
IMPLEMENTATION PROCEDURES

FOR

DESIGN APPROVAL, PRODUCTION ACTIVITIES,
EXPORT AIRWORTHINESS APPROVAL,
POST DESIGN APPROVAL ACTIVITIES, AND
TECHNICAL ASSISTANCE BETWEEN AUTHORITIES

Under the Agreement between
The Government of the United States of America
and
The Government of Federal Republic of Germany
For Promotion of Aviation Safety

Revision 1
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IMPLEMENTATION PROCEDURES

for

Design Approval, Production Activities, Export Airworthiness Approval, Post Design Approval Activities, and Technical Assistance Between Authorities

SECTION I GENERAL

- 1.0 Authorization. These Implementation Procedures are authorized by Article III of the Agreement between the Government of the United States of America and the Government of the Federal Republic of Germany for the Promotion of Aviation Safety, dated 23 May 1996, also known as the Bilateral Aviation Safety Agreement, or "BASA executive agreement." In accordance with Article III, the Federal Aviation Administration (FAA) and the Luftfahrt-Bundesamt (LBA), as the competent aviation authority of the Bundesministerium für Verkehr, Bau und Wohnungswesen (BMVBW), have determined that the aircraft certification systems of each authority for the design approval, production approval, airworthiness certification, and continuing airworthiness of civil aeronautical products are sufficiently similar in structure, performance, and technical competence to support these Implementation Procedures.
- 1.1 Purpose. The purpose of this document is to define the civil aeronautical products, parts, and appliances eligible for import into the United States and the Federal Republic of Germany (See *Section II - Scope*), and to define the interface requirements and activities between the authorities for the import and continued support of those civil aeronautical products.
- 1.2 Principles. These Implementation Procedures address the performance of design, production, airworthiness, and related certification functions, and are based on a high degree of mutual confidence in the FAA's and LBA's technical competence and regulatory capabilities to perform these tasks within the scope of these Implementation Procedures. The FAA and LBA, as importing civil airworthiness authorities, shall give the same validity to the certification made by the other, as the exporting civil airworthiness authority, as if the certification had been made by the FAA or LBA in accordance with its own applicable laws, regulations, and requirements. Also, when a finding is made by one authority in accordance with the laws and regulations of the other authority and with these Implementation Procedures, that finding is given the same validity as if it were made by the other authority. The fundamental principle of these Implementation Procedures is therefore to maximize the use of the exporting civil airworthiness authority's aircraft certification system to ensure that the airworthiness standards of the importing civil airworthiness authority are satisfied.

- 1.2.0 The FAA and LBA agree that all information, including technical documentation, exchanged under these Implementation Procedures will be in the English language. Exceptions for certification compliance data will be mutually agreed to on a case-by-case basis.
- 1.2.1 The FAA and LBA mutually recognize each other's delegation, designee, and organization approval systems as part of their overall aircraft certification systems. Findings made pursuant to these Implementation Procedures by these delegation, designee, and/or organization approval systems are given the same validity as those made directly by the authority. FAA and LBA understand that there may be occasional situations where, upon prior notification to the other authority, either authority may interact directly with an individual designee or delegated organization of the other authority. In advance of designees or representatives of delegated or approved organizations traveling to the United States or Germany to make findings of compliance and/or to perform conformity inspections, the FAA or LBA will coordinate designee or organization activities with the other authority.
- 1.2.2 Assistance From Other Airworthiness Authorities. In accomplishing their regulatory responsibilities, the FAA or LBA, as exporting authorities, may seek assistance from other competent airworthiness authorities in making type, production and airworthiness findings of compliance, and in conducting routine production surveillance and audits, as long as the conditions stated in paragraph 1.2.2.0 are met in all programs and projects. The use of other competent authorities in no way diminishes the responsibility of either the FAA or LBA for assuring full compliance with their obligations under the BASA executive agreement and their responsibilities as defined under these Implementation Procedures, and in no way diminishes their responsibilities under the Chicago Convention on International Civil Aviation.
- 1.2.2.0 Conditions For The Use Of Other Authorities. The FAA and LBA agree that they will comply with the following conditions relative to utilizing the assistance of other authorities:
- (a) The FAA or LBA, as exporting authorities, must be accountable for all certification work which uses other authorities, including the resolution of all technical and program issues. Also, the FAA or LBA must accept full responsibility for all findings of compliance made on behalf of the importing authority, whether made by itself or other competent authorities' staff utilized in the process.
- (b) Where a bilateral agreement or arrangement document does not exist between the FAA or LBA and any other authorities used in the process, the LBA and FAA have the right to review and accept the technical capability of the other assisting authorities' team members.

(c) The other authorities' staff used for assistance must have previous experience with the class and category of product, part, or appliance being assessed.

(d) Ensuring the continued airworthiness of the product or TSO/JTSO appliance must remain the responsibility of the exporting authority, and the exporting authority must have available the resources necessary to accomplish that responsibility.

1.2.3 Use of Joint Aviation Authorities (JAA) Validation Procedures by the LBA for Type Validation of U.S. Products. When the LBA uses JAA validation procedures for the type validation of U.S. products jointly with other JAA member National Aviation Authorities, the LBA assumes responsibility for the validation process with respect to the joint resolution, with the FAA, of all difficulties between the FAA and LBA arising during the validation program.

1.3 Changes in Authority Aircraft Certification Systems.

1.3.0 These Implementation Procedures are based upon sufficiently similar aircraft certification systems being in place at the time of signing. Therefore, the importing and exporting authorities shall keep each other informed of significant changes within those systems, such as:

- (a) statutory responsibilities;
- (b) organizational structure (e.g., key personnel, management structure, technical training, office location);
- (c) significant revisions to airworthiness and environmental standards and procedures;
- (d) production quality control system oversight, including oversight of out-of-country production of parts; or
- (e) delegated functions or the kinds of organizations to which functions have been delegated.

1.3.1 The FAA and LBA recognize that revision by either authority to its regulations, policies, procedures, statutory responsibility, organizational structure, production quality control system oversight, or delegation system may affect the basis and the scope of these Implementation Procedures. Accordingly, upon notice of such changes by one authority, the other authority may request a meeting to review the need for amendment to these Implementation Procedures.

1.4 Authority Meetings. The FAA and LBA agree to meet as necessary to review these Implementation Procedures and their continued validity. The frequency of these

meetings will be mutually agreed by both authorities, and will depend on the number and significance of the issues to be discussed between the authorities.

1.5 Applicable National Requirements, Procedures, and Guidance Material.

1.5.0 The FAA's standards for aircraft airworthiness and environmental certification are contained in the Code of Federal Regulations (CFR), Title 14, Parts 21, 23, 25, 27, 29, 31, 33, 34, 35, and 36. The FAA also uses Joint Aviation Requirements (JAR)-22 and JAR-VLA for some special class aircraft. Guidance material, policy, and procedures are contained in FAA Advisory Circulars, Orders, Notices, and Policy Memoranda.

1.5.1 (a) The LBA's standards for aircraft airworthiness and environmental certification are either Joint Aviation Requirements (JARs), or are contained in the German Certification Order (LuftVZO) and the German Aeronautical Products Investigation Order (LuftGerPV). For the JARs, guidance material and policy are contained in Advisory Circular Joint (ACJ), Advisory Material Joint (AMJ), Interim Policies, and Temporary Guidance Material (TGM). In other cases, guidance material and policy are contained in LBA Regulations to the LuftVZO and the LuftGerPV.

(b) The LBA products are either JAA products or non-JAA products.

(1) JAA products are jointly certificated/validated products, including JAR-21 "caught-up" products.

(2) Non-JAA products are all other products certificated / validated by the LBA not using a JAA procedure.

1.6 Interpretations. In the case of conflicting interpretations of the laws, airworthiness or environmental regulations/standards, requirements, or acceptable means of compliance pertaining to certifications, approvals, or acceptance under these Implementation Procedures, the interpretation of the civil airworthiness authority whose law, regulation/standard, requirement, or acceptable means of compliance is being interpreted shall prevail.

1.7 Amendments and Points of Contact.

1.7.0 These Implementation Procedures may be amended by mutual consent of the FAA and LBA. Such amendments shall be made effective by signature of the duly authorized representatives of the FAA and the BMVBW.

1.7.1 The designated offices for the technical implementation of these Implementation Procedures are:

For the FAA:

Aircraft Certification Service
International Airworthiness Programs
Staff (AIR-4)
Federal Aviation Administration

800 Independence Avenue, SW
Washington, DC 20591
U.S.A.

Telephone: 1-202-267-7008
Fax: 1-202-267-5364

For the LBA:

Luftfahrt-Bundesamt
Department M
Certification/Environmental Protection

Hermann-Blenk-Str. 26
D38108 Braunschweig
Germany

Telephone: 49-531-2355-420
Fax: 49-531-2355-720

1.7.2 The designated offices for administrative coordination of these Implementation Procedures are:

For the FAA:

Office of International Aviation (AIA-1)
Federal Aviation Administration

800 Independence Ave., SW
Washington, DC 20591
U.S.A.

Telephone: 1-202-267-3230
Fax: 1-202-267-5032

For the LBA:

Luftfahrt-Bundesamt
Department M – Certification/Environmental
Protection

Hermann-Blenk-Str. 26
D38108 Braunschweig
Germany

Telephone: 49-531-2355-420
Fax: 49-531-2355-720

1.8 Entry Into Force and Termination. These Implementation Procedures shall enter into force upon signature and shall remain in force until terminated by either party. Either the FAA or BMVBW may terminate these Implementation Procedures upon sixty days written notice to the other party. Termination will not affect the validity of activity conducted under these Implementation Procedures prior to termination.

1.9 Definitions. For the purpose of these Implementation Procedures, the following definitions are provided. Additional definitions can be found in Article II of the BASA executive agreement.

(a) “Airworthiness Standards” means regulations governing the design and performance of civil aeronautical products, parts, and appliances.

(b) “Appliance” means

(1) to the FAA: any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, aircraft engine, or propeller.

(2) to the LBA: “Parts and Appliances” means any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft. It includes parts of an airframe, aircraft engine, or propeller.

(c) “Critical Component” means

(1) to the FAA: a part for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section of the manufacturer’s maintenance manual or Instructions for Continued Airworthiness.

(2) to the LBA: a part for which the failure analysis shows that the component must achieve and maintain a particularly high level of integrity if hazardous effects are not to occur at a rate in excess of extremely remote, and includes parts for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section of the manufacturer’s maintenance manual or Instructions for Continued Airworthiness.

(d) “Environmental Approval” means an approval issued when a civil aeronautical product has been found to comply with standards concerning noise, fuel venting, and/or exhaust emissions.

(e) “Environmental Standards” means regulations governing the certification of designs with regard to noise characteristics and exhaust emissions of civil aeronautical products and appliances.

(f) “Environmental Testing” means a process by which a civil aeronautical product or appliance is determined to comply with environmental standards.

(g) “Equivalent Level of Safety Finding” means a finding that alternative action taken provides a level of safety equal to that provided by the requirements for which equivalency is being sought.

- (h) “Exemption” means a grant of relief from requirements of a current regulation when processed through the appropriate regulatory procedure by the FAA or LBA.
- (i) “Export” means the process by which a product, part or appliance is released from the State-of-Manufacture’s civil aviation authority’s regulatory system for subsequent use by another country.
- (j) “Exporting Civil Airworthiness Authority” means the national organization within the exporting State, charged by the laws of the exporting State, to regulate the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products, parts, and appliances. The exporting civil airworthiness authority will be referred to herein as the exporting authority.
- (k) “Finding” means a determination of compliance/non-compliance as the result of an airworthiness authority’s review, investigation, inspection, test, and/or analysis.
- (l) “Import” means the process by which an exported product, part, or appliance is accepted by a country’s civil aviation authority for its own use and subsequently placed under that authority’s regulatory system.
- (m) “Importing Civil Airworthiness Authority” means the national organization within the importing State, charged by the laws of the importing State with regulating the airworthiness and environmental certification, approval, or acceptance of civil aeronautical products, parts, and appliances. The importing civil airworthiness authority will be referred to herein as the importing authority.
- (n) “JAA Products” means jointly certificated/validated products using JAA procedures, including JAR-21 “caught-up” products.
- (o) “Maintenance” means
- (1) to the FAA: the performance of inspection, overhaul, repair, preservation, and the replacement of parts or appliances of a product, but excludes preventive maintenance to that product.
 - (2) to the LBA: the performance of inspection, overhaul, repair, modification, defect rectification, preservation, and the replacement of parts or appliances of a product.
- (p) “Manufacturer” means a person who, by FAA or LBA regulation, is responsible for determining that all products or parts thereof produced within the quality control system conform to an FAA or LBA-approved design or established government or industry standard and are in a condition for safe operation. For the LBA, this includes a Production Organization.

- (q) “New Aircraft” means an aircraft that is still owned by the manufacturer, distributor, or dealer, if there is no intervening private owner, lease, or time sharing arrangements, and the aircraft has not been used in any pilot school and/or other commercial operations.
- (r) “Non-JAA Products” means all products certificated / validated by the LBA not using a JAA procedure.
- (s) “Person” means an individual, firm, partnership, corporation, company, association, joint stock association, or governmental entity, and includes a trustee, receiver, assignee, or other similar representative of any of them.
- (t) “Product” means a civil aircraft, aircraft engine, or propeller.
- (u) “Production Quality System” means a systematic process which meets the requirements of the exporting authority and ensures that products, parts, and appliances will conform to the approved design and will be in a condition for safe operation.
- (v) “Special Condition” means
- (1) to the FAA: an additional airworthiness standard(s) prescribed by the FAA when the airworthiness standards for the category of product do not contain adequate or appropriate safety standards due to novel or unusual design features. Special Conditions contain such safety standards as the FAA finds necessary to establish a level of safety equivalent to that established in the applicable regulations.
 - (2) to the LBA: an additional airworthiness standard(s) prescribed by the LBA when the airworthiness standards for the category of product do not contain adequate or appropriate safety standards due to novel or unusual design features, unconventional use of the product, or experience in service with similar products showing that unsafe conditions may develop. Special Conditions contain such safety standards as the LBA finds necessary to establish a level of safety equivalent to that established in the intended regulations.
- (w) “Supplier” means a person at any tier who contracts to provide an appliance, part, special process, or service to a manufacturer to be incorporated into the manufacture of a product, part, or appliance.
- (x) “Used Aircraft” means each aircraft that is not a new aircraft, as defined in paragraph (q) above.
- (y) “Validation” means the importing authority’s process of type certification, or equivalent, of a product certificated by either the FAA or LBA, as exporting authorities.

SECTION II SCOPE OF THESE IMPLEMENTATION PROCEDURES

- 2.0 General. These Implementation Procedures cover the products, parts, and appliances identified below, their approvals, and the provisions set forth in the following paragraphs.
- 2.1 Products, Parts, and Appliances Manufactured Under the Regulatory System of the Exporting Authority Accepted for Import Under These BASA Implementation Procedures.

2.1.0 German Acceptance of FAA Export Certificates of Airworthiness for the Following Products:

- (a) new and used aircraft,
- (b) new aircraft engines, and
- (c) new propellers.

See Summary Table 1, at the end of this Section, for the listing of the classes and categories of U.S. products and associated approvals eligible for import into Germany.

2.1.1 German Acceptance of FAA Airworthiness Approval Tags for the Following Appliances and Parts:

- (a) new appliances (articles),
- (b) new parts, including modification and/or replacement parts, for the aircraft, aircraft engines, propellers, and appliances listed in paragraphs 2.1.0 and 2.1.1(a),
- (c) new parts, including modification and/or replacement parts, for the aircraft, aircraft engines, and propellers certificated by the LBA as the authority of the State of Design listed in paragraphs 2.1.2 and 2.1.3(a)-(b), and
- (d) new parts, including modification and/or replacement parts, for aircraft, aircraft engines, and propellers validated by the LBA, but for which neither the LBA nor FAA is the authority of the State of Design.

See Summary Table 1, at the end of this Section, for the listing of the classes and categories of U.S. appliances, parts and associated approvals eligible for import into Germany.

2.1.2 U.S. Acceptance of LBA Export Certificates of Airworthiness for the Following Products (See Appendix G for AIRBUS Aircraft):

- (a) new aircraft and used aircraft.

See Summary Table 2, at the end of this Section, for the listing of the classes and categories of German aircraft and associated approvals eligible for import into the United States.

2.1.3 U.S. Acceptance of LBA Authorised Release Certificates for the Following Products, Parts, and Appliances:

- (a) new aircraft engines,
- (b) new propellers,
- (c) new parts and appliances (articles),
- (d) new replacement parts that conform to FAA-approved design data and that are eligible for installation in a product or appliance which has been granted an FAA design approval, for the following:
- (1) Products and appliances for which Germany is the State of Design; and
 - (2) Products and appliances for which the United States, or a third country, is the State of Design. These parts must be produced by a German Production Organization Approval holder that has an arrangement with a U.S. or third country design approval holder for the manufacturing rights, as specified in paragraph 3.1.4 of these Implementation Procedures.
- (e) new modification parts that conform to FAA-approved design data and that are eligible for installation in a product or appliance which has been granted an FAA design approval, for the following:
- (1) Products and appliances for which Germany is the State of Design for both the product/appliance and the design change; and
 - (2) Products and appliances for which the United States is the State of Design, and for which Germany is the State of Design for the design change;
 - (3) Airbus model aircraft for which Germany is the State of Design for the design change; and

- (4) Products and appliances, regardless of the State of Design, for which the United States is the State of Design for the design change. These parts must be produced by a German Production Organization Approval holder that has an arrangement with a U.S. design approval holder for the manufacturing rights, as specified in paragraph 3.1.4 of these Implementation Procedures.

