

**Working Arrangement for CFM International SA**  
**between the**  
**Federal Aviation Administration (FAA) of the United States of America**  
**and the**  
**European Aviation Safety Agency (EASA) of the European Union**

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**Approved 15 September 2015 as part of FAA/EASA TIP**

**Signed without changes March 16, 2018**

## CHAPTER 1: INTRODUCTION

### 1.1 PURPOSE AND SCOPE

This is a Working Arrangement as defined in Section VII of the *Technical Implementation Procedures for Airworthiness and Environmental Certification* (hereafter referred to as the TIP) between the Federal Aviation Administration of the United States of America (FAA) and the European Aviation Safety Agency of the European Union (EASA). It will be used for the joint type certification and continued airworthiness management of the CFM International (or CFM in this document) engines with the objective that one programme will provide compliance with the applicable standards and requirements of both the European Union and the United States of America (USA). The FAA and the EASA remain completely responsible, however, for the regulatory oversight and management of the certificates they issue.

Consistent with the *Agreement between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety*, the FAA and the EASA are referred to as the Technical Agents in this Working Arrangement.

This Working Arrangement establishes the USA and France as joint States of Design (SoD) for all CFM engines with Type Certificates issued by the FAA and the EASA, as Technical Agents for the two SoDs. Because the FAA and the EASA type certificates are essentially the same, manufacturing may occur under either the FAA Production Certificate (PC) or the EASA Production Organisation Approval (POA) under both TCs. The arrangement covers procedures for certification, design changes including repair designs, and continued airworthiness. It supersedes the Management Plan dated 30 September 2011.

### 1.2 BACKGROUND

CFM is a joint venture between General Electric (GE) of the USA and Snecma (subsidiary of Safran) of France. CFM consists of two legal entities – CFM Incorporated in the USA and CFM SA in France. It is the result of an agreement between Snecma and GE that the respective Président Directeur Général and Vice President / Group Executive jointly signed on January 24, 1974.

CFM SA is the design approval applicant and type certificate holder, and as such, CFM is the entity responsible for the type certificates for the aircraft engines. CFM utilizes the staff and facilities of Snecma in France and GE in the USA. Within the framework of the work-sharing agreement between them, each partner is responsible for the design, manufacture and support of their assigned engine modules, parts, and components. As the Technical Agents for USA and France, respectively, the FAA and the EASA will conduct new and amended type certification approval programmes and exercise continued airworthiness activities jointly for all CFM engine designs.

Snecma and GE produce aircraft engines, modules, parts, and components as licensees of CFM both in France and in the USA. Therefore, the DGAC and the FAA rely on each other to provide the manufacturing oversight for the engines, modules, parts, and components produced in their respective jurisdictions. This results in a joint State of Manufacture. Engines, modules, parts, and components, produced under Snecma's Production Organisation Approval (POA) conform to both

a Type Certificate (TC) issued by the EASA and the corresponding TC issued by the FAA. Likewise, engines, modules, parts, and components produced under GE's Production Certificate (PC) conform to both a TC issued by the FAA and the corresponding TC issued by the EASA. The production related oversight will be conducted in accordance with Annex I of the *Agreement between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety*. This oversight will be carried out in the USA by the FAA Vandalia Manufacturing Inspection District Office (MIDO), and in France by the Direction Générale de l'Aviation Civile (DGAC-France). Appendix 2 to this Working Arrangement outlines the major elements of this production regulatory oversight activity.

Note: French production organisations oversight is performed on behalf of DGAC-France by an approved organisation under contract with DGAC-France.

Within this document, further on, the term "DGAC-France" is to be understood as encompassing the approved organisation delegated to function on behalf of the Direction Générale de l'Aviation Civile.

## CHAPTER 2: GENERAL

2.1 The intent of this Working Arrangement is the efficient regulatory oversight of CFM through work sharing between the FAA and the EASA on design approval and continued airworthiness activities and between DGAC-France and FAA on production regulatory oversight activities. As a result of a long history of cooperative management of CFM and a resultant high level of confidence and trust in each other, it is expected that the operating norm for all regulatory oversight tasks will be that it is assigned to one Technical Agent with the other Technical Agent accepting any findings without any further review.

