.

2. Compliance documentation

For those minor changes to type design or minor repairs where additional work to demonstrate compliance with the applicable CS and environmental protection requirements is necessary, compliance documentation must be established and independently checked as required by 21.A.239(b).

The procedure must describe how the compliance documentation is produced and checked.

3. Approval under the DOA privilege

3.1. For those minor changes to type design or minor repairs where additional work to demonstrate compliance with the applicable CS or environmental protection requirements is necessary, the procedure must define a document to formalise the approval under the DOA privilege.

This document must include at least:

- identification and brief description of the change or the repair and reason for change or repair
- applicable CS or environmental protection requirements and methods of compliance
- reference to the compliance documents
- effects, if any, on limitations and on the approved documentation
- evidence of the independent checking function of the demonstration of compliance
- evidence of the approval under the privilege of 21.A.263(c)(2) by an authorised signatory
- date of the approval

For repairs, see also AMC 21.A.433(a).

3.2. For the other minor changes to type design or minor repairs, the procedure must define a means to identify the change or repair and reasons for the change or repair, and to formalise its approval by the appropriate engineering authority under an authorised signatory. This function must be controlled through appropriate procedures of the DOA holder's design assurance system.

4. Authorised signatories

The persons authorised to sign for the approval under the privilege of 21.A.263(c)(2) must be identified (name, signature and scope of authority) in appropriate documents that may be linked to the handbook.

GM 21.A.263(c)(3) Issue of information or instructions

1. INTENT

This GM provides guidelines to address the various aspects the DOA should cover in order to have a comprehensive procedure for the issue of information or instructions.

2. SCOPE

The information or instructions referred to in 21.A.263(c)(3) are issued by a DOA holder to make available to the owners or operators of a product with all necessary data to implement a change on the product or a repair, or to inspect it. Some are also issued to provide maintenance organisations and other interested persons with all necessary maintenance data for the performance of maintenance, including implementation of a change on the product or a repair, or inspection, in accordance with 21.A.61, 21.A.107, 21.A.120 or 21.A.449 (Instructions for Continued Airworthiness).

This information or instructions may be issued in a format of a Service Bulletin as defined in ATA 100 system, or in Structural Repair Manuals, Maintenance Manuals, Engine and Propeller Manuals etc.

The preparation of this data involves design, production and inspection. As the overall responsibility, through the privilege, is allocated to the DOA holder, the three aspects should be properly handled under the DOA to obtain the privilege 'to issue information or instructions containing a statement that the technical content is approved', and a procedure should exist.

3. PROCEDURE

For the information and instructions issued under 21.A.263(c)(3), the DOA holder should establish a procedure addressing the following points :

- preparation
- verification of technical consistency with corresponding approved change(s) , repair(s) or approved data, including effectivity, description, effects on airworthiness and environmental protection, especially when limitations are changed
- verification of the feasibility in practical applications
- authorised signatories.

The procedure should include the information or instructions prepared by sub-contractors or vendors, and declared applicable to its products by the DOA holder.

4. STATEMENT

The statement provided in the information or instructions should also cover the information or instructions prepared by sub-contractors or vendors and declared applicable to its products by the DOA holder.

The technical content is related to the design data and accomplishment instructions, and its approval means that:

- the design data has been appropriately approved ; and
- the instructions provide for practical and well defined installation/inspection methods, and, when accomplished, the product is in conformity with the approved design data.

Note : Information and instructions related to required actions under 21.A.3B(b) (airworthiness directives) are submitted to the Agency to ensure compatibility with Airworthiness directive content (see 21.A.265(e)), and contain a statement that they are, or will be, subject to an airworthiness directive issued by the Agency.

GM 21.A.263(c)(4) Procedure for the approval of minor revisions to the aircraft flight manual

1. INTENT

This GM provides guidelines to develop a procedure for the approval of minor revisions to the aircraft flight manual (AFM).

Each DOA applicant/holder should develop its own internal procedure, based on these guidelines, in order to obtain the associated privilege under 21.A.263(c)(4).

2. MINOR REVISIONS TO THE AFM

2.1 The following revisions to the AFM are defined as minor revisions:

(a) Revisions to the AFM associated with changes to type design classified as minor in accordance with 21.A.91

(b) Revision to the AFM not associated with changes to type design (also identified as stand-alone revisions), that falls under one of the following:

- Changes to limitations or procedures that are achieved without altering or exceeding certification data (e.g. weight, structural, noise, etc.)
- Consolidation of two or more previously approved and compatible AFMs into one, or compilation of different parts taken from previously approved and compatible AFMs that are directly applicable to the subject aircraft
- The introduction of compatible and previously approved AFM amendments, revisions, appendices or supplements.

(c) Administrative revisions to the AFM, defines as follows:

(1) FOR AFM ISSUED BY THE TYPE-CERTIFICATE HOLDER

- Editorial revisions or corrections to the AFM
- Changes to parts of the AFM that are not required to be approved by EASA
- Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM in a previously approved manner.
- The addition of aircraft serial numbers to an existing AFM where the aircraft configuration, as related to the AFM, is identical to aircraft already in that AFM.
- The removal of reference to aircraft serial numbers no longer applicable to that AFM.
- The translation of an EASA approved AFM into the language of the State of Design or the State of Registration.

(2) FOR AFM SUPPLEMENTS ISSUED BY STC HOLDERS

- Editorial revisions or corrections to the AFM supplement.
- Changes to parts of the AFM that are not required to be approved by EASA
- Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM supplement in a previously approved manner.
- The addition of aircraft serial numbers to an existing AFM supplement where the aircraft configuration, as related to the AFM supplement, is identical to aircraft already in that AFM supplement.
- The addition of a new STC to an existing AFM supplement, when this supplement is fully applicable to the new STC
- The removal of reference to aircraft serial numbers no longer applicable to that AFM supplement.
- The translation of an EASA approved AFM into the language of the State of Design or the State of Registration.

2.2 No other revision can be classified as minor, unless specifically agreed by the Agency.

3. PROCEDURE FOR THE APPROVAL OF MINOR REVISIONS TO THE AFM

3.1 Content

The procedure should address the following points:

- preparation of all revisions to the AFM,

- classification as minor of the revision to the AFM,
- approval of the revisions to the AFM,
- approval statement.

3.2 Preparation

The procedure should indicate how revisions to the AFM are prepared and how the co-ordination with people in charge of design changes is performed.

3.3 Classification

The procedure should indicate how revisions to the AFM are classified as minor, in accordance with the criteria of paragraph 2.

All decisions of classification of minor revisions to the AFM that are not straightforward must be recorded and documented. These records must be easily accessible to the Agency for sample check.

All classifications of minor revisions to AFM must be accepted by an appropriate authorised signatory.

The procedure must indicate the authorised signatories for the various products listed in the terms of approval.

3.4 Approval

The procedure should indicate how the approval under the privilege of 21.A.263(c)(4) will be formalised.

The authorised signatories should be identified (name, signature), together with the scope of authorisation, in a document that can be linked to the DOA handbook.

3.5 Approval statement

Revisions of the AFM approved under the privilege of 21.A.263(c)(4) should be issued with the approval statement defined in 21.A.263(c)(4) on the front page and/or in the log of revisions.

AMC 21.A.263(c)(6) Procedure for the approval of the conditions for issue of a permit to fly

1. INTENT

This AMC provides means to develop a procedure to determine that an aircraft can fly, under the appropriate restrictions compensating for noncompliance with the certification specifications applicable to the aircraft category.

Each DOA applicant or holder must develop its own internal procedure following this AMC, in order to obtain the privilege to make this determination and approve associated conditions without Agency involvement, under 21.A.263(c)(6). When the privilege does not apply, the DOA holder will prepare all necessary data required for the determination in accordance with the same procedure required for the privilege, and will apply for Agency approval.

2. PROCEDURE FOR THE APPROVAL OF THE CONDITIONS FOR ISSUE OF A PERMIT TO FLY

2.1 Content

The procedure must address the following points:

- decision to use the privilege
- management of the aircraft configuration
- determination of the conditions that must be complied with to perform safely a flight
- documentation of flight conditions substantiations
- approval under the DOA privilege, when applicable

- authorised signatories.

2.2 Decision to use the privilege of 21.A.263(c)(6)

The procedure must include a decision to determine:

- flights for which the privilege of 21.A.263(c)(6) will be exercised.

2.3 Management of the aircraft configuration

The procedure must indicate:

- how the aircraft, for which an application for permit to fly is made, is identified;
- how changes to the aircraft will be managed.

2.4 Determination of the conditions that must be complied with to perform safely a flight

The procedure must describe the process used by the DOA holder to justify that an aircraft can perform the intended flight(s) safely. This process should include:

- identification of deviations from applicable certification specifications or non-compliance with Part 21 conditions for the issue of a certificate of airworthiness;
- analysis, calculations, tests or other means used to determine under which conditions or restrictions the aircraft can perform safely a flight;
- the establishment of specific maintenance instructions and conditions to perform these instructions;
- independent technical verification of the analysis, calculations, tests or other means used to determine under which conditions or restrictions the aircraft can perform the intended flight(s) safely;
- statement by the office of airworthiness (or equivalent), that the determination has been made in accordance with the procedure and that the aircraft has no features and characteristics making it unsafe for the intended operation under the identified conditions and restrictions;
- approval by an authorised signatory.

2.5 Documentation of flight conditions substantiations

1. The analysis, calculations, tests, or other means used to determine under which conditions or restrictions the aircraft can perform safely a flight, must be compiled in compliance documents. These documents must be signed by the author and by the person performing the independent technical verification.
2. Each compliance document must have a number and issue date. The various issues of a document must be controlled.
3. The data submitted and approved by the type-certificate holder can be used as substantiations. In that case, the independent technical verification referred to in 2.4 is not required.

2.6 Approval under the DOA privilege

2.6.1 Initial approval

The procedure must include the following EASA Form 18A to support the approval under the DOA privilege:

<table>
<tr><td colspan="2">FLIGHT CONDITIONS FOR A PERMIT TO FLY – APPROVAL FORM</td></tr>
<tr><td>1. Applicant:
Approval No:
[Name and organisation approval number of organisation providing the flight conditions and associated substantiations]</td><td>2. Approval form No:
Issue:
[number and issue, for traceability purpose]</td></tr>
<tr><td>3. Aircraft manufacturer/type</td><td>4. Serial number(s)</td></tr>
<tr><td colspan="2">5. Purpose
[Purpose in accordance with 21.A.701(a)]</td></tr>
<tr><td colspan="2">6. Aircraft configuration
The above aircraft for which a permit to fly is requested is defined in [add reference to the document(s) identifying the detailed configuration of the aircraft]
[For change(s) affecting the initial approval form: description of change(s). This form must be re-issued]</td></tr>
<tr><td colspan="2">7. Substantiations
[References to the document(s) justifying that the aircraft (as described in 6.) can perform the intended flight(s) safely under the defined conditions or restrictions.]
[For change(s) affecting the initial approval form: reference(s) to additional substantiation(s). This form must be re-issued]</td></tr>
<tr><td colspan="2">8. Conditions/Restrictions
The above aircraft must be used with the following conditions or restrictions:
[Details of these conditions/restrictions, or reference to relevant document, including specific maintenance instructions and conditions to perform these instructions]</td></tr>
<tr><td colspan="2">9. Statement
The determination of the flight conditions has been made in accordance with the relevant DOA procedure agreed by the Agency.
The aircraft as defined in block 6 above has no features and characteristics making it unsafe for the intended operation under the identified conditions and restrictions.</td></tr>
<tr><td colspan="2">[strikethrough what is not applicable]
10a. Approved under the authority of DOA EASA.21J.xyz [when privilege of 21.A.263(c)(6) applies]
10b. Submitted under the authority of DOA EASA.21J. xyz [when privilege of 21.A.263(c)(6) does not apply]</td></tr>
<tr><td>11. Date of issue</td><td>12. Name and signature
[Authorised signatory]</td></tr>
<tr><td colspan="2">13. EASA approval and date
[when privilege of 21.A.263(c)(6) does not apply]</td></tr>
</table>

EASA Form 18A Issue 3

When the privilege of 21.A.263(c)(6) is not applicable, the signed form should be presented by the office of airworthiness (or equivalent) to the Agency.

2.6.2 Approval of changes

Except for changes that do not affect the conditions approved for the issue of the permit to fly, the procedure must specify how changes will be approved by the DOA Holder. The EASA Form 18A must be updated.

2.7 Authorised signatories

The person(s) authorised to sign the approval form must be identified (name, signature and scope of authority) in the procedure, or in an appropriate document linked to the DOA handbook.

AMC 21.A.263(c)(7) Procedure for the issue of a permit to fly

1. INTENT

This acceptable means of compliance provides means to develop a procedure for the issue of a permit to fly.

Each DOA applicant or holder must develop its own internal procedure following this AMC, in order to obtain the privilege of 21.A.263(c)(7) to issue permits to fly for aircraft it has designed or modified, or for which it has approved under 21.A.263(c)(6) the conditions under which the permit to fly can be issued, and when the design organisation itself is controlling under its DOA the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight.

2. PROCEDURE FOR THE ISSUE OF A PERMIT TO FLY

2.1 Content

The procedure must address the following points:

- conformity with approved conditions;
- issue of the permit to fly under the DOA privilege;
- authorised signatories;
- interface with the local authority for the flight.

2.2 Conformity with approved conditions

The procedure must indicate how conformity with approved conditions is made, documented and attested by an authorised person.

2.3 Issue of the permit to fly under the DOA privilege

The procedure must describe the process to prepare the EASA Form 20b and how compliance with 21.A.711(b) and (e) is established before signature of the permit to fly.

2.4 Authorised signatories

The person(s) authorised to sign the permit to fly under the privilege of 21.A.263(c)(7) must be identified (name, signature and scope of authority) in the procedure, or in an appropriate document linked to the DOA handbook.

2.5 Interface with the local authority for the flight

The procedure must include provisions describing the communication with the local authority for compliance with the local requirements which are outside the scope of the conditions of 21.A.708(b) (see 21.A.711(e)).

AMC 21.A. 265(a) Administration of the Handbook

1. The handbook of the applicant must be in the language which will permit the best use of it by all personnel charged with the tasks performed for the purpose of the design organisation. The applicant may be requested to provide an English translation of the handbook and other supporting documents as necessary for the investigation.

2. The handbook must be produced in a concise form with sufficient information to meet 21.A.243 relevant to the scope of approval sought by the applicant. The handbook must include the following:

   a. Organisation name, address, telephone, telex and facsimile numbers.

   b. Document title, and company document reference No (if any).

   c. Amendment or revision standard identification for the document.

   d. Amendment or revision record sheet.

   e. List of effective pages with revision/date/amendment identification for each page.

   f. Contents list or index.

   g. A distribution list for the Handbook.

   h. An introduction, or foreword, explaining the purpose of the document for the guidance of the organisation's own personnel. Brief general information concerning the history and development of the organisation and, if appropriate, relationships with other organisations which may form part of a group or consortium, must be included to provide background information for the Agency.

   i. The certificate of approval must be reproduced in the document.

   j. Identification of the department responsible for administration of the Handbook.

   Note: In the case of an initial or revised approval it is recognised that certificate will be issued after EASA agreement to the handbook content in draft form. Arrangements for formal publication in a timely manner must be agreed before the certificate of approval is issued.

3. An updating system must be clearly laid down for carrying out required amendments and modifications to the handbook.

4. The handbook may be completely or partially integrated into the company organisation manual. In this case, identification of the information required by 21.A.243 must be provided by giving appropriate cross-references, and these documents must be made available, on request, to the Agency.

GM 21.A.265(b) Use of the Handbook

1. The handbook should be signed by the Chief Executive and the Head of the design organisation and declared as a binding instruction for all personnel charged with the development and type investigation of products.

2. All procedures referenced in the handbook are considered as parts of the handbook and therefore as basic working documents.

Subpart K — Parts and appliances

AMC 21.A.303(c) Standard Parts

1. In this context a part is considered as a ‘standard part’ where it is designated as such by the design approval holder responsible for the product, part or appliance, in which the part is intended to be used. In order to be considered a ‘standard part’, all design, manufacturing, inspection data and marking requirements necessary to demonstrate conformity of that part should be in the public domain and published or established as part of officially recognised Standards, or

2. For sailplanes and powered sailplanes, where it is a non-required instrument and/or equipment certified under the provision of CS 22.1301(b), if that instrument or equipment, when installed, functioning, functioning improperly or not functioning at all, does not in itself, or by its effect upon the sailplane and its operation, constitute a safety hazard.

‘Required’ in the term ‘non-required’ as used above means required by the applicable certification specifications (CS 22.1303, 22.1305 and 22.1307) or required by the relevant operating regulations and the applicable Rules of the Air or as required by Air Traffic Management (e.g. a transponder in certain controlled airspace).