See Summary Table 2, at the end of this Section, for the listing of the classes and categories of German aircraft engines, propellers, parts and appliances, modification and/or replacements parts, and associated approvals eligible for import into the United States.

2.1.4 Acceptance of Standard Parts.

(a) LBA Acceptance of Standard Parts. The LBA shall accept Standard Parts for all products, parts, and appliances covered under these Implementation Procedures, when they conform to established U.S. industry or U.S. government specifications, or to an FAA parts TSO (e.g., TSO C148, C149, or C150).

(b) U.S. Acceptance of Standard Parts. The FAA shall accept Standard Parts for all products, parts, and appliances covered under these Implementation Procedures, when they conform to established German/European industry specifications.

2.1.5 Airworthiness Certification. These Implementation Procedures for design approval apply to such aircraft type designs to be type certificated by the FAA and LBA for standard category airworthiness certification.

2.1.5.0

(a) For the FAA, standard airworthiness certificates are issued for aircraft certificated in the normal, utility, acrobatic, commuter, and transport categories of aircraft, as well as for manned free balloons and special classes of aircraft which include airships, very light aircraft (VLA), gliders, and other non-conventional aircraft.

(b) Aircraft for which a special airworthiness certificate is to be issued will be dealt with on a case-

2.1.5.1

(a) For the LBA, standard certificates of airworthiness are issued for aircraft certificated in the Large (Turbine Powered) Aeroplane, Normal, Utility, Aerobatic, Commuter, Sailplanes/Powered Sailplanes, Balloons, Airships, Large Rotorcraft, Small Rotorcraft, Very Light Aeroplane categories, and other non-conventional aircraft.

(b) Aircraft for which a special airworthiness certificate is to be

by-case basis through the special arrangements provision in Section V of this document.

issued will be dealt with on a case-by-case basis through the special arrangements provision in Section V of this document.

2.2. Acceptance of Used Aircraft Manufactured in Third Countries. These Implementation Procedures also apply to the acceptance of Export Certificates of Airworthiness for used aircraft for which a third country is the State of Design and that are subsequently exported from Germany to the United States or vice versa. This shall only apply when bilateral agreements/arrangements for this purpose have been formalized between these third countries and both the FAA and LBA, covering the same class of products.

2.3 Provisions for Design Change Approvals.

2.3.0 German Acceptance of the Following FAA-approved Design Changes:

- (a) Amended type certificates for products for which the United States is the State of Design;
- (b) Supplemental type certificates for products for which either the United States or Germany is the State of Design;
- (c) Other FAA-approved major or minor design changes (as identified in Section III, paragraph 3.3.1) for products, parts, and appliances for which the United States is the State of Design; and
- (d) FAA-approved design data used in support of major or minor repairs (as identified in Section III, paragraph 3.3.2) for products, parts, and appliances for which the United States is the State of Design.

2.3.1 U.S. Acceptance of the Following LBA-approved Design Changes:

- (a) Amended type certificates for aircraft for which Germany is the State of Design;
- (b) Supplemental type certificates for aircraft for which either Germany or the United States is the State of Design;
- (c) Supplemental Type Certificates for Airbus model aircraft for which Germany will be State of Design for the design change.
- (d) Other LBA-approved major or minor design changes (as identified in Section III, paragraph 3.3.1) for aircraft, parts, and appliances for which Germany is the State of Design; and

(e) LBA-approved design data used in support of major or minor repairs (as identified in Section III, paragraph 3.3.2) for aircraft, parts, and appliances for which Germany is the State of Design.

2.4 Provisions for Environmental Testing and Approvals.

2.4.0 German Acceptance of FAA Findings for the Following Environmental Requirements:

[Reserved.]

2.4.1 U.S. Acceptance of LBA Findings for the Following Environmental Requirements:

[Reserved.]

2.5 Provisions for Technical Assistance. The scope of all technical assistance activities between the FAA and LBA are specified in Section IV.

2.6 Provisions for Special Arrangements. These Implementation Procedures provide for designated officials within the FAA and LBA to make special arrangements -- with respect to design approval, production activities, export airworthiness approval, post design approval, or technical assistance -- in unique situations which have not been specifically addressed in these Implementation Procedures, but which are anticipated by the BASA. All special arrangements between the authorities are listed in Appendix F.

2.7 Summary Tables. The following tables summarize the new products, appliances, and parts designed and manufactured in the United States or Germany that are eligible for import under these Implementation Procedures. These tables do not show third countries' products eligible for import.

Table 1
Summary of U.S. (State of Design) Products, Appliances, and Parts thereof and
Associated FAA Approvals Eligible for Import into Germany.

<u>Products, Appliances, & Parts</u>	Type Certificate, and Amendments	Supplemental Type Certificate	Technical Standard Order Authorization	Parts Manufacturer Approval
Airplanes in the following categories:				
Normal	√	√	Not Applicable	Not applicable
Utility	√	√	N/A	N/A
Acrobatic	√	√	N/A	N/A
Commuter	√	√	N/A	N/A
Transport	√	√	N/A	N/A
Rotorcraft in the following categories:				
Normal	√	√	N/A	N/A
Transport	√	√	N/A	N/A
Manned Free Balloons	√	√	N/A	N/A
Engines	√	√	N/A	N/A
Propellers	√	√	N/A	N/A
Aircraft in Special Classes:				
Airships	√	√	N/A	N/A
VLA	√	√	N/A	N/A
Gliders	√	√	N/A	N/A
Powered Lift	√	√	N/A	N/A
Appliances (articles)	N/A	N/A	√	N/A
New parts, including replacement and modification parts, for the above airplanes, rotorcraft, balloons, engines, propellers, special class aircraft, and articles / appliances	√ Note: Produced under production approval.	√ Note: Produced under production approval.	√	√

Note: Aircraft certified in the primary, provisional, and restricted categories will be dealt with on a case-by-case basis through the special arrangement provision in Section V.

Note: This table does not show third countries' products, appliances, and parts eligible for import into Germany. See paragraphs 2.1 and 2.2.

Table 2

Summary of German (State of Design) Products, Appliances, and Parts thereof and Associated Approvals Eligible for Import into the United States. (See paragraph 1.5.1 (b))

Products, Parts, & Appliances	Type Certificate, and Amendments	Supplemental Type Certificate	Joint Technical Standard Order Authorisation
Airplanes in the following categories:			
Large (Turbine Powered)	√	√	N/A
Normal	√	√	N/A
Utility	√	√	N/A
Aerobatic	√	√	N/A
Commuter	√	√	N/A
Very Light Aeroplanes	√	√	N/A
Sailplanes/Powered Sailplanes	√	√	N/A
Rotorcraft in the following categories:			
Small	√	√	N/A
Large	√	√	N/A
Airships	√	√	N/A
Engines	√	√	N/A
Manned Free Balloons	√	√	N/A
Propellers	√	√	N/A
Parts and Appliances	N/A	N/A	√ (1)
New parts, including replacement and modification parts, for the above aeroplanes, rotorcraft, very light aeroplanes, sailplanes/powered sailplanes, airships, engines, balloons, propellers, and parts and appliances	√ Note: Produced under JAR-21 Subpart G & F.	√ Note: Produced under JAR-21 Subpart G & F.	√ Note: Produced under JAR-21 Subpart G & F.

Note: Aircraft intended for a special airworthiness certificate will be dealt with on a case-by-case basis through the special arrangement provision in Section V.

Note: This table does not show third countries' products, parts and appliances eligible for import into the United States. See paragraphs 2.1 and 2.2.

(1) See paragraph 3.0.3.0 (b)(3)

SECTION III ESTABLISHED WORKING PROCEDURES

3.0 DESIGN APPROVAL PROCEDURES

3.0.0 General.

(a) The FAA and LBA, as importing authorities, will normally conduct certification activities under a validation process on the product in order to make a finding of compliance and issue its approval. The design approval issued by the importing authority is based to the maximum extent practicable on the technical evaluations, tests, inspections, and compliance determinations made by the exporting authority.

(b) The expectation is that, with only a few exceptions, the determinations of compliance with the importing authority's requirements would be made by the exporting authority, as delegated by the importing authority. The importing authority is able to make findings of compliance, without further showing, based upon statements of compliance by the exporting authority. Since the exporting authority must understand the importing authority's position on all the items for which the exporting authority will be making determinations of compliance, both authorities shall ensure that they communicate adequately on these items. Also, the importing authority will normally seek the exporting authority's opinions before significant issues are resolved and, accordingly, may postpone a meeting with the applicant to discuss and resolve technical issues until the exporting authority is adequately represented. Working in accordance with the principle that communications should occur authority-to-authority, the FAA and LBA also recognize that direct communications between the validating authority and the applicant are sometimes necessary. Direct communications should be limited to technical questions regarding the product (familiarization), or compliance questions that are within the scope of the agreed-to retained validation items. The certifying authority should be informed of the outcome of these communications.

(c) Close cooperation between importing and exporting authorities is necessary to provide for effective management of the validation process and for the most cost effective utilization of resources.

3.0.1 Design Approval Procedures for Type Certificates.

3.0.1.0 Application for U.S. Type Certification.

(a) An application for U.S. Type Certificate (TC), in accordance with 14 CFR § 21.15, from an applicant in Germany should be sent to the LBA.

3.0.1.1 Application for German Type Certification.

(a) An application for LBA Type Certificate from an applicant in the United States electing to follow the joint validation procedures for JAA

Applications may be submitted for products with an LBA Type Certificate, or for products where application for type certification has been made to the LBA. The LBA should ensure the application has the following information:

- (1) The LBA Type Certificate and TC Data Sheet, if available, and a definition of the national airworthiness and environmental standards upon which the LBA design approval was (or is to be) based, and the amendment level of the U.S. airworthiness standards that the applicant proposes and the LBA believes to be equivalent to its own standards;
- (2) Date of application to the LBA; and
- (3) The applicant's requested date for FAA type certification.

(b) Also, the application should contain the following, if known at the time of application:

- (1) A description of all novel or unusual design features known to the applicant or LBA at the time of application which might necessitate issuance of FAA special conditions under 14 CFR § 21.16, or which might require a special review of acceptable means of compliance;
- (2) All known or expected exemptions or equivalent level of safety findings relative to the LBA's national standards for design approval that might affect compliance with the

products should be made in accordance with JAR-21 Sub-subpart N-B and JAA Validation Procedures Based on VI Concept. Applications may be submitted for products with an FAA Type Certificate, or for products where application for type certification has been made to the FAA. The FAA should ensure the application has the following information:

- (1) The FAA Type Certificate and TC Data Sheet, if available, and a definition of the national airworthiness standards upon which the FAA design approval was (or is to be) based, and the amendment level of the LBA airworthiness standards that the applicant proposes and the FAA believes to be equivalent to its own standards;
- (2) Date of application to the FAA; and
- (3) The applicant's requested date for LBA type certification.

(b) Also, the application should contain the following, if known at the time of application:

- (1) A description of all novel or unusual design features known to the applicant or FAA at the time of application which might necessitate issuance of LBA special conditions under JAR 21N16, or which might require a special review of acceptable means of compliance; and
- (2) All known or expected exemptions or equivalent level of safety findings relative to the FAA's national standards for design approval that might affect

applicable U.S. airworthiness and environmental standards; and

(3) Available information on U.S. market potential, including specific customers and U.S. content of the product, if known.

(c) The LBA should forward the application to the appropriate FAA Aircraft Certification Service Directorate, based on the class and category of product. Appendix A contains a list of addresses for the FAA Aircraft Certification Service Directorates.

compliance with the applicable LBA airworthiness standards.

(c) The FAA should forward the application to the LBA in the manner prescribed by the JAA Validation Procedures Based on VI Concept.

(d) An application for LBA Type Certificate from a U.S. applicant electing to follow the German national procedures should be sent to the FAA. The FAA should ensure the application has the information as outlined in (a)(1), (a)(2), (b)(1), and (b)(2) of this paragraph. The FAA should forward the application to the appropriate LBA certification division as listed in appendix B.

3.0.1.2 FAA and LBA Validation Process. After receipt of an application, the FAA or LBA, as the importing authority, will conduct certification activities under a validation process as follows:

(a) For a product designed in Germany, the FAA will conduct certification activities under a validation process in accordance with Appendix C of these Implementation Procedures.

(b) For a product designed in the United States and validated by the LBA under national procedures, the LBA will conduct certification activities under a validation process in accordance with Appendix C of these Implementation Procedures.

(c) For a product designed in the United States and validated under JAA procedure, the LBA will issue a type certificate on the basis of the JAA investigation performed under the JAA Validation Procedure Based on VI Concept.

(d) During the validation process, the importing authority will establish its type certification basis in accordance with paragraph 3.0.1.3.

3.0.1.3 Establishment of the U.S. or German Type Certification Basis. The FAA or LBA, as the importing authority, will develop its type certification basis for imported products in a manner that is consistent with the criteria utilized to

establish the certification basis for a domestic product of a similar design and service history.

3.0.1.3.1 U.S. Type Certification Basis.

(a) The FAA will develop its type certification basis using the applicable airworthiness standards (14 CFR) in effect on the date application was made to the LBA for the German type certificate. The applicable airworthiness requirements may be supplemented with the following additional requirements:

(1) Special conditions: The FAA will review all novel and unusual design features for development of special conditions.

(2) Technical requirements necessary in the interest of safety: These include requirements to preclude a potential unsafe condition finding for the product under 14 CFR § 21.21(b)(2). These may be generated as a result of adverse service history of this product, or other products of a similar nature or design. This includes, but is not limited to, actions taken by the LBA to correct unsafe conditions.

(b) Applicant's for U.S. type certificate must also comply with the applicable airworthiness standards, special conditions, fuel venting and exhaust emission standards of 14 CFR Part 34 and

3.0.1.3.2 German Type Certification Basis.

(a) The LBA will develop its type certification basis using the applicable airworthiness standards in effect on the date application was made to the FAA for the U.S. type certificate. The applicable airworthiness requirements may be supplemented with the following additional requirements:

(1) Special conditions: For the development of special conditions, the LBA will review:

(i) All novel or unusual design features

(ii) The intended use of the product,

(iii) Its service history, and

(iv) the experience from other similar products in service or products having similar design features, having shown that unsafe conditions may develop.

(2) Applicant's must also comply with the applicable noise and exhaust emissions standards in effect on the date of application to the LBA for German type certificate.

the noise standards of 14 CFR Part 36 in effect on the date of U.S. type certification.

3.0.1.4 Environmental Testing and Approval Procedures.

3.0.1.4.1 FAA Procedures.

[Reserved.]

3.0.1.4.2 LBA Procedures.

[Reserved.]

3.0.2 Design Approval Procedures for Supplemental Type Certificates.

3.0.2.1 Design Approval Procedures for U.S. Supplemental Type Certificates.

(a) U.S. Supplemental Type Certificates (STCs) may be issued under the provisions of 14 CFR § 21.117 for approval of major changes to the type design of an aircraft, aircraft engine, or propeller which has been type certificated/validated by the FAA, when either the LBA or the FAA is the authority of the state of design for the product, the LBA is the authority of the state of design for the design change (including Airbus models A300, A310, A320, & A321), and the LBA has issued the STC.

(b) The FAA will develop the STC certification basis in accordance with FAA Order 8110.4, *Type Certification* and 14 CFR § 21.115.

(c) With the exception of the TC holder who may apply for an amended TC or STC, each person who alters a product by introducing a major change in Type Design, not great enough to require a new

3.0.2.2 Design Approval Procedures for LBA Supplemental Type Certificates Using JAA STC Procedures.

(a) LBA Supplemental Type Certificates (STCs) may be issued for approval of major design changes to a Type Design of an aircraft, aircraft engine, or propeller which has been type certificated/validated by the LBA, when either the FAA or the LBA is the authority of the state of design for the product, the FAA is the authority of the state of design for the design change, and the FAA has issued the STC.

(b) With the exception of the TC holder who may apply for an amended TC or STC, each person who alters a Product by introducing a major design change to a Type Design, not extensive enough to require a new application for a type certificate, shall submit an STC application to the FAA with a request that the application and required information be forwarded to the appropriate LBA certification division as listed in Appendix B.

application for a Type Certificate, shall submit an STC application to the LBA with a request that the application and required information be sent to the FAA Directorate, with the request to forward the application and required information to the ACO responsible for the original FAA type certification/validation of the German product, or Airbus model A300, A310, A320, & A321 aircraft. Appendix A contains a list of addresses for the FAA Offices.

(d) Each application should contain the following information:

- (1) A description of the change, together with the make and model of the product;
- (2) A copy of the LBA STC and certification basis;
- (3) The applicant's requested date for FAA issuance of the STC;
- (4) A description of all novel or unusual design features which might necessitate issuance of FAA special conditions; and
- (5) All exemptions or equivalent level of safety findings granted by the LBA for the German STC.

(e) The basic design approval procedures for U.S. Type Certification should be used for STCs, but may be adjusted to

(c) This STC application shall be made in accordance with the JAA STC Procedure and with JAR 21N113(a), and include the information to fulfill JAR 21N113(b). Each application should contain the following information:

- (1) A description of the change, together with the make and model of the product;
- (2) A copy of the FAA STC and Certification basis;
- (3) The applicant's requested date for LBA issuance of the STC;
- (4) A description of all novel or unusual design features which might necessitate issuance of LBA special conditions; and
- (5) All exemptions or equivalent Level of safety findings granted by the FAA for the U.S. STC.