2.2 As identified in Article 4 of the *Agreement between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety*, each Technical Agent will treat the findings of compliance made by the other Technical Agent under its system with the same validity as if that Technical Agent made it. As a European Design Organisation Approval (DOA) holder, CFM has certain privileges granted by the EASA as outlined in Appendix 3 that will be exercised under this Working Arrangement. The FAA authorized GE as an Organization Designation Authorization (ODA) holder. In accordance with CFM letter in Appendix 4, the FAA can delegate the management of CFM certification projects to the GE ODA. Each Technical Agent will inform the other of any changes to their respective systems that relate to CFM engines.

2.3 The FAA and the EASA will inform each other of any changes in their respective organizations that may impact any of the procedures outlined in this Working Arrangement. The offices responsible for this Working Arrangement are identified in Appendix 1. These offices are responsible for control of the document, including the processing of any amendments.

2.4 For an efficient management of CFM certification projects and the minimization of work duplication, the Technical Agents will delegate the approval of various documents to the other Technical Agent or accept directly the approval of the other Technical Agent to the maximum extent practicable. For example, there should always be delegation or direct acceptance to cover those documents where the Title 14, Code of Federal Regulations (14 CFR) Part 33 and Certification Specifications for Engines (JAR-E or CS-E) standards are considered to be equivalent. Documents approved in this manner are considered to be jointly approved by both Technical Agents. In exercising delegation, the Technical Agents will strive to perform tasks locally, as stated under paragraph 6.0.1 of the TIP.

2.5 Joint management of regulatory oversight responsibilities based on mutual trust and confidence, maximizing work sharing is the overriding philosophy of this Working Arrangement. The Technical Agents will ensure timely resolution to any conflicts that may develop between the Technical Agents using a joint resolution process that is consistent with those in applicable sections of the TIP (reference paragraphs 1.1.4(c) and 3.1.4(c)), where applicable.

## **CHAPTER 3: DESIGN APPROVAL ACTIVITIES**

### **3.1 TYPE CERTIFICATION - GENERAL**

The FAA and the EASA are responsible for all design approvals of CFM products.

#### **3.1.1 CFM engine Type Design:**

CFM maintains a unique engine configuration that is recorded into a unique Model List and associated Part Lists. After certification, these Part Lists will be referenced in the EASA and the FAA engine Type Certificate Data Sheets (TCDSs). The referenced Part List for each CFM engine model will reflect identical engine configurations on the FAA and on the EASA TCDSs that can be produced under GE's PC or under Snecma's POA, or both.

#### **3.1.2 New Technology and New Methods of Compliance (MOC)**

The FAA and the EASA will strive to have joint technical meetings with CFM to familiarize both Technical Agents on new technology or new MOCs well in advance of project application. The intent of these joint technical meetings is to sufficiently identify potential regulatory challenges and come to agreement on a general approach to address these challenges during certification, thereby minimizing the need for joint involvement during certification to the extent practicable.

#### **3.1.3 Certification Basis and Special Requirements**

The FAA and the EASA will jointly establish their certification basis in accordance with their respective certification procedures, including any special requirements (for example, special conditions, equivalent level of safety findings, exemptions, and deviations). In order to achieve as much commonality as possible, each Technical Agent will advise the other prior to proposing special requirements. Similarly, any request from CFM for special requirements will be reviewed and discussed jointly by the FAA and the EASA before responding to CFM.

For each engine design approval project, CFM will develop a certification programme covering the envelope of the FAA and the EASA certification basis. A Compliance Check List (CCL), covering the requirements of both certification basis, shall be established by CFM.

#### **3.1.4 Meetings**

The FAA and the EASA will conduct joint type certification board meetings with CFM including preliminary and final type certification board meetings. Other interim type certification board meetings will be convened with CFM as deemed necessary. The FAA and the EASA may conduct joint technical meetings with CFM. These joint technical meetings should include both engineering and manufacturing inspection specialists from the USA and Europe, as appropriate. The FAA and the EASA shall establish the schedule, agenda and location of the meetings based on input from CFM.

Records of tele-conferences or summary minutes of any meetings of one Technical Agent with CFM should be furnished to the other Technical Agent.

### **3.1.5 Joint Certification Work Plan**

The FAA and the EASA will establish a joint certification work plan, based on the CCL submitted by CFM, for each new engine model certification. For each CCL item, the FAA and the EASA will jointly agree to assign oversight responsibility to one Technical Agent. In fulfilling the work sharing philosophy of this Working Arrangement, it is expected that most CCL items will be assigned to one Technical Agent who may rely on its system (CFM DOA or GE ODA, as applicable).

