

EUROPEAN AVIATION SAFETY AGENCY AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT



Federal Aviation Administration

The Aviation Safety Agreement Between The United States and The European Community EASA/FAA Workshops in the US, September 2011

Introduction to the U.S./EC Aviation Safety Agreement

AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE EUROPEAN COMMUNITY ON COOPERATION IN THE REGULATION OF CIVIL AVIATION SAFETY







Introduction

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NEW Agreement & Annexes

Maintenance Annex Guidance

- Section A Authority to Authority
- Section B U.S. Based Repair Stations
- Section C EU Based Maintenance Organisations

Supplement Example



What is the Bilateral Agreement?

- Bilateral agreement
 - It is a cooperative agreement between the United States and the European Union
 - Reduces redundant regulatory oversight
- Minimize duplication of effort, increase efficiency
 - Build a partnership of competent civil aviation safety regulatory authorities



What is a Bilateral Agreement? (Continued)

Bilateral Agreement

- Does not relieve FAA, EASA and the AA's of their statutory responsibilities to "make findings of compliance" with regulations; however...
- Does provide an alternative means for the Authorities to make their findings," using the system of the other signatory country to the maximum extent practicable



Principles of Bilateral Agreements

Bilateral Agreement

- Is between the United States and European Union, not industry
- Promotes reciprocal acceptance of findings and approvals, not mutual recognition
- Is based on systems that produce equivalent results, though processes and procedures may be different
- > Is based on acceptance of a system.





The U.S./EU Aviation Safety Agreement

- The agreement with the European Union is an agreement "On Cooperation in the Regulation of Civil Aviation Safety."
 - > The Agreement and it's Annexes may be found at
 - FAA: <u>http://www.faa.gov/aircraft/repair/</u>
 - EASA: http://easa.europa.eu/approvals-andstandardisation/organisation-approvals/CAOforeign-part-145-organisations-located-in-theunited-states.php



The Executive Agreement and its Annexes are BINDING in international law



Introduction to the New U.S./EU Aviation Safety Agreement

За Европейската общност Por la Comunidad Europea Za Evropské společenství For Det Europæiske Fællesskab Für die Europäische Gemeinschaft Euroopa Ühenduse nimel Για την Ευρωπαϊκή Κοινότητα For the European Community Pour la Communauté européenne Per la Comunità europea Eiropas Kopienas vārdā Europos bendrijos vardu az Európai Közösség részéről Ghall-Komunità Ewropea Voor de Europese Gemeenschap W imieniu Wspólnoty Europejskiej Pela Comunidade Europeia Pentru Comunitatea Europeană Za Európske spoločenstvo za Evropsko skupnost Euroopan yhteisön puolesta På Europeiska gemenskapens vägnar

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Aviation Safety Agreement covers:

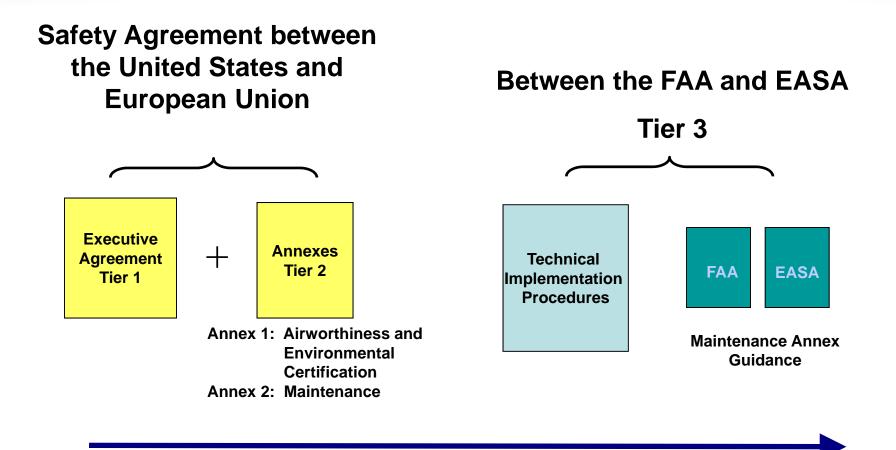
- Airworthiness and environmental certification,

and

- Maintenance



Components of the <u>New</u> Aviation Safety Agreement Format



Level of detail increases with each tier



- The Executive Agreement is an umbrella agreement defining U.S./EU cooperation in aviation safety.
- It is unique in that the agreement is with the EU, not with an individual country
 - Applicable to the United States and EU Member States contained in Annex 2, Appendix 2
- In other words, this agreement is the,
 - first aviation safety bilateral that is multilateral in its scope
 Aviation Safety





- The purposes of this Agreement are to:
 - Enable the reciprocal acceptance of findings of compliance and approval issued by the Technical Agents and Aviation Authorities
 - Promote a high degree of safety in air transport
 - Ensure the continuation of the high level of regulatory cooperation and harmonization between the Unites States and the European Union



- The scope of cooperation under this Agreement is:
 - Airworthiness approvals and monitoring of civil Aeronautical products.
 - Environmental testing and approvals of civil aeronautical products; and
 - Approvals and monitoring of maintenance facilities



- > New provisions in Executive Agreement:
 - Regulatory cooperation
 - This requires the Technical Agents to develop and adopt procedures for regulatory cooperation
- Formal oversight board
 - Bilateral Oversight Board (BOB) defined in Article 3 of the executive agreement
- > Detailed dispute resolution provisions
- Procedures for the suspension of acceptance of findings of compliance and approvals
- Additional details in the Annexes to the Agreement



The Executive Agreement contains 19 articles and two annexes.