(d) In cases where the STC applicant has not entered into an arrangement with the Type Certificate holder, the FAA shall review the applicant's justification and concur with the applicant's position that an arrangement is not necessary. The applicant's justification and the FAA concurrence statement will be provided to the LBA.

(e) The basic design approval procedures for LBA Supplemental Type certification are JAR-21 Subpart N-E, JAA STC Procedures, and JAA Validation Procedures.

accommodate the magnitude and complexity of the design change, per FAA Order 8110.4, *Type Certification*.

(f) The following basic documentation will be required, as applicable, for review by the FAA during the STC approval process:

- (1) Compliance Checklist;
- (2) Airplane/Rotorcraft Flight Manual Supplement;
- (3) Master Documentation List/Master Drawing List;
- (4) Manufacturing and Installation Instruction Drawings;
- (5) Maintenance/Repair Manual Supplements;
- (6) Weight and Balance data; and
- (7) Instructions for Continued Airworthiness.

(g) The FAA will issue an STC when compliance with the applicable U.S airworthiness requirements has been verified and a compliance statement has been made by the LBA.

(f) The following basic documentation will be required, as applicable, for review by the LBA during the STC approval process:

- (1) Compliance Checklist;
- (2) Airplane/Rotorcraft Flight Manual Supplement;
- (3) Master Documentation List/Master Drawing List;
- (4) Manufacturing and Installation Instruction Drawings;
- (5) Maintenance/Repair Manual Supplements;
- (6) Weight and Balance data; and
- (7) Instructions for Continued Airworthiness.

(g) The LBA will issue an STC when compliance with the applicable German airworthiness requirements has been verified and a compliance statement has been made by the FAA.

3.0.2.3 Design Approval Procedures for LBA Supplemental Type Certificates Using German National Procedures. LBA Supplemental Type Certificates (Ergänzung zur Musterzulassung = EMZ) may be issued for products

which have been type certificated/validated by the LBA, when either the FAA or the LBA is the authority of the state of design for the product, the FAA is the authority of the state of design for the design change, and the FAA has issued the STC. The application and its processing should be made following 3.0.2.2(b) and (c).

3.0.2.4 Design Approval Procedures for LBA Supplemental Type Certificates for Products of Third Countries. LBA Supplemental Type Certificates (Ergänzung zur Musterzulassung = EMZ) may be issued for approval of major design changes to a type design of a product which has been type certificated by an authority other than the FAA or LBA and which has been validated by both the FAA and the LBA, when the FAA is the authority of the state of design for the design change and the FAA has issued the STC.

3.0.3 Design Approval Procedures for Technical Standard Order (TSO) and Joint Technical Standard Order (JTSO) Design Approval.

3.0.3.0 Design Approval Procedures for FAA Letters of TSO Design Approval.

(a) Application. A German applicant for an FAA letter of TSO design approval shall make application through the LBA with a request that the application and required information be forwarded to the FAA Brussels Aircraft Certification Staff, at the address indicated in Appendix A. The LBA should contact the FAA for the latest FAA technical policy and

3.0.3.1 Design Approval Procedures for LBA JTSO Authorisations for Import (excluding APUs).

(a) Application. The applicant for a JTSO Authorisation for Import is required to make an application in accordance with JAR-21N603 in writing through the FAA with a request that the application and required information be forwarded to the LBA, Division M-4, at the address indicated in Appendix B. The FAA should contact the LBA for the latest

procedures related to the TSO performance standard.

(b) Issuance of an FAA Letter of TSO Design Approval.

(1) The appropriate form of TSO design approval, within the scope of these Implementation Procedures, may be issued to the applicant by the FAA after:

- (i) Receipt of all the required data/documentation pertaining to the proper installation, performance, operation, and maintenance of the TSO appliance;
- (ii) Receipt of other specific technical data, as jointly agreed between the LBA and the FAA, needed to demonstrate compliance with a TSO standard (e.g., in the case of a first-of-a-kind TSO);
- (iii) Receipt and approval of all proposed deviations; and
- (iv) Receipt of a certifying statement from the applicant through the LBA, with certification by the LBA, that the performance of the appliance or article complies with the applicable FAA TSO or other standards found by the FAA to provide an equivalent level of safety.

(2) The FAA may issue the letter of TSO design approval without further investigation when the TSO and JTSO are identical, unless

LBA technical policy and procedures related to the JTSO performance standard. A holder of FAA TSOA under TSO-C148 fasteners, TSO-C149 bearings, and TSO-C150 seals should not apply for JTSO Authorisation. The LBA considers such parts to be standard parts (see paragraph 2.1.4(a)).

(b) Issuance of LBA JTSO Authorisation for Import.

(1) An appropriate JTSO Authorisation for Import conveying design approval, within the scope of these Implementation Procedures, will be issued to the applicant by the LBA after:

- (i) Receipt of all the required data/documentation pertaining to the proper installation, performance, operation, and maintenance of the JTSO article;
- (ii) Receipt of other specific technical data, as jointly agreed between the FAA and the LBA, needed to demonstrate compliance with a JTSO standard (e.g., in the case of a first-of-a-kind JTSO);
- (iii) Receipt and approval of all proposed deviations; and
- (iv) Receipt of a certifying statement from the applicant through the FAA, with certification by the FAA, that the performance of the appliance or article complies with the applicable JTSO.

(2) The LBA may issue the JTSO Authorisation for Import without

there are deviations to, or it is a first-of-a-kind TSO (paragraphs ii and iii above).

(3) The LBA has approved in the past parts and appliances under a Technical Specification when there was no applicable JTSO. When there is an applicable FAA TSO, these parts and appliances may be issued by an FAA Letter of Design Approval for import into the United States.

further investigation when the JTSO and FAA TSO are identical, unless there are deviations to, or it is a first-of-a-kind JTSO (paragraphs ii and iii above).

(3) In case there is no corresponding JTSO to an FAA TSO, the LBA will issue a National TSO (NTSO) according to the procedures for JTSO Authorisation for Import.

3.0.3.2 Design Approval Procedures for APUs. Application for JTSO Authorisations for Import should be made in accordance with JAR-21N603 in writing through the FAA with a request that the application and required information be forwarded to the LBA, Division M-4, at the address indicated in Appendix B. LBA will then issue a JTSO Authorisation for Import for an APU after a validation process similar to that applicable for Type Certificate validation, performed under either JAA procedures or German national procedures for the APU process.

3.0.4 Joint Design Approval Procedures. The FAA and LBA may undertake concurrent type certification/validation and other design approval projects with respect to products covered by the Scope of these Implementation Procedures when it is in the interest of both authorities and their aviation industries.

3.0.5 JAR-21N5 Arrangement Recordkeeping Requirements. In accordance with 14 CFR § 21.49 for TC holders, § 21.49 and FAA Order 8110.4, *Type Certification*, for STC holders, § 21.613 for TSO Authorization holders, and § 21.303 and FAA Order 8110.42, *Parts Manufacturer Approval Procedures*, for PMA holders, these design holders are required to hold relevant design information and to make it available upon request. This information is available from the design approval holders via the FAA upon request from the LBA.

3.0.6 JAR-21N5 Arrangement Testing Requirement Under FAA PMA. Testing may be required to substantiate that a critical part performs equal to the critical part

it replaces. Such testing would be conducted in accordance with an FAA-approved test plan with performance criteria from either the type design or generated by the PMA applicant itself and approved by the FAA.

3.1 SERIAL PRODUCTION AND SURVEILLANCE ACTIVITIES

3.1.0 Production Quality System. All products, parts, and appliances exported under the provisions of these Implementation Procedures shall be produced in accordance with a production quality system which ensures conformity to the approved design of the importing authority and ensures that completed products are in a condition for safe operation. This production quality system covers the fabrication of products, parts, and appliances within and outside of the country of export. When these fabrication and/or production activities occur outside of the country of export, the associated products or parts thereof shall be considered as being manufactured in the exporting country.

3.1.1 Surveillance of Production Activities.

3.1.1.0 The FAA and LBA, as exporting authorities, shall conduct regulatory surveillance of manufacturers, and their suppliers, in accordance with the exporting authority's specific policies, practices, and/or procedures. Both ongoing and scheduled evaluations should be conducted to verify that the manufacturer is in continual compliance with its production quality system, manufacturing products, parts, and appliances which fully conform to the approved design, and are in a condition for safe operation.

3.1.1.1 Production surveillance includes the surveillance of manufacturers and their suppliers who may be fabricating prototype or pre-production parts for products which are still undergoing type certification. These parts must be produced by the manufacturer, or its approved supplier, with the concurrence of the exporting authority, using an existing approved production quality system for similar type certificated products. The approved production quality system must ensure the prototype or pre-produced parts are properly controlled so that a final determination of airworthiness can be undertaken prior to their use on the type certificated product.

3.1.1.2 FAA production approval and supplier surveillance programs are described in FAA Order 8120.2, Production Approval and Certificate Management Procedures, Advisory Circular 21-20, Supplier Surveillance Procedures, and FAA Order

3.1.1.3 For Production Organization Approvals (POA), LBA production approval and supplier surveillance programs are described in JAR-21, Subpart G, and associated JAA Joint Production Organization Approval Procedures. For production without POA, LBA production approval and

8100.7, Aircraft Certification
Systems Evaluation Program.

supplier surveillance programs are
described in JAR-21, Subpart F, and
associated JAA Joint Implementation
Procedures.

3.1.2 Extensions of Production Approvals.

3.1.2.0 When a production approval has been granted or extended by the FAA or LBA, as exporting authorities, to include manufacturing sites and facilities for parts, components, and subassemblies, in each other's countries or in a third country, the exporting authority remains responsible for the surveillance and oversight of these manufacturing sites and facilities.

3.1.2.1 The FAA or LBA is responsible for surveillance and oversight of its manufacturers located in the other country. Routine surveillance and oversight may be performed by the FAA and LBA on behalf of the other authority through the provisions of Section IV.

3.1.2.2 The FAA or LBA may seek assistance from the civil airworthiness authority of a third country in the undertaking of FAA or LBA regulatory surveillance and oversight functions when a production approval has been granted or extended by formal agreement/arrangement to that third country.

3.1.3 Product Production Approval Based on a Licensing Agreement. Either the FAA or the LBA can grant a production approval for a product (aircraft, engine, or propeller) in their respective country based on design data obtained through a licensing agreement with a type design holder in the other country (i.e., licensing the rights to use the design data). In this case, the authority granting that production approval shall ensure the establishment of adequate manufacturing processes and quality control procedures to assure that each product conforms to the approved licensed design data. There must also be procedures to ensure that all changes to be introduced into the design by the licensee are approved. These design changes shall be submitted to the type design holder who shall obtain approval from its authority using normal procedures. These product production approvals based on a licensing agreement will be addressed on a case-by-case basis under the Special Arrangements provision of Section V.

3.1.4 Parts Production Approval Based on a Licensing Agreement or Arrangement under JAR-21.133(b). The LBA may grant a Production Organization Approval for parts production based on design data obtained through a licensing agreement or arrangement under JAR-21.133(b) with a design approval holder in the United States or third country. In this case, the LBA shall ensure the establishment of adequate manufacturing processes and a quality system to assure that each part conforms to the approved licensed design data. There

must also be procedures to ensure that all changes to be introduced into the design by the licensee are approved by the design approval holder. These design changes shall be submitted to the design approval holder who shall obtain approval from its authority using normal procedures.

3.1.5 Supplier Surveillance - Outside the Exporting Country.

3.1.5.0 The FAA and LBA, as exporting authorities, shall include in their regulatory surveillance and oversight programs a means of surveilling their manufacturer's suppliers who are located outside the exporting country. This surveillance and oversight program for suppliers located outside the exporting country will be equivalent to that program for domestic suppliers. This surveillance activity will assist the FAA and LBA in determining conformity to approved design and whether parts are safe for installation on type certificated products.

3.1.5.1 The FAA or LBA is responsible for surveillance and oversight of its manufacturers' suppliers located in the other country. Routine surveillance and oversight may be performed by the FAA and LBA on behalf of the other authority through the provisions of Section IV.

3.1.5.2 The FAA or LBA may seek assistance from a third country civil airworthiness authority at the supplier's location when an agreement has been formalized with that authority in the undertaking of FAA or LBA regulatory surveillance and oversight functions at suppliers to manufacturers of the exporting country.

3.1.5.3 The manufacturer may not use a supplier in a country where the authority of the manufacturer is denied unimpeded access, by either the supplier or the supplier's civil airworthiness authority, to the supplier's facility to perform surveillance activities.

3.1.6 JAR-21 N5 Arrangement Recordkeeping Requirements. In accordance with 14 CFR § 21.125(b)(10) for TC holders, § 21.165(a) and Advisory Circular 21-1, *Production Certificates*, for Production Certificate and TSO Authorization holders, and § 21.303(h) for PMA holders, these approval holders are required to maintain production records identified with the completed product, part, or appliance. They are required to retain them in order to provide the information necessary to ensure continued airworthiness and to hold them for access by the FAA. This information is available from the approval holders via the FAA upon request from the LBA.

3.2 EXPORT AIRWORTHINESS APPROVAL PROCEDURES

3.2.0 General. For the FAA, Export Certificates of Airworthiness are issued for completed aircraft, aircraft engines, and propellers. Airworthiness approval tags are issued for articles, TSO appliances, and parts. For the LBA, Export Certificates of Airworthiness are issued for completed aircraft. Authorised Release Certificates are issued for aircraft engines, propellers, parts and appliances.

3.2.1 Acceptance of Export Certificates of Airworthiness and Authorised Release Certificates.

(a) The FAA's requirements for import are described in 14 CFR Part 21 and in FAA Order 8130.2, *Airworthiness Certification of Aircraft and Related Products*, and Advisory Circular 21-23, *Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported to the United States*. The LBA's requirements for import of JAA products, parts, and appliances are described in JAR-21 Subpart N. The LBA's requirements for import of non-JAA products, parts, and appliances are described in the LuftVZO.

(b) The LBA's process for issuing export airworthiness approvals for JAA products, parts and appliances is described in JAR-21, Subpart L. The process of issuing export certificates for non-JAA products, parts and appliances is described in LuftVZO. The FAA's process for issuing export airworthiness approvals is described in 14 CFR Part 21 and in FAA Order 8130.2, *Airworthiness Certification of Aircraft and Related Products*, FAA Order 8130.21, *Procedures for Completion and Use of the Authorized Release Certificate*, FAA Form 8130-3, *Airworthiness Approval Tag*, and FAA Advisory Circular 21-2, *Export Airworthiness Approval Procedures*.

3.2.1.0 New Aircraft (See Appendix G for AIRBUS Aircraft).

(a) Except as provided in paragraph 3.2.2, the FAA and LBA as importing authorities shall accept each other's Export Certificates of Airworthiness on new aircraft, as identified in Section II, only when the exporting authority certifies that each aircraft:

- (1) Conforms to a type design approved by the importing authority, as specified in the importing authority's type certificate data sheet and any additional supplemental type certificates approved/accepted by the importing authority;
- (2) Is in a condition for safe operation, including compliance with applicable importing authority Airworthiness Directives, as notified; and
- (3) Meets all additional requirements prescribed by the importing authority, as notified.

(b) Each aircraft exported to the United States with LBA airworthiness approval will have an LBA *Certificate of Airworthiness for Export*. The Certificate should contain the following statement: “The [INSERT AIRCRAFT MODEL SERIES] covered by this certificate conforms to the type design approved under U.S. Type Certificate Number [INSERT TYPE CERTIFICATE NUMBER and REVISION LEVEL], and is found to be in a condition for safe operation,” and/or any other “import requirements” text as specified in the U.S. Type Certificate Data Sheet.

(c) Each aircraft exported to Germany with FAA airworthiness approval will have an FAA Form 8130-4, *Export Certificate of Airworthiness*, issued in accordance with the requirements of 14 CFR Part 21, Subpart L. The FAA Form 8130-4 should contain a statement such as: “The [INSERT AIRCRAFT MODEL] covered by this certificate conforms to the type design approved under LBA Type Certificate Number [INSERT TYPE CERTIFICATE NUMBER and REVISION LEVEL], and is found to be in a condition for safe operation,” and/or any other “import requirements” text as specified in the German Type Certificate Data Sheet.

3.2.1.1 New Aircraft Engines and Propellers.

(a) The FAA and LBA as importing authorities shall accept each other’s Authorised Release Certificates/Export Certificates of Airworthiness on new aircraft engines and propellers, as identified in Section II, only when the exporting authority certifies that each new aircraft engine or propeller:

- (1) Conforms to a type design approved by the importing authority, as specified in the importing authority’s type certificate data sheet;
- (2) Is in a condition for safe operation, including compliance with applicable importing authority Airworthiness Directives, as notified;
- (3) Has undergone a final operational check; and
- (4) Meets all additional requirements prescribed by the importing authority, as notified.

(b) Each aircraft engine or propeller exported to the United States with LBA airworthiness approval will have a JAA Form One, *Authorised Release Certificate*. The JAA Form One should contain the following statement: “The [INSERT AIRCRAFT ENGINE OR PROPELLER] covered by this certificate conforms to the type design approved under U.S. Type Certificate Number [INSERT TYPE CERTIFICATE NUMBER and REVISION LEVEL], is found to be in a condition for safe operation and has undergone a final operational check,” and/or any other “import requirements” text as specified in the U.S. Type Certificate Data Sheet.