Examples of equipment which can be considered standard parts are electrical variometers, bank/slip indicators ball type, total energy probes, capacity bottles (for variometers), final glide calculators, navigation computers, data logger / barograph / turnpoint camera, bug-wipers and anti-collision systems.

Equipment which must be approved in accordance to the certification specifications shall comply with the applicable ETSO or equivalent and is not considered a standard part (e.g. oxygen equipment).

GM No. 2 to 21.A.303(c) Officially recognised Standards

In this context ‘officially recognised Standards’ means:

1. Those standards established or published by an official body whether having legal personality or not, which are widely recognised by the air transport sector as constituting good practice.

2. The standard used by the manufacturer of the equipment as mentioned in paragraph 2 of AMC 21.A.303(c).

Subpart M — Repairs

GM 21.A.431(a) Scope

Manuals and other instructions for continued airworthiness (such as the Manufacturers Structural Repair Manual, Maintenance Manuals and Engine Manuals provided by the holder of the type-certificate, supplemental type-certificate, or APU ETSO authorisation as applicable) for operators, contain useful information for the development and approval of repairs.

When these data are explicitly identified as approved, they may be used by operators without further approval to cope with anticipated in-service problems arising from normal usage provided that they are used strictly for the purpose for which they have been developed.

Approved data is data which is approved either by the Agency, or by an appropriately approved design organisation.

NB: Flow Chart 1 addresses the procedures that should be followed for products where the State of design is a Member State

Flow Chart 2 addresses procedures that should be followed for products where the State of design is not a Member State.

When specific repair data is approved outside of the Community, conditions for acceptance may be defined in the bilateral arrangements between the Community and the competent authority of a third country. In the absence of such arrangement, the repair data shall follow the approval route as if it was designed and approved within the Community.

GM 21.A.431(d) Repairs to ETSO articles other than an APU

A repair to an ETSO article other than an APU can be either be seen:

1. Under 21.A.611 in the context of an ETSO authorisation, i.e., when an article as such is specifically approved under Subpart O, with dedicated rules that give specific rights and obligations to the designer of the article, irrespective of any product type design or change to the type design. For a repair to such an article, irrespective of installation on any aircraft, Subpart O, and 21.A.611 in particular, should be followed; or
2. When an airline or a maintenance organisation is designing a new repair (based on data not published in the TC holder or Original Equipment Manufacturer documentation) on an article installed on an aircraft, such a repair can be considered as a repair to the product in which the article is installed, not to the article taken in isolation. Therefore Subpart M can be used for the approval of this repair, that will be identified as ‘repair to product x affecting article y’, but not ‘repair to article y’.

AMC 21.A.433 (a) and 21.A.447 Repair design and record keeping

1. Relevant substantiation data associated with a new major repair design and record keeping should include:
   a. damage identification and reporting source,
   b. major repair design approval sheet identifying applicable specifications and references of justifications,
   c. repair drawing and/or instructions and scheme identifier,
   d. correspondence with the TC, STC, or APU ETSO authorisation holder, if its advice on the design has been sought,
   e. structural justification (static strength, fatigue, damage tolerance, flutter etc.) or references to this data,
   f. effect on the aircraft, engines and/or systems, (performance, flight handling, etc., as appropriate)

g. effect on maintenance programme,

h. effect on Airworthiness limitations, the Flight Manual and the Operating Manual,

i. weight and moment change,

j. special test requirements.

2. Relevant minor repair documentation includes paragraphs 1(a) and (c). Other points of paragraph 1 may be included where necessary. If the repair is outside the approved data, justification for classification is required.

3. Special consideration should be given to repairs that impose subsequent limitations on the part, product or appliance, (e.g., engine turbine segments that may only be repaired a finite number of times, number of repaired turbine blades per set, oversizing of fastener holes, etc.).

4. Special consideration should also be given to Life Limited parts and Critical Parts, notably with the involvement of the type-certificate or STC holder, when deemed necessary under 21.A.433 (b).

5. Repairs to engine or APU critical parts would normally only be accepted with the involvement of the TC holder.

GM 21.A.435(a) Classification of repairs

1. Clarification of the terms Major/Minor

In line with the definitions given in 21.A.91, a new repair is classified as 'major' if the result on the approved type design has an appreciable effect on structural performance, weight, balance, systems, operational characteristics or other characteristics affecting the airworthiness of the product, part or appliance. In particular, a repair is classified as major if it needs extensive static, fatigue and damage tolerance strength justification and/or testing in its own right, or if it needs methods, techniques or practices that are unusual (i.e., unusual material selection, heat treatment, material processes, jigging diagrams, etc.)

Repairs that require a re-assessment and re-evaluation of the original certification substantiation data to ensure that the aircraft still complies with all the relevant requirements, are to be considered as major repairs.

Repairs whose effects are considered minor and require minimal or no assessment of the original certification substantiation data to ensure that the aircraft still complies with all the relevant requirements, are to be considered ‘minor’.

It is understood that not all the certification substantiation data will be available to those persons/organisations classifying repairs. A qualitative judgement of the effects of the repair will therefore be acceptable for the initial classification. The subsequent review of the design of the repair may lead to it being re-classified, owing to early judgements being no longer valid.

2. Airworthiness concerns for Major/Minor classification

The following should be considered for the significance of their effect when classifying repairs. Should the effect be considered to be significant then the repair should be classified 'Major'. The repair may be classified as 'Minor' where the effect is known to be without appreciable consequence.

i) Structural performance

Structural performance of the product includes static strength, fatigue, damage tolerance, flutter and stiffness characteristics. Repairs to any element of the structure should be assessed for their effect upon the structural performance.

ii) Weight and balance

The weight of the repair may have a greater effect upon smaller aircraft as opposed to larger aircraft. The effects to be considered are related to overall aircraft centre of

gravity and aircraft load distribution. Control surfaces are particularly sensitive to the changes due to the effect upon the stiffness, mass distribution and surface profile which may have an effect upon flutter characteristics and controllability.

iii) Systems

Repairs to any elements of a system should be assessed for the effect intended on the operation of the complete system and for the effect on system redundancy. The consequence of a structural repair on an adjacent or remote system should also be considered as above, (for example: airframe repair in area of a static port).

iv) Operational characteristics

Changes may include:

- stall characteristics
- handling
- performance and drag
- vibration

v) Other characteristics

- changes to load path and load sharing
- change to noise and emissions
- fire protection / resistance

Note: Considerations for classifying repairs 'Major/Minor' should not be limited to those listed above.

3. Examples of 'Major' repairs

i) A repair that requires a permanent additional inspection to the approved maintenance programme, necessary to ensure the continued airworthiness of the product. Temporary repairs for which specific inspections are required prior to installation of a permanent repair do not necessarily need to be classified as 'Major'. Also, inspections and changes to inspection frequencies not required as part of the approval to ensure continued airworthiness do not cause classification as 'Major' of the associated repair.

ii) A repair to life limited or critical parts.

iii) A repair that introduces a change to the Aircraft Flight Manual.

GM 21.A.437 Issue of repair design approval

1) Approval by DOA holder

Approval of repairs through the use of procedures agreed with the Agency, means an approval issued by the DOA holder without requiring Agency involvement. The Agency will monitor application of this procedure within the surveillance plan for the relevant organisation. When the organisation exercises this privilege, the repair release documentation should clearly show that the approval is under their DOA privilege.

2) Previously approved data for other applications

When it is intended to use previously approved data for other applications, it is expected that applicability and effectiveness would be checked with an appropriately approved design organisation. After damage identification, if a repair solution exists in the available approved data, and if the application of this solution to the identified damage remains justified by the previous approved repair design, (structural justifications still valid, possible airworthiness limitations unchanged), the solution can be considered approved and can be used again.

3) Temporary repairs.

These are repairs that are life limited, to be removed and replaced by a permanent repair after a limited service period. These repairs should be classified under 21.A.435 and the service period defined at the approval of the repair.

4) Fatigue and damage tolerance.

When the repaired product is released into service before the fatigue and damage tolerance evaluation has been completed, the release should be for a limited service period, defined at the issue of the repair.

GM 21.A.437(a) Issue of repair design approval

1) Products first type-certificated by the Agency or first type-certificated by a Member State (covering products type-certificated through JAA procedures or under national regulations and products certificated nationally without a type-certificate).

i) Agency approval is required in cases of major repairs proposed by design organisation approval holders, not being the TC, STC or APU ETSO authorisation holder, and in cases of minor repairs proposed by persons not holding a design organisation approval.

ii) Agency approval may be required in cases of major repairs proposed by design organisation approval holders, being the TC, STC or APU ETSO authorisation holder, if the major repair is:

- related to new interpretation of the certification specification as used for type certification.
- related to different means of compliance from that used for type certification.
- related to the application of certification specification different from that used for type certification.

Note: This should be established at the time of DOA approval.

2) Products first type-certificated by the competent authority of a third country.

Agency approval is always required for major repairs on products first type-certificated by the competent authority of a third country. Approval privileges extended to TC holders (noted in 21.A.437(b) are not extended to TC holders of products first type-certificated by the competent authority of a third country. Type-certificate holders of those types may need to be involved when an arrangement with the TC holder has been determined necessary under 21.A.433(b).

For repairs approved outside of the Community conditions for acceptance may be defined in the bilateral arrangement between the Community and the competent authority of a third country. In the absence of such arrangement, the repair data shall follow the approval route as if it was designed and approved within the EU.

AMC 21.A.437(b) Issue of repair design approval

In order for the approved design organisation that is also the type-certificate, supplemental type-certificate or APU ETSO authorisation holder to approve 'Major' repair design the following should be considered applicable:

i) The type-certificate, supplemental type-certificate or APU ETSO authorisation holder being approved under Part 21 Subpart J.

ii) Procedures having been established that comply with Part 21 Subpart M as agreed with the Agency.

iii) The type-certification basis for the product, part or appliance to be repaired having been identified together with all other relevant requirements.

iv) All records and substantiation data including documents demonstrating compliance with all relevant certification specifications being held for reviews by the Agency.

v) A summary list of all major repair approvals being provided to the Agency on a regular basis as agreed with the Agency.

vi) Whether the repair design is affected by the presence of any supplemental type-certificate.

GM 21.A.439 Production of repair parts

A maintenance body, (organisation or person), may manufacture parts for repair purposes when in accordance with Subpart F or when approved under Subpart G of Part 21. In addition, a maintenance organisation may manufacture parts for its own repair purposes when expressly authorised by the competent authority of the Member State in accordance with the applicable implementing rules.

GM 21.A.441 Repair Embodiment

Repairs should be accomplished by an organisation or person in accordance with the relevant implementing rules.

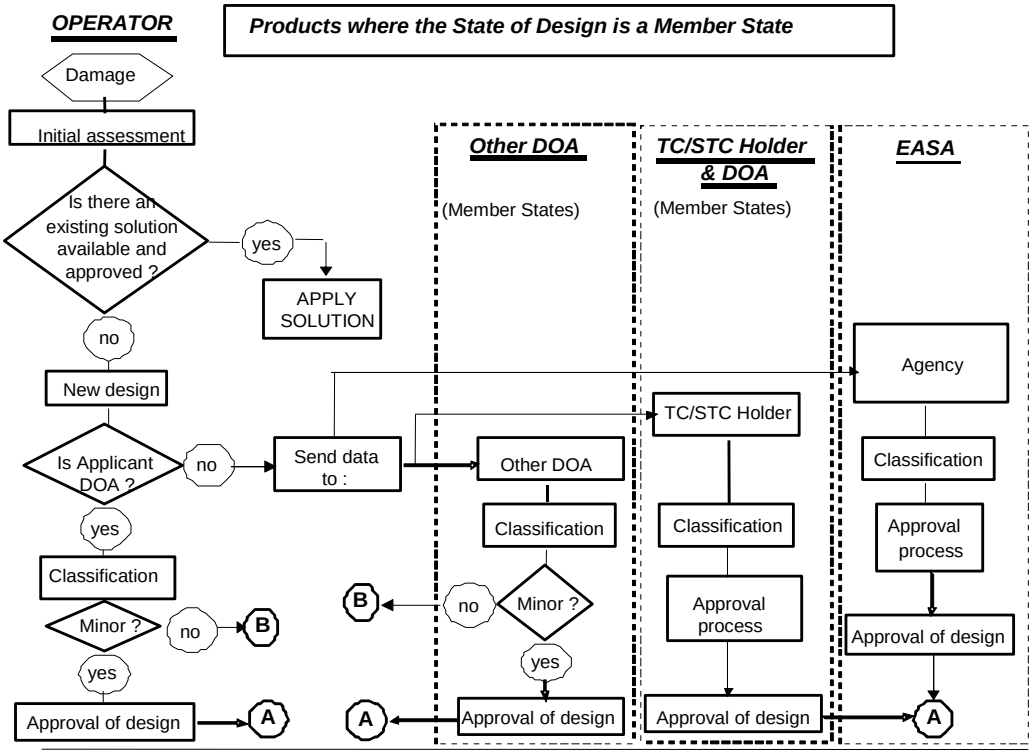
The holder of a production organisation approval under Subpart G of Part 21 may accomplish repairs to new aircraft, within its terms of approval, under the privilege of 21.A.163(d).

GM 21.A.443 Limitations

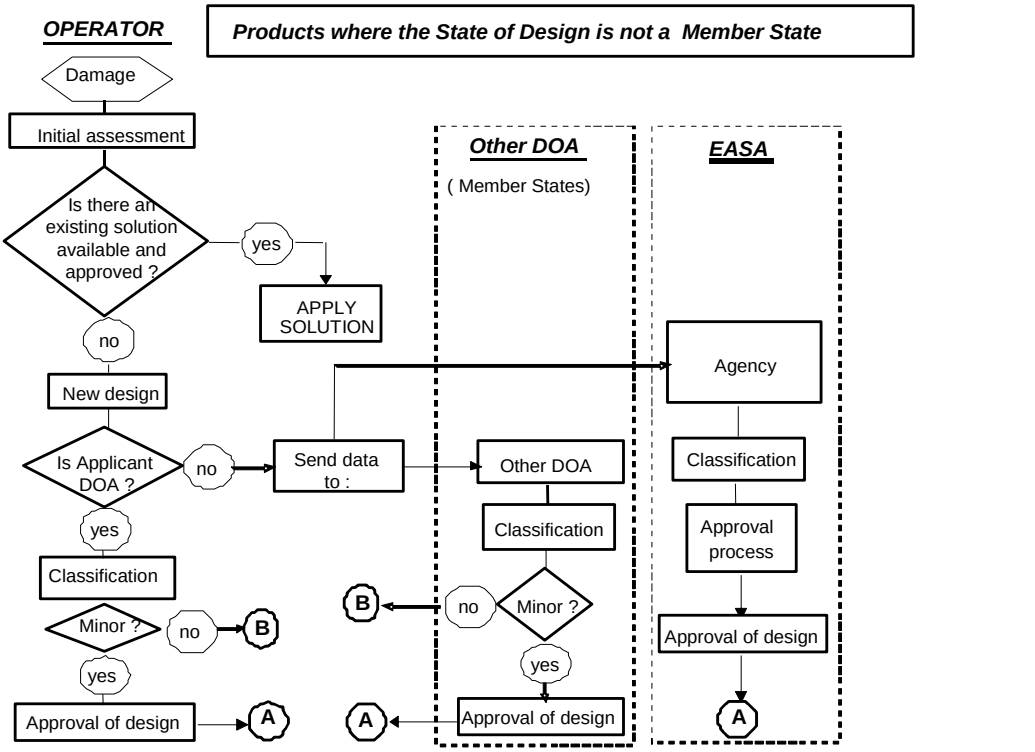
Instructions and limitations associated with repairs should be specified and controlled by those procedures required by the applicable operations rules.

GM 21.A.445 Unrepaired damage

This is not intended to supersede the normal maintenance practices defined by the type-certificate holder, (e.g., blending out corrosion and re-protection, stop drilling cracks, etc.), but addresses specific cases not covered in the manufacturer's documentation.



Legend: (A) : go to " Apply solution " (B) : go to EASA or TC/STCH for approval of major repair (only if T C/STC holder has DOA privilege for major repair)



Legend: (A) : go to " Apply solution " (B) : go to EASA for approval of major repair

Subpart O — European Technical Standard Order Authorisations

AMC 21.A.602B(b)(2) Procedures for ETSO authorisations

1. Scope

   1.1 A manual of procedures must set out specific design practices, resources and sequence of activities relevant for the specific projects, taking account of Part 21 requirements.

   1.2 These procedures must be concise and limited to the information needed for quality and proper control of activities by the applicant/holder, and by the Agency.

2. Management of the ETSO authorisation process

   A procedure explaining how the application to the Agency and certification process to obtain an ETSOA will be made, must be established.

3. Management of design changes

   3.1 A procedure taking into account 21.A.611, must be established for the classification and approval of design changes on articles under ETSO authorisation

   3.2 Procedure for the classification and approval of repairs and unintentional deviations from the approved design data occurring in production (concessions or non-conformance's) must be established.