- Annex 1 : Airworthiness and Environmental Certification
- > Annex 2 : Maintenance

Annex 2 of the Agreement mandates the JMCB to develop Guidance Material This guidance is known as the Maintenance Annex Guidance (MAG)



Executive Management - BOB

- The Bilateral Oversight Board is composed of representatives of:
 - The United States of America, which shall be the Federal Aviation Administration (co-chair)
 - The European Union, which shall be the European Commission (co-chair) assisted by the European Aviation Safety Agency
- The Certification Oversight Board (COB) and the Joint Maintenance Coordination Board (JMCB) report to the BOB



Executive Management - COB

- The Certification Oversight Board is established under Annex 1 of the Agreement as a joint technical coordination body, that includes:
 - Representatives from each Technical Agent responsible for airworthiness and environmental certification, quality management systems and rulemaking.



Executive Management - JMCB

- The Joint Maintenance Coordination Board is established under Annex 2 of the Agreement as a joint technical coordination body which has been established under the joint leadership of:
 - The EASA Director responsible for Organisation Approvals and
 - > the FAA Director of Flight Standards (AFS-1)



JMCB General

Joint Maintenance Coordination Board Leadership

EASA

Director responsible for Organization Approvals



FAA

Director of Flight Standards (AFS-1)





Joint Maintenance Coordination Board

The JMCB is required to:

- Meet at least once a year to ensure the effective functioning of the Maintenance Annex
- Report unresolved issues to the Bilateral Oversight Board (BOB)
- Ensure the implementation of any decisions reached by the BOB
- The JMCB may task sub-groups as necessary to address specific technical issues
- The JMCB develops, approves, and revises the Maintenance Annex Guidance (MAG) as necessary



Annex 2, Maintenance

- Consistent with Article 4.A. of the Agreement Annex 2 covers the reciprocal acceptance of findings of compliance, approvals, documentation, and technical assistance regarding approvals and monitoring of repair stations/maintenance organizations
- Identifies differences (Special Conditions) that must be addressed during certification





Annex 2 (Key Points)

- Outlines the procedures for implementing the provisions of the agreement that apply to maintenance
- BASA/MIP's will remain in place in France, Germany & Ireland until they are transitioned to the new Agreement



- The FAA and EASA have determined the requirements in CFR Parts 43 and 145 that are not covered in the EASA rules and are contained in the FAA Special Conditions of the Maintenance Annex 2
- As a result, an AMO complying with EASA requirements and the FAA Special Conditions in the Maintenance Annex 2 complies with CFR Parts 43 and 145



- The FAA and EASA have determined the requirements in EASA Part 145 that are not covered in the FAA rules and are contained in the EASA Special Conditions of the Maintenance Annex 2
- As a result, a Repair Station complying with CFR Parts 43 and 145 <u>and</u> the EASA Special Conditions in the Maintenance Annex 2 complies with EASA Part 145



Maintenance Annex Guidance (MAG)

- The Maintenance Annex Guidance is subdivided into sections A, B, and C
- The MAG details EASA, FAA, and applicant actions required to be taken to be in compliance with the Agreement
- The Agreement between the FAA and the EU permits reliance on each others surveillance systems to the greatest extent possible



General

Purpose

The purpose of this Section A of the MAG is to define the procedures between the Federal Aviation Administration (FAA), the European Aviation Safety Agency (EASA) and the Aviation Authorities (AAs)







General

Communications and Training



Communications between authorities

The FAA, EASA, and AA's need to keep each other informed of significant changes within their respective systems concerning:

- responsibility
- organizational structure
- significant revisions to an AMO's systems standards or procedures

 revision by the FAA, EASA or an AA to published materials

Requirements for The Agreement training

FAA, EASA, and AA personnel should receive training in:

- maintenance annex
- special conditions, and
- certification procedures.





General

Technical Consultations and Issue Resolutions

Technical consultations between the FAA and EASA For technical consultations the FAA Director of Flight Standards and the EASA Director responsible for Organization oversight agree to consult as necessary



Interpretations and resolution of issues between the FAA and EASA

- The FAA and EASA agree to address interpretations and resolution of issues
- Try to resolve the issues at the lowest possible level
- Procedures are in MAG, Section A, Part
 - I, Paragraph 5



Introduction

Cooperation in Quality Assurance and Standardization Activities

- FAA and EASA focal points should meet and communicate on a regular basis
- Allow for mutual attendance as observers in each other's activities





Standardization of EU Member States

- > FAA involvement as observers
- Conduct of inspection
- > On site visits
- Inspection reports of Aviation Authority
- Regulations and procedures
- EASA verification of compliance with terms of The Agreement



Quality Assurance and Standardization Activities

Implementation of the EU-EASA Standardization in EU Member States

- Are carried out in accordance with the applicable EASA regulations
 - Used to establish the EASA working methods of Standardization Teams for conducting inspections within the European Union





Quality Assurance and Standardization Activities

Flight Standards Evaluation Program (FSEP)

- The Agreement allows for EASA participation as an observer in FAA FSEP internal audits
- EASA participation is limited to CFR parts 43 and 145, and EASA Special Conditions





Quality Assurance and Standardization Activities

In order to promote continued understanding and compatibility in each other's maintenance systems, FAA and EASA need to consult and share information on quality assurance and standardization activities

This is achieved through these four programs, processes, and systems

In the European Member States

EASA Standardisation Inspections (By EASA)

EU Sampling Inspection System (By FAA)

In the United States of America

Flight Standards Evaluation Program (By FAA)

US Sampling Inspection System (By EASA)



FAA Sampling System in the EU

FAA Responsibilities:

Sampling Inspection Schedule:

Eastern Region Coordinator will develop the FAA Sampling System schedule using objective criteria



- Frequency may be tied to successful implementation of the EASA audit program of FAA Special Conditions
- Annual schedule must be provided in advance to EASA for coordination with the Aviation Authorities



EASA Sampling System SIS in the US

A SIS sampling visit schedule is established by the EASA Directorate responsible for Standardization to check that the Agreement is being implemented in the United States in accordance with its terms.