The criteria for Validation Items identified in Appendix C of the TIP, should be used as a guide to identify those CCL items that require joint the FAA and the EASA involvement. It is expected that the number of items requiring joint involvement will be less than the number of validation items for a comparable type validation project. This is a result of the increased collaboration between Technical Agents, commitment of CFM to develop MOCs that envelope both certification basis, and the early pre-application involvement of both Technical Agents in new technology and new MOCs.

It is important that the information associated with CCL items requiring joint approval be detailed and that proper communication is established between the Technical Agents. The Technical Agents should agree on one document (Issue Paper or Certification Review Item) that will be communicated to CFM and used for documenting resolution to a certification issue requiring joint approval.

Every effort shall be made to delegate oversight in the case of unique requirements imposed by one Technical Agent that is associated with compliance activity (for example, review of test plans, witnessing tests, review of analyses and other substantiation data) by the CFM partner company under the jurisdiction of the other Technical Agent.

### **3.1.6 Conformity of Test Set-ups**

If the engines, modules, parts, or components which are presented for certification tests in one jurisdiction contain some sub-elements that are coming from the other Technical Agent's jurisdiction, those sub-elements must be accompanied by Authorized Release Certificates for conformity only (certification prototype) (FAA Form 8130-3 or EASA Form 1), including, as required, the disposition of all deviations and non-conformances. Prior to conducting a test, validation of conformance will be documented in accordance with the procedure of the Technical Agent in whose jurisdiction the test is performed.

### **3.1.7 Units**

All documents containing technical data must be submitted with the data in units acceptable to both Technical Agents.

### **3.1.8 Issuance of Type Certificates**

FAA Type Certificates: Upon receipt of a CFM application for a new or amended type certificate, the FAA will conduct a certification project. After the FAA finds that compliance with the applicable certification basis, as defined under paragraph 3.1.3 of this Working Arrangement, has

been demonstrated, the FAA will grant to CFM a Type Certificate in accordance with 14 CFR 21.21.

EASA Type Certificate: Upon receipt of a CFM application for a new or amended type certificate, the EASA will conduct a certification project. After the EASA finds that compliance with the applicable certification basis, as defined under paragraph 3.1.3 of this Working Arrangement, has been demonstrated, the EASA will grant to CFM a Type Certificate in accordance with Part 21, 21.A.21.

### **3.2 CHANGES to TYPE CERTIFICATE**

#### **3.2.1 Proposed Changes that Introduce New Engine Models**

See section 3.1 of this Working Arrangement for proposed changes in type design requiring an application for a new or amended type certificate (Ref. 14 CFR 21.19 and Part 21, 21.A.19).

#### **3.2.2 Proposed Changes that Do Not Introduce New Engine Models**

Proposed changes in type certificate not considered by the FAA and the EASA to be so extensive as to require an application for a new engine model are to be classified as either a "retained change" or a "non retained change".

Minor and major changes in type design are defined in 14 CFR 21.93 and Part 21, 21.A.91. Classification of changes are to be accomplished according to the procedures of the concerned Technical Agent.

- A "retained change" is any major change in type design that may affect any limit or condition shown on the applicable Type Certificate Data Sheet; introduces new or reduced life limits; may affect any previously issued FAA or EASA Airworthiness Directive (AD); may affect engine installation interchangeability or engine component interchangeability; all changes to engine installation instructions and engine operating instructions; or a change designated as such by the FAA or the EASA. The FAA and the EASA will approve all "retained changes" in accordance with the procedure of the respective Technical Agent.
- A "non retained change" is any major change in type design that is not considered to be a "retained change".
- Minor changes in type design are "non retained changes".
- A "non retained change" will be processed in the jurisdiction of origin in accordance with existing local procedures and delegations or privileges, as applicable, and will be considered approved on behalf of the Technical Agent of the other jurisdiction. The approval is made against both the FAA and the EASA certification basis.

### **3.3 REPAIRS**



Repair data designed by CFM for products for which CFM holds the Type Certificate, will be processed in the jurisdiction of origin of the data in accordance with existing local procedures and delegations or privileges, as applicable.

In accordance with the *Agreement between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety*, repair data will be considered approved on behalf of the Technical Agent of the other jurisdiction. The approval or acceptance is made against both the FAA and the EASA certification basis.

### **3.4 SURRENDER OR ABANDONING OF ENGINE TYPE CERTIFICATE**

Each Technical Agent will advise the other prior to revoking a CFM engine Type Certificate.