(c) Each aircraft engine or propeller exported to Germany with FAA airworthiness approval will have an FAA Form 8130-4, *Export Certificate of Airworthiness*, issued in accordance with the requirements of 14 CFR Part 21, Subpart L. The FAA Form 8130-4 should contain the following statement: “The [INSERT AIRCRAFT ENGINE OR PROPELLER] covered by this certificate conforms to the type design approved under LBA Type Certificate Number [INSERT TYPE CERTIFICATE NUMBER, and REVISION LEVEL,], is found to be in a condition for safe operation and has undergone a final operational check,” and/or any other “import requirements” text as specified in the German Type Certificate Data Sheet.

3.2.1.2 New TSO Appliances.

Each appliance exported to the United States with an LBA airworthiness approval will have a JAA Form One. The FAA shall accept a LBA Authorised Release Certificate on a new TSO appliance, as identified in Section II, only when the LBA certifies, by issuance of the JAA Form One, that each TSO appliance:

- (1) Conforms to the design approved by the FAA, as specified in the FAA Letter of TSO Design Approval;
- (2) Complies with applicable FAA Airworthiness Directives;
- (3) Is marked in accordance with paragraph 3.2.4.0(a) of these Implementation Procedures; and
- (4) Meets all additional requirements prescribed by the FAA, as notified.

3.2.1.4 New Parts, Including Modification and/or Replacement Parts. All parts exported to the United States with LBA airworthiness approval will have a

3.2.1.3 New JTSO and NTSO Parts and Appliances.

Each part and appliance exported to Germany with an FAA airworthiness approval will have an FAA Form 8130-3, *Airworthiness Approval Tag*. The LBA shall accept an FAA airworthiness approval tag on a new JTSO or NTSO part or appliance, as identified in Section II, only when the FAA certifies, by issuance of the FAA Form 8130-3, that each JTSO or NTSO appliance:

- (1) Conforms to the design approved by the LBA, as specified in the LBA JTSO/NTSO Authorisation for Import;
- (2) Complies with applicable LBA Airworthiness Directives;
- (3) Is marked in accordance with paragraph 3.2.4.1(a); and
- (4) Meets all additional requirements prescribed by the LBA, as notified.

3.2.1.5 New Parts, Including Modification and/or Replacement Parts. All parts exported to Germany with FAA airworthiness approval will have an FAA Form 8130-3,

JAA Form One. The FAA shall accept a LBA Authorised Release Certificate on a new part, including a modification and/or replacement part, for the products and appliances identified in Section II, only when the LBA certifies, by the issuance of the JAA Form One, that each part:

- (1) Is eligible for installation in a product or appliance which has been granted an FAA design approval.
- (2) Conforms to FAA-approved design data and is safe for installation;
- (3) Is marked in accordance with paragraph 3.2.4.0(a) of these Implementation Procedures; and
- (4) Meets all additional requirements prescribed by the FAA, as notified.

Airworthiness Approval Tag. The LBA shall accept an FAA airworthiness approval tag on a new part, including a modification and/or replacement part, for the products and appliances identified in Section II, only when the FAA certifies, by the issuance of the FAA Form 8130-3, that each part:

- (1) Is eligible for installation in a product or appliance which has been granted an LBA design approval;
- (2) Conforms to design data approved under a:
 - (i) LBA Type Certificate
 - (ii) LBA STC
 - (iii) LBA JT/STO/NTSO Authorisation, or
 - (iv) FAA PMA (replacement parts must conform to (i), (ii), or (iii) above; parts which comprise a modification to an aircraft must conform to (ii) above).
- (3) Is marked in accordance with paragraph 3.2.4.1(a) of these Implementation Procedures; and
- (4) Meets all additional requirements prescribed by the LBA, as notified.

3.2.2 Used Aircraft for Which There Has Been a Design Approval Granted by the FAA or LBA.

(a) The FAA or LBA shall accept used aircraft of FAA or LBA approved design, as identified in Section II, for import into each other's country for airworthiness certification when the FAA or LBA certifies, by the issuance of an Export Certificate of Airworthiness, that each used aircraft:

- (1) Conforms to a type design approved by the importing authority, as specified in the importing authority's type certificate data sheet, and any additional supplemental type certificates approved/accepted by the

importing authority, as notified by the importing authority to the exporting authority;

(2) Is in a condition for safe operation, including compliance with all applicable importing authority Airworthiness Directives, as notified;

(3) Has been properly maintained using approved procedures and methods during its service life (evidenced by logbooks and maintenance records); and,

(4) Meets all additional requirements prescribed by the importing authority, as notified.

(b) Acceptance of Used Aircraft Manufactured in Third Countries.

(1) The FAA and LBA shall also accept each other's Export Certificate of Airworthiness for used aircraft manufactured and/or assembled in a third country when that country has a bilateral agreement/arrangement with both the FAA and the LBA covering the same class of product, and the conditions of paragraph 3.2.2(a)(1)-(4) have been met.

(2) When a used aircraft produced in the United States or Germany is to be imported into the other country from a third country, the authority of the country of manufacture will, upon request, assist the importing authority in obtaining information regarding the configuration of the aircraft at the time it left the manufacturer. The FAA and LBA will also provide, upon request, information regarding subsequent installations on the aircraft that have been approved by either the FAA or LBA as the exporting authority.

(c) The FAA or LBA, as importing authorities, may also request inspection and maintenance records which include, but are not limited to: the original or certified true copy of the Export Certificate of Airworthiness, or equivalent, issued by the exporting authority; records which verify that all overhauls, major changes, and repairs were accomplished in accordance with approved data; and maintenance records and log entries which substantiate that the used aircraft has been properly maintained throughout its service life to the requirements of an approved maintenance program.

3.2.3 Export Certificate of Airworthiness Exceptions. The exporting authority shall notify the importing authority prior to issuing an Export Certificate of Airworthiness in which a non-compliance to the importing authority's approved type design is to be noted under the "Exceptions" section of the Export Certificate of Airworthiness. This notification should help to resolve all issues concerning the aircraft's eligibility for an airworthiness certificate. For the FAA, this notification should be to the geographic responsible Manufacturing Inspection Office (MIO). Addresses for all FAA MIOs are listed in Appendix A. For the LBA, this notification should be to LBA Braunschweig.

A written acceptance from the importing authority is required before the issuance of the exporting authority's Export Certificate of Airworthiness.

3.2.4 Additional Requirements for Imported Products. The following identifies those additional requirements which must be complied with as a condition of acceptance for products imported into the United States or Germany, or for use on either a U.S.- or German-registered aircraft.

3.2.4.0 U.S. Requirements.

(a) Identification and Marking.

- (1) Aircraft, aircraft engines, and propellers must be identified as required in 14 CFR § 45.11.
- (2) Each critical component of a product must be identified with a part number (or equivalent) and serial number (or equivalent) in a manner outlined in 14 CFR § 45.14.
- (3) Each appliance and article of a design approved by an FAA letter of TSO design approval must be marked in accordance with the requirements in 14 CFR Part 21, Subpart O, and all additional marking requirements specified in the particular TSO.
- (4) Each replacement or modification part must be marked with the part number, serial number if applicable, and a manufacturer's name or trade mark. The model designation of the type certificated product on which the part is eligible for installation must be marked

3.2.4.1 German Requirements.

(a) Identification and Marking.

- (1) Aircraft, aircraft engines, and propellers must be identified as required in JAR-21 Subpart N-Q.
- (2) Each critical component of a product must be identified with a part number (or equivalent) and serial number (or equivalent).
- (3) Each part, appliance and article of a design approved by a JTSA Authorisation for Import must be marked in accordance with the requirements in JAR-21N-O, and all additional marking requirements specified in the particular JTSA.
- (4) Each part to be used as a replacement or modification part must be marked in accordance with JAR-21 Subpart N-Q. In addition, information concerning the model designation of the type certificated product for which the part is eligible for installation must be furnished.

(b) Instructions for Continued Airworthiness. Instructions for continued airworthiness and

on the part, or included on the appropriate airworthiness approval document if it is impractical to mark the part. In addition:

(i) For parts produced under a licensing agreement/arrangement for a product for which the United States is the State of Design, the part must be traceable to the POA holder in order to ensure continued airworthiness control.

(ii) For parts produced to U.S. STC design data, the part must be accompanied with information that identifies the applicable U.S. STC. This information may be included on the appropriate airworthiness approval document.

(b) Instructions for Continued Airworthiness. Instructions for continued airworthiness and maintenance manuals having airworthiness limitation sections must be provided as prescribed in 14 CFR § 21.50.

(c) Maintenance Records. Each aircraft, including the aircraft engine, propeller, rotor, or appliance, must be accompanied by maintenance records equivalent to those specified in 14 CFR § 91.417.

maintenance manuals having airworthiness limitation sections must be provided as prescribed in JAR-21 Subpart N.

(c) Maintenance Records. Each aircraft, including the aircraft engine, propeller, rotor, or appliance, must be accompanied by maintenance records equivalent to either JAR OPS 1.920 (for aeroplanes) and 3.920 (for helicopters), or paragraph 15 of the LuftBO for non-JAA products.

3.3 POST DESIGN APPROVAL PROCEDURES

3.3.0 CONTINUED AIRWORTHINESS

3.3.0.0 General.

(a) The exporting authority is responsible as the State of Design (under International Civil Aviation Organization (ICAO) Annex 8) for resolving in-service safety issues related to design or production. The exporting authority shall provide applicable information which it has found to be necessary for mandatory modifications, required limitations and/or inspections to the importing authority to ensure continued operational safety of the product, part, or appliance. The importing authority will review and normally accept the corrective actions taken by the exporting authority in the issuance of its own mandatory corrective actions. LBA and FAA will co-operate to ensure that the aircraft exporting authority will be adequately informed of in service issues related to engines, propellers and equipment for which LBA or FAA is the authority of the State of Design and which are installed on the aircraft.

(b) At the request of the importing authority, the exporting authority shall assist the importing authority in determining what action is considered necessary by the importing authority for the continued operational safety of the product, part, or appliance. The decision as to the final action to be taken with respect to the products, parts, or appliances under the jurisdiction of the importing country lies solely with the importing authority.

3.3.0.1 Reporting of Malfunctions, Failures, and Defects (MF&D).

(a) The FAA and LBA agree to perform the following functions for the products, appliances, and parts exported to the other country:

- (1) Collecting of MF&D reports and accident/incidents;
- (2) Evaluating MF&D and accident/incidents;
- (3) Investigating and resolving all suspected unsafe conditions;
- (4) Advising the importing authority of all unsafe conditions and the necessary corrective actions (see paragraph 3.3.0.2 below); and
- (5) Upon request, when concerning matters of safety for products registered in the importing country, providing the importing authority with the following:
 - (i) Reports of MF&D and accidents/incidents;
 - (ii) Status of investigations into MF&D and accidents/incidents;

- (iii) Copies of conclusions reached in its investigation into MF&D; and
 - (iv) Copies of conclusions reached in investigations into accidents/incidents in accordance with ICAO Annex 13.
- (6) Making a reasonable effort to resolve issues raised by the importing authority concerning matters of safety for products registered in the importing country.

(b) The FAA and LBA, as importing authorities, agree to perform the following functions:

- (1) Advising the exporting authority of MF&D and accidents/incidents which are believed to be potentially unsafe conditions occurring on the products and appliances which are imported from the country of the exporting authority.
- (2) Supporting the exporting authority in investigations of unsafe conditions and their occurrences on the imported aircraft.
- (3) Advising the exporting authority, if as a result of investigations made by the importing authority into MF&D and accidents/incidents, it has determined that it will make corrective actions mandatory.

(c) Copies of U.S. MF&D reports are available from the FAA Mike Monroney Aeronautical Center, Flight Standards Service Regulatory Support Division, Airworthiness Programs Branch. Copies of U.S. MF&D reports are also available on the Mike Monroney Aeronautical Center internet web site at <http://av-info.faa.gov/isdr..> Copies of German MF&D reports are available from LBA Braunschweig.

3.3.0.2 Unsafe Condition and Mandatory Continuing Airworthiness Actions.

(a) The FAA (under 14 CFR Part 39) and LBA (under LuftBO) issue mandatory continuing airworthiness actions. The FAA and LBA agree to perform the following functions for the products, appliances, and parts for which it is the State of Design (exporting authority):

- (1) Issuing a mandatory continuing airworthiness action (Airworthiness Directive) whenever the authority determines that an unsafe condition exists in a type certificated product or appliance, and is likely to exist or develop on a type certificated product or appliance of the same design. This may include a product or appliance that has another product, part, or appliance installed on it and the installation causes the unsafe condition. The contents of such a

mandatory continuing airworthiness action should include, but are not limited to, the following:

- (i) Make, model, and serial numbers of affected aircraft, aircraft engines, propellers, appliances, and parts;
 - (ii) Description of the unsafe condition, reasons for the mandatory action, and its impact on the overall aircraft and continued operation;
 - (iii) Description of the cause of the unsafe condition (e.g., stress corrosion, fatigue, design problem, quality control, unapproved part);
 - (iv) The means by which the unsafe condition was detected and, if resulting from in-service experience, the number of occurrences; and
 - (v) Corrective actions and corresponding compliance times, with a list of the relevant manufacturer's service information including reference number, revision number and date.
- (2) Ensuring that the following information is provided to the other authority as part of the mandatory continuing airworthiness action or directly from the approval holder:
- (i) The number of aircraft world-wide needing corrective action;
 - (ii) A statement on the availability of parts; and
 - (iii) An estimate of the number of labor hours and the cost of parts required for the corrective actions.
- (3) Issuing a revised or superseding mandatory continuing airworthiness action whenever the exporting authority finds any previously issued mandatory continuing airworthiness action was incomplete or inadequate to fully correct the unsafe condition.
- (4) Notifying the importing authority of the unsafe condition and the necessary corrective actions by submitting a copy of the mandatory continuing airworthiness action at the time of publication to the address referenced in 3.3.0.1(c) above. Additionally, the exporting authority shall arrange for copies of all relevant service bulletins referenced in the mandatory action, as well as other supporting documentation, to be forwarded to the appropriate focal point in the product-responsible FAA Directorate and the LBA. For the LBA, this information is located on the LBA internet web site (www.lba.de).

- (5) In the case of emergency airworthiness action, the exporting authority should ensure special handling so that the importing authority is notified immediately.
- (6) Advising and assisting the importing authority in defining the appropriate actions for the importing authority to take in the issuance of its own mandatory continuing airworthiness action.
- (7) Providing sufficient information to the importing authority for its use in making determinations as to the acceptability of alternative means of compliance to mandatory continuing airworthiness actions.
- (8) On a yearly basis, providing the importing authority a summary index list of mandatory continuing airworthiness actions issued by the exporting authority for products exported to the country of import.

(b) The FAA and LBA recognize that they may disagree as to the finding of an unsafe condition. In that case, it is expected that the importing authority will normally consult with the authority of the State of Design prior to issuing its own airworthiness directive.

(c) The FAA and LBA, as importing authorities, agree to respond quickly to the issuance of a mandatory continuing airworthiness action by the exporting authority in making its own determination of the need for issuing its own similar mandatory continuing airworthiness action that addresses the unsafe condition on the affected product certified, approved or otherwise accepted by the importing authority.

3.3.1 DESIGN CHANGES

3.3.1.0 Procedures for Changes to a Type Certificate by the Type Certificate Holder.

(a) Changes to a type design that require a new or amended type certificate should be done in accordance with paragraph 3.0.1. Also, if the TC holder has applied for an STC, this should be done in accordance with paragraph 3.0.2.

(b) All other changes to a type design by the TC holder should be done in accordance with this paragraph. These types of changes to the type design include those necessary for customer unique design features, product improvements and any other design changes, including revisions to approved manuals, made by the type certificate holder, for whatever reason.

(c) Where design changes are declared by the type certificate holder they will be defined relative to the current definition of the approved type design as validated by the importing authority, hereafter referred to as the validating authority (VA) for the purposes of this paragraph.

(d) Design changes will be classified as either Major or Minor in accordance with the criteria and procedures of the exporting authority, hereafter referred to as the certifying authority (CA) for the purposes of this section. When the LBA is the VA, the TC holder shall make formal application to the LBA - Braunschweig for approval of all major design changes.

(e) Design changes classified as Major will be further categorised as Level 1 Major or Level 2 Major. Level 1 Major design changes include any of the below:

(1) Design changes having an effect on the certification basis or involving new interpretations of the requirements, new special conditions, new equivalent safety findings or novel methods of compliance.

Note: A method of compliance would be considered to be 'novel' if it had not been applied previously in a similar context by both the FAA and the LBA.

(2) Design changes involving a Validation Item (as defined in Appendix C, paragraph 5) and involving the use of a method of compliance different from those agreed by the CA and VA for use in the original certification/validation.

(3) Design changes involving a Validation Item for which the VA has retained the compliance determination during the Type Validation program.

(4) Design changes involving Approved Manual revisions covering:

(i) Initial issues of new manuals, appendices or supplements.

(ii) Introduction of configurations not previously approved by the VA.

(iii) Existing differences between CA and VA approved manual content.

(f) Level 2 Major design changes are all other major design changes not categorised as Level 1 Major.

(g) If neither the CA or VA disagrees, the proposed major design change will be evaluated in accordance with that classification.

(h) Design changes classified as Minor or Level 2 Major will be approved by the CA in accordance with that authority's normal procedures, against the certification bases of the CA and VA if and when validation is requested by the TC holder. All such changes will be included in the type certificate holder's type design definition which defines the VA approved build standard. The VA will not receive prior notification of Minor or Level 2 Major design changes.