EASA Sampling Inspection System in the US

EASA monitors FAA compliance with the Agreement

- Mode of operation
- Forms used
- Files kept





EASA Sampling Inspection System in the US

- EASA provides the FAA National Coordinator with an annual schedule of regions to be visited
- The FAA National Coordinator advises the appropriate Regional Coordinator(s)
- The FAA Regional Coordinator coordinates and attends the Sampling Inspection System visit

The principal inspector responsible for the repair station visited should accompany the SIS team.





EASA Sampling Inspection System in the US

FAA Administrative Duties

Principal Inspector will provide the following information to EASA through the Regional Office:

- The repair station VIS data
- Hotel information
- Ground transportation Information
- Meet the EASA team at the hotel (at a minimum the morning of the first day)





EASA Sampling Inspection System in the US

EASA visit

FSDO:

- -Briefing of FAA and Industry
- -Review of Files of EASA approved repair stations
- -Interviews of Inspectors
- -Review of EASA Training

Sample Repair stations:

- -Review of a complete repair process including all required facilities
- -Review of release documentation (8130-3 Dual Release)
- -Review of Quality Management system and audit reports
- -Interview of management staff and inspectors





EASA Sampling Inspection System in the US

Forms used:

SIS Form 8 US, visit report of organisation





SIS Form 10 US, visit report of FSDO





EASA Sampling Inspection System in the US

SIS team Findings:

- It is the FAA inspectors responsibility to ensure satisfactory corrective action is taken with the repair station Form 8 findings
- The FAA Regional Coordinator needs to be kept informed of any proposed action. The Regional Coordinator will report to EASA
- The Joint Maintenance Coordination Board (JMCB) will perform an annual review of SIS findings and corrective actions

While not explicitly stated in the MAG, the FAA FSDO, Regional Coordinator, and Principal Inspector all have responsibilities in this area.





FAA and EASA Reciprocal Acceptance of Repair Data within the United States and European Union

Presented to: Workshop on the Implementation of Annex 2 (Maintenance) to the Agreement between USA and EU



Briefing Points

- The FAA and EASA have agreed to reciprocal acceptance of repair data.
 - Implemented through the new US/EU Aviation Safety Agreement, effective May 1, 2011
 - Annex 1, paragraph 3.2.7
 - Technical Implementation Procedures, paragraph 3.3
 - Implemented prior to May 2011 through Bilateral Aviation Safety Agreements Implementation Procedures for Airworthiness with 6 EU member states.





• FAA and EASA will accept each others approved repair design data regardless of State of Design of the component/product.

Two processes established:

- Streamlined Reciprocal Acceptance of repair data for non-critical components and critical components developed by the TC/STC holder
- Formal approval of critical component repair data developed by a third party



Process 1: Streamlined acceptance of repair data

US to EUROPE:

- EASA has certificated/validated the product or appliance, i.e. the product has an EASA TC/STC or ETSO approval.
- FAA is the authority of the State of Design for the repair design data.
- Data approved using the FAA system, major repair data approval via an FAA letter, FAA Form 8110-3, 8100-9 or 337



Process 1: Streamlined acceptance of repair data (continued)

EUROPE to US:

- FAA has certificated/validated the product, part, appliance or component (i.e. the product has an FAA TC/STC or TSO approval).
- EASA is acting on behalf of the State of Design for the repair design data.



Process 1: Streamlined acceptance of repair data (continued)

EUROPE to US continued:

- EASA repair design data approval is substantiated via an EASA repair design approval letter or a repair design approval issued under a Design Organisation Approval (DOA), and
- The repair is not in an area that is subject to an FAA AD, unless the AD allows for acceptance of an EASA repair design approval



Acceptance of repair data

FAA and EASA have agreed to accept each other's <u>systems</u> for the classification and approval of repair data.

- **Data must have a local approval.**
 - FAA approval for repairs designed in the US system;
 - EASA approval for repairs designed in the EU system

Remember, FAA or EASA must approve/accept the repair design data under its own system before the other bilateral partner can accept it.



Process 2: CRITICAL COMPONENTS

Formal Approval of Critical Component Repair Data (by other than the TC/STC holder)

- Make application through FAA/EASA:
 - Fast track process when the FAA or EASA can confirm that the applicant has entered into an arrangement with the TC/STC holder for this data.
 - > Validation process is required when there is no arrangement with the TC/STC holder.
 - FAA or EASA will issue its own approval of the critical component repair.





FAA and EASA will accept each others approved repair design data regardless of State of Design of the component/product.

Critical components will require additional review.





Certification process for

US based Repair Staions



MAG Section B

Understanding the EU/US Agreement

Maintenance Annex Guidance (MAG)

HOW a repair station in the US ...





Overview

Certification Process for US Based Repair Stations (Applicable to Industry/Authority)

- Initial Certification Process
- Renewal Certification Process
- Significant Findings and Enforcement Action
- Extensions
- Change / Amendment Certification Process
- Compliance with EASA ratings
 - Annex II Commission Regulation (EC) 2042/2003
- Work Away from a Fixed Location
- Revocation and Suspension
- Appeal and Conflict Resolution
- Transition
- Appendices and Forms



Objectives

The FAA should be able to:

- Assist applicants on initial, continuation and amendment approval as per the Maintenance Agreement with EASA
- Determine the roles and responsibilities required to complete the flow of actions for certification (initial, renewal, amendment) contained in the MAG Section B
- Identify the basic requirements and formal processes relating to EASA approval under MAG Section B
- Review an applicant's EASA Supplement as specified in MAG Section B
- Describe the actions required to accept revisions to an EASA Supplement on behalf of EASA
- Identify and complete the required forms to complete the certification process
- Determine the requirements for making a recommendation for EASA approval