## **CHAPTER 4: CONTINUED AIRWORTHINESS**

The FAA and the EASA are jointly responsible for assuring the continued airworthiness of CFM engines.

### **4.1 UNSAFE CONDITIONS**

During the service life of CFM engines, corrective actions may be required to correct unsafe conditions that are likely to exist or develop in CFM engine type design. Such action will be implemented by:

- 1) the FAA by the issuance of an Airworthiness Directive in accordance with the existing procedures of 14 CFR part 39.
- 2) the EASA by the issuance of an Airworthiness Directive in accordance with EU Commission Regulation 0748/2012 Part 21, 21.A.3B.

Both the FAA and the EASA will comply with the Annex 8, Part II, Chapter 4.2.1.1(a) to the Convention on International Civil Aviation which requires the State of Design to transmit mandatory continuing airworthiness information to the State of Registry.

#### **4.1.1 Uniformity of Mandatory Actions**

The Technical Agents will generally identify and agree upon potentially unsafe conditions occurring on CFM type designs jointly and they will work with CFM to have CFM identify appropriate corrective actions.

Uniformity of mandatory actions to assure continued airworthiness of CFM products is considered highly desirable. It is recognized, however, that the FAA responsibilities and procedures under 14 CFR part 39 and similar constraints on the EASA under Part 21, 21.A.3B may, in some instances, preclude such uniformity. In order to achieve as much commonality as possible, each Technical Agent will advise the other as the Airworthiness Directive (AD) progresses through their process.

#### **4.1.2 Delegation of Mandatory Actions**

The Technical Agents may jointly agree to delegate all or part of the mandatory action process to one Technical Agent. In such instances, the Technical Agent that delegates shall accept the decisions made by the other Technical Agent to the maximum extent allowed by their AD procedures.

#### **4.1.3 Notification to States of Registry**

For aircraft of registry other than USA or an EU Member State, the Technical Agents will notify the affected States of Registry of the mandatory action required in accordance with existing procedures of ICAO Airworthiness Annex 8. Inquiries by any State of Registry on mandatory actions should be referred to the Technical Agent that led the type validation in that State.

### **4.2 FAILURES, MALFUNCTIONS, AND DEFECTS**

The FAA and the EASA will review failures, malfunctions and defects reported by CFM, and GE and Snecma as licensees of a type certificate holder. Failures, malfunctions, and defects are reported to the FAA in accordance with 14 CFR 21.3, and to the EASA in accordance with Part 21, 21.A.3.

The FAA and the EASA will review and provide joint approval or concurrence, as appropriate, for any resulting design changes, inspections, and corrective actions proposed by CFM.

#### **4.3 SERVICE DIFFICULTIES**

Rapid and thorough transmission of information pertaining to service difficulties between the Technical Agents is considered of prime importance in order to resolve any airworthiness concern as quickly as possible. It is recognized that such reports will also be received by the Technical Agents from sources other than CFM, such as operators, GE, or Snecma. The Technical Agent receiving such a report will relay it to its counterpart Technical Agent without delay, unless it is known that the other Technical Agent also is being or has been provided with the information.

Initial investigative inquiries from each Technical Agent will be to CFM, as the type certificate holder. Copies of all correspondence related to service problems will be provided to the counterpart Technical Agent contact listed in Appendix 1. To the extent deemed necessary, there will be subsequent coordination among the FAA, the EASA, and CFM. In this regard, the FAA and the EASA may also communicate with Snecma or GE, acting as the production organizations for CFM.

#### **4.4 ACCIDENT INVESTIGATION**

Either the FAA or the EASA, when involved in an accident investigation or having knowledge pertaining to an accident involving an aircraft equipped with CFM engines, will provide the other Technical Agent with all available information related to engine performance in a timely manner.

#### **4.5 RESOLUTION OF DESIGN NON-COMPLIANCE ISSUES**

Following the issuance of a design approval, in the event that a design non-compliance issue is identified, the FAA or the EASA will send the official notification directly to CFM, with a copy to the other Technical Agent. Subsequent follow-on enforcement activity, if necessary, will be sent to CFM by their cognizant Technical Agent. In order to achieve as much commonality as possible, each Technical Agent will advise the other prior to accepting corrective action proposed by CFM, and closing the design non-compliance issue.

