

# *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 Sweden  
For Promotion of Aviation Safety

**June 3, 2002**

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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 Authorisation. These Implementation Procedures are authorised by Article III of the Agreement between the Government of the United States of America and the Government of Sweden for the Promotion of Aviation Safety, dated February 9, 1998, also known as the Bilateral Aviation Safety Agreement, or “BASA Executive Agreement.” In accordance with Article III, the Federal Aviation Administration (FAA) and the Luftfartsverket (LFV) Luftfartsinspektionen 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 Sweden (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 LFV’s technical competence and regulatory capabilities to perform these tasks within the scope of these Implementation Procedures. The FAA and LFV, 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 LFV 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 LFV 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 LFV 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 LFV 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 Sweden to make findings of compliance and/or to perform conformity inspections, the FAA or LFV 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 LFV, 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 LFV 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 LFV agree that they will comply with the following conditions relative to utilizing the assistance of other authorities:
- (a) The FAA or LFV, as exporting authorities, must be accountable for all certification work that uses other authorities, including the resolution of all technical and program issues. Also, the FAA or LFV 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 LFV and any other authorities used in the process, the LFV 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 LFV for Type Validation of U. S. Products. When the LFV uses JAA validation procedures for the type validation of U.S. products jointly with other JAA member National Aviation Authorities (NAA), the LFV assumes responsibility for the validation process with respect to the joint resolution, with the FAA, of all difficulties between the FAA and LFV 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 LFV 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 LFV 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 LFV's standards for aircraft airworthiness and environmental certification are contained in Bestämmelser för Civil Luftfart (BCL) and in the JAR. 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). Swedish policies are contained in the Verksamhetsbok (VHB-L).

(b) The LFV 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 LFV 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 LFV. Such amendments shall be made effective by signature of the duly authorised representatives of the FAA and the LFV.

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)

***For the LFV:***

Lufftartsverket  
Aviation Safety Authority  
Airworthiness Section

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

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

S-601 79  
Norrköping  
Sweden

Telephone: 46-11-19-2000  
Fax: 46-11-19-2680

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 LFV:***

Lufftartsverket  
Aviation Safety Authority  
Airworthiness Section  
S-601 79  
Norrköping  
Sweden

Telephone: 46-11-19-2000  
Fax: 46-11-19-2680

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 LFV 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 safety 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 LFV: “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 LFV: 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 LFV.
- (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 and 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 LFV: 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 LFV regulation, is responsible for determining that all products or parts thereof produced within the quality control system conform to an FAA or LFV-approved design or established government or industry standard and are in a condition for safe operation. For the LFV, 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 arrangement, and the aircraft has not been used in any pilot school and/or other commercial operation.

(r) “Non-JAA Products” means all products certificated/validated by the LFV not using a JAA procedure.

(s) “Person” means

(1) to the FAA: 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.

(2) to the LFV: a legal entity which is subject to the jurisdiction of Sweden; it can include an Organisation or Company.

(t) “Product” means a civil aircraft, aircraft engine, or propeller.

(u) “Production Quality System” means a systematic process that 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 LFV: an additional airworthiness standard(s) prescribed by the LFV 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 LFV finds necessary to establish a level of safety equivalent to that intended in the applicable 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 LFV, 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. It should be noted that parts which are fabricated and/or produced in a supplier/subcontractor capacity ("supplied parts") in the other country are not included in the Scope of these Implementation Procedures because they are not considered an exported or imported product, appliance, or part, as previously defined. In this case, the provisions of paragraph 3.1.5.1 and of Section IV are applicable.

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 Swedish 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 Sweden.

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

- (a) new appliances (articles),
- (b) new parts that conform to LFV-approved design data and are eligible for installation in a product or appliance which has been granted a LFV design approval. This includes:
  - (1) Replacement parts for all products and appliances, regardless of the State of Design; and
  - (2) Modification parts for products and appliances for which either the United States or Sweden is 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 Sweden.

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

- (a) new and used airplanes.

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

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

- (a) new parts and appliances (articles), and
- (b) 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 Sweden 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 Swedish 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.
- (c) 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 Sweden is the State of Design for both the product/appliance and the design change; and
  - (2) 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 Swedish 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 Swedish 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) LFV Acceptance of Standard Parts. The LFV 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), or Swedish/European industry specifications.

(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 Swedish/European specifications, or established U.S. industry or U.S. government 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 LFV 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, Aerobatic, 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-by-case basis through the special arrangements provision in Section V of this document.

##### 2.1.5.1

(a) For the LFV. 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 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 Sweden 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 LFV, covering the same class of products.

2.3 Provisions for Design Change Approvals.

2.3.0 Swedish 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 the United States 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 LFV-approved Design Changes:

- (a) Amended type certificates for aircraft for which Sweden is the State of Design;
- (b) Supplemental type certificates for aircraft for which Sweden is the State of Design;
- (c) Other LFV-approved major or minor design changes (as identified in Section III, paragraph 3.3.1) for aircraft, parts, and appliances for which Sweden is the State of Design; and
- (d) LFV-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 Sweden is the State of Design.

2.4 Provisions for Environmental Testing and Approvals.

2.4.0 Swedish Acceptance of FAA Compliance Statements (Equivalent to ICAO Annex 16) for the Following Environmental Requirements:

- (a) noise certification requirements for subsonic transport category large airplanes and subsonic turbojet powered airplanes;
- (b) noise certification requirements for propeller-driven small airplanes and propeller-driven commuter category airplanes;
- (c) noise certification requirements for helicopters; and
- (d) fuel venting and exhaust emissions certification requirements for turbine powered airplanes.