MAG Section B

Initial Certification Process

Key Concepts



The Process:

- Who has to take action
- > Who needs to be informed
- > When the action is taken
- > What forms are needed
- Which are the official reference documents





What needs to be done in case of significant findings or certificate action



MAG Section B: Part I Initial Certification Process - Overview

Organization Act

Action

1. FAA

Send the applicant a copy of the MAG with EASA Form 16 application and an example EASA Supplement

Submit: to FAA

2. Applicant

3. FAA

Statement of need

•2 copies of EASA Form 16

- EASA Supplement
- Comply with EASA Fees



- Review and accept supplement
- Conduct an audit/inspection
- •Line station authorisations
- Send recommendation package





Initial Certification Process - Overview

Organization

Action



4. EASA

5. FAA

- Review, and take appropriate action. Invoice the applicant.
- Issue EASA Form 3 approval certificate



- The Regional Coordinator forwards a copy of the EASA certificate to FAA Principal Inspector.
- FAA Inspector adds the EASA Supplementary conditions future FAA oversight audits of the repair station.



Initial Certification Process

Action

Organization

1. FAA

Send the applicant a copy of the MAG with EASA Form 16 application and an example EASA Supplement.





Initial Certification Process

Organization

Action

2. Applicant

Submit to FAA:

- 2 completed copies of EASA Form 16
- Statement of need
- EASA Supplement

MAG B, Appendix 2 - EASA Form 16

MAG B, Appendix 1 - Example EASA Supplement

Additional Guidance

This package must be submitted to the supervising FAA Flight Standards District Office (FSDO) at least 60 days prior to the date initial approval is required.



Statement of Need

- The repair station must submit written confirmation of the need for an EASA Part-145 Approval which may be in the form of a letter of intent, a work order or a contract with details of the relevant customer
 - A relevant customer may be an EASA Part-145 approved maintenance organization, a European operator or distributor, broker or leasing company



Initial Certification Process

Organization

3. FAA

Action

- Review and accept supplement
- Conduct an audit/inspection of the repair station for compliance.
 - Inspect Line Stations identified in the EASA Supplement
 - Forward Recommendation Package to EASA

MAG B, Appendix 1 - Example EASA Supplement MAG B, Appendix 3 - EASA Form 9

Additional Guidance

- Part 1 of EASA Form 9 List the Repair Station Details.
- Part 2 of EASA Form 9 is the EASA Supplement Compliance Audit.
- The Line Station component is item 19 in Part 2 of EASA Form 9.
- FAA Inspectors are not required to check that the prescribed EASA fee has been paid



Initial Certification Process

Organization

4. EASA

Action

- EASA reviews the package and takes appropriate action.
- Sends an invoice to the applicant
- Issues an EASA Form 3 approval certificate, with a two year validity period
- List the approved organization on the EASA Web site

EASA Web site



Initial Certification Process

Organization	Action
5. FAA	 Enter FAA Certification and EASA Approval into the FAA repair station file Add EASA Supplementary conditions to all future FAA oversight audits (PTRS) Update Vital Information Subsystem (VIS), using EASA web listing renewal date

Additional Guidance

EASA Supplement Compliance Audit

Line Maintenance (Line Station) Authorization Compliance



Renewal Certification Process - Overview

Organization Action

1. EASA

EASA sends the invoice to the applicant (this does not free the approval holder from his obligation to track the due date of his EASA certificate)

Submits:

Statement of need

2. Applicant

3. FAA

- •2 copies of EASA Form 16, and a copy of the Air Agency Certificate and associated Operations Specifications.
 - EASA Supplement to the RSM/QCM, if revised.
 - Comply with EASA fees
 - Makes a recommendation to EASA on EASA Form 9.
 - Submits recommendation package to EASA
- Retains a copy of the application package
 - Advises EASA of any serious failure to comply with CFR part 145 on EASA Form 9





MAG Section B: Part II Renewal Certification Process - Overview

Organization Action







5. FAA Regional Coordinator

onal
atorForwards a copy of the EASA certificate to the
appropriate FAA Principal Inspector who updates
office file and VIS as appropriate



Renewal Certification Process

Organization

Action

1. EASA

EASA sends the invoice to the applicant (app.90 days in advance)

Reminder

Approval Holder is responsible to monitor due date of his EASA certificate !!





MAG Section B: Part II Renewal Certification Process

Organization	Action
	Submits to FAA:
2. Applicant	 Proof of need. Two copies of EASA Form 16, and a copy of the Air Agency Certificate and associated Operations Specifications. EASA Supplement to the RSM/QCM if revised.

Additional Guidance

The renewal date is stated on the certificate and is also published on the EASA Web site.

EASA Web site



MAG Section B: Part II Renewal Certification Process

Organization	Action
3. FAA	 Make a recommendation to EASA on EASA Form 9 Submit recommendation package to EASA Retain a copy of the application package Advise EASA of any serious failure to comply with CFR part 145 on EASA Form 9

<u>MAG B, II.3</u> <u>MAG B, Appendix 3 - EASA Form 9 FAA Recommendation</u>

Additional Guidance

FAA Inspectors are not required to check that the prescribed EASA fee has been paid.



MAG Section B: Part II Renewal Certification Process

FAA Action

Recommendation for Continuation

The FAA may make a recommendation for renewal resulting from a successful assessment. The following items should not prevent a positive recommendation when the repair station has taken **corrective action** or has submitted a **plan for corrective action accepted by the FAA**.