#### **4.6 INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA)**

FAA: The ICA, included in the engine maintenance manual and engine overhaul manual, submitted in support of initial certification, will be approved or accepted as applicable by the FAA prior to delivery of the first aircraft with the engine installed or issuance of a standard certificate of airworthiness for the aircraft with the engine installed, whichever occurs later. Subsequent GE responsible changes to the manuals will be approved or accepted as applicable by the FAA or designated representatives. The "Airworthiness Limitation Section" will be approved by the FAA in accordance with applicable policies and procedures.

EASA: Except for the "Airworthiness Limitations Section" which is formally approved by the EASA, and except for ICA (Service Bulletin) related to an EASA Airworthiness Directive, changes to the ICA (including Service Bulletins) made by CFM after engine certification will be approved under the privileges of CFM DOA.

## **CHAPTER 5: THIRD COUNTRY VALIDATION of ENGINE TYPE CERTIFICATES**

Considering that the FAA and the EASA conduct design approval programmes and exercise continued airworthiness activities jointly for all CFM engine designs, both the FAA and the EASA will support CFM for the validation of the engine type certificates in third countries.

FAA: If CFM requests the validation of the FAA engine type certificate, the request for type validation support must be made to the FAA according to the applicable FAA procedure.

EASA: If CFM requests the validation of the EASA engine type certificate, the request for type validation support must be made to the EASA according to the applicable EASA procedure.

The Technical Agent being requested to support type validation will review the request along with any pertinent agreement with that country. If there are issues encountered during the review, the Technical Agent will advise CFM and the other Technical Agent of the issues. The Technical Agents and CFM will discuss and agree upon an approach to support the type validation request.

Note: The FAA and the EASA each have bilateral agreements, working arrangements, working procedures, special arrangements, etc. with a number of the ICAO member States. Exporting engines to third countries must take these agreements and arrangements into consideration.

## CHAPTER 6: TERMINATION AND APPROVAL

### 6.1 TERMINATION

Either Party may at any time give written notice to the other Party of its decision to terminate this Working Arrangement. The Working Arrangement shall terminate three months following the date of receipt of the notice by the other Party, unless the said notice of termination has been withdrawn by mutual agreement before the expiry of this period.

### 6.2 APPROVAL

The Parties agree to the provisions of this Working Arrangement as indicated by the signature of their duly authorized representatives.

Signed in duplicate in the English language.

For the Federal Aviation:

Alvando de Beker

Date: March 16, 2018

Place: Washington DC

For the European Aviation Safety  
Administration: Agency:

J. F. Woods

Date 16 March 2018

Place: Cologne

## APPENDIX 1: FAA / EASA / DGAC- France Points of Contact

Primary Contacts for Certification and Continued Airworthiness Subjects	
EASA	FAA
<p>EASA – Certification Directorate Postfach 10 12 53 50452 Cologne Germany</p> <p>Propulsion, Parts &amp; Appliances Department (Certification and Continued Airworthiness)</p> <p>Propulsion Section Manager Phone +49 221 89990 4003 Fax +49 221 89990 4503 Email: <a href="mailto:propulsion@easa.europa.eu">propulsion@easa.europa.eu</a></p> <p>Design Organisations Department (DOA)</p> <p>Head of Design Organisation Department Phone +49 221 89990 4060 Fax +49 221 89990 4560 Email: <a href="mailto:doa@easa.europa.eu">doa@easa.europa.eu</a></p>	<p>FAA - Engine Certification Office Engine and Propeller Directorate 12 New England Executive Park Burlington, MA 01803 USA</p> <p>Engine Certification Office</p> <p>Manager, Engine Certification Office Phone +1 781 238 7140 Fax +1 781 238 7199</p> <p>ECO Focal Points <a href="http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/air/directorates/field/engine_prop/eco/">http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/air/directorates/field/engine_prop/eco/</a></p>

Primary Contacts for Production Regulatory Oversight Subjects	
DGAC-France / OSAC	FAA
<p>DGAC - DSAC/NO/AGR 50 rue Henry Farman 75720 Paris Cedex France</p> <p>Mrs Sylvie Morales Phone +33 1 5809 4503 Fax +33 1 5809 4319 Email: <a href="mailto:sylvie.morales@aviation-civile.gouv.fr">sylvie.morales@aviation-civile.gouv.fr</a></p>	<p>FAA - Small Airplane Directorate Vandalia MIDO 303 Corporate Center Drive, STE 312 Vandalia, OH 45377 USA</p> <p>Manager, Vandalia MIDO Phone +1 937 898 3991 Fax +1 937 898 8717</p>