4. Obligations addressed in 21.A.609

   The applicant should establish the necessary procedures to show to the Agency how it will fulfil the obligations under 21.A.609.

   For issue of information and instructions, a procedure following the principles of AMC 21.A.14(b), paragraph 4 must be established.

5. Control of design sub-contractors

   The applicant must establish the necessary procedures to show to the Agency how it will control design sub-contractors.

AMC 21.A.608 Declaration of Design and Performance

STANDARD FORM

DDP No. .....

ISSUE No. .....

1. Name and address of manufacturer.
2. Description and identification of article including:

   Type No .....

   Modification Standard

   Master drawing record

   Weight and overall dimensions
3. Specification reference, i.e., ETSO No. and Manufacturer's design specification.
4. The rated performance of the article directly or by reference to other documents.
5. Particulars of approvals held for the equipment.
6. Reference to qualification test report.
7. Service and Instruction Manual reference number.
8. Statement of compliance with the appropriate ETSO and any deviations therefrom.
9. A statement of the level of compliance with the ETSO in respect of the ability of the article to withstand various ambient conditions or to exhibit various properties.

The following are examples of information to be given under this heading depending on the nature of the article and the specifications of the ETSO.

(a) Environmental Qualification
   - i. Temperature and Altitude
   - ii. Temperature Variation
   - iii. Humidity
   - iv. Operational Shocks and Crash Safety
   - v Vibration
   - vi. Explosion Proofness
   - vii. Waterproofness
   - viii. Fluids Susceptibility
   - ix. Sand and Dust
   - x. Fungus Resistance
   - xi. Salt Spray
   - xii. Magnetic Effect
   - xiii. Power Input
   - xiv. Voltage Spike
   - xv. Audio Frequency Conducted Susceptibility - Power Inputs
   - xvi. Induced Signal Susceptibility

xvii. Radio Frequency Susceptibility (Radiated and Conducted)
xviii. Emission of Radio Frequency Energy
xix. Lightning Induced Transient Susceptibility
xx. Lightning Direct Effects
xxi. Icing
xxii. Electrostatic Discharge
xxiii. Fire, Flammability

(Note: The manufacturer should list environmental categories for each of the sections of the issue of EUROCAE ED-14/RTCA DO-160 that was used to qualify the article.)

(b) For radio transmitters the transmitting frequency band, maximum transmitting power, and emission designator.

(c) Working and ultimate pressure or loads.

(d) Time rating (e.g., continuous, intermittent) or duty cycle.

(e) Limits of accuracy of measuring instruments.

(f) Any other known limitations which may limit the application in the aircraft e.g., restrictions in mounting attitude.

10. A statement of the software level(s) used or 'None' if not applicable.

(Note: Software levels (software development assurance levels (DAL)) are those defined in the industry document referred in the latest edition of AMC 20-115)

11. A statement of design assurance level for complex hardware or a statement indicating whether complex hardware is embedded or not in the product.

(Note: Complex hardware design assurance levels are those defined in the applicable issue of EUROCAE ED–80/RTCA DO-254.)

12. The declaration in this document is made under the authority of

……(name of manufacturer)

(Manufacturer's name) cannot accept responsibility for equipment used outside the limiting conditions stated above without their agreement.

Date: ……Signed……..(Manufacturer's authorised representative)

GM to 21.A.611 Design changes

A change to an ETSO article can either be seen:

- under this 21.A.611 in the context of an ETSO authorisation, i.e., when an article as such is specifically approved under Subpart O, with dedicated rules that give specific rights and obligations to the designer of the article, irrespective of any product type design or change to the type design. For a change to such an article, irrespective of installation on any aircraft, Subpart O, and this 21.A.611 in particular, should be followed; or
- when an airline or a maintenance organisation is designing a change (based on data not published in the TC holder or Original Equipment Manufacturer documentation) on an article installed on an aircraft, such a change can be considered as a change to the product in which the article is installed, not to the article taken in isolation. Therefore Subpart D can be used for the approval of this change that will be identified as ‘change to product x affecting article y’, but not ‘change to article y’.

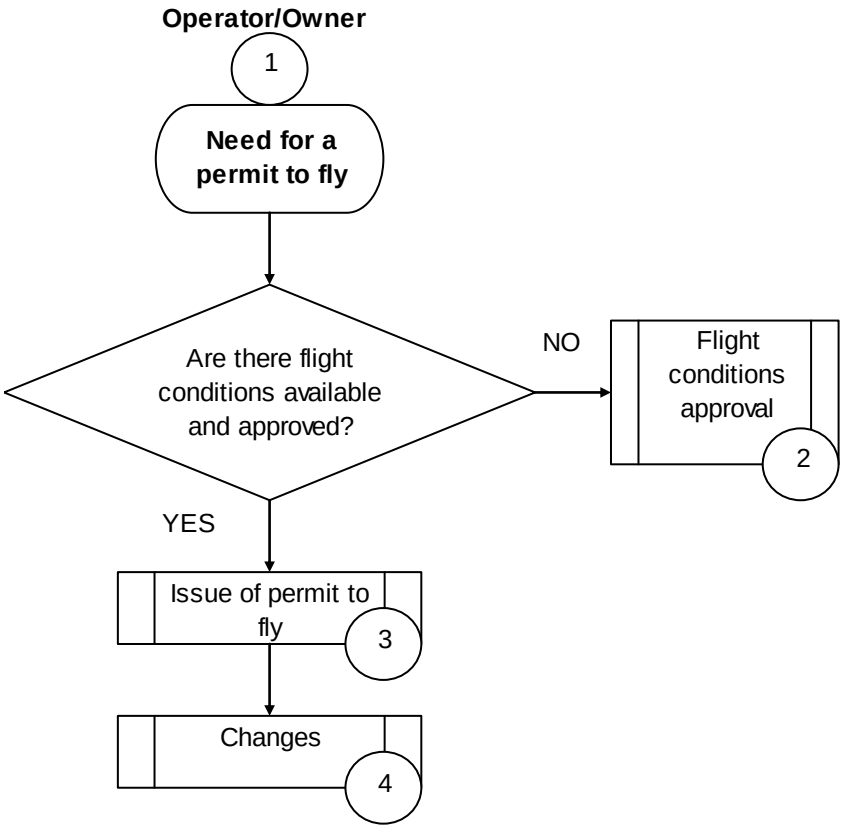
Subpart P — Permit to Fly

GM to Subpart P

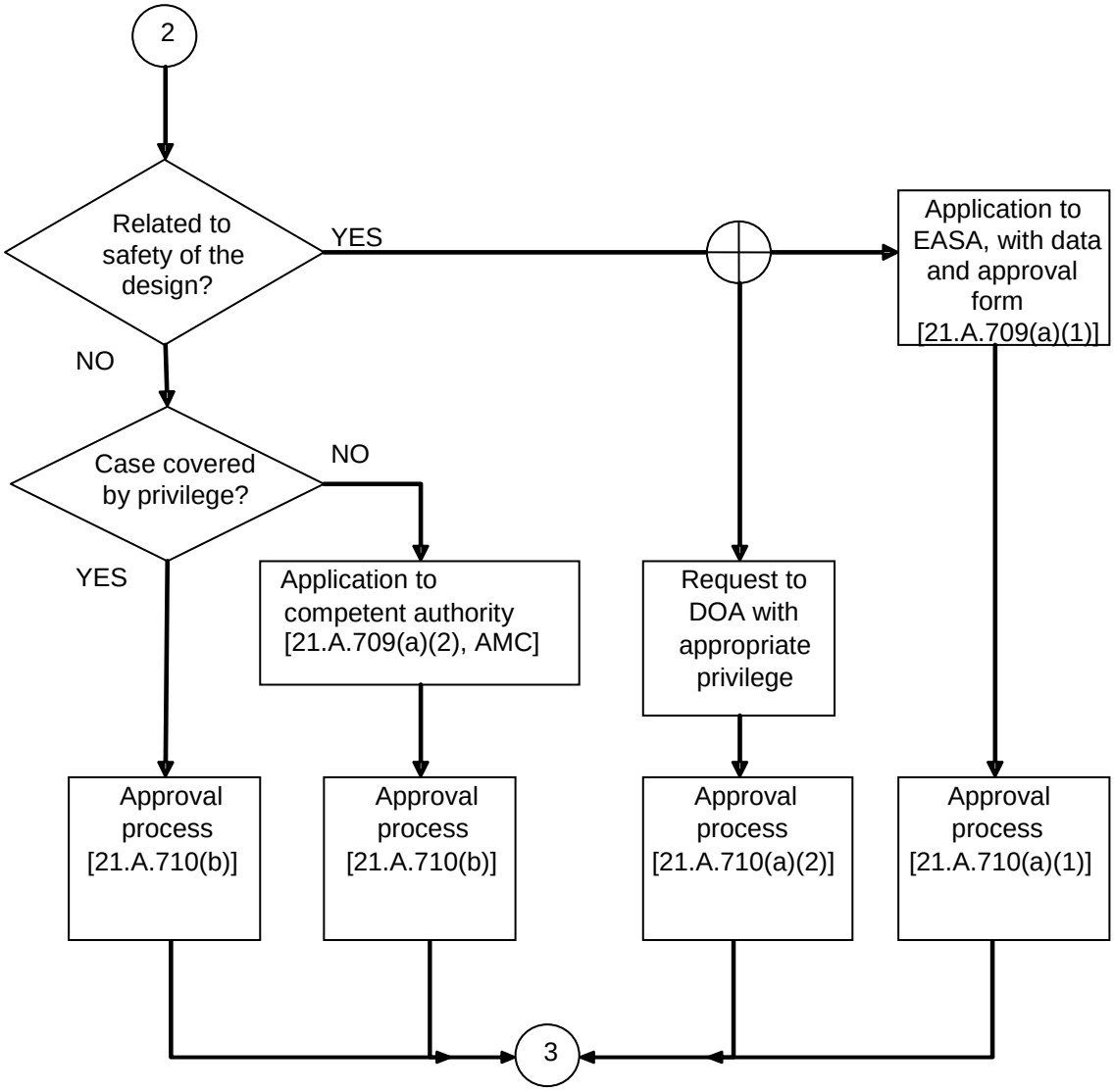
The process allowing a flight under a permit to fly can be described as follows:

1. Flow-chart 1: overview
2. Flow-chart 2: approval of flight conditions
3. Flow-chart 3: issue of permit to fly
4. Flow-chart 4: changes after first issue of permit to fly

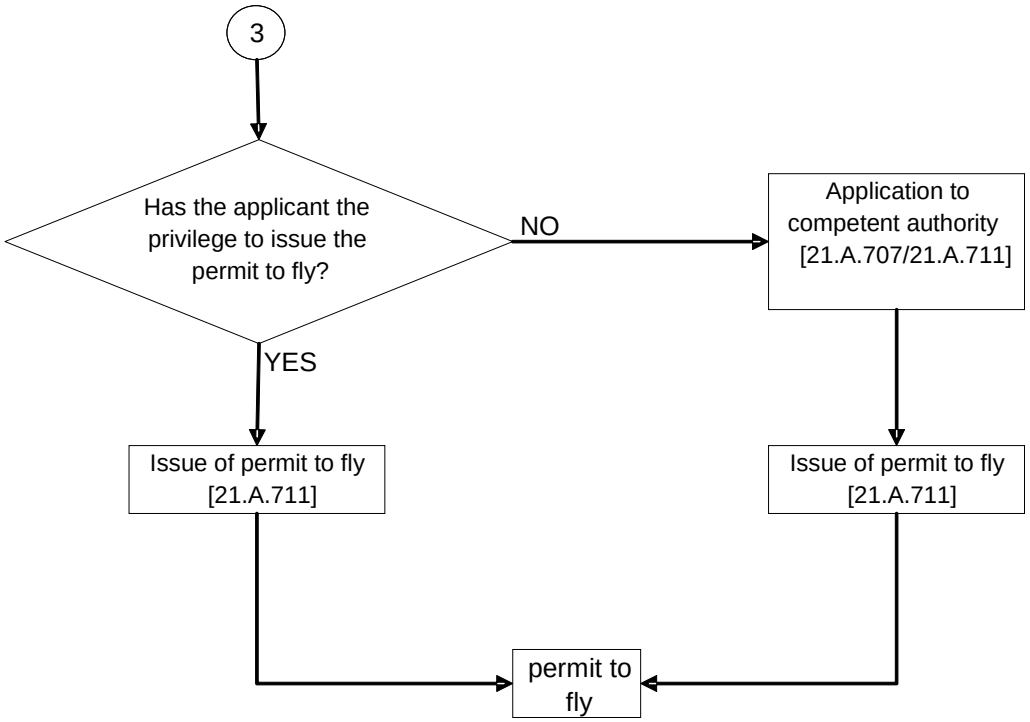
Flow-chart 1: overview



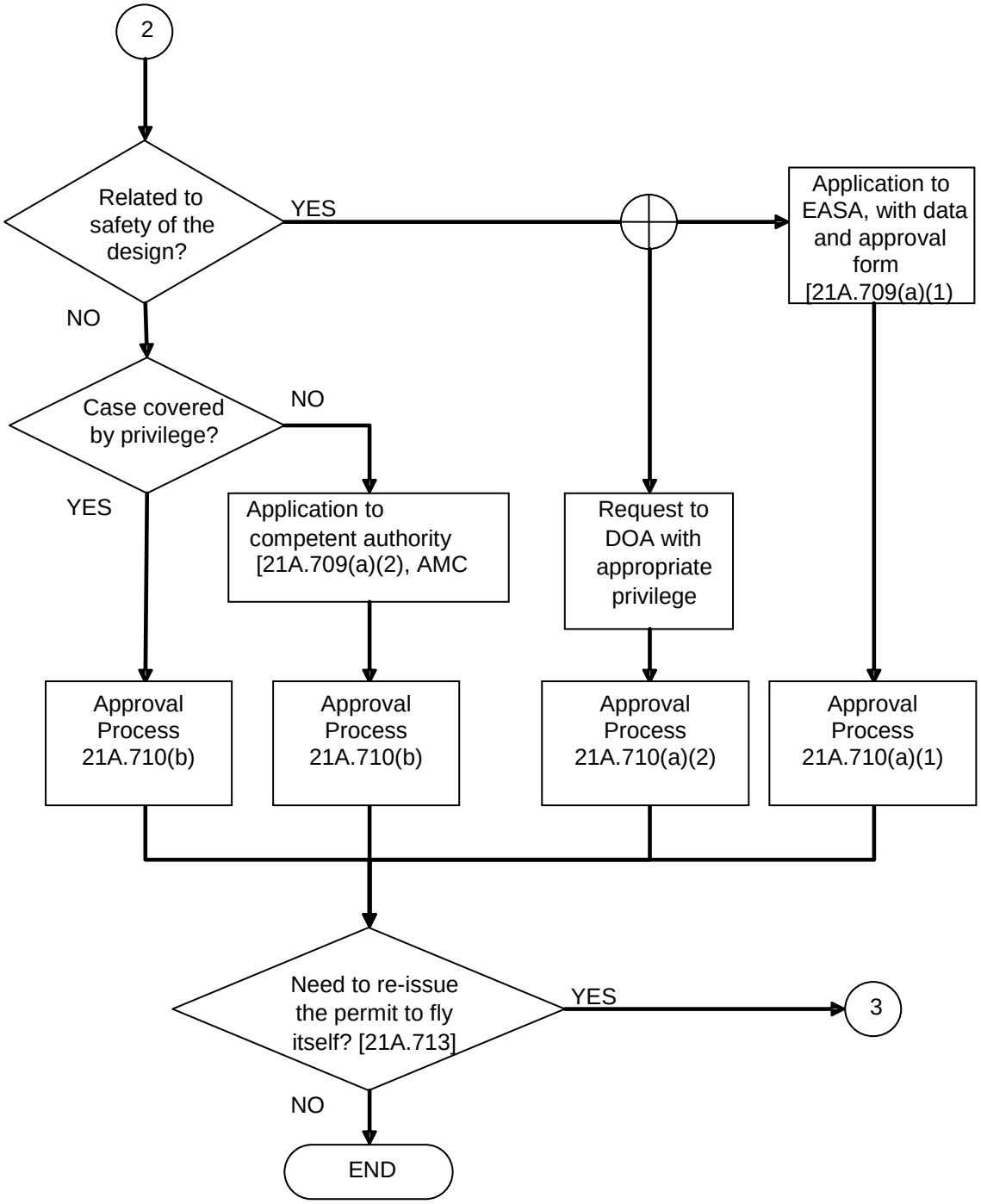
Flow-chart 2: approval of flight conditions



Flow-chart 3: issue of permit to fly



Flow-chart 4: changes after first issue of permit to fly



GM 21.A.701(a) Permit to fly when certificate of airworthiness or restricted certificate of airworthiness is not appropriate

A certificate of airworthiness or restricted category certificate of airworthiness may not be appropriate for an individual aircraft or aircraft type when it is not practicable to comply with the normal continued airworthiness requirements and the aircraft is to a design standard that is demonstrated to be capable of safe flight under defined conditions. Point 21.A.701 identifies cases where the issuance of a (restricted) certificate of airworthiness may not be possible or appropriate and this GM provides further information and typical examples for clarification where appropriate: -

Note: This list of examples is not exhaustive

(1) Development:

- testing of new aircraft or modifications
- testing of new concepts of airframe, engine, propeller and equipment;
- testing of new operating techniques;

(2) Demonstration of compliance with regulations or certification specifications:

- certification flight testing for type certification, supplemental type certificates, changes to type certificates or ETSO authorisation;

(3) Design organisations or production organisations crew training:

- Flights for training of crew that will perform design or production flight testing before the design approval or Certificate of Airworthiness (C of A) can be issued.