(i) The CA will determine compliance with the certification basis of the VA on behalf of that Authority for Level 1 Major design changes. The extent of any VA involvement in the evaluation of a Level 1 Major design change will be discussed and decided between the CA and VA in line with the principles stated in Appendix C, paragraph 1.2, of these Implementation Procedures.

(j) The CA will provide the VA with a statement of compliance with the certification basis of the VA for all Major design changes approved on behalf of the VA. This may be achieved through the provision of individual statements for each design change or by providing collective statements for lists of approved changes (e.g., revisions to a type design definition for the type as validated by the VA, see (k) below).

(k) All major design changes approved by the CA on behalf of the VA or approved by the VA on the basis of compliance findings made by the CA will be recorded in the Type Design definition specifying the VA's current type design and provided to the VA.

3.3.1.1 Existing Post-Type Validation Programs.

(a) Where a list of Validation Items was not defined in accordance with the Type Validation Process (Appendix C), the List of Differences (LOD)/Additional Technical Conditions (ATC) concept may be used as an alternative to the Validation Items concept. From the list of LOD/ATC those items will be identified by the VA team and endorsed by the VA Management which are comparable in scope to the Validation Items.

(b) For the purposes of this paragraph, LOD and ATC are defined as follows:

(1) List of Differences (LOD) means the list of those conditions in the VA certification basis which are different from the CA certification basis that are necessary to account for all the differences between the applicable certification regulations of the FAA and JAA requirements, associated technical policy material and means of compliance.

(2) Additional Technical Conditions (ATC) identify important applicable regulatory differences between JAR and FAR. These may include associated policies and means of compliance. The important regulatory differences are those that have:

- (i) Significant impact on airworthiness level, design, operational limitations, and operating characteristics;
- (ii) Significant differences in means of compliance.

3.3.1.2. Procedures for Changes to a Supplemental Type Certificate by the STC holder. The FAA and the LBA agree to follow the procedures in paragraph 3.3.1.0 to the extent applicable. Where unique situations may occur, the FAA and LBA will consult with each other on the specific process to be applied.

3.3.1.3 Procedures for Changes to a Type Design by Persons Other Than the Type Certificate Holder. For major changes to a type design by persons other than the type certificate holder, the FAA and LBA agree to follow the design approval procedures in paragraph 3.0.2 for supplemental type certificates. Minor changes made by other than Type Certificate holder are considered approved by the FAA and LBA in accordance with their normal procedures.

3.3.1.4 FAA Noise and Emissions Requirements for Changes to a Type Design (TC/STC) by Any Person. For the purpose of complying with 14 CFR Part 34, each voluntary change in the type design of an airplane or engine that may increase fuel venting or exhaust emissions is an “emissions change,” requiring further demonstration of compliance. Likewise, for the purpose of complying with 14 CFR Part 36, each voluntary change in the type design of an aircraft that may increase the noise levels of that aircraft is an “acoustical change,” requiring further demonstration of compliance. The FAA retains all findings of emissions or acoustical change under 14 CFR § 21.93(b) & (c).

3.3.1.5 Approval Procedures for Changes to an FAA Letter of TSO Design Approval. Major changes to a TSO design require re-substantiation of the new design and

3.3.1.6 Approval Procedures for Changes to a LBA NTSO Authorisation for Import. Major changes to a JTSO/NTSO design require re-substantiation of the new

issuance of a Letter of TSO Design Approval, and shall be done in accordance with the procedures in paragraph 3.0.3.0. For minor changes which remain within the scope of the Letter of TSO Design Approval, the FAA will not require prior notification and will rely upon a LBA determination of compliance.

design and issuance of a new or revised JTSO/NTSO Authorisation for Import, and shall be done in accordance with the procedures in paragraph 3.0.3.1. For minor changes which remain within the scope of the JTSO/NTSO Authorisation for Import, the LBA will not require prior notification and will rely upon an FAA determination of compliance.

3.3.2 APPROVAL OF DESIGN DATA USED IN SUPPORT OF REPAIRS

3.3.2.0 Design data used in support of repairs must be approved or accepted, as appropriate, by the exporting authority (State of Design) in a manner which is acceptable to the importing authority.

(a) FAA as Exporting Authority. Design data used in support of major repairs will be approved in accordance with FAA Order 8110.4, *Type Certification*. Minor repairs are made in accordance with “acceptable” data, in accordance with 14 CFR Part 43.

(b) LBA as Exporting Authority. Design data used in support of repairs must be approved in accordance with JAR-21 Subpart M.

3.3.3 ADMINISTRATION OF DESIGN APPROVALS

3.3.3.0 Transfer of U.S. Type Certificate to a Person in Germany.

(a) Upon transfer or an agreed-upon date, the LBA will become responsible for complying with the requirements of ICAO Annex 8 to the Chicago Convention, *Airworthiness of Aircraft*, for affected products, and will notify all ICAO member countries of the change in State of Design responsibility, upon completion of the procedures described below.

3.3.3.1 Transfer of German Type Certificate to a Person in the United States.

(a) Upon transfer or an agreed-upon date, the FAA will become responsible for complying with the requirements of ICAO Annex 8 to the Chicago Convention, *Airworthiness of Aircraft*, for affected aircraft, and will notify all member countries of the change in State of Design responsibility, upon completion of the procedures described below.

(b) The FAA will transfer to the LBA, the ICAO State of Design responsibilities for type certificates only for products within the scope of these Implementation Procedures. The LBA will not assume ICAO State of Design responsibilities for models that have not been found to meet the LBA certification requirements.

(c) Upon notification of a transfer by a U.S. type certificate holder to a person in Germany, the FAA Office that issued the type certificate will notify the LBA and establish procedures to transfer the ICAO State of Design responsibilities for the type certificate to Germany. Each transfer will be accomplished on a case-by-case basis through a special arrangement which identifies each authority's responsibilities in the transfer process.

(d) If a corresponding LBA type certificate exists for the product, the transfer of ICAO State of Design responsibilities will apply to all models listed on that LBA type certificate. For any FAA-certificated model not listed on the LBA type certificate, the FAA will, if requested, provide support to establish acceptance of the additional model as showing compliance to the applicable LBA certification requirements. This support would include the FAA's statement of compliance that the model meets the LBA's certification requirements. Upon acceptance, the LBA will place the additional

(b) The LBA will transfer to the FAA the ICAO State of Design responsibilities for type certificates only for products within the scope of these Implementation Procedures. The FAA will not assume ICAO State of Design responsibilities for models that have not been found to meet the FAA certification requirements.

(c) Upon notification of a transfer by a German type certificate holder to a person in the United States, the LBA will notify the FAA Office responsible for the new holder and establish procedures to transfer the ICAO State of Design responsibilities for the type certificate to the United States. Each transfer will be accomplished on a case-by-case basis through a special arrangement which identifies each authority's responsibilities in the transfer process.

(d) If a corresponding U.S. type certificate already exists for the product, the transfer of ICAO State of Design responsibilities will apply to all models listed on the U.S. type certificate. For any LBA certificated model not previously listed on the FAA type certificate, the LBA will, if requested, provide support to establish acceptance of the additional model as showing compliance to the applicable FAA certification requirements. This support would include the LBA's statement of compliance that the model meets U.S. certification requirements. Upon acceptance, the FAA will place the additional model on the FAA type certificate.

model on the LBA type certificate.

(e) If the transferee of the type certificate applies for a LBA type certificate, the FAA will provide support to establish acceptance of the FAA type certificate as showing compliance to the applicable certification requirements of the LBA. This would include the FAA's statement of compliance that the product meets the LBA's certification requirements. Upon acceptance, the LBA will issue the LBA type certificate.

(f) The transfer of the ICAO State of Design responsibilities for the type certificate to the LBA will be considered complete when the LBA confirms that all necessary data have been transferred to the new holder, and the new holder is able to perform the responsibilities required of a type certificate holder.

(g) The FAA will reissue a type certificate in the name of the transferee after the LBA type certificate issuance, unless the new holder does not wish to maintain FAA approval.

(h) If the transferee does not hold and does not apply for an LBA type certificate, or if the transferee's LBA type certificate covers only some models covered by the FAA type certificate and the transferee does not apply for an additional approval, the FAA will not transfer ICAO State of Design responsibilities for the applicable models to the LBA. The FAA will continue to fulfill State of Design

(e) If the transferee of the type certificate applies for an FAA type certificate, the LBA will provide support to establish acceptance of the LBA type certificate as showing compliance to the applicable certification requirements of the FAA. This would include the LBA's statement of compliance that the product meets the FAA's certification requirements. Upon acceptance, the FAA will issue the FAA type certificate.

(f) The transfer of the ICAO State of Design responsibilities for the type certificate to the FAA will be considered complete when the FAA confirms that all necessary data have been transferred to the new holder, and the new holder is able to perform the responsibilities required of a type certificate holder.

(g) The LBA will reissue a type certificate in the name of the transferee after FAA type certificate issuance, unless the new holder does not wish to maintain LBA approval.

(h) If the transferee does not hold and does not apply for an FAA type certificate, or if the transferee's FAA type certificate covers only some models covered by the LBA type certificate and the transferee does not apply for an additional approval, the LBA will not transfer ICAO State of Design responsibilities for the applicable models to the FAA. The LBA will continue to fulfill ICAO State of Design responsibilities for those models only as long as an undue burden is not placed on the LBA.

responsibilities for those models only as long as an undue burden is not placed on the FAA.

3.3.3.2 Transfer of German Type Certificate from a Person in the United States to another Person in the United States. Upon notification of a transfer by a German TC holder in the United States to another person in the United States, the LBA may notify the FAA to request technical assistance, if needed. The LBA will transfer the TC only when the LBA has been satisfied that the applicant is prepared and able to undertake the responsibilities in JAR21N44 and that the TC has been transferred to the same applicant. The LBA may request the FAA to provide technical assistance in making the determination that the new TC holder will be able to execute the responsibilities of JAR21N44.

3.3.3.3 Transfer of U.S. Supplemental Type Certificate to a Person in Germany.

(a) The LBA will become responsible for complying with the requirements of ICAO Annex 8 to the Chicago Convention, *Airworthiness of Aircraft*, for affected products.

(b) The FAA will transfer to the LBA the ICAO State of Design responsibilities for STCs within the scope of these Implementation Procedures. The LBA will not assume ICAO State of Design responsibilities for design changes to models that have not been found to meet the LBA certification

3.3.3.4 Transfer of German Supplemental Type Certificate to a Person in the United States.

(a) The FAA will become responsible for complying with the requirements of ICAO Annex 8 to the Chicago Convention, *Airworthiness of Aircraft*, for affected products.

(b) The LBA may only transfer to the FAA the ICAO State of Design responsibilities for STCs within the scope of these Implementation Procedures. The FAA will not assume ICAO State of Design responsibilities for design changes to models that have not been found to meet the FAA certification requirements

requirements.

(c) Upon notification of a transfer by a U.S. STC holder to a person in Germany, the FAA Office that issued the STC will notify the LBA and establish procedures to transfer the ICAO State of Design responsibilities for the STC to the LBA. Each transfer will be accomplished on a case-by-case basis through a special arrangement which identifies each authority's responsibilities in the transfer process.

(d) If a corresponding LBA STC already exists for the changed product, the transfer will apply to the model listed on that LBA STC.

(e) If the transferee of the STC applies for a LBA STC, the FAA will provide support to establish acceptance of the FAA STC as showing compliance to the applicable certification requirements of the LBA. This would include the FAA's statement of compliance that the changed product meets the LBA's certification requirements. Upon acceptance, the LBA will issue the LBA STC.

(f) The transfer of the ICAO State of Design responsibilities for the STC to the LBA will be considered complete when the LBA confirms that all necessary data have been transferred to the new holder and the new holder is able to perform the responsibilities required of an STC holder.

(c) Upon notification of a transfer by the German STC holder to a person in the United States, the LBA will notify the FAA office responsible for the new holder and establish procedures to transfer the ICAO State of Design responsibilities for the STC to the FAA. Each transfer will be accomplished on a case-by-case basis through a special arrangement which identifies each authority's responsibilities in the transfer process.

(d) If a corresponding U.S. STC already exists for the changed product, the transfer will apply to all models listed on that U.S. STC.

(e) If the transferee of the STC applies for a U.S. STC, the LBA will provide support to establish acceptance of the LBA STC as showing compliance to the applicable certification requirements of the FAA. This would include the LBA's statement of compliance that the changed product meets the FAA's certification requirements. Upon acceptance, the FAA will issue the U.S. STC.

(f) The transfer of the ICAO State of Design responsibilities for the STC to the FAA will be considered complete when the FAA confirms that all necessary data have been transferred to the new holder and the new holder is able to perform the responsibilities required of an STC holder.

(g) The LBA will only reissue an STC in the name of the transferee

(g) The FAA will only reissue an STC in the name of the transferee after LBA STC issuance and when the STC is within the scope of these Implementation Procedures, as identified in Section II, paragraph 2.3.1(b). If the transferee does not wish to maintain FAA approval, the FAA will not reissue the STC.

(h) If the LBA has not issued the corresponding type certificate for the product being changed, or if the transferee does not hold and does not apply for an LBA STC for the same design change, the FAA will not transfer ICAO State of Design responsibilities for the applicable models to the LBA. The FAA will continue to fulfill ICAO State of Design responsibilities for the STC only as long as an undue burden is not placed on the FAA.

after U.S. STC issuance and when the STC is within the scope of these Implementation Procedures, as identified in Section II, paragraph 2.3.0(b). If the transferee does not wish to maintain LBA approval, the LBA will not reissue the STC.

(h) If the FAA has not issued the corresponding type certificate for the product being changed, or if the transferee does not hold and does not apply for a U.S. STC for the same design change, the LBA will not transfer ICAO State of Design responsibilities for the applicable models to the FAA. The LBA will continue to fulfill ICAO State of Design responsibilities for the STC only as long as an undue burden is not placed on the LBA.

3.3.3.5 Transfer of German STC from a Person in the United States to another Person in the United States.

Upon notification of a transfer by a German STC holder in the United States to another person in the United States, the LBA may notify the FAA to request technical assistance, if needed. The LBA will transfer the STC only when the LBA has been satisfied that the applicant is prepared and able to undertake the responsibilities in JAR 21 Subpart N118A and that the STC has been transferred to the same applicant. The LBA may request the FAA to provide technical assistance in making the determination that the new STC holder will be able to execute the responsibilities of

3.3.3.6 Surrender of Type Certificate or Supplemental Type Certificate. If a certificate holder elects to surrender a type certificate or supplemental type certificate issued by either the FAA or LBA as the exporting authority, the FAA or LBA shall immediately notify the other in writing of the action. The FAA and LBA, as exporting authorities, shall inform the importing authority when an unsafe condition has been identified until such time as:

- (a) The type certificate or supplemental type certificate is reissued to a new holder when that new holder demonstrates competence to fulfill the necessary obligations; or
- (b) The FAA or LBA, as the exporting authority, terminates the type certificate or supplemental type certificate. Prior to termination, the exporting authority shall notify the importing authority of the pending cancellation.

3.3.3.7 Revocation or Suspension of a Type Certificate or Supplemental Type Certificate.

(a) LBA Revocation or Suspension. In the event the LBA revokes or suspends a type certificate or supplemental type certificate of a product for which the LBA is the authority of the state of design, it should immediately inform the FAA product-responsible Directorate. The FAA, upon notification, will conduct an investigation to determine if action is required in the United States. If the revocation or suspension was “for cause” and the FAA concurs with the LBA's certificate action, the FAA will initiate revocation of the U.S. type certificate or supplemental type certificate. The FAA may decide to assume continued airworthiness responsibilities if there is sufficient information for it to support the continued operational safety of the fleet in the United States. In this case, the LBA should obtain and

(b) FAA Revocation or Suspension. In the event the FAA revokes a type certificate or supplemental type certificate of a product for which the FAA is the authority of the state of design, the FAA product-responsible Directorate should immediately inform the LBA Braunschweig. The LBA, upon notification, will conduct an investigation to determine if action is required in Germany. If the revocation or suspension was “for cause” and the LBA concurs with the FAA's certificate action, the LBA will initiate revocation of the German type certificate or supplemental type certificate. The LBA may decide to assume continued airworthiness responsibilities if there is sufficient information for it to support the continued operational safety of the fleet in Germany. In this case, the FAA should obtain and provide type design data as requested to the LBA. Final certificate action is at the sole

provide type design data as requested to the FAA. Final certificate action is at the sole discretion of the FAA. The FAA may revoke the U.S. type certificate or supplemental type certificate if the continued airworthiness responsibilities would cause an undue burden for the FAA.

discretion of the LBA.

3.3.3.8 Surrender or Withdrawal of a TSO or JTSO Design Approval.

(a) Surrenders. If an FAA TSO Authorization holder, FAA Letter of Design Approval holder, or a JTSO Authorisation holder elects to surrender the TSO/JTSO approval issued by the FAA or LBA as the exporting authority, the FAA or LBA will immediately notify the other in writing of the action. The exporting authority shall inform the importing authority when an unsafe condition has been identified, until such time as the TSO/JTSO approval is formally withdrawn by the exporting authority.