2.4.1 U.S. Acceptance of LFV Compliance Statements for the Following Environmental Requirements: [Reserved]

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

2.6 Provisions for Special Arrangements. These Implementation Procedures provide for designated officials within the FAA and LFV 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/will be listed in Appendix E.

2.7 Summary Tables. The following tables summarize the new products, appliances, and parts designed and manufactured in the United States or Sweden 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 Sweden.**

<u>Products, Appliances, &amp; Parts</u>	Type Certificate, and Amendments	Supplemental Type Certificate	Technical Standard Order Authorisation	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 Sweden. See paragraphs 2.1 and 2.2.

Table 2

Summary of Swedish (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)	√	√	Not applicable
Normal	√	√	N/A
Utility	√	√	N/A
Aerobatic	√	√	N/A
Commuter	√	√	N/A
Very Light Aeroplanes	√	√	N/A
Sailplanes/Powered Sailplanes	√	√	N/A
Airships	√	√	N/A
Balloons	√	√	N/A
Parts and Appliances	N/A	N/A	√
New parts, including replacement and modification parts, for the above airplanes, very light airplanes, sailplanes/powered sailplanes, airships, balloons, 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:* Airplanes 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, appliances, and parts eligible for import into the United States. See paragraphs 2.1 and 2.2.

## SECTION III     ESTABLISHED WORKING PROCEDURES

### 3.0 DESIGN APPROVAL PROCEDURES

#### 3.0.0 General.

(a) The FAA and LFV, as importing authorities, will normally conduct certification activities under a validation process on a product in order to make a finding of compliance and issue its design 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 LFV 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

##### 3.0.1.1 Application for Swedish Type Certification.

(a) An application for LFV Type Certificate from an applicant in the

14 CFR § 21.15, from an applicant in Sweden should be sent to the LFV. Applications may be submitted for products with an LFV Type Certificate, or for products where application for type certification has been made to the LFV. The LFV should ensure the application has the following information:

- (1) The LFV Type Certificate and TC Data Sheet, if available, and a definition of the national airworthiness and environmental standards upon which the LFV design approval was (or is to be) based, and the amendment level of the U.S. airworthiness standards that the applicant proposes and the LFV believes to be equivalent to its own standards;
- (2) Date of application to the LFV; 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 LFV 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; and
- (2) All known or expected exemptions or equivalent

United States electing to follow the joint validation procedures for JAA products should be made in accordance with JAR-21 Subpart N-B and JAA Validation Procedures Based on Validation Item (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 LFV 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 LFV 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 LFV special conditions under JAR-21N16, or which might require a special review of acceptable means of compliance; and

level of safety findings relative to the LfV's national standards for design approval that might affect compliance with the 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 LfV 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.

(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 compliance with the applicable LfV airworthiness standards and environmental standards according to ICAO Annex 16; and

(3) Available information about specific customers and delivery schedule, if known.

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

(d) An application for LfV Type Certificate from a U.S. applicant electing to follow the Swedish national procedures should be sent to the FAA. The FAA should ensure the application has the information as outlined in (a)(1), (a)(2), (a)(3), (b)(1), (b)(2), and (b)(3) of this paragraph. The FAA should forward this application to the LfV.

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

(a) For a product designed in Sweden, 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 LfV under national procedures, the LfV 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 LfV 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 Swedish Type Certification Basis. The FAA or LFV, 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 LFV for the Swedish 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

3.0.1.3.2 Swedish Type Certification Basis.

(a) The LFV 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 LFV 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) Applicants must also comply with the applicable noise



the LFV to correct unsafe conditions.

- (b) Applicants 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 the noise standards of 14 CFR Part 36 in effect on the date of U.S. type certification.

standards in effect on the date of application to the LFV for the Swedish type certificate.

Compliance is also expected for meeting the fuel venting and emission requirements according to BCL-M2.2.

### 3.0.1.4 Environmental Testing and Approval Procedures.

#### 3.0.1.4.1 FAA Procedures.

- (a) For a product designed in Sweden and validated in the United States, the FAA must make all findings of compliance to 14 CFR Parts 34 and 36 based upon FAA witnessed tests, conducted in accordance with FAA-approved test plans. The FAA will review and approve all data and compliance demonstration reports submitted via the LFV.
- (b) The FAA process for environmental testing and approvals includes the following:
  - (1) Environmental (noise, fuel venting and exhaust emissions) certification compliance demonstration plans must be submitted to the FAA for review, comment and subsequent approval prior to undertaking certification testing.

#### 3.0.1.4.2 LFV Procedures.

- (a) For a product designed in the United States and validated in Sweden, the LFV will review the environmental requirements applied by the FAA for the certification of the U.S. product. FAA findings of compliance with the FAA environmental requirements will be accepted by the LFV without further investigation when no differences are identified in the requirements between FAA and the LFV. FAA compliance determinations must include a statement that the 14 CFR part 36 test and analysis procedures used to obtain the noise levels and/or the 14 CFR part 34 test and analysis procedures used to obtain the emissions levels are essentially equivalent to those required by ICAO Annex 16, Volume II.
- (b) For any differences between the LFV and FAA environmental requirements, the LFV will require further compliance

(2) Information and data must be supplied to the FAA in order to make a finding in accordance with the Noise Control Act of 1972 (P.L. 92-272 §44715(a)(3)). The FAA, before issuing an original type certificate for an aircraft of any category, must assess the extent of noise abatement technology incorporated into the type design and determine whether additional noise reduction is achievable. This examination must be initiated as soon as possible after the application for type certification in each original type certification project and reflect noise reduction potentials that become evident during the design and certification process.

(3) Information and data must be supplied to the FAA in order to conduct an evaluation of the measurement and analysis methods and practices, and data correction procedures of the applicant for aircraft noise certification under 14 CFR Part 36, Subpart B, Subpart F, or Subpart H.