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Primary Contacts for CFM International SA Working Arrangement	
EASA	FAA
<p>EASA – Strategy &amp; Safety Management Directorate Postfach 10 12 53 50452 Cologne Germany</p> <p>Head of International Cooperation Department Phone: +49 221 89990 5007 Fax: +49 221 89990 5507 Email: <a href="mailto:Erick.Ferrandez@casa.europa.eu">Erick.Ferrandez@casa.europa.eu</a></p>	<p>International Policy Office, AIR-40 Aircraft Certification Service 800 Independence Avenue, SW Washington, DC 20591 USA</p> <p>Manager, International Policy Office Phone: +1 202 385 8950 Fax: +1 202 493 5144</p>

## **APPENDIX 2: Production Regulatory Oversight**

The FAA and DGAC-France are respectively responsible for regulatory oversight of GE and Snecma as production approval holders.

In carrying out this Working Arrangement, the FAA and DGAC-France may utilize representatives delegated to function on their behalf, including approved organizations, where applicable.

### **A2.1 DIVISION OF PRODUCTION RESPONSIBILITIES**

The production of CFM engines, modules, parts, and components to be used in commercial revenue service is divided between Snecma and GE in accordance with their respective production license agreements with CFM. Modules, parts, and components produced by Snecma and GE will be utilized in the assembly of complete engines by either Snecma or GE, and used as replacement or modification parts for either GE or Snecma assembled engines.

### **A2.2 QUALITY CONTROL SYSTEM**

The quality control system utilized by both Snecma and GE for CFM engine fabrication, assembly, inspection, and test operations shall be acceptable to both the FAA and the DGAC-France.

The DGAC-France and the FAA will insure that records of deviations are available at both production facilities.

### **A2.3 SURVEILLANCE**

The FAA and DGAC-France will maintain continuous communication and exchanges of information for the purpose of performing adequate surveillance of manufacturing of CFM engines. In particular, in order to ensure that both GE and Snecma's quality assurance systems remain equivalent, information on production system performance will be shared between the authorities as deemed necessary.

FAA: The FAA has regulatory responsibility for surveillance of GE's production approval for the manufacturing of CFM engines, modules, parts, and components under FAA type certificate. This responsibility includes surveillance of modules, parts and components manufactured by GE under their Production Certificate (PC) and exported to France. The FAA will hold GE accountable under their PC for any modules, parts and components produced by GE including those exported to France for final assembly in CFM engines by Snecma.

DGAC-France: The DGAC-France has regulatory responsibility for surveillance of Snecma's production for the manufacturing of CFM engines, modules, parts, and components under the EASA type certificate. This responsibility includes surveillance of modules, parts and components manufactured by Snecma under their Production Organisation Approval (POA) and exported to the United States. The DGAC-France will hold Snecma accountable under their POA for any modules, parts and components produced by Snecma including those exported to the United States for final assembly in CFM engines by GE.

### **A2.4 RESOLUTION OF MANUFACTURING NON-COMPLIANCE ISSUES**

In the event that a manufacturing non-compliance issue arises, FAA or DGAC-France will send the official notification directly to CFM, with a copy to the other Technical Agent. Subsequent follow-on enforcement activity, if necessary, will be sent to the responsible approval holder by their cognizant Technical Agent. In order to achieve as much commonality as possible, each Technical Agent will advise the other prior to accepting corrective action proposed by CFM, and closing the non-compliance issue.

## **A2.5 CERTIFICATES OF AIRWORTHINESS FOR EXPORT**

a) The FAA will provide certificates of airworthiness for export (Form 8130-3) of complete engines from GE facilities and authorized release certificates (airworthiness approval tags) (Form 8130-3) for export of articles from GE's approved production system, including GE-approved suppliers.

b) The Snecma Production Organisation (POA) as approved by DGAC-France will provide authorised release certificates (EASA Form 1) for export of complete engines from Snecma facilities and for export of parts and appliances from Snecma's approved production system, including approved suppliers.

The FAA and the EASA certificates will make reference to both the FAA engine Type Certificate and the EASA engine Type Certificate.

## **A2.6 QUALITY ASSURANCE ISSUES**

a) The FAA will inform the DGAC-France in writing of production regulatory oversight issues applicable to CFM engines produced under GE's approved production system, including GE-approved suppliers, on a periodic basis.

b) The DGAC-France will inform the FAA in writing of production regulatory oversight issues applicable to CFM engines produced under Snecma's approved production system, including Snecma-approved suppliers, on a periodic basis.