- Serious failure to comply with EASA requirements
- Overall failure to comply with the EASA supplementary conditions
- Failure to use FAA-approved data for major repairs/alterations/modifications
- Failure of the repair station to maintain a working quality monitoring system



Renewal Certification Process

FAA Action

Non-recommendation for Continuation

The FAA should make a **non-recommendation** to EASA when the following reportable items have <u>**not**</u> been corrected or when an corrective action plan has <u>**not**</u> been submitted and accepted by the FAA:

- Serious failure to comply with EASA requirements (this includes CFR 14 Part 145 and 43)
- Overall failure to comply with the EASA supplementary conditions
- Failure to use FAA-approved data for major repairs/alterations/modifications
- Failure of the repair station to maintain a working quality monitoring system



Renewal Certification Process

Organization

Action

4. EASA

- EASA reviews the application for compliance with the Agreement
- Forwards EASA Form 3 with a new due date to the Repair Station - Copy to Regional Coordinator



Renewal Certification Process

IN CASE OF:

Significant Findings and/or Enforcement Action

> FAA completes EASA non-recommendation Form 9

When EASA receives a non-recommendation it may formally suspend the approval

EASA formally notifies the Repair Station

EASA Web site will be updated

Extensions (in case the renewal date was missed)

EASA may grant an extension for a maximum of 60 days subject to FAA confirmation via Form 9



Renewal Certification Process

Organization	Action
5. FAA (Region)	 Forward a copy of the EASA Form 3 with a new renewal date to the appropriate FAA Principal Inspector. The FAA Inspector will update office file and VIS as appropriate



Change/Amendment Certification Process

Any change of name including "doing business as" (dba) names, change of address of the Approved Facility, or a change of Repair Station number requires the EASA certificate to be re-issued.

Evidence of need not required





2. FAA

Change/Amendment Certification Process – Overview

Overview Action

1. Applicant Send to

- Send to the supervising FSDO:
- Two copies of the EASA Form 16
- Amendments to the supplement



- Review the Repair Station's submitted documents
- Complete any inspection required by the change
- using EASA Form 9
- Forward all required documents to EASA.
- Review the application for compliance with the Agreement.
- **3. EASA** Issue a revised certificate to the Approval Holder with a copy to the FAA EASA Regional Office Coordinator.
 - Update EASA Web site.





5. FAA

Change/Amendment Certification Process – Overview

Overview Action



- Operational Station Certificate
 - Operations Specifications
 - Ratings



6. EASA Acknowledge receipt of completed recommendations to the FAA



Change/Amendment Certification Process

Organization

Action

Send to the supervising FSDO:

1. Applicant

Two copies of the EASA Form 16

> Amendments to the supplement





Change/Amendment Certification Process

Organization Action



- 2. FAA
- Review the Repair Station's submitted documents
- Complete any inspection required by the change using EASA Form 9
- Forward all required documents to EASA



Change/Amendment Certification Process

Organization

3. EASA

Action

On receipt of a completed recommendation from the FAA, EASA shall:

- Review the application for compliance with the Agreement
- Issue a revised certificate to the Approval Holder with a copy to the FAA EASA Regional Office Coordinator
- Update EASA Web site



4. FAA

Change/Amendment Certification Process

Organization Action

- The FAA EASA Regional Office Coordinator forwards any EASA documents to the FAA PI.
- The FAA PI should enter any changes into the FAA repair station file



80

Change/Amendment Certification Process

Organization

FAA

Action

Whenever there is a change that includes additional line stations or fixed locations, the FAA shall forward to EASA:

- A copy of the Amended Supplement page for Line Stations or operations specifications
- A completed EASA Form 9 recommendation



Work Away from a Fixed Location

> For a One Time Special Circumstance.

If the EASA supplement or the RSM/QCM does not have a written procedure for work away from its fixed location, the repair station must notify EASA in advance of doing the work.

On a reoccurring basis when necessary

subject to approval contained in FAA Operations Specification D100, and only as necessary to perform emergency or non-routine maintenance limited to urgent defect rectification, or repair work on an EU Registered aircraft, or articles intended for fitment on EU registered aircraft



Revocation and Suspension

- An EASA Part-145 Approval may be suspended or revoked by EASA if the certificate becomes invalid under the conditions specified in the Agreement, the Maintenance Annex, applicable regulations, or if the organization fails to comply with the Agency's fees and charges regulation
- EASA shall notify the holder of an EASA Part-145 Approval in writing about any suspension or revocation including the option for the organization to appeal the decision in accordance with Article 44 of Regulation (EC) No. 216/2008

FAA revocation of the 14 CFR Part 145 Certificate automatically invalidates the EASA Part-145 Approval Certificate



Revocation and Suspension

The FAA EASA Regional Office Coordinator will forward a copy of the EASA documentation on the suspension or revocation action to the assigned FAA Principal Inspector



Appeal and Conflict Resolution

If the Repair Station Certificate holder does not accept the suspension or revocation, he/she may request the Executive Director of EASA to initiate a conflict resolution process. The Executive Director shall, after consultation of the Panel of Experts and with reference to internal procedures in maintenance matters, provide his decision with respect to the suspension/revocation





Why is Conflict Resolution so Important?

- Both governments are committed to a smoothly functioning agreement
- Both, EASA and our FAA partners are committed to continuous improvement. This extends to our international relationships as well as domestic ones
- The FAA's and EASA's stakeholders, U.S. and EU industry, expect to benefit from the reciprocal acceptance under this agreement

Conflict resolution begins with each of us



EU-US Bilateral: Long way to ...