(4) Production flight testing of new production aircraft:

- For establishing conformity with the approved design, typically this would be the same program for a number of similar aircraft;

(5) Flying aircraft under production between production facilities:

- green aircraft ferry for follow on final production.

(6) Flying the aircraft for customer acceptance:

- Before the aircraft is sold and/or registered.

(7) Delivering or exporting the aircraft:

- Before the aircraft is registered in the State where the C of A will be issued.

(8) Flying the aircraft for Authority acceptance:

- In the case of inspection flight test by the authority before the C of A is issued.

(9) Market survey, including customer's crew training:

- Flights for the purpose of conducting market survey, sales demonstrations and customer crew training with non type-certificated aircraft or aircraft for which conformity has not yet been established or for non-registered a/c and before the Certificate of Airworthiness is issued.

(10) Exhibition and air show:

- Flying the aircraft to an exhibition or show and participating to the exhibition or show before the design approval is issued or before conformity with the approved design has been shown.

(11) Flying the aircraft to a location where maintenance or airworthiness review are to be performed, or to a place of storage:

- Ferry flights in cases where maintenance is not performed in accordance with approved programmes, where an AD has not been complied with where certain equipment outside the Master Minimum Equipment List (MMEL) is unserviceable or when the aircraft has sustained damage beyond the applicable limits.

(12) Flying an aircraft at a weight in excess of its maximum certificated take-off weight for flight beyond the normal range over water, or over land areas where adequate landing facilities or appropriate fuel is not available:

- Oversees ferry flights with additional fuel capacity.

(13) Record breaking, air racing or similar competition:

- Training flight and positioning flight for this purpose are included

(14) Flying aircraft meeting the applicable certification specifications before conformity to the environmental requirements has been found:

- Flying an aircraft which has been demonstrated to comply with all applicable certification specifications but not with environmental requirements.

(15) For non-commercial flying activity on individual non-complex aircraft or types for which a certificate of airworthiness or restricted certificate of airworthiness is not appropriate.

- For aircraft which cannot practically meet all applicable certification specifications, such as certain aircraft without TC-holder ('generically termed orphan aircraft') or aircraft which have been under national systems of Permit to Fly and have not been demonstrated to meet all applicable requirements. The option of a permit to fly for such an aircraft should only be used if a certificate of airworthiness or restricted certificate of airworthiness cannot be issued due to conditions which our outside the direct control of the aircraft owner, such as the absence of properly certified spare parts.

  Note: The above listing is of cases when a permit to fly MAY be issued; it does not mean that in the described cases a permit to fly MUST be issued. If other legal means are available to allow the intended flight(s) they can also be used.

GM 21.A.701 Scope

An aircraft registered outside the Member States and used for flight testing by an organisation which has its principle place of business in a Member State, remains under the authority of its state of registry. The Agency or an appropriately approved design organisation can provide, on request, technical assistance to the state of registry for the issue of a permit to fly, or equivalent authorisation, under the state of registry applicable regulations.

GM 21.A.703 Applicant for a permit to fly

1. The applicant for a permit to fly may be a person other than the registered owner of the aircraft. As the holder of this permit will be responsible for ensuring that all the conditions and limitations associated with the permit to fly are continuously satisfied, the applicant for the permit should be a person or organisation suitable for assuming these responsibilities. In particular, the organisations designing, modifying or maintaining the aircraft should normally be the holder of the associated permits to fly.
2. An appropriately approved design organisation can apply for the approval of the flight conditions when using its privilege in accordance with 21.A.263(b)(1).

GM 21.A.705 Competent authority

An aircraft registered in a Member State is under the responsibility of this Member State for continuing airworthiness aspects. Consequently, any permit to fly under Part 21 should be issued by that Member State including cases where the aircraft will fly in another State. The permit to fly contains all the conditions and restrictions to ensure safe flight but other airspace and operational rules remain the competence of the authority of the State where the flight will take place. The applicant should therefore also ensure compliance with the relevant regulations of that State.

GM 21.A.707(b) Application

EASA Form 21 (see AMC 21.B.520(b)) should be obtained from the competent authority.

GM 21.A.708(b)(6) Continuing airworthiness

In most cases a simple reference to existing maintenance requirements will suffice for aircraft that have a temporarily invalid C of A.

For other aircraft it will have to be proposed by the applicant as part of the flight conditions. For approved organisations they can be included in their procedures.

GM No. 1 to 21.A.708(c) Safe flight

Safe flight normally means continued safe flight and landing but in some limited cases (e.g. higher risk flight testing) it can mean that the aircraft is able to fly in a manner that will primarily ensure the safety of overflown third parties, the flight crew and, if applicable other occupants.

This definition of 'safe flight' should not be interpreted as allowing a test pilot, equipped with a parachute and operating over a sparsely populated area, to set out on a test flight in the full knowledge that there is a high probability of losing the aircraft. The applicant should take reasonable care to minimise safety risks and to be satisfied that there is a reasonable probability that the aircraft will carry out the flight without damage or injury to the aircraft and its occupants or to other property or persons whether in the air or on the ground.

GM No. 2 to 21.A.708(c) Substantiations

The substantiations should include analysis, calculations, tests or other means used to determine under which conditions or restrictions the aircraft can perform safely a flight.

GM No. 3 to 21.A.708(c) Operation of Overweight Aircraft

This GM provides information and guidance with respect to permit to fly for operating an aircraft in excess of its maximum certificated take-off weight, for flight beyond the normal range over water, or over land areas where adequate landing facilities or appropriate fuel is not available.

1. GENERAL.

   The excess weight that may be authorized for overweight operations should be limited to additional fuel, fuel carrying facilities, and navigational equipment necessary for the flight.

   It is recommended that the applicant discuss the proposed flight with the TC holder of the aircraft to determine the availability of technical data on the installation of additional fuel carrying facilities and/or navigational equipment.

2. CRITERIA USED TO DETERMINE THE SAFETY OF ADDITIONAL FACILITIES.

   In evaluating the installation of additional facilities, the Agency or the design organisation must find that the changed aircraft is safe for operation. To assist in arriving at such a determination, the following questions are normally considered:

   a. Does the technical data include installation drawings, structural substantiating reports, weight, balance, new centre of gravity limits computations, and aircraft performance limitations in sufficient detail to allow a conformity inspection of the aircraft to be made?

   b. In what ways does the aircraft not comply with the applicable certification specifications?

   c. Are the fuel tanks vented to the outside? Are all areas in which tanks are located ventilated to reduce fire, explosion, and toxicity hazards?

   d. Are the tanks even when empty strong enough to withstand the differential pressure at maximum operating altitude for a pressurized aircraft?

   e. Have means been provided for determining the fuel quantity in each tank prior to flight?

   f. Are shutoff valves, accessible to the pilot, provided for each additional tank to disconnect these tanks from the main fuel system?

   g. Are the additional fuel tank filler connections designed to prevent spillage within the aircraft during servicing?

   h. Is the engine oil supply and cooling adequate for the extended weight and range?

3. LIMITATIONS.

   The following types of limitations may be necessary for safe operation of the aircraft:

   a. Revised operational airspeeds for use in the overweight condition.

   b. Increased pilot skill requirements.

   c. A prescribed sequence for using fuel from various tanks as necessary to keep the aircraft within its centre of gravity range.

   d. Notification to the control tower of the overweight take-off condition to permit use of a runway to minimize flight over congested areas.

   e. Avoidance of severe turbulence. If encountered, the aircraft should be inspected for damage as soon as possible.

EXAMPLE of operating limitations which may be prescribed as part of the permit to fly:

Aircraft type: xxxxxx Model: yyyy

Limitations:

1. Maximum weight must not exceed 8 150 pounds.
2. Maximum quantity of fuel carried in auxiliary tanks must not exceed 106 gallons in fwd tank, 164 gallons in centre tank, and 45 gallons in aft tank.
3. Centre of gravity limits must not exceed (fwd) +116.8 and (aft) +124.6.
4. Aerobatics are prohibited.
5. Use of autopilot while in overweight condition is prohibited.
6. Weather conditions with moderate to severe turbulence should be avoided.
7. When an overweight landing is made or the aircraft has been flown through moderate or severe turbulence while in an overweight condition, the aircraft must be inspected for damage after landing. The inspections performed and the findings must be entered in the aircraft log. The pilot must determine, before the next take-off, that the aircraft is airworthy.
8. When operated in the overweight condition, the cruising speed (Vc) shall not exceed 185 m.p.h. and the maximum speed (Vne) shall not exceed 205 m.p.h.
9. Operation in the overweight condition must be conducted to avoid areas having heavy air traffic, to avoid cities, towns, villages, and congested areas, or any other areas where such flights might create hazardous exposure to person or property on the ground.

GM 21.A.708(d) Control of aircraft configuration

The applicant should establish a method for the control of any change or repair made to the aircraft, for changes and repairs that do not invalidate the conditions established for the permit to fly.

All other changes should be approved in accordance with 21.A.713 and when necessary a new permit to fly should be issued in accordance with 21.A.711.

AMC 21.A.709(b) Submission of documentation supporting the establishment of flight conditions

Together with the application, the documentation required by 21.A.709(b) must be submitted with the approval form (EASA Form 18B) defined below, completed with all relevant information. If the complete set of data is not available at the time of application, the missing elements can be provided later. In such cases, the approval form must be provided only when all data are available, to allow the applicant to make the statement required in box 9 of the form.

FLIGHT CONDITIONS FOR A PERMIT TO FLY – APPROVAL FORM	
1. Applicant *[Name of organisation providing the flight conditions and associated substantiations]*	**2. Approval form No:** **Issue:** *[Number and issue, for traceability purpose]*
3. Aircraft manufacturer/type	**4. Serial number(s)**
5. Purpose *[Purpose in accordance with 21.A.701(a)]*	
6. Aircraft configuration The above aircraft for which a permit to fly is requested is defined in *[add reference to the document(s) identifying the configuration of the aircraft]* *[For change(s) affecting the initial approval form: description of change(s). This form must be re-issued]*	
7. Substantiations *[References to the document(s) justifying that the aircraft (as described in 6.) can perform the intended flight(s) safely under the defined conditions or restrictions.]* *[For change(s) affecting the initial approval form: reference(s) to additional substantiation(s). This form must be re-issued]*	
8. Conditions/Restrictions The above aircraft must be used with the following conditions or restrictions: *[Details of these conditions/restrictions, or reference to relevant document, including specific maintenance instructions and conditions to perform these instructions]*	
9. Statement The flight conditions have been established and justified in accordance with 21.A.708. The aircraft as defined in block 6 above has no features and characteristics making it unsafe for the intended operation under the identified conditions and restrictions.	
[when approved under a privilege of an approved organisation] **10.** Approved under *[ORGANISATION APPROVAL NUMBER]'*	
11. Date of issue	**12. Name and signature** *[Authorised signatory]*
[when not approved under a privilege of an approved organisation] **13. Approval and date** *[the appropriate approval: EASA, competent authority]*	

EASA Form 18B Issue 3

When the flight conditions are approved under a privilege, this form should be used by the approved organisation to document the approval.

GM 21.A.710 Approval of flight conditions

1. The approval of flight conditions is related to the safety of the design, when:
   a. the aircraft does not conform to an approved design; or
   b. an Airworthiness Limitation, a Certification Maintenance Requirement or an Airworthiness Directive has not been complied with; or
   c. the intended flight(s) are outside the approved envelope;
   d. the permit to fly is issued for the purpose of 21.A.701(a)(15).
2. Examples when the approval of flight conditions is not related to the safety of the design are:
   a. production flight testing for the purpose of conformity establishment;
   b. delivery / export flight of a new aircraft the design of which is approved;
   c. demonstrating continuing conformity with the standard previously accepted by the Agency for the aircraft or type of aircraft to qualify or re-qualify for a (restricted) certificate of airworthiness.

GM 21.A.711(e) Additional conditions and restrictions

The conditions and restrictions prescribed by the competent authority may include airspace restrictions to make the conditions approved under 21.A.710 more concrete, or conditions outside the scope of the ones mentioned in 21.A.708(b) such as a radio station license.

GM 21.A.713 Changes

Changes to the conditions or associated substantiations that are approved but do not affect the text on the permit to fly do not require issuance of a new permit to fly.

In case a new application is necessary, the substantiation for approval of the flight conditions only needs to address the change.

GM 21.A.719 Transfer of a permit to fly

Except for permits to fly issued under 21.A.701(a)(15), like aircraft without TC holder, a permit to fly is issued based upon the applicant's declaration of many aspects of the proposed flight or flights, some of which are specific to the applicant. Accordingly, the basis upon which a permit to fly has been issued necessarily is no longer fully in place when the holder of a permit to fly changes, ownership changes, and/or there is a change of register. Such changes necessitate a new application under 21.A.707.

Subpart Q — Identification of products, parts and appliances

GM 21.A.804(a)(1) Identification of parts and appliances

It is not the intent of 21.A.804(a)(1) to introduce an obligation for a production organisation (manufacturer) to mark new parts or appliances with information which is not identified by the design approval holder. Therefore, the physical marking of parts and appliances is only required when established by the design approval (TC, STC, ETSO, repair, change) holder.

For designs (TC, STC, ETSO, repair, change) approved after 28 December 2009 (the date of entry into force of Commission Regulation (EC) No 1194/2009), the design approval holder is required to identify to the manufacturer how the marking in accordance with 21.A.804(a)(1) should be done. This can be limited to identifying a marking field, possible depth and/or means etc., without prescribing the actual text or symbols to be used.

SECTION B

Subpart A — General provisions

GM 21.B.20 Responsibility for implementation

Each certificate or approval in accordance with Part 21 Section A Subparts F, G, H, I and P will normally be issued and controlled by the competent authority of the Member State in whose country the applicant or holder is located. Therefore, to ensure consistency between the competent authorities of the Member States in issuing certificates and approvals, implementation of Part 21 should be based on the following three principles:

a) The establishment and maintenance of an effective organisation and corresponding processes by all competent authorities.

b) The operation of all competent authorities in accordance with Part 21 and its Acceptable Means of Compliance (AMC) and guidance material (GM).

c) A standardisation process established and operated by the Agency to access the standard achieved, and to provide timely advice and guidance to the competent authorities of the Member States.

As a result the responsibility for implementation comprises of the two main objectives:

a) To ensure that certificates and approvals are only granted to applicants that comply with the requirements of Part 21; and

b) To ensure sufficient visibility of the processes to give the Agency and the other Member States the necessary confidence in the certificates or approvals granted.

GM 21.B.25(a) Organisation

The competent authority designated by each Member State should have an organisation in such a way that -

a) there is specific and effective management authority in the conduct of all relevant activities,

b) the functions and processes described in Part 21 and its AMC and GM may be properly implemented,

c) the competent authority of the Member State policy, organisation and operating procedures for the implementation of Part 21 are properly documented and applied,

d) all competent authority of the Member State personnel involved in the related activities are provided with training where necessary,

e) specific and effective provision is made for the communication and interface as necessary with the Agency and the competent authorities of the Member States,

f) all functions related to the implementation of Part 21 are adequately described and shown (Standardisation).

A general policy in respect of Part 21 activities should be developed, sponsored and implemented by the manager at the highest appropriate level, for example the top of the functional area of the competent authority of the Member State that is responsible for the related matters.

Appropriate steps should be taken to ensure that the policy is known and understood by all staff involved, and all necessary steps should be taken to implement and maintain the policy.

Whilst satisfying also additional national regulatory responsibilities, the general policy should in particular take into account:

a) the provisions of the Regulation (EC) No 216/2008

b) the provisions of Part 21 and its AMC and GM

c) the needs of industry

d) the needs of the Agency and of the competent authorities of the Member States.

The policy should define specific objectives for key elements of the organisation and processes for implementation of related Part 21 activities, including the corresponding control procedures and the measurement of the achieved standard.