(b) Withdrawals. If a TSO/JTSO approval is withdrawn, the FAA or LBA, as the exporting authority, will immediately notify the other in writing of the action. The exporting authority shall inform the importing authority when an unsafe condition has been identified. In the event of withdrawal of a TSO/JTSO approval for noncompliance, the exporting authority will investigate all noncompliances for corrective action and will notify the importing authority of the corrective action. The exporting authority still has responsibility for the continued airworthiness of those TSO/JTSO articles manufactured under its authority.

3.3.3.9 Change of Ownership of LBA JTSO Authorisation. Upon notification of a change of ownership of the German JTSO Authorisation holder in the United States, the LBA will be notified by the responsible FAA Directorate. Upon notification, the LBA will agree to the change of ownership, and re-issue the JTSO Authorisation in the name of the new holder.

SECTION IV TECHNICAL ASSISTANCE BETWEEN AUTHORITIES

4.0 General. Upon request and after mutual agreement, and as resources permit, the FAA and LBA may provide technical assistance to each other when significant activities are conducted in either the United States or Germany. Both authorities concur that technical assistance is the preferred method of conducting these activities, and every effort should be made to have these certification tasks performed on behalf of one authority in the other authority's country. These technical assistance activities will help to avoid the undue burden imposed on the exporting authority in the undertaking of its regulatory surveillance and oversight functions at locations outside of the country of export. These supporting technical assistance activities shall in no way relieve the exporting authority of the responsibilities for regulatory control and airworthiness certification of products and parts manufactured at facilities located outside the exporting country. Each authority will use its own policies and procedures when providing technical assistance to the other authority, unless other special arrangements are agreed upon. Types of assistance may include, but are not limited to, the following:

(a) Determination of Compliance.

- (1) Witnessing tests;
- (2) Performing compliance and conformity inspections;
- (3) Reviewing reports; and
- (4) Obtaining data.

(b) Surveillance and Oversight.

- (1) Witnessing of first article inspection of parts;
- (2) Monitoring the controls on special processes;
- (3) Conducting sample inspections on production parts;
- (4) Monitoring the activities and functions of designees or approved organizations;
- (5) Conducting investigations of service difficulties; and
- (6) Evaluating/surveilling of production quality systems.

4.1 Witnessing of Tests During Design Approval.

(a) The airworthiness authority of the country in which a design approval applicant is located may request assistance in the witnessing of tests from the airworthiness authority of the country in which a design approval applicant's supplier is located.

(b) Only authority-to-authority requests are permissible and authorities will not respond to a test-witnessing request from the manufacturer or supplier. Witnessing of tests will be conducted only after consultations between the two airworthiness authorities on the specific work to be performed and agreement has been obtained from the airworthiness authority in the country in which the supplier is located. The airworthiness authority of the country in which the design approval applicant is located makes the written request for witnessing of tests.

(c) Approval of the design approval applicant's test plans, test procedures, test specimens, and hardware configuration remains the responsibility of the airworthiness authority of the country in which the design approval applicant is located. Establishing the conformity of each test article prior to the conduct of the test is the responsibility of the design approval applicant.

(d) Requests for witnessing of tests must be specific enough to provide for identification of the location, timing, and nature of the test to be witnessed. An approved test plan must be provided by the requesting authority at least two weeks prior to each scheduled test.

(e) The LBA's or FAA's requests for witnessing of tests will be sent in writing to the LBA Braunschweig or FAA Aircraft Certification Office which has geographic responsibility for the location of the test. FAA and LBA offices are listed in Appendices A and B.

(f) Upon completion of test witnessing on behalf of the requesting authority, the FAA or LBA will send a report stating that the test was conducted in accordance with approved test plans and confirming the test results, as well as any other documentation as notified by the requesting authority.

4.2 Conformity Certifications During Design Approval.

(a) The airworthiness authority of the country in which a design approval applicant is located may request conformity certifications from the airworthiness authority in the country in which the design approval applicant's supplier is located for prototype parts produced by that supplier.

(b) Only authority-to-authority requests are permissible and authorities will not respond to a conformity certification request from the manufacturer or supplier. Certifications will be conducted only after consultations between the two airworthiness authorities on the specific work to be performed, and agreement has been obtained from the airworthiness authority in the country in which the supplier is located.

Requests for conformity certifications should be limited to prototype parts that are of such complexity that they are not inspectable by the manufacturer or its airworthiness authority prior to installation in the final product. Conformity certifications may require the development of a working procedure based on the complexity of the requested certifications. At the discretion of the authority in receipt of such requests, conformity certifications may be delegated to authorized designees or approved organizations.

(c) LBA requests for conformity certifications will be sent in writing. FAA requests for conformity certifications will be sent on FAA Form 8120-10, *Request for Conformity*, and described in the Special Instructions section of the form. LBA or FAA requests will be sent to the LBA Braunschweig or the FAA Directorate Manufacturing Inspection Office which has geographic responsibility for the location of the part or appliance. FAA and LBA offices are listed in Appendices A and B.

(d) Upon completion of all conformity inspections conducted on behalf of the requesting authority, the FAA or LBA will complete and return all documentation to the requesting authority, as notified. The airworthiness authority of the country in which the supplier is located will note all deviations from the requirements notified by the design approval applicant's airworthiness authority on the conformity certification for the particular part. Any nonconformity described as a deviation should be brought to the attention of the FAA or the LBA for evaluation and disposition as to its effect on safety and the validity of the test under consideration. The FAA or LBA should receive a report stating the disposition required on each deviation before an FAA Form 8130-3 or JAA Form One is issued.

(e) Neither conformity certification on prototype parts, nor inspections on production parts, should be construed as being an export airworthiness approval, since a conformity certification does not constitute an airworthiness determination. Airworthiness determinations remain the responsibility of the design holder and/or manufacturer and their airworthiness authority.

4.3 Airworthiness Certificates. There may be certain programs and conditions that warrant technical assistance from each authority for the issuance of standard airworthiness certificates so that aircraft may be placed directly into operation from the site of manufacture. The importing authority may seek assistance from the exporting authority in the final processing and delivery of an airworthiness certificate when the aircraft has completed its manufacturing cycle, and has subsequently been granted an Export Certificate of Airworthiness by the exporting authority. This will require the development of a special procedure between the exporting and importing authorities to mitigate all undue regulatory burdens.

4.4 Protection of Proprietary Data and Freedom of Information Act (FOIA) Requests.

4.4.0 Protection of Proprietary Data. Both authorities recognize that data submitted by a design approval holder is the intellectual property of that holder, and

release of that data by the FAA or LBA is restricted. The FAA and LBA agree that they will not copy, release, or show proprietary data obtained from either authority to anyone other than an FAA or LBA employee without written consent of the design approval holder or other data submitter. This written consent should be obtained by the FAA or LBA from the design approval holder through the authority of the country in which the holder is located and will be provided to the other authority.

4.4.1 FOIA Requests. The FAA often receives requests from the public under the United States Freedom of Information Act (FOIA) to release information which the FAA may have in its possession. Each record the FAA has in its possession must be disclosed under the FOIA unless a FOIA exemption applies to that record. One exemption is for trade secrets, and financial or commercial information that is confidential or privileged. Design approval holders' data may include trade secrets or other information that is confidential because release of the information would damage the competitive position of the holder or other person. When the FAA receives a FOIA request related to a product, part, or appliance of an FAA approval holder or applicant who is located in Germany, the FAA will request the LBA's assistance in contacting the FAA approval holder or applicant to help determine what portions of that information may qualify for exemption under the criteria above and to ask them to provide factual information justifying use of the exemption. If the approval holder or applicant consents to the release of information the LBA must provide the written consent to the FAA. If release is objected to, a statement of the reasons must be furnished by the LBA to the FAA.

4.5 Accident/Incident and Suspected Unapproved Parts Investigation Information Requests. When either the FAA or LBA needs information for the investigation of service incidents, accidents, or suspected unapproved parts involving a product, part, or appliance imported under these Implementation Procedures, the request for the information should be directed to the appropriate office of the exporting authority. In turn, upon receipt of the request for information, the exporting authority should immediately do everything necessary to make sure the requested information is provided in a timely manner, as far as this information is available to LBA or FAA and authorized for release. If urgency requires that either the FAA or LBA requests the information directly from the manufacturer because immediate contacts cannot be made with the exporting authority, the importing authority shall inform its counterpart authority of this action as soon as possible.

SECTION V SPECIAL ARRANGEMENTS

- 5.0 It is anticipated that urgent or unique situations will develop which have not been specifically addressed in these Implementation Procedures, but which are within the scope of the BASA. When such a situation arises, it shall be reviewed by the respective FAA Aircraft Certification Service Director and the LBA, Head of Department M, and a procedure shall be developed to address the situation. The procedure shall be mutually agreed upon by the FAA and the LBA in a separate working procedure. If it is apparent that the situation is unique, with little possibility of repetition, then the working procedure shall be of limited duration. However, if the situation has anticipated new technology or management developments which could lead to further repetitions, then these Implementation Procedures shall be revised accordingly by the FAA and the LBA.
- 5.1 It should be noted that, when the unique or urgent situation falls within the responsibility of an FAA Aircraft Certification Service Directorate Manager, that Manager will be responsible for developing the necessary procedures with the LBA. The special arrangements co-developed between the authorities are listed in Appendix F.

SECTION VI AUTHORITY

The FAA and BMVBW agree to the provisions of these Implementation Procedures as indicated by the signature of their duly authorized representatives.

FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

BUNDESMINISTERIUM FÜR VERKEHR,
BAU-UND WOHNUNGSWESEN
FEDERAL REPUBLIC OF GERMANY

By signed by John J. Hickey

By signed by Horst Busacker

Title Director, Aircraft Certification
 Service

Title Director, Aviation Engineering

Date June 3, 2002

Date June 3, 2002

APPENDIX A

List of Addresses for

FAA Headquarters Offices, FAA Mike Monroney Aeronautical Center,
FAA Aircraft Certification Service Directorates, FAA Manufacturing Inspection Offices,
FAA Aircraft Certification Offices

FAA Headquarters - Aircraft Certification Service

International Policy Office

AIR-40

800 Independence Avenue, SW
Washington, DC 20591

Telephone: 1-202-385-8940

Fax: 1-202-493-5144

Aircraft Engineering Division

AIR-100

800 Independence Avenue, SW
Washington, DC 20591

Telephone: 1-202-267-9580

Fax: 1-202-267-5340

Production & Airworthiness Division

AIR-200

800 Independence Avenue, SW
Washington, DC 20591

Telephone: 1-202-267-8361

Fax: 1-202-267-5580

International Policy Branch - Brussels

Office

AEU-100

27 Blvd du Regent

B-1000 Brussels

Belgium

Telephone: 32-2-508-2710

Fax: 32-2-230-6899

Brussels staff includes representatives from the Aircraft Engineering Division (AIR-100), Transport Airplane Directorate (ANM-100), Engine & Propeller Directorate (ANE-100) and Rotorcraft Directorate (ASW-100).

FAA Headquarters - Environmental Policy and Regulations

Office of Environment and Energy

AEE-1

800 Independence Avenue, SW

Washington, DC 20591

Telephone: 1-202-267-3576

Fax: 1-202-267-5594

FAA Headquarters - Administrative Coordination

Office of International Aviation

AIA-1

800 Independence Avenue, SW

Washington, DC 20591

Telephone: 1-202-385-8885

Fax: 1-202-267-5306

FAA Mike Monroney Aeronautical Center - Contact Point for FAA Airworthiness Directives

Flight Standards Service Regulatory Support Division

Airworthiness Programs Branch

AFS-610

P.O. Box 26460

Oklahoma City, OK 73125

Telephone: 1-405-954-4103

Fax: 1-405-954-4104

FAA Aircraft Certification Service Directorates

Engine and Propeller Directorate

ANE-100

Regulatory and policy responsibility for all aircraft engines, propellers, and auxiliary power units.

12 New England Executive Park

Burlington, Massachusetts 01803

Telephone: 1-781-238-7100

Fax: 1-781-238-7199

Rotorcraft Directorate

ASW-100

Regulatory and policy responsibility for normal and transport category rotorcraft.

2601 Meacham Blvd.

Fort Worth, TX 76137-4298

Telephone: 1-817-222-5100

Fax: 1-817-222-5959

Small Airplane Directorate

ACE-100

Regulatory and policy responsibility for:

1. Airplanes weighing less than 12,500 pounds and having passenger configurations of 9 seats or less,
2. Commuter airplanes weighing 19,000 pounds or less, with passenger configurations of 19 seats or less, and
3. Gliders, airships, and manned free balloons, powered lift, and VLA.

DOT Building

901 Locust

Room 301

Kansas City, MO 64106-2641

Telephone: 1-816-329-4100

Fax: 1-816-329-4106

Transport Airplane Directorate

ANM-100

Regulatory and policy responsibility for all transport category airplanes.

1601 Lind Avenue, SW

Renton, WA 98055-4056

Telephone: 1-425-227-2104

Fax: 1-425-227-1100

FAA Manufacturing Inspection Offices

Engine and Propeller Directorate Manufacturing Inspection Office

For the States of: Connecticut, Delaware, Maine, Maryland, Massachusetts,
New Hampshire, New Jersey, New York, Pennsylvania,
Rhode Island, Vermont, Virginia, and West Virginia.

ANE-180
12 New England Executive Park
Burlington, Massachusetts 01803

Telephone: 1-781-238-7180
Fax: 1-781-238-7199

Rotorcraft Directorate Manufacturing Inspection Office

For the States of: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ASW-180
2601 Meacham Blvd.
Fort Worth, TX 76137-4298

Telephone: 1-817-222-5180
Fax: 1-817-222-5962

Small Airplane Directorate Manufacturing Inspection Office

For the States of: Alabama, Alaska, Florida, Georgia, Illinois, Indiana, Iowa, Kansas,
Kentucky, Michigan, Minnesota, Mississippi, Missouri, Nebraska,
North Carolina, North Dakota, Ohio, South Carolina, South Dakota,
Tennessee, and Wisconsin.

ACE-180
DOT Building
901 Locust
Room 301
Kansas City, MO 64106

Telephone: 1-816-329-4100
Fax: 1-816-329-4106

Transport Airplane Directorate Manufacturing Inspection Office

For the States of: Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

ANM-108
1601 Lind Avenue, SW
Renton, WA 98055-4056
Telephone: 1-425-227-2108
Fax: 1-425-227-1100

FAA Aircraft Certification Offices

Boston Aircraft Certification Office
ANE-150
12 New England Executive Park
Burlington, MA 01803
Telephone: 1-781-238-7150
Fax: 1-781-238-7199

Boston Engine Certification Office
ANE-140
12 New England Executive Park
Burlington, MA 01803
Telephone: 1-781-238-7140
Fax: 1-781-238-7199

New York Aircraft Certification Office
ANE-170
1600 Stewart Avenue, Suite 410
Westbury, NY 11590
Telephone: 1-516-228-7300
Fax: 1-516-794-5531

Atlanta Aircraft Certification Office
ACE-115A
One Crown Center
1895 Phoenix Boulevard, Suite 450
Atlanta, GA 30349
Telephone: 1-770-703-6035
Fax: 1-770-703-6097

Chicago Aircraft Certification Office
ACE-115C
2300 East Devon Avenue
Room 323
Des Plaines, IL 60018
Telephone: 1-847-294-7357
Fax: 1-847-294-7834

Wichita Aircraft Certification Office
ACE-115W
1801 Airport Road
Room 100, Mid-Continent Airport
Wichita, KS 67209
Telephone: 1-316-946-4106
Fax: 1-316-946-4407

Anchorage Aircraft Certification Office

ACE-115N
222 West 8th Avenue,
Anchorage, AK 99513

Telephone: 1-907-271-2669
Fax: 1-907-271-6365

Seattle Aircraft Certification Office

ANM-100S
1601 Lind Avenue, SW
Renton, WA 98055-4056

Telephone: 1-425-227-2180
Fax: 1-425-227-1181

Denver Aircraft Certification Office

ANM-100D
Technical Operations Center (TOC)
26805 E. 68th Avenue, Room 214
Denver, CO 80249

Telephone: 1-303-342-1080
Fax: 1-303-342-1088

Los Angeles Aircraft Certification Office

ANM-100L
3960 Paramount Blvd.
Lakewood, CA 90712

Telephone: 1-562-627-5200
Fax: 1-562-627-5210

Fort Worth Airplane Certification Office

ASW-150
2601 Meacham Blvd.
Fort Worth, TX 76137-4298

Telephone: 1-817-222-5150
Fax: 1-817-222-5960

Fort Worth Rotorcraft Certification Office

ASW-170
2601 Meacham Blvd.
Fort Worth, TX 76137-4298

Telephone: 1-817-222-5170
Fax: 1-817-222-5960

Fort Worth Special Certification Office

ASW-190
2601 Meacham Blvd.
Fort Worth, TX 76137-4298

Telephone: 1-817-222-5189
Fax: 1-817-222-5136

APPENDIX B

List of Addresses for BMVBW & LBA Offices

BMVBW Office

Bundesministerium für Verkehr, Bau-und Wohnungswesen
Referat LS 15
Postfach 20 01 00
53170 Bonn
Germany

LBA Headquarters

Department M

Certification/Environmental Protection
Hermann-Blenk-Str. 26
D-38108 Braunschweig
Telephone: ++49 531 2355 420
Fax: ++ 49 531 2355 720

Division M 1

Type Certification Large Aeroplanes
Hermann-Blenk-Str. 26
D-38108 Braunschweig
Telephone: ++49 531 2355 438
Fax: ++49 531 2355 720

Division M 2

Type Certification Small Aeroplanes/Rotorcraft
Hermann-Blenk-Str. 26
D-38108 Braunschweig
Telephone: ++49 531 2355 302
Fax: ++49 531 2355 721

Division M 3

Type Certification Sailplanes/Powered Sailplanes/Balloons/Airships

Hermann-Blenk-Str. 26

D-38108 Braunschweig

Telephone: ++49 531 2355 295

Fax: ++49 531 2355 724

Division M 4

Type Certification Engines/Propellers/Equipment

Hermann-Blenk-Str. 26

D-38108 Braunschweig

Telephone: ++49 531 2355 421

Fax: ++49 531 2355 723

Division M 5

Specialists

Hermann-Blenk-Str. 26

D-38108 Braunschweig

Telephone: ++49 531 2355 442

Fax: ++49 531 2355 720

Division M 6

Environmental Protection

Hermann-Blenk-Str. 26

D-38108 Braunschweig

Telephone: ++49 531 2355 386

Fax: ++49 531 2355 722

Department B

Approved Organisations

Hermann-Blenk-Str. 26

D-38108 Braunschweig

Telephone: ++49 531 2355 582

Fax: ++49 531 2355 760

Division B 1
Design Organisations
Hermann-Blenk-Str. 26
D-38108 Braunschweig

Telephone: ++49 531 2355 555
Fax: ++49 531 2355 761

Division B 2
Production Organisations
Hermann-Blenk-Str. 26
D-38108 Braunschweig

Telephone: ++49 531 2355 558
Fax: ++49 531 2355 762

Division B 3
Maintenance Organisations
Hermann-Blenk-Str. 26
D-38108 Braunschweig

Telephone: ++49 531 2355 584
Fax: ++49 531 2355 763

APPENDIX C

TYPE VALIDATION PROCESS

1. Introduction

1.1 This document addresses the principles under which the authorities will operate during type validation projects relating to:

- How the VA, through early cooperation with the applicant and the CA, will establish their Certification Basis
- How the validation items (VI) will be established by the validating authority (VA).
- What involvement the VA will have in the review of the methods of compliance (MOC) already accepted by the certifying authority (CA) or to be discussed for concurrent projects proposed by the Applicant.
- How and by whom the compliance determinations will be made to the validation requirements.