- Agreement signed in 2008
- Diplomatic Notes exchanged March 15, 2011
- Bilateral Agreement entered into force on May 1, 2011



Transition (to be revised)

- Approvals deemed valid in accordance with Annex 2 paragraph 8 of the Agreement are valid for a period of up to 2 years from the entry into force of the Agreement, subject to the following transition provisions
- From the entry into force of the Agreement, Initial applications shall be recommended using the MAG Section B procedures Part I
- From the entry into force of the Agreement, Renewal of approvals shall be recommended using MAG Section B procedures Part II



Transition (to be revised)

- From the entry into force of the Agreement, Amendment of approvals shall be recommended using MAG Section B procedures Part III
- The current FAA certificate and Operations Specifications shall be reviewed to ensure that the FAA scope does not exceed the EASA ratings system
- The EASA shall produce a transition matrix for all approvals covered by this paragraph in conjunction with the FAA



Transition(to be revised)

- For a period of 3 months following the entry into force of the Agreement, EASA may extend the continuation period of existing approvals for a maximum of 90 days in order to align the approvals with the Agreement and the associated guidance material
- From the entry into force of the Agreement, Extensions to the Continuation of approvals shall be recommended using MAG Section B procedures Part III



Transition to the New Agreement (MAG Revision pending)

Approvals deemed valid at the time of entry into force of the new Agreement are valid for a period of up to two years, depending on the renewal date.

Approvals that are due in 2011 can be recommended under the old provisions with an old supplement (MIP-G)

Thereafter renewal only with a new supplement using new Form 9 and new Form 16 (MAG)

All EASA approval holders **must** have a new supplement in place latest

31 December 2012





Bilateral Agreement, Annexes, Maintenance Annex Guidance MAG and Technical Implementation Procedures TIP

http://www.easa.europa.eu

http://www.faa.gov/aircraft/repair

Online TRAINING: https://av-info.faa.gov/DsgReg/sections.aspx



MAG Section B, EASA Supplement

EASA Supplement





MAG Section B, EASA Supplement

- Addresses why the Supplement is necessary
- A CFR part 145 Repair Station can be EASA Part-145 approved when the Repair Station complies with the CFR parts 145 and 43

AND the EASA Special Conditions

EASA Part-145 is a European requirement similar to CFR part 145





MAG Section B: Appendix 1 – Example EASA Supplement Understanding the EASA Supplement



This example EASA Supplement gives guidance on the subjects which need to be addressed and translated into working procedures to ensure compliance with EASA Special Conditions.



The Supplement must therefore be **customized** to satisfy the specific Repair Station procedures.



EASA Supplement Index

- List of Effective Pages
- Amendment Procedure
- Introduction
- Accountable Manager Commitment Statement
- Approval Basis and Limitation
- Access by EASA and FAA
- Work Orders / Contracts
- Approved Design and Repair Data
- Airworthiness Directives
- Release of Components after Maintenance

- Certificate of Airworthiness (C of A) validity
- Release of A/C after Maintenance
- Reporting of Un-airworthy conditions
- Quality Monitoring System (QM)
- Provision of Hangar Space for A/C maintenance
- Contracted Maintenance
- Human Factor
- Line Stations
- Work away from a fixed location



List of Effective Pages

This section should contain the list of pages that are still effective at the date of last revision

It should bear the required signatures and appropriate reference to relevant documentation





Amendment Procedure

Description of procedures to ensure that EASA Supplement stays current

Identification of responsibilities for amendment and FAA acceptance

Failure to ensure that the CFR part 145 RSM/QCM and this EASA Supplement are kept up to date could invalidate the EASA Approval

EASA Supplement revisions must be accepted by the FAA prior to implementation or incorporation into the manual system



Accountable Manager's Commitment Statement

- Ensures that the repair station complies with applicable regulations
- Must be signed by the Accountable Manager
- The Accountable Manager must have full financial authority
- Every newly appointed Accountable Manager must sign the statement (amendment procedure)





Approval Basis and Limitation

EASA approval is based on compliance with 14 CFR parts 43 and 145 plus Special Conditions.

The approval of maintenance is limited to the scope of work permitted under the current FAA certificate

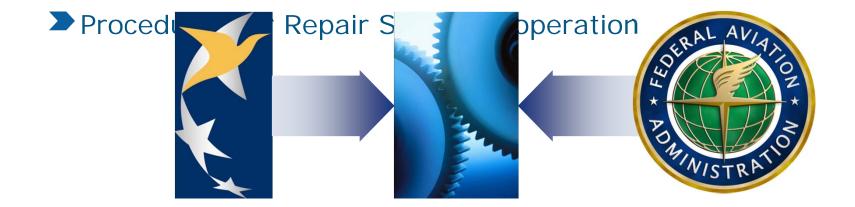




MAG Section B: Appendix 1 – Example EASA Supplement ACCESS by EASA and FAA

EASA and the FAA will be allowed unrestricted access ("foreign officials")

Repair Station acceptance of investigation and enforcement actions by EASA





Work Orders / Contracts

Procedures used by the Repair Station to ensure that work orders and contracts:

- Must be understandable
- Must specify exactly what should be done
- Must ensure completeness and compliance
- > All required work must be stated by the customer
- The work order form must contain all the relevant data and information

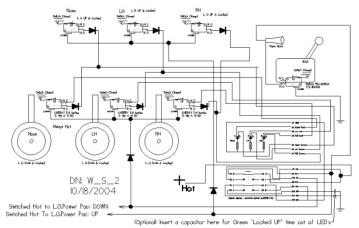


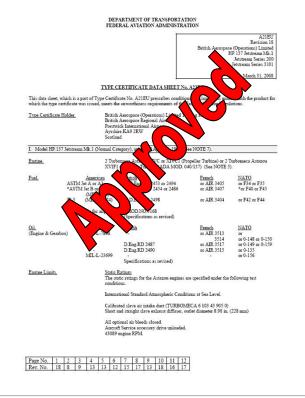


MAG Section B: Appendix 1 – Example EASA Supplement Approved Design and Repair Data

Procedures used by the Repair Station for acceptance of data that has already been approved by the FAA or EASA:

- Automatic acceptance
- Major repair data
- Minor repair data
- Acceptable under 14 CFR part 43