GM 21.B.25(b) Resources

The organisation for related Part 21 activities should be clearly defined within the general organisation of the competent authority of the Member State, with the hierarchical and functional links, and the names of the senior staff. Although final responsibility should be placed at the top of the functional area that is responsible for the related Part 21 activities as a whole, all subordinate levels of management should be suitably resourced and empowered to fulfil their delegated tasks.

The definition of an organisation for the implementation of related Part 21 activities should include the specification of

a) a manager responsible for the specific Part 21 activity acting as internal and external focal point. The responsibility is best placed with the manager who is in control of the day-to-day functions concerning the specific Part 21 activity, although he may delegate specific tasks to other individuals;

b) individual or group responsibilities, duties and associated reporting lines;

c) the resources, human and material;

d) the documented procedures to be operated in respect of the relevant Part 21 activities.

The various tasks and responsibilities of the personnel involved in the related Part 21 activities should be clearly identified. The authority attached to the responsibilities should be enough to ensure that the activities will be performed correctly.

These responsibilities include among others:

a) the management of the organisation

b) the management of investigation teams

c) the team leadership/membership

d) the investigation and surveillance activities

e) the administrative management of certificates and approvals including record keeping

f) the external and internal interface activities including feedback to the Agency

g) the control and distribution of documentation

The definition of the organisation should include means to ensure continued effectivity of the organisation. The means should provide for a regular assessment of the organisation and its related activities as well as a feedback system for the follow up of necessary corrective actions (e.g., through the implementation of a quality system, internal audit system, etc.).

GM 21.B.25(c) Qualification and training

The competent authority of the Member State should ensure appropriate and adequate training of its personnel to meet the standard that is considered by the Agency necessary to perform the work. Arrangements should be made for initial and continuation training as required.

It is understood that the basic competence of the competent authority of the Member State staff is a matter of recruitment and normal management functions in selection of staff for particular duties. Moreover, it is understood that the competent authority of the Member State provides training in the basic skills as required for those duties.

However, to avoid differences in understanding and interpretation, it is considered important that all personnel involved in Part 21 activities should be provided with further training specifically related to the relevant Part 21 activity up to the common Agency standard.

The competent authority of the Member State should provide training through its own training organisation with qualified trainers or through another qualified training source (e.g., training provided by other competent authorities, the Agency or qualified entities).

AMC 21.B.30(a) Documented procedures

The various elements of the organisation for the related Part 21 activities must be documented in order to establish a reference source for the establishment and maintenance of this organisation. The documented procedures must be established in a way that it will facilitate its use. They must be clearly identified, kept up-to-date and made readily available to all the personnel involved in the relevant activities.

The documented procedures must cover, as a minimum, the following aspects:

a) policy and objectives,

b) organisation structure,

c) responsibilities and attached authority,

d) procedures and processes,

e) internal and external interfaces,

f) internal control procedures,

g) training of personnel,

h) cross-references to associated documents,

i) assistance from other competent authorities or the Agency (where required).

Except for smaller competent authorities, it is likely that the information is held in more than one document or series of documents, and suitable cross-reference information must be provided. For example, organisational structure and job descriptions are not usually in the same documentation as the detailed working procedures. In such cases it is recommended that the documented procedures include an index of cross-references to all such other related information, and the related documentation must be readily available when required.

AMC 21.B.35(a) Changes

Standardisation is based on the assessment of the organisation and procedures of the competent authorities of the Member States and their implementation and suitability by the Agency. Consequently, a significant change in the competent authority of the Member State organisation and documented procedures validated by the Agency needs a reassessment to maintain the confidence in the standardisation process.

Examples of significant changes include changes in the organisation hierarchy, decision making levels, number and qualification of personnel, etc.

The competent authority of the Member State must notify any of these changes to the Agency and must be prepared to provide any further explanation/information requested by the Agency. The Agency may decide to review the documented organisation and procedures of the competent authority of the Member State and request any clarification or changes. This might also apply when a change in the regulations takes place and the Agency decides that a specific assessment/monitoring of the competent authorities related to that change is necessary.

GM 21.B.40 Principles for the resolution of disputes

It is essential for the efficient accomplishment of the competent authority of the Member State activities related to Part 21 that all decisions regarding the resolution of disputes are taken at as low a level as possible. In addition the documented procedures for the resolution of disputes should clearly identify the chain of escalation.

GM No. 1 to 21.B.45 Co-ordination with other related activities

The purpose of co-ordination with other related activities is to

a) harmonise the effects of various approval and certification teams especially when dealing with one organisation / applicant to prevent conflicts of conclusions,

b) ensure efficient flow of information between the various approval and certification teams to facilitate the execution of their duties

c) optimise the use of the Agency and the competent authorities resources to minimise disruption and cost.

Therefore, for a given organisation / applicant the responsible person(s) of the Agency or competent authorities of the Member State should arrange for exchange of information with, and provide necessary assistance, as appropriate, to the relevant competent authority of the Member State or Agency teams or staff - e.g.:

a) the appropriate certification teams;

b) the design organisation approval team;

c) the production organisation approval team;

d) the maintenance organisation approval team; or

e) other approval or certification teams as appropriate.

GM No. 2 to 21.B.45 Co-ordination

An exchange of information should especially take place in accordance with Article 15 of the Regulation (EC) No 216/2008:

(a) an immediate reaction of a competent authority of the Member State to a safety problem

(b) granting of exemptions by the competent authority of the Member State from the substantive requirements of the Regulation (EC) No 216/2008 and its implementing rules (for a period of more than two months or when the exemptions become repetitive)

(c) granting of approvals on an equivalent level of protection by the competent authority of the Member State by derogation from the Part 21 requirements

GM No. 3 to 21.B.45 Reporting - Information relevant to registers established by the Agency

When so requested by the Agency, the competent authority of the Member State should notify any certificate or approval issued, changed or revoked including details of the scope of that certificate or approval to the Agency for inclusion in a central register managed by the Agency.

GM 21.B.55 Record keeping for design approvals transferred to the Agency

Record keeping related to design approvals, for which the responsibility is transferred to the Agency, will remain initially with the competent authority of the Member State that has granted the approvals, at the disposal of the Agency. This GM specifies the administrative documents to be kept for the various kinds of design approvals. It does not repeat the requirements put on holders of design approvals to keep records (ref. 21.A.55, 21.A.105, 21.A.118A(a)(1), 21.A.447, 21.A.605).

1. Type-certificate
    a) Copy of the type-certificate
    b) Copy of the type-certificate data sheet
    c) Environmental protection approval data
    d) Documents defining the type-certification basis including information to justify special conditions, equivalent safety findings and exemptions (Certification Review Items or equivalent)
    e) List of approved modifications,
    f) List of the competent authority's approved publications (Flight Manual, Repair Manual, Airworthiness Limitations, Certification Maintenance Requirements)
    g) Airworthiness directives
    h) Master Minimum Equipment List
    i) Maintenance Review Board Report
2. Supplemental type certificate

- Copy of supplemental type certificate
- Environmental protection approval data
- Documents defining the certification basis including information to justify special conditions, equivalent safety findings and exemptions (Certification Review Items or equivalent)
- List of the competent authority's approved documents
- Airworthiness directives

3. JTSO Authorisation
   - Copy of JTSO authorisation letter
   - Copy of Declaration of Design and Performance
   - Statement of compliance with applicable standards
   - Airworthiness directives
4. Other part or appliance approvals
   a) Copy of approval letter,
   b) Copy of Declaration of Design and Performance or equivalent
   c) Statement of compliance with applicable standards
   d) Airworthiness Directives
5. Changes from non TC or STC holders
   a) Modification approval sheet, or equivalent document
   b) Documents required by 21.A.105, or equivalent national requirement

   Note: Not applicable to minor design changes approved under a DOA privilege, for which record keeping is under the DOA holder responsibility.
6. Repair design approvals
   a) Repair approval sheet
   b) Documents listed in 21.A.447, or equivalent national requirement

   Note: Not applicable to repair design approved under a DOA privilege, for which record keeping is under the DOA holder responsibility.

Subpart F — Production without Production Organisation Approval

AMC 21.B.120(a) Investigation team - Qualification criteria for the investigation team members

The competent authority must ensure that the team leader and team members have received appropriate training in the relevant Subpart of Part 21 and in the related competent authority documentation before performing investigations. They must also have knowledge and experience at the appropriate level in aviation production and inspection activities relative to the particular application for a letter of agreement.

AMC 21.B.120(c)(1) Evaluation of applications

1. General

When applying Part 21 Section A Subpart F and Section B Subpart F the competent authority must consider that these Subparts are only an alternative way for production to Part 21 Section A Subpart G and Section B Subpart G. To meet the ICAO airworthiness obligations and to issue a Certificate of Airworthiness for an individual aircraft in a practical and efficient way, the competent authority must use a system of approval of production organisations (POA) under Part 21 Section A Subpart G and Section B Subpart G, providing to the competent authority the necessary confidence in technical standards. The consistent standards of these approvals will also support the standardisation efforts by the Agency. Nevertheless it is recognised that it is not always practical, economical and/or advisable to use the POA.

Considering ICAO airworthiness obligations as well, Part 21 Section A Subpart F and Section B Subpart F is provided for such a case on the basis of the following principles:

a) Subpart F must be considered as an alternative option for particular cases
b) Its adoption must be done on an individual basis, as consequence of an assessment by the competent authority (see 21.A.121, 21.A.133(a) and their associated CS and GM).

2. Application

The competent authority must receive an application for a letter of agreement on an EASA Form 60 (see below) completed by the applicant. The eligibility of the application should be verified in relation to the competent authority procedures, based on 21.A.121 and its associated CS and GM. The applicant should be advised accordingly about the acceptance or rejection of the application.

3. Location of the applicant

The location of the applicant seeking acceptance for production under Part 21 Section A Subpart F determines which competent authority is responsible for issuing the letter of agreement.

EASA Form 60 **Application for agreement of production under Part 21 Subpart F**	
Competent authority *of an EU Member State or* *EASA*	
1. Registered name and address of the applicant:	
2. Trade name (if different):	
3. Location(s) of manufacturing activities:	
4. Description of the manufacturing activities under application	
a) Identification (TC, P/N , … as appropriate):	
b) Termination (No. of units, Termination date, …):	
5. Evidence supporting the application, as per 21.A.124(b):	
6. Links/arrangements with design approval holder(s)/design organisation(s) where different from Block 1. :	
7. Human resources:	
8. Name of the person signing the application:	
Date	Signature

EASA Form 60 Issue 3

Block 1: The name of the applicant must be entered. For legal entities the name must be as stated in the register of the National Companies Registration Office. In this case a copy of the entry in the register of the National Companies Registration Office must be provided to the competent authority.

Block 2: State the trade name by which the applicant is known to the public if different from the information given in Block 1. The use of a logo may be indicated in this Block.

Block 3: State all locations of manufacturing activities that are covered by the application. Only those locations must be stated that are directly under the control of the applicant stated in Block 1.

Block 4: This Block must include further details of the manufacturing activities under the approval for the addresses indicated in Block 3. The Block 'Identification' must indicate the products, parts or appliances intended to be produced, while the Block 'Termination' must address any information on the limitation of the activity, e.g., by stating the intended number of units to be manufactured or the expected date of completion of the manufacturing activities.

Block 5: This Block must state evidence supporting the determination of applicability as stated in 21.A.121. In addition an outline of the manual required by 21.A.125(b) must be provided with the application.

Block 6: The information entered here is essential for the evaluation of eligibility of the application. Therefore special attention must be given concerning the completion of this Block either directly or by reference to supporting documentation in relation to the requirements of 21.A.122 and AMC 21.A.122.

Block 7: The information to be entered here must reflect the number of staff, or in case of an initial approval the intended number of staff, for the manufacturing activities under this application and therefore must include also any associated administrative staff.

Block 8: State the name of the person authorised to sign the application.

GM 21.B.120(c)(3) Investigation preparation and planning

Following acceptance of an application and before commencing an investigation the competent authority should:

- identify the site locations needing investigation
- liaise with the competent authority of another Member State where there is seen to be a need to visit a production facility in that State for one of the following reasons:
  a) where a manufacturer has contracted part of the production to another organisation holding a production organisation approval and a need arises to ensure the contract has the same meaning for all parties to the contract, and the local competent authority of the Member State agrees
  b) to inspect a product (or part or appliance) under production where the sub-contractor is not holding a POA
- co-ordinate with the competent authority of a third country and/or the Agency where there is seen to be a need to visit a production facility in that country for one of the following reasons:
  a) where a manufacturer has contracted part of the production to another organisation holding a production organisation approval issued by the Agency or accepted through an recognition agreement in accordance with Article 12 of the Basic Regulation and a need arises to ensure the contract has the same meaning for all parties to the contract, and the Agency and/or the competent authority agrees
  b) to inspect a product (or part or appliance) under production where the sub-contractor is not holding a POA.

GM 21.B.120(c)(5) and (6) Auditing and investigation findings

During its investigation process, the competent authority may make findings which should then be recorded. These may be non-conformities to the requirements, the manual as supplied by the

manufacturer describing its inspection procedures or non-conformities related to the items under inspection. The manner in which the findings will be handled by the competent authority before and during the validity of the letter of agreement, should be detailed in its procedures.

GM 21.B.125(a) Objective evidence

Objective evidence is a fact which is, or can be documented, based on observations, measurements or tests that can be verified. Objective evidence generally comes from the following:

a) documents or manuals

b) examination of equipment/products

c) information from interview questions and observations of production activities

AMC 21.B.130 Issue of the letter of agreement

Unless otherwise agreed by the competent authority no production before the issue of the letter of agreement may be accepted under Part 21 Section A Subpart F.

GM 21.B.130(b) Issue of the letter of agreement

The agreement should include or reference a pre-defined plan of inspection points established as part of the production inspection system and agreed with the competent authority to be used as a basis for the inspections described in 21.A.129 and 21.B.120(c)(5) and its associated CS and GM. The plan should clearly identify inspection point, places, inspection subjects (materials, process, tooling documentation, human resources, etc.), as well as the focal points and the method of communication between the manufacturer and the competent authority.

The competent authority should detail a method how it will assure itself that the manufacturer is working in accordance with the manual and the agreed inspection procedures during the validity period of the agreement. For renewal of this validity period the procedure as defined in 21.B.140 should be used.

Any conditions under which the agreement will expire (such as termination date and/or number of units to produce), should be clearly stated in the letter of agreement.

AMC 21.B.140 Amendment of a letter of agreement

The competent authority must be satisfied that any change affecting a letter of agreement comply with the shows of Section A Subpart F before implementation can start. A plan for the change should be agreed with the applicant in accordance with AMC 21.B.130. If the change affects the content of the letter of agreement, a new application should be filed and an amended/revised letter of agreement should be obtained subsequently.

GM 21.B.150(d) Record keeping - Traceability of release certificates

The recordkeeping for those EASA Forms 52 and 1 that have been validated by the competent authority should allow verification of such validation by concerned parties including the recipients of the release certificates.

Subpart G— Production Organisation Approval

GM 21.B.220(a) Investigation team

1. Type of Team

Where the applicant is located in a Member State, the competent authority should appoint a production organisation approval team (POAT) leader and members appropriate to the nature and scope of the applicant's organisation.

Where the facilities of the applicant are located in more than one Member State, the competent authority of the country of manufacture should liaise with the other involved competent authorities to agree and appoint a POAT leader and members appropriate to the nature and scope of the applicant's organisation.

2. Team leader selection

The team leader should satisfy all of the criteria for a team member and will be selected by considering the following additional criteria:

a) the capability to lead and manage a team

b) the capability to prepare reports and be diplomatic

c) experience in approval team investigations (not necessarily only Part 21 Section A Subpart G)

d) a knowledge of production and quality systems for aircraft and related products and parts

3. Team member selection

The team leader should agree with the competent authority on the size of the POA team and the specialisations to be covered taking into account the scope of work and the characteristics of the applicant. Team members should be selected by considering the following criteria:

- training, which is mandatory, for Part 21 Section A, Subpart G and Section B, Subpart G
- education and experience, to cover appropriate aviation knowledge, audit practices and approval procedures
- the ability to verify that an applicant's organisation conforms to its own POA procedures, and that its key personnel are competent.

AMC 21.B. 220(c) Procedures for investigation - Evaluation of applications

The competent authority must receive an application for POA on an EASA Form 50 (see below) completed by the applicant. The eligibility and appropriateness of the application must be evaluated in accordance with 21.A.133 at that time and the applicant must be advised about acceptance or rejection of its application in writing accordingly.