(4) Compliance demonstration aircraft noise test plans and engine exhaust emissions test plans to be used for demonstrating U.S.

demonstration to account for those differences.

(c) The LFV will normally delegate the witnessing of the tests and review for acceptance of the applicant's compliance data to the FAA. All approved environmental data must be submitted by the applicant to the LFV through the appropriate FAA office.

environmental certification compliance must be submitted to the FAA for review and comment, and subsequent approval not less than 90 days prior to commencing testing.

- (5) Proposed equivalent procedures to be used by the applicant during testing, data processing, data reductions, and data analysis must be specifically identified to the FAA and approved in advance by the FAA as part of items (1) and (4).
- (6) Compliance demonstration tests must be witnessed by FAA personnel or FAA designated engineering representatives. Prior to the start of testing it is necessary to assure the conformity of the test article (aircraft or engine configuration) to that identified in the FAA approved compliance demonstration test plans.
- (7) Compliance demonstration reports must be submitted to the FAA for review and comment and subsequent approval prior to type certification approval.

### 3.0.2 Design Approval Procedures for Supplemental Type Certificates.

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

#### 3.0.2.2 Design Approval Procedures for LFV Supplemental Type Certificates Using JAA STC

(a) U.S. Supplemental Type Certificates (STC) may be issued under the provisions of 14 CFR § 21.117 for approval of major changes to the type design of an aircraft, which has been type certificated/validated by the FAA, when the LFV is the authority of the State of Design for both the product and the design change, and the LFV has issued the STC.

(b) The FAA will develop the STC certification basis in accordance with FAA Order 8110.4, *Type Certification* and CFR § 21.115. The date of application is the date application is made to LFV for the Swedish STC.

(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 application for a type certificate, shall submit an STC application to the LFV with a request that the application and required information be forwarded to the FAA Directorate responsible for the original FAA validation of the Swedish product. 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;

Procedures. (Pending JAA designation of the LFV as a Primary Certification Authority for STCs)

(a) LFV Supplemental Type Certificates (STC) 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 LFV, when the FAA is the authority of the State of Design for both the product and 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 LFV, as listed in Appendix B.

(c) This STC application shall be made in accordance with the JAA STC Procedure and with JAR-21N113(a), and include the information required in JAR-21N113(b). 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 LFV.

(d) The basic design approval

(2) A copy of the LfV 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 LfV for the Swedish STC.

(e) The basic design approval procedures for U.S. Type Certification should be used for STCs, but may be adjusted to accommodate the magnitude and complexity of the design change, per FAA Order 8110.4, *Type Certification*.

(f) The following 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,

procedures for LfV Supplemental Type certification are JAR-21 Subpart N-E, JAA STC Procedures, JAA Validation Procedures, and the LfV Primary Certifying Authority (PCA) Handbook. For the purpose of establishing the STC certification basis, the date of application, in accordance with ACJ 21N101, is the date application is made to the FAA for the U.S. STC.

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

(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 LFV.

3.0.2.3 Design Approval Procedures for LFV Supplemental Type Certificates using Swedish National Procedures.

(a) LFV 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 LFV, when the FAA is the authority of the State of Design for both the product and 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 LFV, as listed in Appendix B.

(c) This STC application shall be

made in accordance with the JAA STC Procedure and with JAR-21N113(a), and include the information required in JAR-21N113(b). In cases where the STC applicant has not entered into an arrangement with the Type Certificate holder, the FAA shall review 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 LFV.

(d) The basic design approval procedures for LFV Supplemental Type Certificates are defined in the LFV BCL. An acceptable alternative to these procedures are the procedures of JAR-21 Subpart N-E and the corresponding JAA STC procedures. For the purpose of establishing the STC certification basis, the date of application is the date application is made to the FAA for the U.S. STC.

(e) The LFV will issue an STC when compliance with the applicable Swedish airworthiness requirements has been verified and a compliance statement has been made by the FAA. LFV may verify compliance data.

### 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 Swedish applicant for an FAA letter of TSO

#### 3.0.3.1 Design Approval Procedures for LFV JTSO Authorisation for Import (excluding APUs).

(a) Application. The applicant for a

design approval shall make application through LFV 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 LFV should contact the FAA for the latest FAA technical policy and 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 LFV 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 LFV, with certification by the LFV, that the performance of the appliance or article complies

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 LFV, at the address indicated in Appendix B. The FAA should contact the LFV for the latest LFV 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 LFV considers such parts to be standard parts (see paragraph 2.1.4(a)).

(b) Issuance of LFV 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 LFV 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 LFV, 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



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

(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 LFV may issue the JTSO Authorisation for Import without 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).

3.0.3.2 Design Approval Procedures for APUs. Application for JTSO Authorisations for Import should be made in accordance with JAR-21N603. The LFV 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 Swedish national procedures for the APU process.

### 3.0.4 Approval Procedures for Part Manufacturer Approval (PMA) and Joint Part Approval (JPA).

3.0.4.0 Approval Procedures for FAA Acceptance of Joint Part Approval issued by the LFV.

[Reserved.]

3.0.4.1 Procedures for Acceptance by LFV of FAA PMA.

(a) Direct acceptance by the LFV of PMA parts. LFV will directly accept PMA parts for use as modification and/or replacement parts when accompanied with an FAA Airworthiness Approval Tag (FAA Form 8130-3) in the following cases:

(1) The PMA part is not a “critical

component”, (See definition, paragraph 1.9(c)(1)) The statement “This PMA part is not a critical component” should be written in Block 13 of the FAA Form 8130-3; or

(2) The PMA part conforms to design data obtained under a licensing agreement from the TC or STC holder according to 14 CFR § 21.303(c)(4). The statement “Produced under licensing agreement from the TC or STC holder” should be written in Block 13 of FAA Form 8130-3; or

(3) The PMA holder has previously received an explicit authorisation from the LFV per paragraph 3.0.4.1(b). The reference to this LFV use authorisation should be written in Block 13 of the FAA Form 8130-3.