Formal approval

• Repairs to critical components



Airworthiness Directives (AD's)

Procedures for how the Repair Station:

- Ensures it has EASA ADs for the work it performs under it's ratings
- Manages and controls the distribution and use of ADs
- Ensure applicable EASA ADs will be made available to its personnel
- Ensures that the customer requests or approves performance of applicable ADs
- Records non-compliance of any applicable AD in maintenance records and transmits records to customer
- EASA AD compliance must be addressed to the customer on the return to service or appropriate aircraft record

•http://ad.easa.europa.eu/

EASA AD No : 2011-0120R1

EASA	AIRWO	ORTHINESS DIRECTIVE			
X	AD No.: 2011-0120	R1			
	Date: 13 July 2011				
É	Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance or Regulation (EC) No 218/2008 on behalf of the European Community, its Member States of the European third countries that participate in the activities of EASA under Article 80 that Regulation.				
continuing airworthiness of a operate an aircraft to which a	in aircraft shall be ensured by acco in AD applies, except in accordance	 In accordance with EC 2042/2003 Annex I, Part M.A.301, th mplishing any applicable ADs. Consequently, no person ma with the requirements of that AD, unless otherwise specified b the Authority of the State of Registry [EC 216/2008, Article 14(4) 			
Type Approval H	older's Name :	Type/Model designation(s) :			
AIRBUS		A318, A319, A320 and A321 aeroplanes			
TCDS Number :	EASA.A.064				
Foreign AD :	Not applicable				
Revision :	This AD revises EASA AD 2	011-0120 dated 29 June 2011.			
ATA 53	Fuselage – Nuts – Ins	spection / Replacement			
Manufacturer(s):	Airbus (formerly Airbus In	ndustrie)			
Applicability:	A319-133, A320-214, A3 212, A321-213 and A321 numbers (MSN): 3339, 3 3382, 3385, 3387, 3388,	121, A319-111, A319-112, A319-115, A319-132, 20-216, A320-232, A320-233, A321-211, A321- -231 aeroplane models, manufacturer serial 340, 3350, 3355, 3360, 3367, 3369, 3372, 3380, 3390, 3393, 3395, 3397 to 3508 inclusive, 3510 to 23, 3525, 3527, 3529, 3530, 3537, 3539, 3542, and 3555.			
Reason:	Number (P/N) ASNA253 performed to determine t that these nuts have bee	sembly in Airbus production line, some nuts Part 1-4 were found cracked. Investigations were he batches of the affected nuts and had revealed n installed in production on the fuselage of upplicability section of this AD.			
	Static, fatigue and corrosion tests were performed, which demonstrated that no immediate maintenance action is necessary. However, a large number of these nuts are fitted on primary structural elements, which could have long- term consequences.				
	This condition, if not corrected, could impair the structural integrity of the affected aeroplanes.				
	For the reasons described above, this AD requires a detailed inspection of the affected nuts, associated corrective actions, depending on findings, and replacement of the affected P/N ASNA2531-4 nuts with new ones, having the same P/N.				
		d to reduce the Applicability. Since no spare nuts perators for installation on Airbus aeroplanes, only			

EASA Form 110

Page 1/2

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Release of Components After Maintenance

- Procedures for release to service of components
- Compliance with CFR part 43.9 and Paragraphs 7 to 10 of the Example EASA Supplement
- Issue FAA Form 8130-3 Dual Release at the completion of maintenance
- FAA Form 8130-3 maintenance release includes:
 - EASA Part-145 certifying statement
 - Specific maintenance actions, parts, and references
- Authorized staff must be defined in the RSM/QCM

 Approving National Aviation Authority: Country: FAA/United States 	AUTHORIZED	D RELEASI			3. Form Tracking Number: 2004-1009
4. Organization Name and Address:					5. Work Order Contract Invoice Number :
	1104 Wing Avenue, Anyplace, T.				W 13884
6. Item: *. Description:	8. Part Number: 9.	Eligibility: *	10. Quantity:	11. Serial Batch Nut	nber: 12. Status Work:
001 Antenna	12342	N/A	1	AN-223-H	OVERHAULED
work carried out per	dance with CMM 12342, section work order no. W 13884. fied in Blocks 12:13 was carried (out in accordance w	th EASA part 14	5, and with respect	
I4. Certifies the items identified abo Approved design data and Non-approved design data	for release to service under EASA we were manufactured in conformity to: are in a condition for safe operation, specified in Block JJ. 16. Approval-Anthe	19. 🖸 Ore Brid Frid	14 CFR 43.9 Return t iffes that unless other described in Bock 13 val Regulations, part in to service. ortzed Signature:	o Service Of wise specified in Block 12 was accomplished in a	her regulation specified in Block 13 (the work identified in Block 12 ordance with Title 14, Cole of wark, the Bronz set approved flow and the start of the supervey distance of the 21. Approval Certificate Na: OC280251.
14. Certifies the liteux identified abo- Approved design data and Non-approved design data 15. Anthorized Signature:	ve were manufactured in conformity to: are in a condition for safe operation, specified in Bock 13.	19. ⊠ Creation Nes.: 29. Aut of Eastion Nes.: 29. Aut of Page 21. New	14 CFR 43.9 Return 6 ffest that unless other described in Block 10 ral Regulations, part ra to service. orlard Signature: coolar c (Typed or Pylated).	o Service Of wise specified in Block 12 was accomplished in a	the work identified in Block 12 ordance with Title 14, Code of work, the Bruss are approved for 21. Approval Certificate No.: OC2B0251, 33. Date (and y).
14. Certifies the items identified abo	we were manufactured in conformity in: are in a contilion for safe operation, specified in Nock 13.	19. ⊠ Cre and Ped Ped Ped Ped Ped Ped Ped Ped Ped Pe	14 CFR 43.9 Return 6 ffest that unless other described in Block 10 ral Regulations, part ra to service. orlard Signature: coolar c (Typed or Pylated).	o Service Of wise specified in Block 12 was accomplished in a	A the work identified in Block 12 ordance with Title 14, Code of work, the Items are approved for 21. Approval Certificate No.: OC2R025L
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FAA Order 8130.21

