Federal Aviation Administration

Memorandum

Date: MAR 22 2007

From: FOR David W. Hempe, Manager; Aircraft Engineering Division, AIR-100

To: The Directorates

Prepared by: Sol Maroof, Senior Engineer, AIR-110

Subject: FAA & EASA Reciprocal Acceptance of Repair Data and Certain STCs

In the new United States/European Community aviation safety agreement, FAA and the European Aviation Safety Agency (EASA) have negotiated provisions for more streamlined acceptance of repair data and acceptance of certain Supplemental Type Certificates (STC). While this agreement is being finalized and ratified, FAA and EASA have agreed to amend the scope of acceptance in existing Bilateral Aviation Safety Agreement Implementation Procedures for Airworthiness (BASA IPAs) with six European Union Member States: France, Germany, Italy, Netherlands, Sweden and the United Kingdom to enable this acceptance early.

The FAA and EASA have agreed via an exchange of letters to expedite:

- the reciprocal acceptance of certain STCs regardless of their State of Design.
- the reciprocal acceptance of data used to support the repair of products, parts, and appliances regardless of their State of Design (with the exception of critical components).

The attached information describes what the new acceptance entails and is effective April 1, 2007. This interim measure is a way for the FAA, EASA, and industry to phase in an increasing reliance on each other's data approvals.

If there are further questions, please contact the Certification Procedures Branch, AIR-110 at (202) 267-9588.

Attachments (2)

Attachment 1

SCOPE OF ACCEPTANCE OF STC APPLICATIONS FROM EASA

a. New Applications for FAA Validation of STCs.

(1) EASA's Programmes Department will send new STC applications to the New York ACO. Our procedures for responding and working the project with EASA and the applicant still use the Type Validation Principles (See FAA Order 8110.52, *Type Validation Procedures*).

(2) The STC scope is defined in the negotiated bilateral agreement. Effective April 1, 2007, the FAA may accept applications for STCs from applicants in France, Germany, Italy, Netherlands, Sweden, or the United Kingdom for:

(a) All STCs (Basic and Non-Basic) on products for which EASA acts on behalf of the State of Design.

(b) Basic STCs on U.S. State of Design and third country aircraft which have been type certificated by both the FAA and EASA. Unless otherwise specified by the FAA under the type validation procedures, the FAA shall retain the compliance determinations for such Basic STCs in the following areas:

1) Electrical equipment & complex wiring installations,

2) Avionics systems,

3) Communications systems, and

4) In-flight entertainment systems.

(c) All STCs (Basic and Non-Basic) on U.S. State of Design aircraft that EASA allocates to the German LBA.

Note: Basic and Non-Basic STCs are defined in the negotiated agreement and FAA Order 8110.52, "Type Validation Procedures."

Attachment 2

ACCEPTANCE OF REPAIR DATA

a. FAA Acceptance/Approval of EASA Approved Repair Design Data.

(1) Effective April 1, 2007, the FAA shall accept/approve EASA-approved design data used in the support of major and minor repairs regardless of the State of Design of the product, part, or appliance, from companies in France, Germany, Italy, Netherlands, Sweden, or the United Kingdom if:

(a) The FAA has certificated/validated the product, part, or appliance,

(b) EASA is acting on behalf of the State of Design for the repair design data,

(c) EASA repair design data approval is substantiated via an EASA repair design approval letter or a repair design approval issued under a DOA, *and*

(d) 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.

Note: For repair data approved prior to September 28, 2003, FAA will accept either a National Aviation Authority's approval document, or equivalent, or a repair design approval issued under a former national DOA as evidence of the approval.

(2) The process we use to accept/approve repair design data depends on the criticality of the component being repaired. See Figure 2-1.

(3) The negotiated agreement defines critical components as follows:

"A critical component is a part identified as critical by the design approval holder during the validation process, or otherwise by the exporting authority."

As further explanation, the definition states: *"Typically*, such components include parts for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations or Certification Maintenance Requirements (CMR) sections of the manufacturer's maintenance manual or in the Instructions for Continued Airworthiness (ICA)."