(b) Acceptance by LFV of FAA PMA parts subject to explicit authorisation by the LFV.

(1) Applicability. An explicit authorisation from the LFV is required prior to using PMA parts as modification and/or replacement parts when:

- (i) the PMA part has not been produced under a licensing agreement from the TC or STC holder; and
- (ii) the PMA part is a “critical component”, (See definition, paragraph 1.9(c)(1))

(2) Application. The applicant for a LFV PMA use authorisation is requested to make an application in writing through the FAA to the LFV at

the address indicated in Appendix B. This application should contain the following information:

- (i) The FAA PMA approval, with all supplements, and in particular the description of the means by which the FAA PMA approval was granted;
- (ii) Overview of the technical data transmitted to the FAA for the purpose of approving the PMA part;
- (iii) Description of the means by which the PMA part user would be made aware of any changes on the PMA part by the PMA holder with a potential impact on safety; and
- (iv) Description of the means by which the PMA part user would be made aware of any changes by the TC holder with a potential safety impact on the PMA part.

(3) Technical validation by the LFV. The LFV will validate the FAA PMA. For this purpose, the LFV may require:

- (i) Additional information and technical data to be provided by the applicant through the FAA to the LFV; and/or
- (ii) Assistance from the FAA under the provision of Section IV of these Implementation Procedures.

(4) Nature of LFV PMA

Authorization. Depending upon the safety implication of the use of the PMA part, the authorization delivered by the LFV may take one of the following forms:

- (i) STC, or
- (ii) major aircraft modification approval, or
- (iii) minor aircraft modification approval, or
  
- (iv) specific approval as deemed necessary.

(5) Subsequent use of LFV PMA Authorisation. The following reference of the LFV PMA authorisation should be quoted in Block 13, "Remark," of FAA Form 8130-3 for any subsequent shipment of an authorised PMA part, as per paragraph 3.0.4.1(a)(3): "This PMA part has received authorisation for use from the LFV."

3.0.5 Joint Design Approval Procedures. The FAA and LFV 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.

3.0.6 JAR-21N5 Arrangement Record Keeping Requirements. In accordance with 14 CFR § 21.49 for TC holders; CFR § 21.49 and FAA Order 8110.4, *Type Certification*, for STC holders; CFR § 21.613 for TSO Authorisation holders; and CFR § 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 LFV.

### 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 LFV, 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 8100.7, *Aircraft Certification Systems Evaluation Program*.

3.1.1.3 For Production Organization Approvals (POA), LFV production approval and supplier surveillance programs are described in JAR-21, Subpart G, and associated JAA Joint Production Organization Approval Procedures and in the BCL. For production without POA, LFV production approval and 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 LFV, 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 LFV 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 LFV on behalf of the other authority through the provisions of Section IV.

3.1.2.2 The FAA or LFV may seek assistance from the civil airworthiness authority of a third country in the undertaking of FAA or LFV 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 LFV 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 LFV 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 LFV 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 LFV, 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 LFV in determining conformity to approved design and whether parts are safe for installation on type certificated products.

3.1.5.1 The FAA or LFV 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 LFV on behalf of the other authority through the provisions of Section IV.

3.1.5.2 The FAA or LFV 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 LFV 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 Record Keeping Requirements. In accordance with 14 CFR § 21.125(b)(10) for TC holders; CFR § 21.165(a) and Advisory Circular 21-1, *Production Certificates*, for Production Certificate and TSO Authorisation holders; and CFR § 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 LFV.

## 3.2 EXPORT AIRWORTHINESS APPROVAL PROCEDURES

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

### 3.2.1 Acceptance of Export Certificates of Airworthiness and Authorized 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 LFV's requirements for import of products, parts and appliances are described in the BCL.

(b) 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*. The LFV's process for issuing export airworthiness approvals for products, parts and appliances is described in BCL, and JAR-21, Subpart F, G, and L.

#### 3.2.1.0 New Aircraft.

(a) Except as provided in paragraph 3.2.2, the FAA and LFV 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 LFV airworthiness approval will have an LFV Form L-1424. The Form L-1424 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 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 Sweden 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 LFV 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 LFV Type Certificate Data Sheet.

#### 3.2.1.1 New Aircraft Engines and Propellers.

(a) The LFV as importing authority shall accept FAA’s Export Certificates of Airworthiness on new aircraft engines and propellers, as identified in Section II, only when the FAA 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 LFV, as notified.

(b) Each aircraft engine or propeller exported to Sweden 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 LFV 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 LFV Type Certificate Data Sheet.

#### 3.2.1.2 New TSO Appliances.

Each appliance exported to the United States with a LFV airworthiness approval will have a JAA Form One. The FAA shall accept a LFV Authorised Release Certificate on a new TSO appliance, as identified in Section

#### 3.2.1.3 New JTSO Parts and Appliances.

Each part and appliance exported to Sweden with an FAA airworthiness approval will have an FAA Form 8130-3, *Airworthiness Approval Tag*. The LFV shall accept an FAA airworthiness approval tag on a new JTSO part or appliance, as

II, only when the LFV 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 3.2.3.0(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 LFV airworthiness approval will have a JAA Form One. The FAA shall accept a LFV Authorised Release Certificate on a new part, including a modification and/or replacement part, for the aircraft and appliances identified in Section II, only when the LFV certifies, by the issuance of the JAA Form One, that each part:

- (1) Is eligible for installation in an aircraft or appliance which has been granted an FAA design approval.
- (2) Conforms to FAA-approved design data and is safe for installation;

identified in Section II, only when the FAA certifies, by issuance of the FAA Form 8130-3, that each JTSO appliance:

- (1) Conforms to the design approved by the LFV, as specified in the LFV JTSO Authorisation for Import;
- (2) Complies with applicable LFV Airworthiness Directives;
- (3) Is marked in accordance with paragraph 3.2.3.1(a); and
- (4) Meets all additional requirements prescribed by the LFV, as notified.