1.2 The VA has sovereign authority over the certification process and compliance findings within its country. The validation principles are not intended, in any way, to diminish the authority's responsibilities or future right to type design information, but are intended to define how the rights of the authority would be routinely exercised. It is agreed that if there are overwhelming reasons to go outside these defined principles, such reasons will be technically explained by the VA in every instance.

2. Definitions

2.1 **Certifying Authority:** The airworthiness authority of the state of the type certificate holder. Also referred to as the exporting authority.

JAA Note: Where the certifying authority is a member authority of the JAA, JAA procedures will be applied.

- 2.2 **Compliance Determination:** The determination, by either the CA or the VA, that identified certification requirements have been complied with by the applicant.
- 2.3 **Compliance Findings:** The official act by which the responsible authority makes a legal determination of compliance with identified airworthiness requirements. The finding may be based, in whole or in part, on compliance determinations made by another airworthiness authority working under a bilateral agreement, or similar country-to-country legal arrangements.
- 2.4 **Non-Significant Regulatory Difference:** Regulations where the FAR and the JAR requirements are different, but are not classified as SRDs.
- 2.5 **Significant Regulatory Difference:** Regulations where the FAR and JAR requirements are substantively different and may result in type design changes (including approved manuals) to meet the requirements of the VA different from the design and operation approved by the CA.
- 2.6 **Validating Authority:** The FAA for import into the USA, or a member state of the JAA, for import into a state of a JAA member authority, when using the applicable JAA procedures. Also referred to as the importing authority.

3. Vision

- 3.1 The vision of all validation projects is:

“A simple process based on mutual authority trust, which leads to design acceptance in compliance with the validating authority’s safety regulations.” This process requires effective communication between all parties on all matters related to the validation process.

- 3.2 The expectation is that there will be an early exchange of information and discussion between the CA and the VA. This exchange will include: proposed use of exceptions to the latest CA requirements, Special Conditions, Exemptions, Equivalent Safety Findings, and MOCs. This exchange will ease the validation process and benefit the Applicant in reaching a timely validation.

Note 1: The VA should be responsive to requests to discuss issues prior to formal applications. These requests should be made to the VA by the Applicant through the CA.

Note 2: The ultimate decision to establish the CA and VA Certification Bases rests with the CA and VA, respectively

- 3.3 The expectation is that, with only a few exceptions, the determinations of compliance with the VA's Certification Basis would be made by the CA, as delegated by the VA. The VA is able to make findings of compliance, without further showing, based upon statements of compliance by the CA, on the basis of bilateral airworthiness, or bilateral aviation safety, agreements.
- 3.4 Concurrent certification/validation projects provide the best opportunities for collaborative development of both CA and VA use of exceptions to the latest requirements, Special Conditions, Exemptions, Equivalent Safety Findings and acceptable MOC. Additionally, the result of concurrent certification/validation projects is early identification of areas where jointly agreed solutions are not readily available.
- 3.5 The authorities recognize the benefits to aviation safety of efficiently run validation programs. These programs provide an opportunity for assessment of significant safety features, in accordance with the concepts in this document. This will enable and facilitate the mutual recognition of the work of the authorities and the long term cooperation and effectiveness of the authorities and the manufacturers.
- 3.6 It is the VA's prerogative to issue a type certificate without any investigation of compliance, relying solely on the compliance statements of the CA.

4. Applicability

- 4.1 These principles define the normal conduct of both the certifying and validating authorities during a type validation program.
- 4.2 These principles apply to validation projects on engines, propellers, airplanes, and helicopters.
- 4.3 These principles apply to both type validation and amended type validation programs, carried out either concurrently or sequentially.

5. The Use of Significant Regulatory Differences (SRD)

- 5.1 The SRD are unique to a particular amendment-pair of regulations. An amendment-pair is defined as a particular JAR amendment number and a comparable FAR amendment number.
- 5.2 The SRD for the current regulations will be updated as the FAR and JAR regulation amendments change. Pending full harmonization, there will be a

current set of SRD, as well as other SRD that have been generated for other amendment-pairs in the past.

- 5.3 Once a particular set of SRD is generated for a particular amendment-pair of regulations, that set of SRD will be published and should be used for all validation projects where the regulatory basis consists of that amendment-pair.
- 5.4 In a particular validation project, especially for derivative products, the amendment-pair of regulations that form the CA and VA Certification Bases may not have a set of SRD. In that case, the VA team will work during Phase II of the validation project (See 8.3) to identify the SRD for the amendment-pair of regulations that comprise the CA and VA Certification Bases of the product. The team must begin their work by referring to the SRD that correspond to an amendment-pair of regulations that is closest to those of the product CA and VA Certification Basis.
- 5.5 All regulatory interpretive material associated with an SRD must be identified. For the JAA, the Advisory Circular-Joint (ACJ), Advisory Material Joint (AMJ), and Temporary Guidance Material (TGM) may contain regulatory interpretive material. For the FAA, the regulatory interpretive material includes the preambles to notices and final regulations and any formally issued interpretations by FAA Headquarters, the accountable Directorate or The Office of the Chief Counsel.
- 5.6 Once the project-specific SRD are developed they must be approved by the appropriate Directorate within the FAA and the Regulation and Certification Directors within the JAA.
- 5.7 SRD and non-SRD are used to identify regulatory differences. For harmonized regulations, differences in interpretive advisory, or guidance material that meet the criteria provided in 8.2.3.1 will be addressed as potential VI(I).

6. Validation Items (VI)

- 6.1 Validation items define the normal scope of involvement of the VA. The basic principle behind the VI is that the VA will not review compliance determinations by the CA to the CA regulations except in identified cases within the areas defined by the VI.
- 6.2 Validation Items consist of:
 - 6.2.1 Significant Regulatory Differences (SRD)

6.2.2 Validation Items Specific to an Individual Project (VI(P))

6.2.3 Validation Items Identified in the Validation Process (VI(I))

$$VI = SRD + VI(P) + VI(I)$$

6.3 VI(P) consist of those items that are unique to the particular validation project and are established solely to address that uniqueness. VI(P) items under 6.3.1, 6.3.2, 6.3.3, and 6.3.4 may result in special conditions. All VI(P) are identified in issue papers and certification review items (CRI). The VI(P) consist of items that address:

6.3.1 New Technology - This is technology that is new to the FAA or the JAA as a whole, not just new to the VA team members. For instance, if technology used by the applicant were new to the validation team but not the VA itself, it would not be considered a VI(P). It would be the VA responsibility to make sure the VA team members were properly educated on the technology, VA regulations, and MOC.

6.3.2 Novel Applications of Existing Technology - This is where a particular technology is being used in a manner that causes the precepts of the technology to be questioned. Novel again applies to the FAA or JAA as a whole, not just the VA team members - as discussed above. This does not mean that existing technology being applied for the first time to a particular product line is automatically novel.

6.3.3 The Product Use is Unconventional - This is where a product is being used for a purpose for which it was previously not designed.

6.3.4 Unsafe Condition - The product contains design features where experience with other products in service has shown an unsafe condition might occur in that product, even though compliance with the regulations in the VA Certification Basis can be demonstrated. Unsafe is measured with respect to the overall level of safety intended by the product VA Certification Basis.

Note: This principle of “unsafe condition” should not be used to upgrade the level of safety of the product unless the VA has mandated, or will immediately mandate, in accordance with its own regulation, that upgraded safety to products with similar design features for which it is responsible.

6.3.5 New Rule Interpretations or MOC for the Existing Rules by the CA that are different from those already agreed to between the CA and the VA.

- 6.3.6 Exemptions - These are exemptions from issued CA or VA regulations. The VA may wish to understand the exemptions allowed by the CA to the CA's rules.
- 6.3.7 Equivalent Safety Findings - Again, these are to both the CA and the VA regulations, as above for exemptions.
- 6.4 VI(I) consist of those items that are identified by the validation team during its familiarization and validation of the product as justified by the VA team and endorsed by the VA management. These might include potential VI(I) identified in paragraph 8.2.3. VI(I) are identified in issue papers and CRI.

7. **The Validation Authority Certification Basis (previously referred to as Validation Basis)**

- 7.0 For concurrent certification and validation projects, the CA and VA will meet early with the applicant to identify their respective applicable requirements and will endeavour to harmonize their requirements to the maximum extent possible in accordance with their respective procedural regulations. The CA and VA Type Certification Bases, including Special Conditions, Certification Plans, etc. will be worked out in parallel to enable approval/closure according to the project schedule.
- 7.1 Once the VA Certification Basis has been established by the VA, it will remain unchanged except when unsafe conditions arise, design changes are made that affect the certification basis, or when the applicant elects to comply with later amendments.
- 7.2 Operational requirements with design impacts should be identified by the VA up front in the program so they may be included in the validation program.
- 7.3 Compliance with the VA Certification Basis (previously referred to as Validation Basis) for the product will be based on compliance with: the certification basis of the CA, plus the regulatory differences for the particular amendment pair of regulations, plus any exemptions and special conditions issued by the VA.
- 7.4 As long as Non-SRDs exist, they should be considered in accordance with Chapter 11 of this document.

8. **The Validation Process**

8.1 General

8.1.0 In the paragraphs below, different phases of a validation project are discussed. It is the Applicant's responsibility to propose a realistic time-scale, to seek the CA and VA concurrence and to take appropriate action with the CA and VA to stay as close as possible to the agreed schedule. The events that begin and end each phase are identified. Certain technical disciplines on a validation team may be at different phases of the validation project, depending on the progress of their efforts (this is valid in particular for Flight Test). There is no need for any technical discipline to hold up its validation efforts to wait for those that are not as far along.

8.1.1 It is essential that relevant CA Certification/Policy/Regulatory staff supports the VA in the four phases of a validation program, in particular by attending validation meetings as appropriate.

Note: It is particularly important that CA staff as identified above attend meetings that discuss new Exemptions, new Special Conditions and new Equivalent Safety Findings. The VA team is also encouraged to seek advice from the VA Policy/Regulatory staff when considering new Exemptions, new Special Conditions, and new Equivalent Level of Safety findings applicable to the VA certification basis.

8.1.2 Upon identification of the VI and agreement to the MOC, the expectation is that all determinations of compliance, except for defined subjects limited to VI, would be delegated to the CA.

8.1.3 When an activity is carried out by the CA on behalf of the VA, that activity may be carried out by the CA or under the legally constituted System of the CA.

8.1.4 The VA will not review any of the determinations made by the CA to rules that are outside of the set of regulations defined by the VI.

8.1.5 The FAA and the JAA agree that management will closely follow the validation programs. The CA, Applicant and VA Project Managers have a collective responsibility to ensure that every effort is made to resolve all certification impasses between the VA and CA teams as the program progresses, at the lowest possible level. However, impasses should be expeditiously elevated to consecutively higher levels of management within the VA and the CA until resolution has been obtained or the appeal process has run its course. The objective is to not delay the applicant's certification program while the authorities are resolving their issues.

8.1.6 The concepts discussed below are summarized in the table in the Appendix.

8.1.7 The CA and VA may, for selected projects, review the proper implementation of these Principles with a view to identify potential areas for improvement in the Type Validation Principles process.

8.2 Phase I - General Familiarization

8.2.0 Before the formal receipt of an application, the VA should be able to discuss policy and regulatory issues with the CA for the purpose of future timely validation.

8.2.1 This phase begins when the type certification application is received by the validating authority. In this meeting the time schedule will be established for the validation process.

8.2.2 The objective of this meeting is to enable the VA to receive an overview briefing of the project. The purpose of this briefing is to acquire sufficient information for the VA to establish the appropriate technical disciplines, size of the team, and guidance for the follow-on technical validation team. This should maximize the effectiveness of any follow-on meetings. The meeting is expected to last no more than about two days.

8.2.3 At the initial meeting, the VA should identify potential VI(I) that meet the criteria of the following 2 paragraphs for further discussion in the familiarization phase. These potential VI(I) should be published and periodically updated by the VA so they may be commonly known by all applicants. Potential VI(I) include:

8.2.3.1 Regulations where variations in methods of compliance resulting from different design philosophies used in the industry may affect design and operation, and the acceptability of these variations cannot be solved by the harmonization process without limiting the applicant's prerogative to propose a method of compliance; or

8.2.3.2 New VA rules where there is no past experience with their application to a product, they have an important impact on the whole product or a critical feature, and engineering judgment is required to establish compliance.

8.2.4 This phase ends with the establishment of the validation technical team.

8.3 Phase II - Technical Familiarization

8.3.1 The objective of this phase is technical familiarization with the project by the VA and the establishment of the initial VA Certification-Basis and the initial VI.

8.3.2 This phase begins with the scheduling of a familiarization meeting, unless the product is a derivative and the changes from previously validated designs do not warrant the briefing.

8.3.3 The VA should receive a thorough familiarization briefing on a new certification program in order to fully understand the product design and any unique or novel design features.

Detailed discussions will also be presented when:

- The product has novel design features, or its use is unconventional,
- The product contains design features where experience has shown an unsafe condition might occur,
- New rule interpretations or MOC for the existing rules are proposed, and
- The product design features items identified on the VA's Potential VI(I) list.

This information will be used to establish the VA Certification Basis for the project. It will also serve the purpose of educating the VA so it may appropriately deal with continued operational safety issues within its country.

8.3.4 The briefing should be conducted jointly by the CA and the applicant.

8.3.5 For sequential certification/validation projects, the CA should identify its certification basis and present an overview of any significant compliance findings established during its certification program. For concurrent certification/validation projects, the CA will identify its proposed certification basis.

8.3.6 Of prime importance is the opportunity for the VA to understand the MOC used or to be used. The CA and the Applicant will provide general information on the methods of compliance that have been used (sequential certification/validation) to the VA during the technical familiarization phase. This general information should be sufficiently detailed to allow the VA team to understand the general principle of the MOC used or to be used. In depth discussion of MOC (including those for SRD's as necessary) should be conducted in phase III. Further

discussion of MOC that have been used and accepted by both the CA and VA for harmonised rules and for non-SRD should not be required.

- 8.3.7 The CA and the applicant will present detailed information on the MOC that are used, or are to be used, to establish compliance with regulations related to subjects referred to under 8.3.3, such as basic loads, or fatigue, that are judged to be significant by the CA.
 - 8.3.8 For sequential certification/validation projects, the CA will thoroughly brief the VA on all exemptions and special conditions issued by the CA to ensure they are fully understood by the VA. For concurrent certification/validation projects, the CA will thoroughly brief the VA on all proposed exemptions and special conditions.
 - 8.3.9 The objective of the briefing is to convey information to the VA. In-depth discussion or debate of the material is to be done, if needed, during Phase III of the project. The VA should ask clarifying questions and have dialogue as necessary to properly understand the material presented.
 - 8.3.10 It is expected that all VA functional areas would be represented at the briefing so that the familiarization briefing takes place only once. It is recognized that once information is received, the size of the actual VA team involved in the type validation may be reduced. For instance, if there are no significant systems issues, the VA team may not have a full-time systems member.
 - 8.3.11 This phase includes the familiarization flights by the VA.
 - 8.3.12 This phase ends with the establishment of the initial VA Certification Basis and initial validation items.
- 8.4 Phase III - Determining VA Involvement
- 8.4.1 The objective of this phase is to specifically identify the amount of delegation of compliance determinations by the VA to the CA and identify those findings that the VA wishes to make for itself.
 - 8.4.2 This phase begins with the first technical team meeting following the establishment of the VA Certification Basis and initial VI.
 - 8.4.3 The practice of authorities making joint determinations of compliance for any one specific requirement should be avoided unless there is a justifiable benefit.