EASA Form 50 **Application for Part 21 production organisation approval**	
Competent authority *of an EU Member State or* *EASA*	
1. Registered name and address of the organisation:	
2. Trade name (if different):	
3. Locations for which the approval is applied for:	
4. Brief summary of proposed activities at the item 3 addresses	
a) General:	
b) Scope of approval:	
c) Nature of privileges:	
5. Description of organisation:	
6. Links/arrangements with design approval holder(s)/design organisation(s) where different from 1. :	
7. Approximate number of staff engaged or intended to be engaged in the activities:	
8. Position and name of the accountable manager:	
Date	*Signature of the accountable manager*

EASA Form 50

Block 1: The name of the organisation must be entered as stated in the register of the National Companies Registration Office. For the initial application a copy of the entry in the register of the National Companies Registration Office must be provided to the competent authority.

Block 2: State the trade name by which the organisation is known to the public if different from the information given in Block 1. The use of a logo may be indicated in this Block.

Block 3: State all locations for which the approval is applied for. Only those locations must be stated that are directly under the control of the legal entity stated in Block 1.

Block 4: This Block must include further details of the activities under the approval for the addresses indicated in Block 4. The Block 'General' must include overall information, while the Block 'Scope of approval' must address the scope of work and products/categories following the principles laid down in the GM 21.A.151. The Block 'nature of privileges' must indicate the requested privileges as defined in 21.A.163(b)-(e). For an application for renewal state 'not applicable'.

Block 5: This Block must state a summary of the organisation with reference to the outline of the production organisation exposition, including the organisational structure, functions and responsibilities. The nomination of the responsible managers in accordance with 21.A.145(c)(2) must be included as far as possible, accompanied by the corresponding EASA Forms 4.

For an application for renewal state 'not applicable'.

Block 6: The information entered here is essential for the evaluation of eligibility of the application. Therefore special attention must be given concerning the completion of this Block either directly or by reference to supporting documentation in relation to the requirements of 21.A.133(b) and (c) and the AMC to 21.A.133(b) and (c).

Block 7: The information to be entered here must reflect the number of staff, or in case of an initial approval the intended number of staff, for the complete activities to be covered by the approval and therefore must include also any associated administrative staff.

Block 8: State the position and name of the accountable manager.

GM No. 1 to 21.B.220(c) Procedures for investigation - Investigation preparation and planning

Following the acceptance of the application and before commencing an investigation, the competent authority should, for the preparation and planning of the investigation:

- identify the site locations needing investigation taking into account the scope of any other POA issued by a Member State, which are valid in the circumstances
- liaise with the Agency for the appointment of any necessary observer(s) for standardisation purposes
- establish any necessary liaison arrangement with other competent authorities
- agree the size and composition of the POAT and any specialist tasks likely to be covered and to select suitable team members from all involved competent authorities
- seek any necessary advice and guidance from the Agency
- liaise with the competent authority of the other Member State where there is seen to be a need to visit a production approval holder facility in that Member State for one of the following reasons:
    1) where a manufacturer has subcontracted production to another organisation and therefore a need arises to ensure that contract has the same meaning for all parties to the contract, and the competent authority of the Member State agrees
    2) to inspect a product, part, appliance, or material under production for its own, Member States or non-EU register.

GM No. 2 to 21.B.220(c) Procedures for investigation – General

1. Purpose of the Procedures

The purpose is to investigate the applicant production organisation for compliance with Part 21 Subpart G in relation to the requested terms of approval. When appropriate, this procedure should also be used to investigate significant changes or applications for variation of scope of approval.

The following procedure assumes that the application has been accepted and that an investigation team has been selected.

2. Initiation

The POA Team Leader initiates the procedure by:

2.1 arranging a meeting with the POAT members to review the information provided in accordance with 21.A.134 and to take account of any knowledge that the POAT members have regarding the production standards of the applicant

2.2. obtaining information from other teams of a competent authority of the Member State or the Agency on the functioning applicant organisation (see GM No. 1 to 21.B.45)

2.3 arranging a meeting with the applicant in order to:

- enable the applicant to make a general presentation of its organisation and products, parts or appliances
- enable the POAT to describe the proposed investigation process
- enable the POAT to confirm to the applicant the identity of those managers nominated in accordance with Part 21 Subpart G who need to complete an EASA Form 4 (See EASA Form 4 for Production Organisations on EASA website: http://easa.europa.eu/certification/application-forms.php). The applicant should provide a completed copy of EASA Form 4 for each of the key management staff identified by Part 21 Subpart G. The EASA Form 4 is a confidential document and will be treated as such.

3. Preparation

The POAT:

3.1 studies the information gathered in the initiation phase

3.2 establishes an investigation plan which:

- takes account of the location of the POA applicants facility as identified per GM No. 3 to 21.B.220(c)
- defines areas of coverage and work-sharing between POAT members taking account of their individual expertise
- defines areas where more detailed investigation is considered necessary
- establishes the need for external advice to POAT members where expertise may be lacking within the team
- includes completion of a comprehensive plan for the investigation in order to present it to the applicant
- recognises the need to:
- review the documentation and procedures
- verify compliance and implementation
- audit a sample of products, parts, and appliances

3.3 co-ordinates with the appropriate Part 21 Section A Subpart J design organisation approval Teams sufficiently for both parties to have confidence in the applicants co-ordination links with the holder of the approval of the design (as required by 21.A.133)

3.4 establishes liaison with the applicant to plan mutually suitable dates and times for visits at each location needing investigation, and also to agree the investigation plan and approximate time scales with the applicant

4. Investigation

The POAT:

4.1 makes a check of the POE for compliance with Part 21 Subpart G

4.2 audits the organisation, its organisational structure, and its procedures for compliance with Part 21 Subpart G, using EASA Form 56 as a guide during the investigation, and as a checklist at the end of it

4.3. generates compliance checklists for investigations of working processes and procedures on site as required

4.4 accepts or rejects each EASA Form 4 completed by the key nominated personnel in accordance with 21.A.145(c)(2)

4.5 checks that the production organisation exposition (POE) standard reflects the organisation, its procedures, practices and 21.A.143. Having checked and agreed a POE issue or subsequent amendment, the competent authority should have a clear procedure to indicate its acceptance or rejection

4.6 makes sample audits at working level to verify that:-

(i) work is performed in accordance with the system described in the POE

(ii) products, parts, appliances or material produced by the organisation are in conformity with the applicable design data (see GM 21.B.235(b)(4)).

(iii) facilities, working conditions, equipment and tools are in accordance with the POE and appropriate for the work being performed

(iv) competence and numbers of personnel is appropriate for the work being performed

(v) co-ordination between production and design is satisfactory

4.7 at an advanced stage of the investigation, conducts an interim team review of audit results and matters arising, in order to determine any additional areas requiring investigation.

Each investigation team should be accompanied during the process by company representatives who are knowledgeable of the applicants organisation and procedures. This will ensure that the organisation is aware of audit progress and problems as they arise. Access to information will also be facilitated.

The POATL should co-ordinate the work of POAT members for an efficient investigation process, which will provide a consistent and effective investigation and reporting standards.

5. Conclusions

5.1 The POATL holds a team meeting to review findings and observations so as to produce a final agreed report of findings.

5.2 The POATL, on completion of the investigation, holds a meeting to verbally presents the report to the applicant.

The POATL should be the chairman of this meeting, but individual team members may present their own findings and observations.

5.3 The meeting should agree the findings, corrective action time scales, and preliminary arrangements for any follow up that may be necessary.

5.4 Some items may as a result of this meeting be withdrawn by the POATL but if the investigation has been correctly performed, at this stage there should be no disagreement over the facts presented.

5.5 Inevitably there will be occasions when the POAT member carrying out the audit may find situations in the applicant or POA holder where it is unsure about compliance. In this case, the organisation is informed about possible non-compliance at the time and advised that the

situation will be reviewed within the competent authority before a decision is made. The organisation should be informed of the decision without undue delay. Only if the decision results in a confirmation of non-compliance this is recorded in Part 4 of EASA Form 56.

5.6 The POATL will transmit the final signed report on EASA Form 56 together with notes of the final meeting with the applicant to the competent authority where the applicant is located. The report will include recommendations and significant findings, together with appropriate conclusions and corrective actions. In particular, it should indicate if the POE is acceptable, or changes are required.

5.7 Completion of EASA Form 56 includes the need to record in Part 4 comments, criticisms, etc., and this must reflect any problems found during the visit and must be the same as the comments, criticisms made to the organisation during the debrief. Under no circumstances should additional comments, criticisms, etc., be included in Part 4 of the report unless the applicant or POA holder has previously been made aware of such comments.

Many applicants may need to take corrective action and amend the proposed exposition before the competent authority is able to conclude its investigation. Such corrective actions should be summarised in Part 4 of the EASA Form 56 and a copy always given to the applicant, so that there is a common understanding of the actions necessary before approval can be granted.

The intention of the EASA Form 56 Part 4 is to provide a summary report of findings and outstanding items during initial investigation and major changes. The competent authority will need to operate a supporting audit system to manage corrective action monitoring, closure etc. While the EASA Form 56 Part 4 format may be used for monitoring purposes, it is not adequate on its own to manage such system.

5.8 If the findings made during the investigation mean that approval recommendation will not or cannot be issued, then it is essential that such findings are confirmed in writing to the organisations within two weeks of the visit. The reason for confirmation in writing is that many organisations take a considerable time to establish compliance. As a result, it is too easy to establish a position of confusion where the organisation claims it was not aware of the findings that prevented issue of an approval.

6. Management Involvement

The accountable manager will be seen at least once during the investigation process and preferably twice, because he or she is ultimately responsible for ensuring compliance with the requirements for initial grant and subsequent maintenance of the production organisation approval. Twice is the preferred number of visits to the accountable manager, with one being conducted at the beginning of the audit to explain the investigation process and the second, at the end, to debrief on the results of the investigation.

Competent authority

of an EU Member State or

EASA

RECOMMENDATION REPORT IN SUPPORT OF Part 21 SUBPART G APPROVAL ISSUE / CONTINUATION / VARIATION / SIGNIFICANT CHANGE

PART ONE OF FIVE PARTS: **BASIC DETAILS OF THE ASSESSMENT**

Name of the organisation:

Approval reference: _____

Address(es) of the facilities surveyed:

Main Part 21 Subpart G activities at facilities surveyed:

Date(s) of survey:

Names and positions of the organisation's senior management attended during survey:

Names of the competent authority staff:

Office: **EASA Form 56 completion date:**

Note: If it is determined that recommendation for issue/continuation/variation/significant change of approval cannot be made because of non-compliance with Part 21 Subpart G, the reasons for non-compliance need to be identified in PART 4 of the report. A copy of PART 1 and PART 4, or at least the information included in these parts, must be given to the organisation to ensure that the organisation, in failing to obtain Part 21 Subpart G approval, even if only temporarily, has the same information as is on the files of the competent authority.

EASA Form 56 Issue 3-– POAT Recommendation Audit Report - Part 1 of 5, Page 1 of 1 MONTH YEAR

Competent authority

of an EU Member State or

EASA

RECOMMENDATION REPORT IN SUPPORT OF Part 21 SUBPART G ISSUE / CONTINUATION / VARIATION/SIGNIFICANT CHANGE

PART TWO OF FIVE PARTS: **Part 21 SUBPART G COMPLIANCE**

Name of organisation:

Approval of organisation:

Approval reference: _____ **Survey reference:**

Note A: This form has been compiled according those points of Part 21 Subpart G which are relevant to an organisation trying to demonstrate compliance.

Note B: The right hand part of each box must be completed with one of three indicators:
1. a tick (✓) which means compliance;
2. NR which means the requirement is Not Relevant to the activity at the address surveyed; (the reason for NR should be stated in Part 4 of the report, unless the reason is obvious)
3. a number relating to a comment which must be recorded in Part 4 of the report.

The left hand part of each box is optional for use by the competent authority.

21.A.133 Eligibility

Any natural or legal person ('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 co-ordination between production and design.

21.A.134 Application

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

PART TWO OF FIVE (CONTINUED): **SURVEY REFERENCE:**

21.A.139 Quality System

(a) The production organisation shall demonstrate that it has established and is able to maintain a quality system. The quality system shall be documented. This quality system shall be such as to enable the organisation to ensure that each product, part or appliance produced by the organisation or by its partners, or supplied from or subcontracted to outside parties, conforms to the applicable design data and is in condition for safe operation, and thus exercise the privileges set forth in point 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 sub-contractor 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 co-ordination with the applicant for, or holder of, a design approval;

(x) ☐ records completion and retention;

(xi) ☐ personnel competence and qualification;

(xii) ☐ issue of airworthiness release documents;

(xiii) ☐ handling, storage and packing;

(xiv) ☐ internal quality audits and resulting corrective actions;

(xv) ☐ work within the terms of approval performed at any location other than the approved facilities;

(xvi) ☐ work carried out after completion of production but prior to delivery, to maintain the aircraft in a condition for safe operation;

(xvii) ☐ issue of permit to fly and approval of associated flight conditions.

☐ The control procedures need to include specific provisions for any critical parts.

(b) The quality system shall contain (cont'd) –
(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 point 21.A.145(c)(2) and ultimately to the manager referred to in point 21.A.145 (c)(1) to ensure, as necessary, corrective action. ☐

EASA Form 56 Issue 3- POAT Recommendation Report POA Audit Report - Part 2 of 5, Page 2 of 5 MONTH YEAR

PART TWO OF FIVE (CONTINUED): **SURVEY REFERENCE:**

21.A.143 Exposition

(a) The organisation shall submit to the competent authority a production organisation exposition providing the following information:
(see Part 3 of this Form)

(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 competent authority.

21.A.145 Approval requirements

The production organisation shall demonstrate, on the basis of the information submitted in accordance with point 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 21.A.165;

(b) with regard to all necessary airworthiness, noise, fuel venting and exhaust emissions data:
(1) the production organisation is in receipt of such data from the Agency, and from the holder of, or applicant for, the type-certificate, restricted type-certificate or design approval to determine conformity with the applicable design data;

(2) the production organisation has established a procedure to ensure that airworthiness, noise, fuel venting and exhaust emissions data are correctly incorporated in its production data;

(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 competent authority. His or her responsibility 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 point 21.A.143.

(2) a person or a group of persons have been nominated by the production organisation to ensure that the organisation is in compliance with the requirements of this Annex I (Part 21), 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 point (1). The knowledge, background and experience of the persons nominated shall be appropriate to discharge their responsibilities;

(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 co-ordination within the production organisation in respect of airworthiness, noise, fuel venting and exhaust emission data matters;

(d) with regard to certifying staff, authorised by the production organisation to sign the documents issued under point 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.

PART TWO OF FIVE (CONTINUED): **SURVEY REFERENCE:**

21.A.147 Changes to the approved production organisation

(a) After the issue of a production organisation approval, each change to the approved production organisation that is significant to the showing of conformity or to the airworthiness and characteristics of noise, fuel venting and exhaust emissions of the product, part or appliance, particularly changes to the quality system, shall be approved by the competent authority. An application for approval shall be submitted in writing to the competent authority and the organisation shall demonstrate to the competent authority before implementation of the change, that it will continue to comply with this Subpart.

(b) The competent authority shall establish the conditions under which a production organisation approved under this Subpart may operate during such changes unless the competent authority determines that the approval should be suspended.

21.A.148 Changes of location

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

21.A.149 Transferability

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

21.A.151 Terms of approval

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

21.A.153 Changes to the terms of approval

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

21.A.157 Investigations

A production organisation shall make arrangements that allow the competent authority to make any investigations, including investigations of partners and sub-contractors, necessary to determine compliance and continued compliance with the applicable requirements of this Subpart.

21.A.163 Privileges

Pursuant to the terms of approval issued under point 21.A.135, the holder of a production organisation approval may:

(a) perform production activities under this Annex I (Part 21).

(b) in the case of complete aircraft and upon presentation of a statement of conformity (EASA Form 52) under point 21.A.174, obtain an aircraft certificate of airworthiness and a noise certificate without further showing;

(c) in the case of other products, parts or appliances, issue authorised release certificates (EASA Form 1) under 21.A.307 without further showing;

(d) maintain a new aircraft that it has produced and issue a certificate of release to service (EASA Form 53) in respect of that maintenance;

(e) under procedures agreed with its competent authority for production, for an aircraft it has produced, and when the production organisation itself is controlling under its POA the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight, to issue a permit to fly in accordance with point 21.A.711(c) including approval of the flight conditions in accordance with point 21.A.710(b).

PART TWO OF FIVE (CONTINUED): **SURVEY REFERENCE:**

21.A.165 Obligations of the holder

The holder of a production organisation approval shall:

(a) ensure that the production organisation exposition furnished in accordance with point 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 competent authority; or

☐

(2) determine that other products, parts or appliances are complete and conform to the approved design data and are in a condition for safe operation before issuing an EASA Form 1 to certify conformity to approved design data and in a condition for safe operation, and additionally in case of engines, determine according to data provided by the engine type-certificate holder that each completed engine is in compliance with the applicable emissions requirements as defined in point 21.A.18(b), current at the date of manufacture of the engine, to certify emissions compliance; or

☐

(3) determine that other products, parts or appliances conform to the applicable data before issuing EASA 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;

☐

(2) report to the Agency and the competent authority of the Member State, or both, the deviations which could lead to an unsafe condition identified according to point (1). Such reports shall be made in a form and manner established by the Agency under point 21.A.3A(b)(2) or accepted by the competent authority of the Member State;

☐

(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 sub-contractors, 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 competent authority and be retained in order to provide the information necessary to ensure the continuing 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 point 21.A.163(e), determine the conditions under which a permit to fly can be issued;

☐

(k) where applicable, under the privilege of point 21.A.163(e), establish compliance with point 21.A.711(c) and (e) before issuing a permit to fly to an aircraft.