3.2.1.5 New Parts, Including Modification and/or Replacement Parts. All parts exported to Sweden with FAA airworthiness approval will have an FAA Form 8130-3, *Airworthiness Approval Tag*. The LFV 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 LFV design approval;
- (2) Conforms to design data approved under a:
  - (i) LFV Type Certificate

(3) Is marked in accordance with paragraph 3.2.3.0(a) of these Implementation Procedures; and

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

(ii) LFV STC

(iii) LFV JTSO Authorisation, or

(iv) LFV approved aircraft modification;

(3) Is marked in accordance with paragraph 3.2.3.1(a) of these Implementation Procedures; and

(4) Meets all additional requirements prescribed by the LFV, as notified. (In particular, refer to paragraph 3.0.4.1 for PMA requirements.)

### 3.2.1.6 Used Aircraft for Which There Has Been a Design Approval Granted by the Authority of the Importing Country.

#### (a) Acceptance of Used Aircraft Manufactured in the Exporting Country.

(1) The FAA or LFV shall accept Export Certificates of Airworthiness on used aircraft for which either the United States or Sweden is the State of Design, as identified in Section II, for import into each other's country for airworthiness certification when the FAA or LFV certifies that each used aircraft:

- (i) 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;
- (ii) Is in a condition for safe operation, including compliance with all applicable importing authority Airworthiness Directives, as notified;
- (iii) Has been properly maintained using approved procedures and methods (evidenced by logbooks and maintenance records); and,
- (iv) Meets all additional requirements prescribed by the importing authority, as notified.

(2) If the exporting authority is not in a position to assess whether or not the used aircraft satisfies the above conditions, it will inform the importing authority accordingly.

#### (b) Acceptance of Used Aircraft Manufactured in the Importing Country or in Third Countries.

(1) The FAA and LFV shall also accept each other's Export Certificate of Airworthiness for used aircraft manufactured in the importing country, or a third country when that country has a bilateral agreement/arrangement with both the FAA and the LFV covering the same class of product, and the conditions of paragraph 3.2.1.6.(a)(1) have been met.

(2) When a used aircraft produced in the United States or Sweden 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 LFV will also provide, upon request, information regarding subsequent installations on the aircraft that have been approved by either the FAA or LFV as the exporting authority.

(c) The FAA or LFV, 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 major 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.

3.2.2 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. For the FAA, it is under the "Exceptions" section of the Export Certificate of Airworthiness. For the LFV it is in the "Special Conditions" section of the LFV's Certificate of Airworthiness for Export. 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 LFV, this notification should be to the Luftfartsverket. A written acceptance from the importing authority is required before the issuance of the exporting authority's Export Certificate of Airworthiness.

3.2.3 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 Sweden, or for use on either a U.S. or Swedish-registered aircraft.

3.2.3.0 U.S. Requirements.

3.2.3.1 Swedish Requirements.

(a) Identification and Marking.

- (1) Aircraft must be identified as required in 14 CFR § 45.11.
- (2) Each critical component of an aircraft 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 trademark. The model designation of the type certificated product on which the part is eligible for installation must be marked 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

(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 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

of Design, the part must be traceable to the POA holder in order to ensure continued airworthiness control.

records equivalent to those specified in the BCL, and JAR-OPS 1.920 (for airplanes) or JAR-OPS 3.920 (for rotorcraft).

(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.

### 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 FAA will ensure the LFV is adequately informed of in-service issues related to engines, propellers and equipment for which the FAA is authority of the State of Design and which are installed on LFV aircraft. The LFV and FAA will co-operate to ensure that the aircraft exporting authority will be adequately informed of in service issues related to products, parts, and appliances for which the LFV 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 LFV 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).
- (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 LFV, 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, Delegations and 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 Swedish MF&D reports are available from the Luftfartsverket.

#### 3.3.0.2 Unsafe Condition and Mandatory Continuing Airworthiness Actions.

(a) The FAA (under 14 CFR Part 39) and LFV under BCL-M1.11 issue mandatory continuing airworthiness actions. The FAA and LFV 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 Luftfartsverket.
- (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 LFV 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 LFV, 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) These Implementation Procedures cover both JAA and non-JAA products in both new and existing programs. For programs existing at the time of entry into force of these procedures, not all will have been processed in accordance with Appendix C. In these cases, the FAA and LFV will consult on the applicability of paragraph 3.3.1.1 to specific programs with the expectation that the validating authority will rely to the maximum extent possible on the determinations made by the certifying authority.

(b) Changes to a type design that require a new or amended type certificate should be done in accordance with paragraph 3.0.1. except that, for an amended TC, the validating authority's date of application is the date application was made to the certifying authority for the amended TC. For amended type certificates, the FAA will develop the certification basis in accordance with 14 CFR § 21.101, and § 21.93(b) and (c). LFV will develop the certification basis in accordance with JAR 21N101. Also, if the TC holder has applied for an STC, this should be done in accordance with paragraph 3.0.2.

(c) All other changes to a type design by the TC holder should be done in accordance with this paragraph. These types of changes 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.

(d) 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.

(e) 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.

#### 3.3.1.1 Procedures for Programs for which a List of Validation Items was defined in accordance with Appendix C.

a) 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 LFV.