The periodicity of this exchange of information will be agreed between the FAA and DGAC-France.

## **APPENDIX 3: CFM International SA DOA PRIVILEGES**

### **A3.1 CFM INTERNATIONAL SA DESIGN ORGANISATION APPROVAL (DOA) HOLDER PRIVILEGES**

On March 25, 2005, CFM International SA was granted an EASA Part 21, Section A, Subpart J Design Organisation Approval (DOA). As a result, it is accorded the privileges outlined in the attached EASA Terms of Approval 21J.086, as of the date of this Working Arrangement.

## **APPROVAL CERTIFICATE**

**EASA.21J.086**

Pursuant to Regulations (EC) 1592/2002 and (EC) 1702/2003 and subject to the conditions specified below, the Agency hereby certifies

### **CFM International S.A.**

2, Boulevard du Général Martial Valin  
75015 Paris  
France

as a DESIGN ORGANISATION

approved according to Part 21, Section A, Subpart J

#### **CONDITIONS :**

1. The approval is limited to that specified in the enclosed Terms of Approval, and
2. This approval requires compliance with the procedures specified in the Design Organisation Handbook, ref. CFM OP T-031, in the latest revision, and
3. This approval is valid whilst the approved Design Organisation remains in compliance with Part 21, Section A, Subpart J.
4. Subject to compliance with the foregoing conditions, this approval shall remain valid until surrendered or revoked.

**For the European Aviation Safety Agency,**

**Date of issue: 25 March 2005**

**Patrick GOUDOU**  
**Executive Director**



Terms of Approval 21J.086  
Issue 3, 4 May 2015

CFM International S.A

## Terms of Approval Design Organisation Approval Certificate EASA.21J.086

### 1 Scope of approval

This Design Organisation Approval has been granted for:

- designing engines and changes and repairs therein in accordance with the applicable type certification basis and environmental protection requirements
- demonstrating and verifying the compliance with the applicable type-certification basis and environmental protection requirements, and
- demonstrating to the Agency this compliance.

### 2 Categories of products

Turbine engines.

### 3 List of products

CFM56-2/3	Series	(TC E.066)
CFM56-5	Series	(TC E.067)
CFM56-5B/-5C	Series	(TC E.003)
CFM56-73	Series	(TC E.004)

Type(s) for which CFM International S.A is undertaking type-certificate applicant's actions and obligations:

LEAP-1A & 1C models  
LEAP-1B models

### 4 Privileges

- a) The holder of this design organisation approval shall be entitled to perform design activities under Part 21 and within its scope of approval.
- b) Subject to 21.A.257(b), the Agency shall accept without further verification compliance documents submitted by the holder of this design organisation approval for the purpose of obtaining a type certificate or approval of a major change to a type design.
- c) The holder of this design organisation approval shall be entitled, within its terms of approval and under the relevant procedures of the design assurance system:
  1. to classify changes to type design and repairs as "major" or "minor";
  2. to approve minor changes to type design and minor repairs;
  3. to issue information or instructions containing the following statement: "The technical content of this document is approved under the authority of DOA ref. EASA.21J.086".



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Terms of Approval 211.086  
Issue 3, 4 May 2015

CFM International S.A.

5. to approve the design of major repairs to products for which it holds the type-certificate;

## 5 Limitations

[See in 3, above]

Date of issue 04 May 2015

  
Dominique ROLAND  
HEAD of Design Organisations Department



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## **APPENDIX 4: USE OF GE ODA**

### **A4.1 USE BY FAA OF THE GE ODA UNIT FOR MANAGING CFM CERTIFICATION PROJECTS**

Mr. Thomas Boudreau, Manager  
Engine Certification Office  
Federal Aviation Administration

Mr. Kevin Dickert, GE ODA Organization Management Team Leader  
Engine Certification Office  
Federal Aviation Administration

Reference: GE ODA Number: ODA-000080-NE

Dear Messrs. Boudreau and Dickert:

Recently, the General Electric Company (GE), one of the CFM International consortium partners received an Organization Designation Authorization (ODA) from the FAA. GE receives ODA authorization ODA-400340-NE on 20 December 2013.

CFM, and not GE, is the applicant for all current, in process, and planned CFM related FAA and EASA certification projects. In light of the authority delegated to GE, CFM respectfully asks the FAA to approve use of the GE DCA in managing CFM certification projects.