☐

Competent authority

of an EU Member State or

EASA

RECOMMENDATION REPORT IN SUPPORT OF Part 21 SUBPART G ISSUE / CONTINUATION / VARIATION/SIGNIFICANT CHANGE

PART THREE OF FIVE PARTS: **Part 21 SUBPART G EXPOSITION COMPLIANCE**

Name of organisation:

Approval of organisation:

Approval reference: _____ **Survey reference:**

Note A: Each box must be completed with one of three indicators:
1. a tick (✓) which means compliance;
2. NR which means the requirement is NOT RELEVANT to the activity at the address surveyed; (The reason for NR should be stated in Part 4 of the report unless the reason is obvious.);
3. a number relating to a comment which must be recorded in Part 4 of the report.

Note B: The exposition may be compiled in any subject order as long as all applicable subjects are covered.

Note C: If the organisation holds another Part approval requiring an exposition or handbook it is acceptable to use this index as a supplement to the existing exposition or handbook and to cross-refer each subject to the position in the existing exposition or handbook.

Production organisation exposition

Revision Status:

(Content as required by 21.A.143(a))

(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 the managers accepted by the competent authority in accordance with point 21.A.145(c)(2);
(3)	☐	the duties and responsibilities of the manager(s) as required by point 21.A.145(c)(2) including matters on which they may deal directly with the competent authority on behalf of the organisation.
(4)	☐	an organisational chart showing associated chains of responsibility of the managers as required by point 21.A.145(c)(1) and (c)(2);
(5)	☐	a list of certifying staff as referred to in point 21.A.145(d) **[Note :** a separate document may be referenced**]**
(6)	☐	a general description of man-power resources;

PART THREE OF FIVE (CONTINUED):	**SURVEY REFERENCE:**

(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 competent authority;

(10) ☐ the amendment procedure for the production organisation exposition;

(11) ☐ a description of the quality system and the procedures as required by point 21.A.139(b)(1);

(12) ☐ a list of those outside parties referred to in point 21.A.139 (a).
[Note : a separate document may be referenced**]**

EASA Form 56 Issue 3 - POAT Recommendation Report POA Audit Report - Part 3 of 5, Page 2 of 2 MONTH YEAR

Competent authority

of an EU Member State or

EASA

RECOMMENDATION REPORT IN SUPPORT OF Part 21 SUBPART G APPROVAL ISSUE / CONTINUATION / VARIATION/SIGNIFICANT CHANGE

PART FOUR OF FIVE PARTS: **FINDINGS ON Part 21 SUBPART G COMPLIANCE STATUS**

Name of organisation:

Approval reference: _____ **Survey reference:** _____

Note A: Each finding must be identified by number and the number must cross-refer to the same number in a box in Part 2 or 3 of the Part 21 Subpart G survey report.

Note B: As stated in Part 1 any comments recorded in this Part 4 should be copied to the organisation surveyed together with Part 1.

Note C: In case of a partial clearance of a finding with some outstanding action remaining, this action has to be identified.

NO:	FINDING	LEVEL	OUTSTANDING ACTION	CLEARANCE	
				DATE	REP.REF.

NAME & SIGNATURE OF SURVEYOR: **Date:**

PART FOUR OF FIVE (CONTINUED): **Sheet ___ of ___**

SURVEY REFERENCE:

NO:	FINDING	LEVEL	OUTSTANDING ACTION	CLEARANCE	
				DATE	REP.REF.

NAME & SIGNATURE OF SURVEYOR: **Date:**

EASA Form 56 Issue 3 - POAT Recommendation Report POA Audit Report - Part 4 of 5, Page 2 of 2 MONTH YEAR

Competent authority

of an EU Member State or

EASA

RECOMMENDATION REPORT IN SUPPORT OF Part 21 SUBPART G APPROVAL ISSUE / CONTINUATION / VARIATION/SIGNIFICANT CHANGE

PART FIVE OF FIVE PARTS: **Part 21 SUBPART G APPROVAL RECOMMENDATION**

Name of organisation:

Approval reference: _____ Survey reference: _____

Recommendation for issue / variation of approval/significant change:

The following Part 21 Subpart G Terms of approval are recommended for the above organisation at the address(es) specified in Part 1 of this report:

or

Recommendation for continuation of existing approval:

It is recommended that the Part 21 Subpart G Terms of approval identified in EASA Form 55 referenced

_____ be continued.

☐ **Reporting performed according to procedure for authority surveillance of suppliers of a POA holder located in other Member States, if applicable (Strict confidentiality to be observed)**

Name of competent authority surveyor making recommendation:

Signature of the competent authority surveyor:

Competent authority office: **Date:**

EASA Form 56 Issue 3 - POAT Recommendation Report POA Audit Report Part 5 of 5, Page 1 of 1 MONTH YEAR

GM No. 3 to 21.B.220(c) Procedures for investigation - POA applications received from organisations with facilities/partners/suppliers/sub-contractors located in a third country

The obligations of the applicant are totally independent from the surveillance exercised by the competent authority. It is not acceptable that the applicant relies on surveillance activities of the competent authority to simplify its tasks.

Facilities located in a third country

When any part of the production facilities of an applicant for POA is located outside the Member States, then the location will be treated in all aspects as part of the applicant's POA organisation.

Therefore the investigating competent authority will:

a) include the facilities outside the Member States fully in their investigation and surveillance activities for the applicant for, or holder of, the POA

b) include the facilities outside the Member States in the terms of approval of the EASA Form 55 (see Annex I Part 21 Appendix X) when issuing the POA.

Partners/suppliers/sub-contractors located in a third country

The competent authority should define on the basis of Part 21, its associated CS and GM, a clear procedure on supplier control. This procedure should include the control of partners/suppliers/sub-contractors of the applicant for, or holder of, a POA that are located outside the Member States.

In respect of the applicant for, or holder, of the POA, the competent authority should:

1) investigate, for the initial approval and consequent continued surveillance, the production organisation, and its partners/suppliers/sub-contractors at the necessary level to ensure the organisation can comply with the requirements of Part 21,

2) in accordance with the competent authority procedure, assess and accept the documented procedure for supplier control as part of the POA holder's quality system, and changes to that procedure prior to implementation,

3) in accordance with competent authority procedure, assess the necessary level of surveillance to be exercised by the production organisation on partners / suppliers / sub-contractors and check the audit plan of the production organisation against this level.

The level of co-operation between the competent authority and the competent authority of the third country where a partner/supplier/sub-contractor of the production organisation is located may influence the authorities' activities concerning this partner/supplier/sub-contractor. Co-operation with the competent authority of the third country should be based on the capability and goodwill of that authority, and a complete interchange of necessary information.

The involvement of this competent authority of the third country in the surveillance of the partner/supplier/sub-contractor will be based on the following principles:

- When a recognition agreement under Article 12 of Regulation (EC) No 216/2008 covering production subjects has been concluded:

  a) The competent authority in accordance with GM No. 2 to 21.A.139(a) may decide that direct surveillance of the POA holder activities at the foreign location may not be necessary.

  b) In any other case, provisions of the recognition agreement on the subject apply (technical assistance, ...).

- If a recognition agreement has not been concluded, or it does not cover production subjects, it may be necessary that the competent authority of the Member State, the Agency, and the competent authority of a third country enter into a specific working arrangement addressing the following matters:

  a) acceptance by the competent authority of the third country of conducting manufacturing surveillance of the relevant production activities on behalf of the competent authority, under the respective quality standards defined by the competent authority.

  b) tasks to be performed

  c) practical methods

These arrangements are between authorities and do not relieve the applicant of its obligations.

- In all cases, even though surveillance tasks are delegated to the competent authority of the third country, the competent authority remains the responsible authority and may consequently exercise direct surveillance if necessary.
- In case that it is not possible to delegate surveillance tasks to the competent authority of the third country, the competent authority will have to establish a direct surveillance program in accordance with its procedure concerning supplier control as part of the overall surveillance of the POA holder.

GM No. 4 to 21.B.220(c) Procedures for investigation – Competent authority surveillance of suppliers of a POA holder located in other Member States

1. The aviation legislation identifies specific State obligations in relation to complete products:

   State of manufacture, as used in ICAO Annex 8, normally identifies the country where the final assembly and the final determination of airworthiness is made. However, sub-assemblies and parts may be produced by POA holders in other countries and the EASA Form 1 - Authorised Release Certificate will identify those countries as the location for production.

   Among Member States the obligations of the State of manufacture may be discharged through the use of the Part 21 POA system.

   According to Part 21 Subpart G, each POA holder must have established and documented in its POE a system for its own control of suppliers/supplies. Surveillance of this system is part of the responsibility of the competent authority of the POA holder wherever the suppliers are located.

   This surveillance may be exercised through the POA holder and/or at supplier level especially in the cases where the supplier would be eligible for its own POA.

   The purpose of this procedure is to ensure the completeness of the responsibilities chain so that no separate technical agreement between these national authorities is necessary and when necessary to establish a means of communication between the involved competent authorities of the Member States.

2. Principle to organise competent authority supplier surveillance between Member States:

   In order to avoid duplication and to take the best advantage of Regulation (EC) No 216/2008 that establishes under Article 11 mutual recognition of certificates issued by production organisations approved in accordance with Part 21 Section A Subpart G by an Member State, the principle for the competent authority surveillance of the suppliers of a POA holder located in other Member States is for the responsible competent authority to delegate surveillance activity to the other competent authority of the supplier.

   This applies between Member States and for suppliers holding a Part 21 POA.

   Delegation of surveillance tasks does not imply a delegation of the overall responsibility, therefore the competent authority of the contractor always retains the right of direct supervision at the supplier location especially when serious quality problems are encountered. In such a case, co-ordination will be organised between both competent authorities.

   This delegation of surveillance is to be considered automatic as soon as the supplier holds a Part 21 POA provided that the intended supply is included in the approved scope of work. Evidence of that approval will normally be found through the release of the supplied parts with an EASA Form 1. In addition, the competent authority of the supplier should immediately inform the competent authority of the contractor in case of a serious quality problem.

   In the cases where the competent authority of the contractor considers that it is necessary to establish closer ties with the competent authority of the supplier (i.e., critical or significant parts) exchange of information between the competent authorities should be organised as follows:

   2.1 Tasks of the competent authority of the POA contractor

   The competent authority of the contractor should inform in writing the competent authority of the sub-contractor with the following:

   a. Identification (and location) of the contractor

b. Identification (and location) of the sub-contractor

c. Identification of the subcontracting (parts, contract N°, etc.)

d. Reference to the quality requirements attached to the contract

e. Name and address of the competent authority office/person in charge of the POA

f. Whether Direct Delivery Authorisation (DDA) applies

g. Any specific action item/requirement from the competent authority

h. Request for a bi-annual reporting (both ways).

EASA Form 58A is provided for convenience of the competent authority for this purpose.

The competent authority of the contractor should require that the contract/order from the contractor to the sub-contractor should indicate that it is placed under the surveillance of its competent authority on behalf of the competent authority of the contractor and should address the subject to the payment of the possible surveillance fees.

2.2 Tasks of the competent authority of the supplier (sub-contractor)

On receipt of the information from the competent authority of the contractor, the competent authority of the sub-contractor should:

- Verify that the scope of work of the POA of the supplier covers the intended supply (or envisage to extend it in liaison with the supplier).
- Verify that the specific quality requirements for the parts have been introduced in the quality system of the supplier.
- Confirm to the competent authority of the contractor that the procurement is included in the POA of the supplier and that their surveillance will cover this activity.
- Indicate the name and address of the competent authorities office/person in charge of the POA.

If the supplier has no POA under Part 21, or does not want to extend it, and/or if its competent authority cannot conduct surveillance on behalf of the other competent authority, the competent authority of the supplier will inform the competent authority of the contractor in order for it to decide on appropriate actions.

2.3 Exchange of information between the competent authorities

This information should normally take two forms:

- Immediate exchange of information between both competent authorities in case of serious quality problems;
- A bi-annual exchange of information at a given date in order to guarantee proper on going control of the subcontract by both competent authorities.

This information should cover in a concise form:

a) For the competent authority of the contractor:

- A resume of the quality problems encountered by the contractor, on receipt inspection, on installation on aircraft or on in service aircraft;
- A status of the reference documents.

b) For the competent authority of the sub-contractor:

- A resume of at least the following subjects:
  - Changes in organisation and qualification of the sub-contractor.(in case of impact on the procurement),
  - Quality problems encountered during manufacture,
  - Corrective actions following problems encountered earlier on the procurement,

- Findings from national authorities surveillance that may have an impact on the procurement,
- Quality problems related to the contractor procurement (materials, documentation, procedures, processes).

Exchange of information between national authorities according to this procedure is strictly confidential and should not be disclosed to other parties.

It is recommended to plan at least every 5 years a meeting between Industry and the two national authorities to review each major subcontract to verify proper management by the various parties involved.

3. Miscellaneous

a) Release documentation

Release of parts by the POA sub-contractor to the contractor will be accompanied by an «Authorised Release Certificate EASA Form 1» issued for «Airworthiness» or for «Conformity» as appropriate.

b) Sub-subcontracting

If the sub-contractor wants itself to subcontract, it is up to the competent authority of the sub-contractor to verify that this is done in accordance with the conditions of the contract, to organise as necessary the related authority surveillance and to inform the competent authority of the contractor.

c) Language

Except if agreed otherwise it is recommended to use the English language for exchange of information between the competent authorities.

Competent authority

of an EU Member State or

EASA

REQUEST FOR REPORTING ON SUB-CONTRACTOR SURVEILANCE

Document reference number:	*<REQUEST REF. NO.>*
As competent authority which issued a POA to:	*<CONTRACTOR COMPANY>*
With approval reference:	*<CONTRACTOR POA REF. NO..>*
The *<COMPETENT AUTHORITY>* has determined that there is a need for direct authority supplier surveillance of:	*<SUB-CONTRACTOR COMPANY>*
With approval reference:	*<SUB-CONTRACTOR POA REF.NO.>*
Which is situated in:	*<COUNTRY OF SUB-CONTRACTOR COMPANY>*
As part of the surveillance as required for the Part 21 Section A Subpart G approved production organisation, according to GM No. 4 to 21.220(c) the competent authority of the sub-contractor is requested to perform authority surveillance on the specific sub assemblies and parts as details and requirements are defined below.	
Identification of subcontracting (parts, contract No., …):	
Reference to the quality requirements attached to the contract between contractor and sub-contractor:	
Name and address of the requesting competent authority office/person in charge of the POA:	
Direct Delivery Authorisation (DDA) applies:	☐ Yes ☐ No
Specific action item/requirement from the competent authority of the contractor:	
Request and details required for a bi-annual reporting (both ways) according to GM No. 4 to 21.B.220(c) (Strict confidentiality to be observed):	
Name and signature of competent authority person making the request:	
Competent authority office:	**Date:**

EASA Form 58A – Request for reporting on sub-contractor surveillance, Page x of x

Competent authority

of an EU Member State or

EASA

REPORT ON SUB-CONTRACTOR SURVEILLANCE

Document reference number:	*<REPORT REF. NO.>*
Reporting request reference number:	*< REQUEST REF. NO >*
As responsible competent authority the *<COMPETENT AUTHORITY>* issued a POA to and is performing direct authority surveillance of:	*<SUB-CONTRACTOR COMPANY>*
With approval reference:	*<SUB-CONTRACTOR POA REF. NO..>*
Which is a subcontracted supplier of:	*<CONTRACTOR COMPANY>*
With approval reference :	*<CONTRACTOR POA REF.NO.>*
Which is situated in:	*<COUNTRY OF CONTRACTOR COMPANY>*
According to GM No. 4 to 21.220(c) and on request of the competent authority of the contractor company the *<COMPETENT AUTHORITY>* reports on the results of its authority surveillance on the specific parts and appliances defined below:	
Identification of subcontracting (parts, contract No., …):	
Identification of attachments to this report (if needed):	
Date and identification of previous report:	
Resume of surveillance results:	
Changes in organisation and qualification of the sub-contractor. (in case of impact on the procurement):	
Quality problems encountered during manufacture:	
Corrective actions following problems encountered earlier on the procurement:	
Findings from competent authority surveillance that may have an impact on the procurement:	
Quality problems related with the contractor procurement (materials, documentation, procedures, processes):	
Note: Exchange of information between national authorities according to this procedure is strictly confidential and should not be disclosed to other parties.	
Name and signature of competent authority person reporting:	
Competent authority office:	**Date:**

EASA Form 58B – Report on sub-contractor surveillance, Page x of x

GM 21.B.225(a) Objective evidence

Objective evidence is a fact which is, or can be documented, based on observations, measurements or tests that can be verified. Objective evidence generally comes from the following:

a) documents or manuals

b) examination of equipment/products

c) information from interview questions and observations of POA activities.