(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.

(5) Any other design changes categorized as Level 1 Major by the Certifying Authority or the Type Certificate Holder.

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

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

(d) 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 that defines the VA approved build standard. The VA will not receive prior notification of Minor or Level 2 Major design changes.

(e) 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.

(f) 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).

(g) 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.

### 3.3.1.2 Procedures for Programs for which a List of Validation Items was not defined in accordance with Appendix C.

(a) 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.

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.

(b) Upon agreement of both authorities, other concepts may be used as an alternative to either the LOD/ATC concept or the validation item concept.

3.3.1.3 Procedures for Major 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 LFV agree to follow the design approval procedures in paragraph 3.0.2 for supplemental type certificates.

3.3.1.4 Procedures for Minor Changes to a Type Design by Persons Other Than the Type Certificate Holder. For the FAA, minor design changes are approved using the same procedures as minor design changes presented by the TC holder. For the LFV, the applicant must apply for approval of the minor change to the type design in accordance with JAR 21.92. The FAA and LFV, as importing authorities, normally accept or approve minor changes without technical involvement.

3.3.1.5 Procedures for Changes to a Supplemental Type Certificate by the STC holder. The FAA and the LFV agree to follow the procedures in paragraph 3.3.1.0 to the extent applicable. Where unique situations may occur, the FAA and LFV will consult with each other on the specific process to be applied. A major change to an LFV STC must be approved as a separate STC in accordance with JAR-21 Subpart N-E unless the STC holder is also the TC holder.

3.3.1.6 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 acoustical or emissions change under 14 CFR § 21.93(b) & (c).

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

3.3.1.8 Procedures for Changes to a LFV JTSO Authorisation for Import. Major changes to a JTSO design require re-substantiation of the new design and issuance of a new or revised JTSO Authorisation for Import, and shall be done in accordance with the procedures in paragraph 3.0.3.1. For minor changes that remain within the scope of the JTSO Authorisation for Import, the LFV will not require prior notification and will rely upon an FAA determination of compliance.

3.3.1.9 Approval Procedures for Minor Changes to a Type Design by Persons Other Than the Type Certificate Holder. Minor design changes are approved using the same procedure as minor design changes presented by the TC holder. They are normally accepted or approved by the importing authority without technical involvement.

### 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 that 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

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

accordance with 14 CFR Part 43.

### 3.3.3 ADMINISTRATION OF DESIGN APPROVALS

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

(a) Upon transfer or an agreed-upon date, the LFV 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.

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

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

#### 3.3.3.1 Transfer of Swedish 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 products, and will notify all ICAO member countries of the change in State of Design responsibility, upon completion of the procedures described below.

(b) The LFV 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 Swedish type certificate holder to a person in the United States, the LFV 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 that identifies each authority's responsibilities in the transfer process.

(d) If a corresponding U.S. type

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

(e) If the transferee of the type certificate applies for a LFV 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 LFV. This would include the FAA's statement of compliance that the product meets the LFV's certification requirements. Upon acceptance, the LFV will issue the LFV type certificate.

(f) The transfer of the ICAO State of Design responsibilities for the type certificate to the LFV will be considered complete when the LFV 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 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 LFV-certificated model not listed on the FAA type certificate, the LFV 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 LFV'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.

(e) If the transferee of the type certificate applies for an FAA type certificate, the LFV will provide support to establish acceptance of the LFV type certificate as showing compliance to the applicable certification requirements of the FAA. This would include the LFV'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 LFV will reissue a type certificate in the name of the



certificate in the name of the transferee after the LFV 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 LFV type certificate, or if the transferee's LFV 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 LFV. The FAA will continue to fulfill ICAO State of Design responsibilities for those models only as long as an undue burden is not placed on the FAA.

transferee after the FAA type certificate issuance, unless the new holder does not wish to maintain LFV 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 LFV type certificate and the transferee does not apply for an additional approval, the LFV will not transfer ICAO State of Design responsibilities for the applicable models to the FAA. The LFV will continue to fulfill ICAO State of Design responsibilities for those models only as long as an undue burden is not placed on the LFV.

3.3.3.2 Transfer of Swedish Type Certificate from a Person in the United States to another Person in the United States. Upon notification of a transfer by a U.S. Swedish TC holder to another person in the United States, the LFV may notify the FAA to request technical assistance, if needed. The LFV will transfer the TC only when the LFV has been satisfied that the applicant is prepared and able to undertake the responsibilities in JAR-21N44 and that the TC has been transferred to the same applicant. LFV may request the FAA to provide technical assistance in making the determination that the new TC holder will be able execute the responsibilities of JAR-21N44.

3.3.3.3 Transfer of U.S. Supplemental Type Certificate to a

3.3.3.4 Transfer of Swedish Supplemental Type Certificate to a

### Person in Sweden.

- (a) The LFV 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 LFV the ICAO State of Design responsibilities for STCs within the scope of these Implementation Procedures. The LFV will not assume ICAO State of Design responsibilities for design changes to models that have not been found to meet the LFV certification requirements.
- (c) Upon notification of a transfer by a U.S. STC holder to a person in Sweden, the FAA Office that issued the STC will notify the LFV and establish procedures to transfer the ICAO State of Design responsibilities for the STC to the LFV. Each transfer will be accomplished on a case-by-case basis through a special arrangement that identifies each authority's responsibilities in the transfer process.
- (d) If a corresponding LFV STC already exists for the changed product, the transfer will apply to the model listed on that LFV STC.
- (e) If the transferee of the STC applies for an LFV STC, the FAA will provide support to establish acceptance of the FAA STC as showing compliance to the applicable certification

### 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 LFV 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.
- (c) Upon notification of a transfer by the Swedish STC holder to a person in the United States, the LFV 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 that 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 the model listed on that U.S. STC.
- (e) If the transferee of the STC applies for a U.S. STC, the LFV will provide support to establish acceptance of the LFV STC as showing compliance to the applicable certification requirements of the FAA. This would include the LFV's

requirements of the LFV. This would include the FAA's statement of compliance that the changed product meets the LFV's certification requirements. Upon acceptance, the LFV will issue the LFV STC.