This definition differs from the definitions of critical components found in our earlier Implementation Procedures for Airworthiness (IPAs) with individual European aviation authorities. Although critical component lists will be established in all future validation programs, critical components lists may *not* exist for currently type

certificated/validated products. As a result, the exporting authority, EASA in this case, will have to determine if the repair is to a critical component.

(4) Repair Data from TC/STC Holder and on Non-Critical Components from Other than the TC/STC Holder: We will use a streamlined process to *accept* design data for major and minor repairs to non-critical components. We will also use it to *accept* design data developed by European Community TC and STC holders for repairs to critical components.

(a) These data are considered to be approved by the FAA following their approval under EASA's system, provided they meet the four criteria given in paragraph a.(1), above.

(b) This process does not require application to the FAA or compliance findings to the FAA certification basis.

(5) Repair Data on Critical Component from Other than the TC/STC Holder: Data developed by someone *other than* the TC and STC holders to support major repairs to *critical* components will receive more scrutiny. In addition to meeting the four criteria given in paragraph a.(1) above, these applicants must apply to the FAA to have their data *approved*.

(a) The applicants in France, Germany, Italy, Netherlands, Sweden, or the United Kingdom shall submit their applications to EASA and request that the applications and required information be forwarded to the appropriate Directorate Standards Staff.

(b) The applicants shall use the same EASA Form 31, Application for Approval of Major Change/Major Repair Design that they used to get EASA approval of the data for this purpose.

(c) EASA will attach a cover letter to the EASA Form 31s and forward them to the FAA Standards Staff.
Note: EASA classifies all repairs to critical components as major repairs.

(d) The FAA Standards Staff shall process the applications by:

i. Establishing a project number and initiating a CPN.
ii. Initiate coordination with CMACO for any U.S. product repairs, as defined in paragraph 4-18 of Order 8110.4C.
iii. If an application package is incomplete, the Standards Staff should notify the EASA contact on the application letter and advise the International Policy Office, AIR-40.

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(e) After the appropriate review and following the issuance of EASA's repair data approval, the Standards Staff shall issue an FAA letter of approval. The letter shall reference the number of EASA's repair data approval.

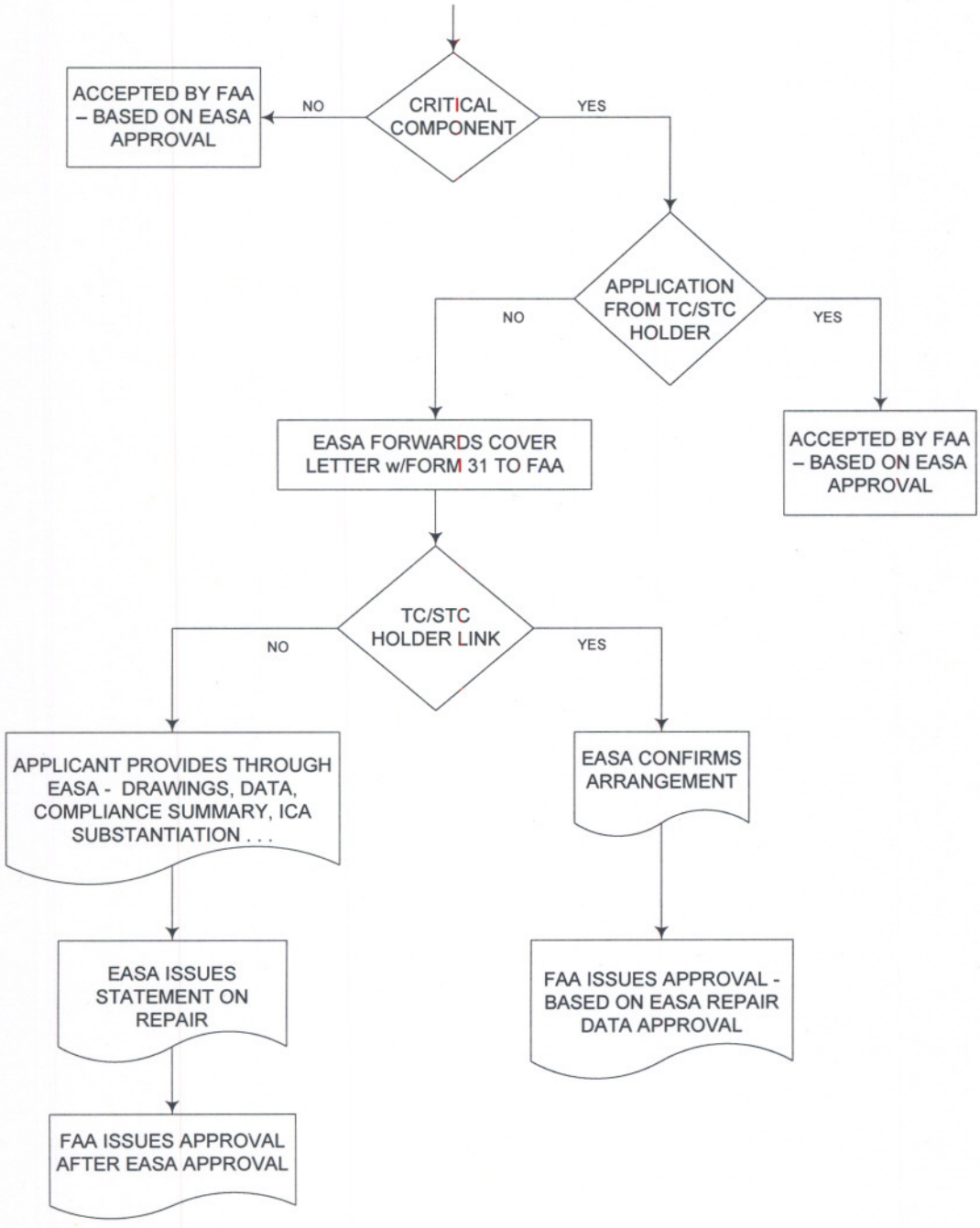
(f) We recognize that some applicants have arrangements with design approval holders that will insure that they have access to all the information necessary to design the repair. In these cases, the application package should include confirmation from the applicant and EASA of the existence of these arrangements. We will issue letters approving the repair data based on EASA's repair data approvals without further technical review if this condition is satisfied.