AMC 21.B.225(a) Notification of findings

In case of a level one finding confirmation must be obtained in a timely manner that the accountable manager received the letter containing details of the level one finding and the approval suspension details.

A level two finding requires timely and effective handling by the competent authority to ensure completion of the corrective action. This includes intermediate communication, including reminding letters as necessary, with the POA holder to verify that the corrective action plan is followed.

AMC No. 1 to 21.B.230 Issue of the certificate

The competent authority should base its decision to issue or amend a POA on the recommendation report (EASA Form 56, see GM No.2 to 21.B.220(c)) of the POAT submitted by the POA team leader. The EASA Form 56 includes a proposal by the POAT for the scope and terms of approval defining the products, parts and appliances for which the approval is to be granted, with appropriate limitations.

When the competent authority issues the approval a final controlled copy of an acceptable exposition for the organisation should have been supplied to the competent authority.

In some cases it may be accepted that some findings are not fully closed because corrective actions are still in progress. The competent authority may decide according to the following principles:

1) Findings should be equivalent to level two, which do not need to be rectified as a matter of urgency within less than three months, and should normally not exceed three in number.

2) Corrective action plan, including timescales, should have been accepted and should not require an additional and specific follow-up audit by the competent authority.

A record should be kept by the competent authority and should be brought to the attention of the Agency on request for standardisation purposes.

GM 21.B.235(a)(4) Guide to the conduct of monitoring production standards.

1. 21.B.235(a)(4) identifies a need for a sample investigation of products, parts or appliances, their associated conformity determinations and certifications made by a POA holder. For this to be performed effectively and efficiently, the competent authority should integrate a sampling plan as part of the planning of the investigation and continued surveillance activities appropriate to the scope and size of the relevant applicant.

2. The sampling plan could, for example, investigate:

   - a modification (or change)
   - the installation, testing, or operation of a major part or system
   - the accuracy and generation of the Flight Test report data
   - the accuracy and generation of the Weighing report data
   - an engine test bed run
   - records traceability
   - the accuracy and generation of the Statement of Conformity data and the associated safe operation determination
   - the accuracy and generation of EASA Form 1 data.

   The sampling plan should be flexible so as to:

   - accommodate changes in production rate
   - make use of results from other samples

- make use of results from other POA Investigations
- provide the maximum national authorities confidence

To be effective this product sample requires that the individual investigator(s):

- have a good practical knowledge of the product, part or appliance
- have a good practical knowledge of the manufacturing processes
- have an up to date knowledge of the manufacturers production programme
- use an appropriate and up to date sample plan and compliance check lists
- have a suitable recording system for the results
- have a properly operating feedback system to their national authorities organisation for POA and the manufacturer
- maintain an effective working relationship with the manufacturer and his staff
- be able to communicate effectively.

GM 21.B.235(b) Maintenance of the POA - Work allocation within the competent authority

After issue of the approval the competent authority should appoint a suitable member of its technical staff as the POATL to be in charge of the approval for the purpose of continued surveillance.

Where the POA holder facilities are located in more than one Member State the competent authority of the State of manufacture will liaise with the competent authorities of the various partners/members to ensure appropriate continued surveillance.

GM 21.B.235(b) and (c) Continued surveillance

Continued surveillance consists of:

1. Planned continued surveillance, in which the total surveillance actions are split into several audits, which are carried out at planned intervals during the validity period of the production organisation approval. Within the continued surveillance one aspect may be audited once or several times depending upon its importance.
2. Unplanned POA reviews, which are specific additional investigation of a POA holder related to surveillance findings or external needs. The competent authority is responsible for deciding when a review is necessary taking into account changes in the scope of work, changes in personnel, reports on the organisation performance submitted by other EASA or national authorities teams, reports on the in service product.

AMC 21.B.235(c) Continuation of POA

At the end of the 24 months continued surveillance cycle the POATL responsible for the POA should complete an EASA Form 56 (see GM No.2 to 21.B.220(c)) as a summary report for the continued surveillance including the recommendation for continuation of the POA as applicable. The EASA Form 56 should be countersigned by the person responsible within the competent authority for his acceptance. At this stage there is no limitation to the number of level two findings that may be open, provided they are within the time limits of the respective corrective action plans.

AMC No. 1 to 21.B.240 Application for significant changes or variation of scope and terms of the POA

The competent authority must receive an application for significant changes or variation of scope and terms of the POA on an EASA Form 51 (see below) completed by the applicant.

EASA Form 51 **Application for significant changes or variation of scope and terms of Part 21 POA**	
Competent authority *of an EU Member State or* *EASA*	
1. Name and address of the POA holder:	
2. Approval reference number:	
3. Locations for which changes in the terms of approval are requested:	
4. Brief summary of proposed changes to the activities at the item 3 addresses:	
a) General:	
b) Scope of approval:	
c) Nature of privileges:	
5. Description of organisational changes:	
6. Position and name of the accountable manager or nominee:	
Date	Signature of the accountable manager (or nominee)

EASA Form 51

Block 1: The name must be entered as written on the current approval certificate. Where a change in the name is to be announced state the old name and address here, while using Block 5 for the information about the new name and address. The change of name and/or address must be supported by evidence, e.g. by a copy of the entry in the register of commerce.

Block 2: State the current approval reference number.

Block 3: State the locations for which changes in the terms of approval are requested or state 'not applicable' if no change is to be anticipated here.

Block 4: This Block should include further details for the variation of the scope of approval for the addresses indicated in Block 3. The Block 'General' must include overall information for the change (including changes e.g. in workforce, facilities etc.), while the Block 'Scope of approval' must address the change in the scope of work and products/categories following the principles laid down in the GM 21.A.151. The Block 'nature of privileges' must indicate a change in the privileges as defined in 21.A.163(b)-(d). State 'not applicable' if no change is anticipated here.

Block 5: This Block must state the changes to the organisation as defined in the current production organisation exposition, including changes the organisational structure, functions and responsibilities. This Block must therefore also be used to indicate a change in the accountable manager in accordance with 21.A.145(c)(1) or a change in the nomination of the responsible managers in accordance with 21.A.145(c)(2). A change in the nomination of responsible managers must be accompanied by the corresponding EASA Forms 4. State 'not applicable' if no change is anticipated here.

Block 6: State the position and name of the accountable manager here. Where there is a change in the nomination of the accountable manager, the information must refer to the nominee for this position. State 'not applicable' if no change is anticipated here.

In case of an application for a change of the accountable manager the EASA Form 51 must be signed by the new nominee for this position. In all other cases the EASA Form 51 must be signed by the accountable manager.

GM 21.B.245 Continued validity

1. GENERAL

Decisions on restriction, surrender, suspension or revocation of POA will always be actioned in such a way as to comply with any applicable national laws or regulations relating to appeal rights and the conduct of appeals, unless the decision has been taken by the Agency. In such case, the Agency appeal procedures will apply.

2. RESTRICTION is temporary withdrawal of some of the privileges of a POA under 21.A.163.

3. SURRENDER is a permanent cancellation of a production organisation approval by the competent authority upon formal written request by the accountable manager of the organisation concerned. The organisation effectively relinquishes its rights and privileges granted under the approval and, after cancellation, may not make certifications invoking the approval and must remove all references to the approval from its company documentation.

4. SUSPENSION is temporary withdrawal of all the privileges of a production organisation approval under 21.A.163. The approval remains valid but no certifications invoking the approval may be made while the suspension is in force. Approval privileges may be re-instated when the circumstances causing the suspension are corrected and the organisation once again can demonstrate full compliance with the Requirements.

5. REVOCATION is a permanent and enforced cancellation of the whole of an approval by the competent authority. All rights and privileges of the organisation under the approval are withdrawn and, after revocation, the organisation may not make any certifications or other statements invoking the approval and must remove all references to the approval from its company documentation.

AMC 21.B.245 Corrective action plan

It is expected that any established POA holder will move quickly to re-establish compliance with Part 21 and not risk the possibility of approval suspension. Therefore, the corrective action period granted by the competent authority must be appropriate to the nature of the finding but in any case initially must not be more than six months. In certain circumstances and subject to the nature of the finding the competent authority can vary the six months period subject to a satisfactory corrective action plan agreed by the competent authority.

Failure to comply within time scale agreed by the competent authority means that provisional suspension of the POA in whole or in part must proceed.

Subpart H — Airworthiness certificates and restricted certificates of airworthiness

GM 21.B.320(b)(6) Investigation

1. Determination of necessary conditions, restrictions and/or limitations on the airworthiness certificate issued by a Member State

   The competent authority of the Member State of registry may issue under its own legislation a document to list and identify all necessary conditions, restrictions and limitations that result from the investigation by the Agency and/or from the legislation of the competent authority of the Member State of registry. This document could take the form of an addendum to the approved flight manual or operating instruction or comparable document and should be referenced in Block 5 (limitations/remarks) of the appropriate certificate of airworthiness.

GM 21.B.325(a) Airworthiness certificates

1. Completion of the certificate of airworthiness by a Member State

   Block 5: Insert restrictions developed in accordance with Part 21, including any reference to limitations as indicated in GM 21.B21.B.320(b)(6).

2. Completion of the restricted certificate of airworthiness by a Member State

   Block 5: Insert restrictions developed in accordance with Part 21, including any reference to limitations as indicated in GM 21.B.320(b)(6).

GM 21.B.325(b) Completion of the Airworthiness Review Certificate by a Member State

1 Purpose

In accordance with the applicable continuing airworthiness requirements a certificate of airworthiness is valid only if a valid airworthiness review certificate is attached to it. For new aircraft, the competent authority will issue the airworthiness review certificate when issuing the certificate of airworthiness.

Subpart I — Noise certificates

GM 21.B.425(a) Noise certificates

1. Completion of the noise certificate by a Member State

1.1 Completion instructions

Block 1. State of registry

The name of the State issuing the noise certificate. This item should match the corresponding information on the certificate of registration and certificate of airworthiness.

Block 2. Noise certificate

The title of the EASA Form 45 is 'Noise Certificate'

Block 3. Document No

A unique number, issued by the State of registry that identifies this particular document in their administration. Such a number will facilitate any enquiries with respect to the document.

Block 4. Registration marks

The nationality or common mark and registration marks as issued by the State of registry in accordance with Annex 7 to the Chicago Convention[2]. This item should match the corresponding information on the certificate of registration and certificate of airworthiness.

Block 5. Manufacturer and manufacturer's designation of aircraft

The type and model of the subject aircraft. This item should match the corresponding information on the certificate of registration and certificate of airworthiness.

Block 6. Aircraft serial No

The aircraft serial number as given by the manufacturer of the aircraft. This item should match the corresponding information on the certificate of registration and certificate of airworthiness.

Block 7. Engine

The designation of the installed engine(s) for identification and verification of the aircraft configuration. It should contain the type and model of the subject engine(s). The designation should be in accordance with the type certificate or supplemental type certificate for the subject engine(s).

Block 8. Propeller

The designation of the installed propeller(s) for identification and verification of the aircraft configuration. It should contain the type and model of the subject propeller(s). The designation should be in accordance with the type certificate or supplemental type certificate for the subject propeller(s). This item is included only in noise certification documentation for propeller driven aeroplanes.

Block 9. Maximum take-off mass (kg)

The maximum take-off mass associated with the certificated noise levels of the aircraft in kilograms. The unit (kg) should be specified explicitly in order to avoid misunderstanding. If the primary unit of mass for the State of manufacture of the aircraft is different from kilograms, the conversion factor used should be in accordance with Annex 5 to the Chicago Convention.

[2] The Convention on International Civil Aviation on 7 December 1944

Block 10. Maximum landing mass (kg)

The maximum landing mass associated with the certificated noise levels of the aircraft in kilograms. The unit (kg) should be specified explicitly in order to avoid misunderstanding. If the primary unit of mass for the State of manufacture of the aircraft is different form kilograms, the conversion factor used should be in accordance with Annex 5 to the Chicago Convention. This item will only be included in the noise certification documentation for noise certificates issued under Chapter 2, 3, 4, 5 and 12.

Block 11. Noise certification standard

The Chapter to which the subject aircraft is noise certificated. For chapters 2, 8, 10 and 11, the section specifying the noise limits should also be included.

Block 12. Additional modifications incorporated for the purpose of compliance with the applicable noise certification standards

This item should contain as a minimum all additional modifications to the basic aircraft as defined by Blocks 5, 7 and 8 that are essential in order to meet the requirements of this Annex to which the aircraft is certificated as given under Block 11. Other modifications that are not essential to meet the stated chapter but are needed to attain the certificated noise levels as given may also be included at the discretion of the certificating authority. The additional modifications should be given using unambiguous references, such as supplemental type certificate (STC) numbers, unique part numbers or type/model designators given by the manufacturer of the modification.

Block 13. Lateral/full-power noise level

The lateral/full-power noise level as defined in the relevant Chapter. It should specify the unit (e.g. EPNdB (unit of the effective perceived noise level)) of the noise level and the noise level should be stated to the nearest tenth of a decibel (dB). This item is included only in noise certification documentation for aircraft certificated to Chapters 2, 3, 4, 5 and 12.

Block 14. Approach noise level

The approach noise level as defined in the relevant chapter. It should specify the unit (e.g. EPNdB) of the noise level and the noise level should be stated to the nearest tenth of a dB. This item is included only in noise certification documentation for aircraft certificated to Chapters 2, 3, 4, 5, 8 and 12.

Block 15. Flyover noise level

The flyover noise level as defined in the relevant chapter. It should specify the unit (e.g. EPNdB) of the noise level and the noise level should be stated to the nearest tenth of a dB. This item is included only in noise certification documentation for aircraft certificated to Chapters 2, 3, 4, 5 and 12.

Block 16. Overflight noise level

The overflight noise level as defined in the relevant chapter. It should specify the unit (e.g. EPNdB or dB(A) (unit of the A-weighted noise level)) of the noise level and the noise level should be stated to the nearest tenth of a dB. This item is included only in noise certification documentation for aircraft certificated to Chapters 6, 8 and 11.

Block 17. The take-off noise level

The take-off noise level as defined in the relevant chapter. It should specify the unit (e.g. EPNdB or dB(A)) of the noise level and the noise level should be stated to the nearest tenth of a dB. This item is included only in noise certification documentation for aircraft certificated to Chapters 8 and 10.

Block 18. Statement of compliance, including reference to Annex 16 to the Chicago Convention, Volume I

The statement is provided in EASA Form 45.

Block 19. Date of issue

The date on which the document was issued.

Block 20. Signature

The signature of the officer issuing the noise certificate. Other items may be added such as seal, stamp etc.

Additional information:

1. Logo and name of the issuing authority

In order to facilitate recognition the logo or symbol and the name of the issuing authority may be added in the box ‘For use by the State of registry’.

2. Language

States issuing their noise certification documentation in a language other than English should provide an English translation.

Subpart P — Permit to fly

AMC 21.B.520(b) Application for a permit to fly

The competent authority must receive an application for permit to fly in a form and manner established by that authority, e.g. on EASA Form 21 (see below) completed by the applicant.

Application for Part 21 Permit to Fly	
1. Applicant:	*[Name of applicant]*
2. Aircraft nationality and identification marks:	
3. Aircraft owner:	
4. Aircraft manufacturer/type	**5. Serial number**
6. Purpose of flight *[Use terminology of 21.A.701(a) and add any additional information for accurate description of the purpose, e.g. place, itinerary, duration…]* *[For an application due to a change of purpose (ref. 21.A.713): reference to initial request and description of new purpose]*	
7. Expected target date(s) for the flight(s) and duration	
8. Aircraft configuration as relevant for the permit to fly 8.1 The above aircraft for which a permit to fly is requested is defined in *[add reference to the document(s) identifying the configuration of the aircraft. Same as required in AMC 21.A21.A.263(c)(6) or AMC 21A.21.A.709(b) application approval form 18A or 18B, box 6]* 8.2 The aircraft is in the following situation related to its maintenance schedule: *[Describe status]*	
9. Approval of flight conditions *[if not available at the time of application, indicate reference of request for approval]* *[Reference to:* *1. EASA approval, if flight conditions are approved by EASA; or* *2. DOA approval form (see AMC 21.A.263(c)(6)), if approved under DOA privilege; or* *3. Competent authority approval.*	
10. Date:	**11. Name and signature:** *[Authorised signatory]*

EASA Form 21