(f) The transfer of the ICAO State of Design responsibilities for the STC to the LFV will be considered complete when the LFV 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 FAA will only reissue an STC in the name of the transferee after LFV 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 LFV 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 LFV STC for the same design change, the FAA will not transfer ICAO State of Design responsibilities for the applicable models to the LFV. 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.

#### 3.3.3.5 Transfer of U.S. STC from a Person in Sweden to Another

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 LFV will only reissue an STC in the name of the transferee 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 LFV approval The LFV 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 LFV will not transfer ICAO State of Design responsibilities for the applicable models to the FAA. The LFV will continue to fulfill ICAO State of Design responsibilities for the STC only as long as an undue burden is not placed on the LFV.

#### 3.3.3.6 Transfer of Swedish STC from a Person in the United States to

Person in Sweden. Upon notification of a transfer by a holder of a U.S. STC in Sweden to another person in Sweden, the FAA will reissue the STC in the name of the new approval holder.

Another Person in the United States. The LFV will transfer the STC only when the LFV has been satisfied that the applicant is prepared and able to undertake the responsibilities in JAR-21Subpart N118A and that the STC has been transferred to the same applicant. The LFV may request the FAA to provide technical assistance in making the determination that the new STC holder will be able execute the responsibilities of JAR-21N118A.

3.3.3.7 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 LFV as the exporting authority, the FAA or LFV shall immediately notify the other in writing of the action. The FAA and LFV, 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 LFV, 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.

### 3.3.3.8 Revocation or Suspension of a Type Certificate or Supplemental Type Certificate.

#### (a) LfV Revocation or Suspension.

In the event the LfV revokes a type certificate or supplemental type certificate of a product for which the LfV is the authority of the State of Design, the LfV 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 was “for cause” and the FAA concurs with the LfV’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 LfV should obtain and 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.

#### (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 LfV. The LfV, upon notification, will conduct an investigation to determine if action is required in Sweden. If the revocation or suspension was “for cause” and the LfV concurs with the FAA’s certificate action, the LfV will initiate revocation of the LfV type certificate or supplemental type certificate. The LfV may decide to assume continued airworthiness responsibilities if there is sufficient information for it to support the continued operational safety of the fleet in Sweden. In this case, the FAA should obtain and provide type design data as requested to the LfV. Final certificate action is at the sole discretion of the LfV.

### 3.3.3.9 Surrender or Withdrawal of a TSO or JTSO Design Approval.

(a) Surrenders. If an FAA TSO Authorisation holder, FAA Letter of Design Approval holder, or a JTSO Authorisation holder elects to surrender the TSO/JTSO approval issued by the FAA or LfV as the exporting authority, the FAA or LfV 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/JTSA approval is formally withdrawn by the exporting authority.

(b) Withdrawals. If a TSO/JTSA approval is withdrawn, the FAA or LFV, 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/JTSA 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/JTSA articles manufactured under its authority.

3.3.3.10 Change of Ownership of U.S. / LFV JTSA Authorisation. Upon notification of a change of ownership of the U.S. / LFV JTSA Authorisation holder, the LFV will be notified by the responsible FAA Directorate. Upon notification, the LFV will agree to the change of ownership, and re-issue the JTSA 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 LFV may provide technical assistance to each other when significant activities are conducted in either the United States or Sweden. 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 normally at least two weeks prior to each scheduled test.

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

(f) Upon completion of test witnessing on behalf of the requesting authority, the FAA or LFV 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 authorised designees or approved organizations.

(c) LFV 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. LFV or FAA requests will be sent to the LFV office or the FAA Directorate Manufacturing Inspection Office which has geographic responsibility for the location of the part or appliance. FAA and LFV 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 LFV 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 LFV for evaluation and disposition as to its effect on safety and the validity of the test under consideration. The FAA or LFV 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 FAA Protection of Proprietary Data and Freedom of Information Act (FOIA) Requests and LFV/Public Access to Official Documents under the Freedom of the Press Act.

- 4.4.0 Protection of Proprietary Data. Both authorities recognize that data submitted by a design approval holder may be the intellectual property of that holder or another person, and release of that data by the FAA or LFV is restricted. The FAA and LFV agree that they will not copy, release, or show proprietary data obtained from either authority to anyone other than an FAA or LFV employee without written consent of the design approval holder or other data submitter. This written consent should be obtained by the FAA or LFV 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. In exceptional cases the LFV may have to disclose proprietary data without the consent of the data submitter due to a court decision. However, see paragraph 4.4.2 below regarding the Secrecy Act and Secrecy Ordinance.
- 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 Sweden, the FAA will request the LFV'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 LFV must provide the written consent to the FAA. If release is objected to, a statement of the reasons must be furnished by the LFV to the FAA.
- 4.4.2 Public Access to Official Documents. The LFV often receives requests from the public, under the principle of public access to information held by Swedish authorities, to release information that the LFV may have in its possession. This principle is established in one of Sweden's constitutional laws - the Freedom of the Press Act – and any information that the LFV has in its possession must be disclosed with regard to the principle unless it falls within certain exceptions, including trade secrets, or financial or commercial data that would be considered confidential under the Secrecy Act and Secrecy Ordinance. When the LFV receives such a request for the release of information that has been submitted by a design approval holder in the U.S. and covered by these Implementation Procedures, the LFV will advise the FAA of any information received from the FAA and submitted to the LFV that might be released. The LFV may also request the FAA's assistance in determining if the person submitting the information would object to release and which

portions of the information received from that person or generated by the FAA might be withheld under the secrecy exceptions, if any.