8.4.4 Where compliance to the VA Certification Basis has been delegated to the CA, compliance documents representing those determinations should only be requested by the VA in the spirit of preparing itself for continued operational safety issues. They should not be requested to review the compliance determinations of the CA.

8.4.5 This phase ends with the issuance of a document that identifies which authority is to make compliance determinations with the regulations within the VI.

8.5 Phase IV - Compliance Determinations

8.5.1 This phase is where the actual compliance determinations are made by either the CA or the VA.

8.5.2 This phase begins immediately after the establishment of compliance responsibility.

8.5.3 This phase ends with the issuance of the type certificate by the VA.

9. **Methods of Compliance**

9.1 Where there is no precedent, i.e. for new technology, novel applications of existing technology or MOC, novel MOC, or product use is unconventional, the VA will work closely with the CA and the applicant during Phase II of the program to establish an acceptable VA Certification Basis and MOC.

9.2 Once a MOC for a given rule has been accepted by the VA on any program with the CA, the expectation is that the VA will accept that MOC in the future as long as the assumptions made in the MOC are applicable. An exception is where an MOC has been determined not to be sufficient. This determination must be discussed between the VA and the CA.

9.3 When the VA determines there is a need to evaluate or review a MOC with the CA and the applicant, in accordance with the concepts in this document, the VA will confine its evaluation or review to the general, overall methodology to be used by the applicant, including assumptions, boundary conditions, and critical parameters of that methodology that are essential to the technical adequacy of the MOC. Details in the form of test plans, test parameters and other MOC steps should be left up to the CA to further define and approve.

10. **Compliance Statements**

10.1 On the basis of a bilateral agreement between the VA and the CA, the below statement is to be given by the CA (exporting authority) to the VA (importing authority) at the end of the validation project so that the VA may issue the type certificate.

“With the determinations of compliance made by the {VA} and summarized in {Letter or document} dated {Date}, the {CA} certifies that the {Specific product type and model} complies with the {VA’s} Certification Basis as identified in {Certification Review Item A-1 or issue paper G-1} dated {Date}.”

10.2 Note that this statement requires the VA to list all compliance findings it has made in a letter or report to the CA.

11. **Consequences of Existence of Non-SRDs for the Application of this Document**

11.1 For non-SRDs, until the non-SRDs between the JARs and the FARs have been harmonized, there is a need for a compliance statement from the CA relative to these VA regulations.

11.2 The non-SRDs are unique to a particular amendment-pair of regulations. An amendment-pair is defined as a particular JAR amendment number and a comparable FAR amendment number.

11.3 The non-SRDs will be listed in a Certification Review Item (CRI) or Issue Paper (IP) that will be provided to the VA team by the VA management.

11.4 This CRI/IP must be referred to in CRI A-1 and IP G-1, respectively.

11.5 The determination of compliance against all non-SRDs outside the VIs will be made by the CA.

VA investigation of MOC associated with non-SRD will be limited to items within the scope of identified VIs.

Appendix C

Summary of Validation Phases

Project Phase	Objective	Beginning	Ending
Phase I	General familiarization	Receipt of application by VA	Establishment of validation team
Phase II	Technical familiarization	Familiarization briefing	Establishment of initial VA Certification Basis and initial VI
Phase III	Establishing the scope of delegation to the CA	Technical compliance discussions	Document defining which authority is to make which determinations
Phase IV	Compliance determinations	Establishment of compliance authority	Issuance of VA type certificate

APPENDIX D

SIMPLIFIED TYPE VALIDATION PROCESS FOR SAILPLANES AND POWERED SAILPLANES

1. TYPE VALIDATION PROCESS

1.1 This Simplified Type Validation Process can be requested by the applicant at any stage of certification status. To realize the most benefit in cost and time, the process should be initiated at the start of the Type Certificate (TC) program. The seven step process is as follows:

- (a) TC Application
- (b) Authority Review of TC Application
- (c) Authority Briefing by Applicant
- (d) Authorities Define Certification Basis
- (e) Findings of Compliance
- (f) Authority Final Review
- (g) Issuance of TC

1.2 TC APPLICATION

To initiate the process, the applicant submits a letter, the required application forms, and data to both the FAA and the LBA requesting type certification of the sailplane and specifically requests the use of the Simplified Validation Process.

1.2.1 Application for U.S. Type Certification:

1.2.1.1 The applicant submits a letter requesting a U.S. TC through the LBA to the FAA Small Airplane Directorate, 601 East 12th Street, Kansas City, MO 64136, ACE-100 Manager, Attn: Project Officer, Sailplanes, ACE-112, Tel.: (816) 426-6934, Facsimile: (816) 426-2169. The letter should state the applicant's proposed certification basis and include the documents listed below.

1.2.1.1.1 FAA Form 8110-12, "APPLICATION FOR TYPE CERTIFICATE, PRODUCTION CERTIFICATE, OR SUPPLEMENTAL TYPE CERTIFICATE."

1.2.1.1.2 A three view drawing of the sailplane. Dimensional information must be in English measurement system units.

1.2.1.1.3 A detailed description of the sailplane.

1.2.1.1.4 Applicant submits appropriate letters and documentation to LBA, and requests that the application for the VA be forwarded with LBA's concurrence.

1.2.2 Application for German Type Certification:

1.2.2.1 Applicant submits application letter, forms and data mentioned in section 1.2 above to the geographic responsibility FAA Aircraft Certification Office (ACO). The FAA ACO will provide a copy of these documents to the attention of the Project Officer, Sailplanes, ACE-112.

1.2.2.2 Applicant submits appropriate letter and documentation to LBA through the ACO.

1.3 AUTHORITY REVIEW OF TC APPLICATION

1.3.1 Upon receipt, the authorities will review their respective applications for completeness, and acceptability.

1.3.2 The FAA and LBA will coordinate on a suitable meeting date and location for an AUTHORITY BRIEFING by the applicant if deemed necessary.

1.3.3 The Certifying Authority (CA) will inform the applicant of the time and location of the meeting. The usual location for this briefing is at the applicant's facility.

1.4 AUTHORITY BRIEFING BY APPLICANT

1.4.1 The AUTHORITY BRIEFING should consist of:

1.4.1.1 General design presentations covering the configuration of the sailplane and its systems:

1.4.1.2 Composite material specifications, tests, allowables;

1.4.1.3 Proposed tests to substantiate compliance with the regulations;

1.4.1.4 Operational requirements and limitations;

1.4.1.5 Vendor parts incorporated in the design;

1.4.1.6 Service history on this model or previous similar model;

1.4.1.7 Proposed schedule of events including the submittal of the required data, and anticipated TC issuance date.

1.4.2 The applicant should highlight any unusual, and/or novel materials, techniques or aspects to permit the early determination by the authorities for the need of: Special Conditions; Equivalent Safety Findings; or, Policy Decisions.

1.4.3 The applicant should be prepared to answer questions posed by the authorities in their attempt to fully understand the design proposal.

1.5 AUTHORITIES DEFINE CERTIFICATION BASIS

1.5.1 The applicant should make a proposal for the certification basis at the time of application.

1.5.2 Based upon the information presented by the applicant in accordance with section 1.4, the authorities will determine their respective certification basis, and any other regulatory requirements.

1.5.3 The Validating Authority (VA) will:

1.5.3.1 Incorporate the regulatory requirements into IP/CRI G-1 "VA Type Certification Basis".

1.5.3.2 Prepare Issue Paper (IP)/Certification Review Item (CRI) G-2 "VA Type Design Data Requirements", E-1 "Environmental Impact Statement (EIS)", and F-1 "Flight Test Evaluation", M-1 "Instructions for Continued Airworthiness", O-1 "Aircraft Flight Manual", and other single topic IP/CRIs as required. These describe the minimum requirements to obtain a U.S. TC. The single topic IP/CRIs will cover:

1.5.3.2.1 Any significant and/or controversial issues, discovered during the meeting;

1.5.3.2.2 The specific tests the VA intends to witness; and,

1.5.3.2.3 The specific data or documents VA wishes to review.

1.5.3.3 After internal VA coordination, approved copies will be provided to the applicant, through the CA.

1.5.4 The authorities will coordinate their respective proposed certification bases to minimize differences.

1.5.5 The Certifying Authority (CA) will:

1.5.5.1 Forward the FAA letters, documents, and CRIs to the applicant for action.

1.5.5.2 Review, comment, and/or approve, as appropriate, on applicant responses and submittals requested by the VA, prior to forwarding the data to the VA.

1.5.5.3 Prepare appropriate CA documentation in accordance with internal policy and procedures for action by the applicant.

1.5.6 The applicant is expected to respond, in a timely fashion.

1.5.7 At this point the IP/CRI's Status will be noted as OPEN.

1.5.8 IP/CRI actions:

1.5.8.1 Applicant response to VA generated IP/CRIs will be forwarded by the CA to the VA with comments.

1.5.8.2 Upon their return to VA, they will be reviewed and classed as acceptable/not-acceptable. A copy of those found to be acceptable will be returned to the applicant with the Status as CLOSED. Those not found acceptable will be returned with VA comment for applicant action.

1.5.8.3 Upon completion of the required action or data submittal by the applicant, and upon acceptance by the VA the IP/CRI Status will be classed as COMPLETE.

1.6 FINDINGS OF COMPLIANCE

1.6.1 The CA, acting for the VA, will determine if the applicant has demonstrated compliance with the VA requirements: As stated in the IP/CRIs; and, taking into account the VA stated policies and interpretation of the regulations.

1.6.2 The CA will use its internal procedures to review and approve data, and determine compliance.

1.6.3 The VA required data shall be in the language and measurement system units specified by the VA.

1.6.3.1 For the United States, English and the English measurement system is required.

1.6.3.2 For European countries the metric system is required, unless specifically directed otherwise by the VA.

1.7 AUTHORITY FINAL REVIEW

1.7.1 The AUTHORITY FINAL REVIEW will be conducted upon request by the applicant. This request should be made after the authorities IP/CRIs G-1 and G-2 have been designated CLOSED and all other CRIs as COMPLETE.

1.7.2 Upon review, acceptance of the final data submittal, and after the CA is satisfied that an CA TC can be issued, the CA:

1.7.2.1 Designates the CA IP/CRI G-2 as COMPLETE; and,

1.7.2.2 Reviews and forwards the following documentation for VA review and acceptance:

1.7.2.2.1 The final Certification Compliance Table (Checklist) together with the supporting substantiation data.

1.7.2.2.2 The final draft of the Type Certificate Data Sheet (TCDS).

1.7.2.2.3 The required attestation of compliance as required by 14CFR Part 21, section 21.29(a)(1).

1.7.3 Upon review and acceptance of the applicant data and the CA attestation, the VA will designate the VA IP/CRI G-2 as COMPLETE.

1.8 ISSUANCE OF TC

1.8.1 The CA designates CA CRI IP/G-1 as COMPLETE and issues the CA TC to the applicant.

1.8.2 Upon the designation of the VA IP/CRI G-2 as COMPLETE and upon acceptance of the CA Certification Statement, the VA designates CRI G-1 as COMPLETE and issues the VA TC to the applicant through the CA.

2. AUTHORITY CERTIFICATION TEAM

2.1 The CA will advise the applicant of the names and specialties of all attendees.

2.1.1 The VA will advise the CA of the names and specialties of the VA team members.

2.1.1.1 If the VA is the FAA: The FAA Type Certification team will usually be composed of: The Small Airplane Directorate Project Officer, Sailplanes; plus, at FAA's option, a Flight Test Pilot, and as needed, one or more Aerospace Engineer specialists.

2.1.1.2 If the CA is the FAA: The FAA Type Certification team will usually be composed of: The cognizant ACO Project Officer, and the Small Airplane Directorate Project Officer, Sailplanes, and at FAA's option a Flight Test Pilot, and as needed one or more Aerospace Engineer specialists.

3. ORGANIZATION

3.1 COMMUNICATIONS

3.1.1 To expedite this process, direct informal tele-conference discussions to exchange technical information between the applicant and the authorities are encouraged.

3.1.2 All formal correspondence, policy decisions or required actions must be in writing through the CA.

3.1.2.1 For German applicants for U.S. type certification, the FAA point of contact is:

The Project Officer, Sailplanes
Small Airplane Directorate, ACE-112
Federal Aviation Administration
601 East 12th Street,
Kansas City, MO 64106
Telephone number: 1-816-329-4146
Facsimile number: 1-816-329-4090

3.1.2.2 For U.S. applicants for German type certification, the FAA point of contact is the Project Officer in the cognizant ACO.

3.2 ORGANIZATION OF MEETINGS

3.2.1 The need for joint meetings, and the time and place for these meetings will be coordinated between the authorities. The CA will notify the applicant.

3.2.2 The applicant is responsible for initiating the request for the AUTHORITY BRIEFING and the AUTHORITY FINAL REVIEW meetings. The applicant has the option to request additional meetings.

3.2.2.1 The VA has the option to either attend the AUTHORITY FINAL REVIEW

meeting, or to close the remaining open action items by telephone and/or facsimile through the CA specialist at the meeting.

3.3 TIMING

3.3.1 The time span from the initial application until award of the TC is primarily dependent on the timely action by the applicant, prompt submittal of required data, response to authority communications, requests for test witnessing, or meetings, and adherence to the proposed schedule of events (section 1.4) is the sole responsibility of the applicant.

3.3.2 The U.S. Type Certification basis described in CRI/IP G-1 and initially agreed to by the applicant, is valid for three years starting from the date of application as required by Title 14 of the U.S. Code of Federal Regulations Part 21 (14CFR21), paragraph 21.17(c). If after 3 years the TC has not been issued, the TC basis will be reviewed and later amendments will be added to the Basis.

4. PROCESS LEADING TO THE FINDING OF COMPLIANCE

The authorities will use their internal system for data review, data approval, the witnessing and conduct of tests, and the need for interim review meetings.

APPENDIX E

List of Referenced Documents & Forms

FAA Referenced Documents & Forms

1. Code of Federal Regulations, Title 14, Parts 21-36, 39, 43, 45, 91, and 183
2. FAA Advisory Circular 21-23, *Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported into the United States*
3. FAA Order 8110.4, *Type Certification*
4. FAA Order 8130.2, *Airworthiness Certification of Aircraft and Related Products*
5. FAA Order 8130.21, *Procedures for Completion and Use of the Authorized Release Certificate, FAA Form 8130-3, Airworthiness Approval Tag*
6. FAA Advisory Circular 21-2, *Export Airworthiness Approval Procedures*
7. ICAO Annex 8, *Airworthiness of Aircraft*
8. FAA Order 8120.2, *Production Approval and Certificate Management Procedures*
9. FAA Order 8100.7, *Aircraft Certification Systems Evaluation Program*
10. FAA Advisory Circular 21-20, *Supplier Surveillance Procedures*
11. FAA Advisory Circular 21-1, *Production Certificates*
12. Authorized Release Certificate, FAA Form 8130-3, *Airworthiness Approval Tag*
13. FAA Form 8130-4, *Export Certificate of Airworthiness*
14. FAA Form 8120-10, *Request for Conformity*

LBA Referenced Documents & Forms

1. Joint Aviation Requirements (JARs); JAR-21; JAR OPS
2. Advisory Circular Joint (ACJ)
3. Advisory Material Joint (AMJ)
4. Temporary Guidance Material (TGM)
5. JAA Validation Procedures based on Validation Items
6. JAA Supplemental Type Certificate Procedures
7. JAA Joint Production Organization Approval Procedures
8. JAA Joint Procedures
9. ICAO Annex 8, *Airworthiness of Aircraft*
10. JAA Form One, *Authorised Release Certificate*
11. LBA *Certificate of Airworthiness for Export*

APPENDIX F

List of Special Arrangements

1. Name of Special Arrangement:

Date of Issue:

2. Name of Special Arrangement:

Date of Issue:

3. Name of Special Arrangement:

Date of Issue:

APPENDIX G

U.S. Acceptance of European Aviation Safety Agency (EASA) Export Certificates of Airworthiness on New AIRBUS Aircraft Additions to Paragraphs 2.1.2. and 3.2.1.0 for AIRBUS Aircraft Only

Additions to Paragraphs 2.1.2 and 3.2.1.0 are as follows:

2.1.2 U.S. Acceptance of Export Certificates of Airworthiness for the Following Products:

Add:

(b) EASA Export Certificates of Airworthiness for new AIRBUS aircraft.

3.2.1.0 New Aircraft.

Add:

(b) In addition, the FAA as importing authority shall accept a European Aviation Safety Agency (EASA) Export Certificate of Airworthiness on new AIRBUS aircraft, only when EASA certifies that each aircraft meets the conditions in 3.2.1.0(a)(1), (2), and (3).

Note: Existing subparagraph (b) is renumbered to (c) with the same text.

Add:

(d) All new AIRBUS aircraft exported to the United States will have an EASA Export Certificate of Airworthiness, Form 27. The EASA Export Certificate of Airworthiness should contain the following statement: "The [INSERT AIRCRAFT MODEL] covered by this certificate conforms to the type design approved under U.S. Type Certificate Number [INSERT TYPE CERTIFICATE NUMBER], and is found to be in a condition for safe operation," and/or any other "import requirements" text as specified in the U.S. Type Certificate Data Sheet.

Note: Existing subparagraph (c) is renumbered to a new (e) with the same text.