In making this request, CFM hereby acknowledges that it will respect decisions of the GE ODA where GE is the design responsible company, and that the FAA and EASA agreement per the CFM Management Plan takes precedence where SNECMA is the design responsible company. CFM therefore requests use of GE ODA procedures in Type and Amended Type Certification Projects to make determinations of compliance within the scope of the GE ODA authority. This request is contingent on agreement by the FAA ECO that SNECMA generated deliverables requiring FAA approval be retained by the FAA ECO or delegated to EASA for approval (also applicable to SNECMA data within a common document, e.g. Recommendation Report). CFM will provide copies of all approved certification reports to the GE ODA for the purpose of records management.

Approval of CFM deliverables, where GE is the design responsible company, would be processed through GE ODA procedures.

CFM airworthiness documents that are "FAA Related" (require FAA approval) per the FAA EASA Management Plan, where SNECMA is the design responsible company and where there is GE design responsible involvement, would be processed via GE ODA procedures for the GE contribution. The GE ODA will supply to CFM (SNECMA) the UPN (unit project number) and the ODA forms and documentation (including GE design responsible data) required by FAA Order 8100.15B and the GE ODA Procedures Manual for transmittal to the FAA.

CPI International One Neumann Way, Cincinnati, Ohio 45215


LAKE CHARLES FISH AND WILDLIFE MANAGEMENT DISTRICT


January 6, 2014  
Page Two

CFM airworthiness documents (SP, CTR, CR, and major CADs (design changes)) that are "FAA Retained" (require FAA approval) per the FAA EASA Management Plan, where SNECMA is the design responsible company and where there is no GE design responsible involvement, would be transmitted by CFM (SNECMA) directly to the FAA for approval. The GE ODA will only supply to CFM (SNECMA) the UPN (and project number) and the ODA forms and documentation required by FAA ODA Order 8100.15B and the GE ODA Procedures Manual for transmittal to the FAA.

GE submits that the requests made in this letter fit squarely within the FAA's stated aim for the ODA program to provide more effective certification services. We expect the details provided will enable your favorable response, but should additional information be required please contact Mr. Paul A. Hill at (513) 552-2151 or paul.hill@ge.com.

Sincerely yours,

  
Chaker Chahrouh  
Executive Vice-President  
CFM International

  
Cedric Goubert  
Executive Vice-President  
CFM International

cc Mr. K. Doering, EASA  
Mr. P. Hill, GE ODA Lead Administrator  
SNECMA Airworthiness (Dominique Bouvier)  
CFM ODA Office (Muriel Perrot)

CFM International, One Neumann Way - Mail Drop 17, Cincinnati, Ohio 45215

CFM, GE and the EASA are not responsible for EASA's interpretation of the EASA regulations and the EASA's interpretation of the EASA regulations.





U.S. Department  
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Federal Aviation  
Administration

Engine and Propeller Directorate

Engine Certification Office  
12 New England Caspary Park  
Burlington, MA 01933  
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DEC 9 9 2014

Chaker Chahrouh  
CFM International  
1 Neumann Way  
Cincinnati, OH 45215

Cedric Goubet  
CFM International  
1 Neumann Way  
Cincinnati, OH 45215

Dear Messrs Chahrouh and Goubet:

Subject: Management of CFM International (CFM) Certification Programs by General Electric's (GE's) Organization Designation Authorization

We received your letter, dated January 6, 2014, requesting that the FAA allow GE's ODA to manage CFM certification programs on behalf of the FAA. In your letter, you stated that the request was contingent on the Engine Certification Office's agreement that SNECMA generated certification documents that require FAA approval would not be delegated to GE's ODA for approval.

We concur with the use of GE's ODA to manage CFM certification programs as it allows more efficient use of FAA resources. We further agree that CFM may submit SNECMA generated certification reports directly to the FAA for approval. However, because GE's ODA is capable of approving such documents and it is CFM's choice to submit them directly to the FAA, such certification reports will receive priority similar to those submitted by applicants without delegation privileges.

Should you have any questions about our response or desire further discussion on this topic, please contact Kevin Dickert at [kevin.dickert@faa.gov](mailto:kevin.dickert@faa.gov) or 781-238-7117.

Sincerely,

Shane Cook  
Acting Manager, Engine Certification Office

cc: Paul Hill, GE ODA Lead Administrator