Includes sample completed dual release Form 8130-3



Release of Components After Maintenance

Information regarding the acceptability of new and used components authorized for use during maintenance:

- New components should be traceable to the:
 - > OEM
 - TC holder
 - PC holder
- Used components should be traceable to approved maintenance organizations and repair stations to include life limited parts regulatory compliance records
- EASA accepts new and used components from Canada (Canadian Form 1)





Release of Aircraft After Maintenance

- Procedures for release to service of aircraft
- Compliance with CFR part 43.9 and Paragraphs 7 to 10 and Paragraph 12 of the Example EASA Supplement
- Certification statement in aircraft maintenance records could include either:
 - Return to service in accordance with CFR part 43.9
 - Release to service in accordance with EASA Part-145.A.50
- EASA Part-145 and CFR part 145 certificate numbers must be quoted





MAG Section B: Appendix 1 – Example EASA Supplement Certificate of Airworthiness Validity

How the Repair Station ensures that both the Certificate of Airworthiness and the Airworthiness Review Certificate are valid

- Only applicable to repair stations that hold airframe or aircraft ratings,
- EU aircraft have indefinite certificates of airworthiness, their validity period is verified by an airworthiness review certificate (ARC). The airworthiness review certificate is located behind the airworthiness certificate

It is the responsibility of the Repair Station to verify that the Airworthiness Review Certificate is current





Reporting of Un-airworthy Conditions

Procedures the Repair Station uses to report serious defects to EASA:

- ► EASA Form 44 Occurrence Reporting Form,
- ► FAA Form 8010-4 Malfunction Defect Report,
- ► FAA Service Difficulty Report







MAG Section B: Appendix 1 – Example EASA Supplement Quality Monitoring (QM) System

The primary objective of the QM system is to ensure the organization knows that it can deliver a safe product while remaining in compliance with CFR part 43 and 145 and EASA Special conditions.







MAG Section B: Appendix 1 – Example EASA Supplement Quality Monitoring (QM) System

Independent Audit

- A process of sample audits
- Establish audit independence
- 2 types of audits
 - Procedural
 - Product







Quality Monitoring (QM) System

Management Control and Follow Up

- A system to ensure that all independent audit findings/discrepancies are corrected
- Routine meetings enable the accountable manager to remain informed of the state of compliance and any safety issues
- This function must not be contracted to outside persons
- When applicable, each line station used by an aircraft operated under the regulatory control of an EU Member State in accordance with the MAG should be listed giving its location and the basic maintenance capability for each location





Provision of Hangar Space for A/C Maintenance

Repair Station procedures to ensure hangar space is available for maintenance of aircraft operated under the regulatory control of an EU Member State





Applicable to repair stations with airframe and/or limited airframe ratings



Contracted Maintenance

- Procedures the repair station uses to ensure that contracted maintenance meets the terms of the MAG
 - The repair station must ensure that the other organizations are approved to EASA Part-145 for the maintenance they carry out



OR



 A non-EASA approved organization must be controlled under the same provisions as a non-certificated facility



Human Factors

The Repair Station's supplement procedures shall ensure that the FAA approved initial and recurrent training program and any revision to that program includes human factors training

The following topics should be covered:

- General / Introduction to human factors
- Safety Culture / Organizational factors
- Human Error
- Human performance & limitations
- > Environment
- Procedures, information, tools and practices
- Communication
- > Teamwork
- Professionalism and integrity
- Organization's Human Factors program



Line Stations

- ➤ Air Carrier
 - Holds a repair station certificate
 - Rated for the aircraft type/model
 - Scope of work is relevant to the line station operation



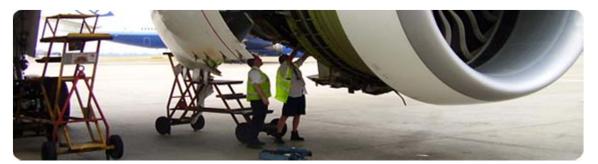
- Repair Station
 - Operations Specifications D 107 authorizes line maintenance
 - European operators may **not** be listed on FAA Operations Specifications
 - EASA uses the term Line Stations, while the FAA uses the term Line Maintenance Authorization. In the context of the Agreement, these terms are synonymous.



Line Stations

All line stations exercising the privileges of the EASA Part-145 approval should be listed in the EASA Supplement together with associated Operator, aircraft type and primary maintenance capability. Do not list EU operators on US Operations Specifications

> Line stations are not accepted outside US territories. (subject of next MAG revision!)





Note: EASA uses the term Line Stations, while the FAA uses the term Line Maintenance Authorization in relation to CFR part 145.



Work away from Fixed Location

One Time Basis For repair stations that do not have a D-100 Operations Specification:

Notify EASA in advance with a written letter including the following information:

- > Work to be performed
- Date of work
- Customer name
- Repair Station Manual and Supplement procedures will be applied





Work away from Fixed Location

Recurring Basis:

When necessary subject to the FAA Operations Specification D100 being in place for this work:

Procedures must show how the Repair Station will comply with CFR part 145 and the EASA supplement when utilizing work away from fixed location on European Registered aircraft in emergency or non routine cases:

➤When working away from a fixed location within the United States and its territories, the Repair Station should contact the local FSDO to obtain authorization. <u>Notification to EASA is not</u> <u>necessary</u>

➤Within the US, EASA accepts the FAA's procedures provided they incorporate the EASA Special Conditions





Death by powerpoint ? OR Any Questions ?