- 4.5 Accident/Incident and Suspected Unapproved Parts Investigation Information Requests. When either the FAA or LFV 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 LFV or FAA and authorized for release. If urgency requires that either the FAA or LFV 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 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 LFV Aviation Safety Director, and a procedure shall be developed to address the situation. The procedure shall be mutually agreed upon by the FAA and the LFV 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 LFV.

5.1 It should be noted that, when the 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 LFV. The special arrangements co-developed between the authorities are listed in Appendix E.

## SECTION VI    AUTHORITY

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

FEDERAL AVIATION ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION  
UNITED STATES OF AMERICA

LUFTFARTSVERKET  
SWEDEN

By    signed by John J. Hickey

By    signed by Ingmar Hedblom  
for Arne Axelsson

Title    Director, Aircraft Certification  
Service

Title    Director, Aviation Safety  
Authority

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

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#### **FAA Headquarters - Aircraft Certification Service**

##### International Policy Office

AIR-40  
Room 600W  
c/o Wilbur Wright Building  
800 Independence Avenue, SW  
Washington, DC 20591  
Telephone: 1-202-385-8940  
Fax: 1-202-493-5144

##### Aircraft Certification International Policy Branch

AEU-100  
15 Rue de la Loi (1<sup>st</sup> Floor)  
B-1040 Brussels  
Belgium  
Telephone: 011-32-2-508-2710  
Fax: 011-32-2-230-6899

##### 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

**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  
6<sup>th</sup> Floor, East  
c/o Wilbur Wright Building  
800 Independence Avenue, SW  
Washington, DC 20591

Telephone: 1-202-385-8857  
Fax: 1-202-267-5032

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

*Mailing Address*

Delegation and Airworthiness  
Programs Branch  
AIR-140  
P.O. Box 26460  
Oklahoma City, OK 73125

Telephone: 1-405-954-4103  
Fax: 1-405-954-4104

*Office Address*

Delegation and Airworthiness  
Programs Branch  
AIR-140  
ARB, Room 304  
6500 S. MacArthur Blvd.  
Oklahoma City, OK 73169

## **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, MA 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, manned free balloons, and VLA.

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, MA 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: 1-817-222-5136

### 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

Room 301  
Kansas City, MO 64106-2641

Telephone: 1-816-329-4180

Fax: 1-816-329-4157

### 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: 1-425-227-1320



## 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: 1-316-946-4107

### 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  
1801 Lind Avenue, SW  
Renton, WA 98055-4056

Telephone: 1-425-917-6400  
Fax: 1-425-917-6590

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 LFV Offices

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#### **Luffartsverket**

#### Aviation Safety Authority, Head Office

Street Address:

Vikboplan 11

Norrköping  
Sweden

Mailing Address:

SE-601 79

Norrköping  
Sweden

Telephone: 46-11-19-2000

Fax: 46-11-19-2680

e-mail: [luffartsinspektionen@lfv.se](mailto:luffartsinspektionen@lfv.se)

This office may be contacted for matters related to individual Export Certificates of Airworthiness and Form 1.

Aviation Safety Authority, Surveillance Section

Street address:

Bergkällavägen 32  
Sollentuna  
Sweden

Mailing address:

Box 304  
SE-192 30 Sollentuna  
Sweden

Telephone: 46-8-797-6900  
Fax: 46-8-754-4210

e-mail: [tillsynssektionen@lfv.se](mailto:tillsynssektionen@lfv.se)

## APPENDIX C

### ***TYPE VALIDATION PROCESS***

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#### **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

<b>Project Phase</b>	<b>Objective</b>	<b>Beginning</b>	<b>Ending</b>
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

### List of Referenced Documents & Forms

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#### ***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 Notice 8110.70, *FAA/JAA Type and Post-Type Validation Principles*
5. FAA Order 8130.2, *Airworthiness Certification of Aircraft and Related Products*
6. FAA Order 8130.21, *Procedures for Completion and Use of the Authorized Release Certificate, FAA Form 8130-3, Airworthiness Approval Tag*
7. FAA Advisory Circular 21-2, *Export Airworthiness Approval Procedures*
8. ICAO Annex 8, *Airworthiness of Aircraft*
9. FAA Order 8120.2, *Production Approval and Certificate Management Procedures*
10. FAA Order 8100.7, *Aircraft Certification Systems Evaluation Program*
11. FAA Advisory Circular 21-20, *Supplier Surveillance Procedures*
12. FAA Advisory Circular 21-1, *Production Certificates*
13. Authorized Release Certificate, FAA Form 8130-3, *Airworthiness Approval Tag*
14. FAA Form 8130-4, *Export Certificate of Airworthiness*

15. FAA Form 8120-10, *Request for Conformity*

***LFV 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 Organisation Approval Procedures
8. JAA Joint Procedures
9. ICAO Annex 8, *Airworthiness of Aircraft*
10. JAA Form One, *Authorised Release Certificate*
11. LFV Form L-1424, *Certificate of Airworthiness for Export*
12. Bestämmelser för Civil Luftfart (BCL)
13. Verksamhetshandbok-Luftfartsverket (VHB-L)
14. LFV Primary Certifying Authority (PCA) Handbook

## APPENDIX E

### List of Special Arrangements

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1. Name of Special Arrangement:

Date of Issue:

2. Name of Special Arrangement:

Date of Issue:

3. Name of Special Arrangement:

Date of Issue: