

Advisory Circular

Subject: Repair Station Guidance for

Compliance with the Safety Agreement between the United States and the European Union Date: DRAFT

AC No: 145-11

Initiated by: AFS-300

Change: 1

1. PURPOSE. This advisory circular (AC) provides information and guidance on an acceptable means, but not the only means, of how a repair station located in the United States may obtain, renew, or amend a European Aviation Safety Agency (EASA) approval to maintain foreign aircraft and parts. This AC also provides information to an Approved Maintenance Organization (AMO) located within the European Union (EU) on how to obtain, renew, or amend a Federal Aviation Administration (FAA) certificate to maintain U.S. aircraft and parts. Repair stations should use the Maintenance Annex Guidance (MAG) in order to obtain EASA and FAA approvals under the provisions of the U.S./EU aviation safety agreement (the Agreement), Annex 2.

2. PRINCIPAL CHANGES. This change incorporates new information into AC 145-11, Repair Station Guidance for Compliance with the Safety Agreement between the United States and the European Union.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
Pages 5 and 6	3/9/12	Pages 5 and 6	xx/xx/xx

John M. Allen

Director, Flight Standards Service



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1. PURPOSE. This advisory circular (AC) provides information and guidance on an acceptable means, but not the only means, of how a repair station located in the United States may obtain, renew, or amend a European Aviation Safety Agency (EASA) approval to maintain foreign aircraft and parts. This AC also provides information to an Approved Maintenance Organization (AMO) located within the European Union (EU) on how to obtain, renew, or amend a Federal Aviation Administration (FAA) certificate to maintain U.S. aircraft and parts. Repair stations should use the Maintenance Annex Guidance (MAG) in order to obtain EASA and FAA approvals under the provisions of the U.S./EU aviation safety agreement (the Agreement), Annex 2.

NOTE: The Agreement and the MAG are two separate documents. "The Agreement" is the general term used in place of its official title, which is "Agreement Between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety." Also, "the MAG" is the general term used in place of the document's official title, which is "Maintenance Annex Guidance Between the Federal Aviation Administration for the United States of America and the European Aviation Safety Agency for the European Union."

2. AUDIENCE. This AC is applicable for AMOs located in a country listed in the Agreement, Annex 2, Appendix 2, who want to maintain U.S.-registered aircraft and parts. This AC is also applicable for repair stations located within the United States who want to maintain European-registered aircraft and parts.

3. CANCELLATION. This AC cancels:

- AC 145-7A, Issuance of Repair Station Certificates to Foreign Approved Maintenance Organizations under the Maintenance Implementation Procedures of a Bilateral Aviation Safety Agreement, dated September 23, 2002.
- AC 145-8A, Acceptance of Repair Stations by the JAA and JAA-Member NAAs Under the Maintenance Implementation Procedures of a Bilateral Aviation Safety Agreement, dated April 3, 2003.

- **4. RELATED REGULATIONS.** Title 14 of the Code of Federal Regulations (14 CFR):
 - Part 43,
 - Part 121,
 - Part 145, and
 - Part 187.
- **5. ACRONYMS AND DEFINITIONS.** Appendix 1 in this AC contains acronyms and definitions as used in the Agreement and associated guidance material.

6. RELATED READING MATERIAL (current editions).

- **a. ACs.** You can obtain current editions of the following documents from the FAA Web site at http://www.faa.gov/regulations_policies/advisory_circulars/.
 - AC 00-44, Status of Federal Aviation Regulations.
 - AC 00-58, Voluntary Disclosure Reporting Program.
 - AC 20-62, Eligibility, Quality, and Identification of Aeronautical Replacement Parts.
 - AC 21-29, Detecting and Reporting Suspected Unapproved Parts.
 - AC 140-7, FAA Certificated Repair Stations Website (Directory).
 - AC 145-10, Repair Station Training Program.
 - AC 187-1, Flight Standards Service Schedule of Charges Outside the United States.
- **b. FAA Orders.** You can obtain current editions of the following documents from the MyFAA employee Web site, https://employees.faa.gov/. Inspectors can access these documents through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators can obtain these documents at http://fsims.faa.gov. The public can access these documents at http://www.faa.gov/regulations_policies/orders_notices/.
 - 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.
 - FAA Order 8900.1, Flight Standards Information Management System (FSIMS).
- **c. EASA Documents.** You can obtain all related EASA documents on the EASA Web site at http://www.easa.europa.eu/ws_prod/c/c_orgapprocaopart145us.php.
- **d. Joint Documents.** You can obtain the following documents from our Web site, http://www.faa.gov/aircraft/repair/.
 - Agreement Between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety (The Agreement).
 - Maintenance Annex Guidance Between the Federal Aviation Administration for the United States of America and the European Aviation Safety Agency for the European Union (The MAG).

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7. BACKGROUND.

a. U.S./EU Aviation Safety Agreement.

- (1) The Agreement was signed on June 30, 2008. The Agreement's official title is "Agreement Between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety." The Agreement contains two annexes. Annex 1 pertains to airworthiness and environmental certification while Annex 2 pertains to maintenance.
- (2) The Agreement allows the FAA and EASA to rely on each other's surveillance systems, minimize the duplication of efforts, increase efficiency, and conserve resources to the greatest extent possible. The Agreement calls for successful completion of regularly scheduled FAA inspections. The FAA and EASA must be satisfied that repair stations located in the U.S. and EU-based AMOs meet the conditions of Annex 2.
- (3) Annex 2 of the Agreement allows EASA and the FAA to accept each other's standards, systems, and approvals relating to repair stations located in the U.S. and EU-based AMOs that maintain civil aviation products. Annex 2 also explains how to establish points of communication and cooperation when urgent or unusual situations develop.
- **b.** MAG. The MAG is the general term for the document's official title, which is "Maintenance Annex Guidance Between the Federal Aviation Administration for the United States of America and the European Aviation Safety Agency for the European Union." The MAG, which is a separate document than the Agreement, explains how to implement the Agreement and its Annex 2.
- **c.** Contents of the MAG. The MAG contains three sections (A, B, and C) that address the processes and procedures agreed to between EASA and the FAA. The sections are as follows:
- (1) Section A—Authority Interaction (Not Applicable to Industry). This section applies to the FAA, EASA, and aviation authorities (AA). It provides the coordination and communication process for the regulatory agencies. It also includes FAA sampling and independent inspections and blank forms for the coordination process.
- (2) Section B—Certification Process for U.S.-Based Repair Stations. This section identifies the requirements and processes for repair stations located in the United States to follow for obtaining an EASA approval.
- (3) Section C—Certification Process for EU-Based Maintenance Organisations. This section identifies the requirements and processes for an EU-based AMO to follow for obtaining FAA certification and renewal. Additionally, it contains the responsibilities of both the FAA aviation safety inspector (ASI) and the AA.

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8. THE AGREEMENT, ANNEX 2, MAINTENANCE.

- **a. General Information.** The FAA recommends that people maintaining U.S. and EU aeronautical products be familiar with the Agreement and the associated MAG.
- **b. Special Conditions.** The FAA and EASA have established the differences between 14 CFR part 145 and EASA Part-145. The Agreement, Annex 2, Appendix 1, lists these differences as special conditions. As a result, an FAA-certificated repair station (CRS) located in the United States, when in compliance with EASA-published maintenance special conditions, may apply for EASA approval. Also, an EU-based AMO, when in compliance with published FAA maintenance special conditions, may apply for FAA approval.
- **c.** Unimpeded Access. For the purposes of surveillance and inspections, the FAA and EASA (and AAs) will help each other gain unimpeded access to repair stations/AMOs subject to their respective jurisdictions. It is incumbent upon you to provide unimpeded access to EASA and the FAA to all work areas having civil aviation application. If you provide maintenance for both civil and military products, you should ensure, where possible, that there is clear delineation between work areas with civil and military applications within the repair station/AMO.
- **d.** Training Program Requirements. Human factors training is required for repair stations located in the United States that hold an EASA Part-145 approval. Fuel tank safety (FTS) training is recommended as the best practice for these repair stations.
- (1) If you hold an EASA approval, you must include human factors training. FTS training is recommended as the best practice if the repair station has a limited airframe rating for aircraft with a maximum passenger capacity of 30 or more, or a maximum certificated payload capacity of 7,500 pounds. These programs should be located in your FAA-approved repair station training programs.
- (2) Personnel at your repair station should know how to interface between maintenance, inspection, quality audit, and maintenance management. Thus, your training should center on the scope of work you perform. You should also ensure the training program is controlled and developed per the FAA Repair Station Manual (RSM)/EASA supplement.
- (3) For details regarding training development, affected repair stations, and additional information, see AC 145-10.

9. GUIDANCE FOR A REPAIR STATION LOCATED IN THE UNITED STATES TO OBTAIN EASA APPROVAL.

- **a. Application Contents.** To apply for EASA approval per the MAG, Section B, you need to submit an application, which will include the following:
 - (1) EASA Form 16, Application Form.
- (2) Manual Supplements. You must establish an EASA supplement to the RSM/Quality Control Manual (QCM) based on the sample EASA supplement contained in the MAG, Section B, Appendix 1.

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- (3) Evidence of need. In order to qualify for an EASA-approved repair station located in the United States, you must have previously obtained an FAA certificate and operations specification (OpSpec). You must submit written confirmation of the need for an EASA approval. Written confirmation may be in the form of a letter of intent (LOI), a work order, or a contract with details of the relevant customer. A relevant customer may be an EU-based AMO or a European operator.
- **b. Fees.** You must comply with the regulations for EASA fees and charges found at http://www.easa.europa.eu/ws_prod/c/c_orgapprocaopart145us.php.
- **c. Sending the Application Package.** Send one copy of EASA Form 16, a copy of the proposed EASA supplement, and a copy of the Air Agency Certificate and associated OpSpecs to the supervising FAA Flight Standards District Office (FSDO) at least 60 days before the date initial approval is required.
- **d. Renewal**. You should send the following items to the supervising FSDO at least 60 days before the end of the current 2-year renewal cycle of the EASA approval:
- (1) One copy of EASA Form 16, plus any amendment to the EASA supplement, if appropriate, and
 - (2) One copy of the Air Agency Certificate and associated OpSpecs.

e. Changes/Amendments.

- (1) You need to apply for approval if any of the following has occurred to you:
 - Change of name, including doing business as (DBA) names.
 - Change of the address of the approved facility (this does not include the mailing address).
 - Change of repair station number.
- (2) Send the following items to the supervising FSDO at the same time that you submit the FAA application for amendment to the 14 CFR part 145 repair station:
 - One copy of EASA Form 16.
 - The corresponding amendments to the EASA supplement.
- (3) For information on changes/amendments, see the MAG, Section B, Part III, Change/Amendment Certification Process.

f. Special Conditions.

(1) Initial Approval. In order for you to obtain an EASA approval, and to continue to be approved, you must allow EASA, or the FAA on its behalf, to inspect your repair station. To comply with the special conditions, you need to submit an application, which will include:

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- A statement that explains why EASA approval is necessary to maintain EU-based aircraft and parts, and
- A supplement to your RSM.
- (2) **Renewal.** In order to continue to be approved, you must:
 - Allow EASA, or the FAA on behalf of EASA, to inspect your repair station for continued compliance with the requirements of 14 CFR parts 43 and 145 and the special conditions.
 - Accept that investigation and enforcement action may be taken by EASA in accordance with any relevant EU regulations and EASA procedures.
 - Cooperate with any EASA investigation or enforcement action.

NOTE: For a complete list of special conditions, see the MAG, Section A, Part V, paragraph 1.

10. GUIDANCE FOR AN EU-BASED AMO TO OBTAIN FAA APPROVAL.

- **a. Application Contents.** To apply for FAA approval per the MAG, Section C, you must submit to your AA an application, which will include the following:
- (1) FAA Form 8310-3, Application for Repair Station Certificate and/or Rating, containing the list of maintenance functions.
- (2) Statement of need. In order to qualify for an FAA-approved AMO located in an EU Member State, you must have previously obtained an EASA approval. You must submit evidence of a need to maintain or alter U.S.-registered aircraft and parts. This evidence may be in the form of an LOI, work order, or contract with details of the relevant customer.
 - (3) FAA supplement to the maintenance organization exposition (MOE).
- (4) Written confirmation demonstrating that employees have been trained in the transportation of dangerous goods.
- (5) The addresses of all additional fixed locations located within an EU Member State listed in the Agreement, Annex 2, Appendix 2.
- **(6)** The addresses of line stations that are authorized, if any, and the name of the air carrier/operator of the U.S.-registered aircraft.

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- (7) EASA Form 3, Maintenance Organisation Approval Certificate.
- **b.** Fees. You must pay the fees required per 14 CFR part 187 directly to the FAA upon receipt of the invoice.
- **c. Sending the Application Package.** Send the completed application to your AA in which your principal place of business is located.
- **d. Renewal.** You are required to apply for renewal of your repair station certificate 12 months after the initial certification and 24 months after that. You should submit the renewal package to the AA between 60 to 90 days before your current certificate expires.

e. Changes/Amendments.

- (1) You need to apply for approval if any of the following has occurred to you:
 - A change in the housing and facilities that would affect the certificate and/or OpSpecs (e.g., change in address).
 - An addition or amendment to a rating.
 - A change in ownership or name change. If the holder of an AMO certificate sells
 or transfers its assets, the new owner must apply for an amended certificate. Name
 changes also require an application and certificate change.
 - An addition or deletion of additional fixed locations or line station authorizations.
- (2) In addition to providing updated enhanced Vital Information Database (eVID) information, send the following to the AA:
 - A completed FAA Form 8310-3 indicating the changes,
 - Any supporting documentation (in English) required by the change. The AA may require you to submit a copy of the documentation in the national language.
 - If the request requires a change to your FAA supplement to the MOE, you also need to submit these documents to the AA.
- (3) For information on changes/amendments, see the MAG, Section C, Part III, Change/Amendment Certification Process.

f. Special Conditions.

- (1) **Initial Approval.** In order for you to obtain an FAA approval, and to continue to be approved, you must allow the FAA, or EASA on its behalf, to inspect your AMO. To comply with the special conditions, you need to submit an application, which will include:
 - A statement demonstrating that the FAA repair station certificate and/or rating is necessary for maintaining or altering U.S.-registered aeronautical products or foreign-registered aeronautical products operated under the provisions of 14 CFR.

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- A list of maintenance functions, approved by the AA, to be contracted/sub-contracted to perform maintenance on U.S. civil aeronautical products.
- In the case of transport of dangerous goods, written confirmation demonstrating that all involved employees have been trained in the transport of dangerous goods in accordance with ICAO standards.
- Provide a supplement (in English) to your MOE.
- **(2) Renewal.** In order to continue to be approved, you need to comply with the following:
 - Allow the FAA, or EASA on behalf of the FAA, to inspect your AMO for continued compliance with the requirements of EASA Part-145 and the special conditions.
 - Cooperate with any FAA investigation or enforcement action.

NOTE: For a complete list of special conditions, see the MAG, Section A, Part V, paragraph 2.

11. REQUEST FOR INFORMATION. The Repair Station Branch (AFS-340) developed this AC. For information concerning this AC, contact AFS-340 at 202-385-6400. Direct comments regarding this AC to:

Federal Aviation Administration
Aircraft Maintenance Division, Repair Station Branch, AFS-340
5th Floor, 950 L'Enfant Plaza, S.W.
Washington, DC 20024

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APPENDIX 1. ACRONYMS AND DEFINITIONS

1. ACRONYMS. The following are acronyms as applied to this AC, the Agreement, and applicable guidance material.

AMO	Approved Maintenance Organization
AA	Aviation Authority
ASI	Aviation Safety Inspector
BOB	Bilateral Oversight Board
CFR	Code of Federal Regulations
EASA	European Aviation Safety Agency
EU	European Union
FAA	Federal Aviation Administration
JMCB	Joint Maintenance Control Board
MAG	Maintenance Annex Guidance
MOE	Maintenance Organization Exposition
OpSpec	Operations Specification
QCM	Quality Control Manual
RSM	Repair Station Manual
TA	Technical Agent
TIP	Technical Implementation Procedures for Airworthiness
U.S.	United States
SIS	Sampling Inspection System

- **2. DEFINITIONS.** The following are definitions applied to this AC per the Agreement, Annex 2.
- **a.** The Agreement. This is the general term for the document's official name, which is "Agreement Between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety." The Agreement is one of a number of executive agreements concluded between the United States and foreign countries or international organizations that provide a legal basis for one or more implementation procedures.
- **b.** Airworthiness Approval. A finding that the design or change to a design of a civil aeronautical product meets applicable standards or that an individual product conforms to a design that has been found to meet those standards and is in a condition for safe operation.
- **c. Alteration or Modification.** A change to the construction, configuration, performance, environmental characteristics, or operating limitations of the affected civil aeronautical product.

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- **d. Approved Maintenance Organization (AMO).** An EU-based aircraft maintenance provider that is certificated by an AA in accordance with EASA Part-145.
- **e. Aviation Authority (AA).** A responsible government agency or entity of an EU Member State that exercises legal oversight on behalf of the EU over regulated entities and determines their compliance with applicable standards, regulations, and other requirements within the jurisdiction of the EU.
- **f.** Aviation Safety Inspector (ASI). An FAA employee who develops, administers, and enforces the regulations and standards relating to aviation safety. ASIs provide advice and guidance to many segments of the aviation industry and airmen in the interest of aviation safety.
- **g. Bilateral Oversight Board (BOB).** The BOB is a joint executive-level group responsible for ensuring the effective functioning of the Agreement.
- **h.** Civil Aeronautical Product. Any civil aircraft, aircraft engine, or propeller, or any appliance, part, or component to be installed.
- i. Code of Federal Regulations (CFR). Specifically, Title 14 of the Code of Federal Regulations (14 CFR) parts 1 through 199.
- **j. Data Approved by EASA.** Data approved by the EU TA or by an organization approved by that TA, including U.S. design data reciprocally accepted under Annex 1.
- **k.** Data Approved by the FAA. Data approved by the Administrator or the Administrator's designated representative, including EU design data reciprocally accepted under Annex 1.
- **l.** Environmental Approval. A finding that the design or change to a design of a civil aeronautical product meets applicable standards concerning noise, fuel venting, or exhaust emissions.
- **m. Environmental Testing.** A process by which the design or change to a design of a civil aeronautical product is evaluated for compliance with applicable standards and procedures concerning noise, fuel venting, or exhaust emissions.
- **n. Joint Maintenance Coordination Board (JMCB).** The JMCB is responsible for the implementation of, and any changes to, the MAG for proper application of the Agreement.
- **o.** Letter of Intent (LOI). A statement explaining why an EASA or FAA certificate is needed to maintain or alter aircraft and parts registered in the United States or in an EU Member State.
- **p. Maintenance.** The performance of any one or more of the following actions: inspection, overhaul, repair, preservation, or the replacement of parts, materials, appliances, or components of a civil aeronautical product to assure the continued airworthiness of such a product; or the installation of previously approved alterations or modifications carried out in accordance with requirements established by the appropriate TA.

- **q.** Maintenance Annex. Annex 2 of the Agreement between the United States and the EU.
- **r. Maintenance Annex Guidance (MAG).** The MAG is the general term for the document's official title, which is "Maintenance Annex Guidance Between the Federal Aviation Administration for the United States of America and the European Aviation Safety Agency for the European Union." The MAG contains the agreed-upon procedures that the FAA, EASA, and AAs must follow to comply with the Agreement.
- **s. Maintenance Organization Exposition (MOE).** A manual required by EASA, Part 145.A70, that describes an AMO and sets forth its procedures, means, and methods.
- **t. Monitoring.** Periodic surveillance to determine continuing compliance with the appropriate standards.
- **u. Operations Specification (OpSpec).** An FAA document identifying the repair stations' ratings, authorizations, and limitations.
- v. Overhaul. A process that ensures the aeronautical article is in complete conformity with the applicable service tolerances specified in the type certificate holder's (or equipment manufacturer's) instructions for continued airworthiness (ICA), or in the data that is approved or accepted by the AA. No person may describe an article as being overhauled unless it has been at least disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested in accordance with the data specified above.
- w. Regulated Entity. Any natural or legal person whose civil aviation safety and environmental testing and approval activities are subject to the statutory and regulatory jurisdiction of the United States, the EU, or both.
- **x. Repair Station.** An aircraft maintenance provider located in the United States that is certificated by the FAA in accordance with 14 CFR part 145.
- y. Repair Station Manual (RSM)/Quality Control Manual (QCM). A manual explaining the operation and internal quality control (QC) procedures of a 14 CFR part 145 certificated repair station (CRS) that describes how the repair station will comply with the QC and repair station operational requirements.
- **z.** Sampling Inspection System (SIS) in the United States A sampling visit schedule to be established by the EASA directorate responsible for standardization to verify that the United States is accurately implementing the Agreement.
- **aa. Special Conditions.** Those requirements in either 14 CFR parts 43 and 145 or in EASA Part-145 that have been found, based on a comparison of the regulatory maintenance systems, not to be common to both systems and which are significant enough that they must be addressed.
- **bb. Technical Agent.** The FAA is the TA for the United States, and EASA is the TA for the EU.

Appendix 1

cc. Technical Implementation Procedures (TIP) for Airworthiness. The procedural document authorized by Annex 1 of the Agreement for design approval, export airworthiness approvals, post-design activities, and technical assistance between authorities. See the current edition of FAA Order 8100.14, Interim Procedures for Working with the European Community on Airworthiness Certification and Continued Airworthiness.