(g) In cases where the European applicant has *not* entered into an arrangement with the TC and STC holder, more information is required for FAA approval. EASA will ensure that the applicants submit:

- **i.** Drawings, specifications, and other data necessary to define the configuration and design features of the repair;
- **ii.** A compliance summary that identifies the applicable airworthiness standards, methods of compliance, and compliance results; and
- **iii.** Substantiation for continued applicability of existing Instructions for Continued Airworthiness (ICA) or supplemental ICAs, if any.

(h) In addition, EASA must issue a statement that indicates that the repair brings the design back to its original or properly altered condition.

FIGURE 2-1. FAA ACCEPTANCE/APPROVAL OF EASA REPAIR DATA



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b. EASA Acceptance/Approval of FAA Approved Repair Design Data.

(1) EASA shall similarly accept/approve the FAA-approved repair design data used in the support of major and minor repairs regardless of the State of Design of the product or appliance, if:

(a) EASA has certificated/validated the product or appliance,

(b) FAA is the authority of the State of Design for the repair design data,

(c) For *major* repairs, the FAA repair design data approval is substantiated via an FAA letter or properly executed FAA Form 8110-3, 8100-9, or FAA Form 337.

Note: It is important that FAA and its designees execute all FAA forms correctly for EASA acceptance, e.g. an FAA Form 337 must reference the approved data in block 8 and/or approve the data in block 3.

Note: For a multidiscipline repair, the 8110-3/8100-9 should have the following statement in the "Purpose of Data" block (Reference FAA Order 8110.37C Paragraph 611g): "This form does constitute FAA approval of all the engineering design data necessary for substantiation of compliance to necessary requirements for the entire alteration/repair".

(d) For *minor* repairs, either

i. The repair design data has been provided by a U.S. design approval holder, *or*

ii. If not provided by a U.S. design approval holder, the determination that data are acceptable has been made by a U.S. maintenance organization under FAA's authorized system (e.g. 14 CFR parts 43, 65, 121, 125, 135, 145 or 129.14).

Note: An EU company must use EASA Part 21 for the approval of repair data for use on an EU-registered aircraft. Unless the minor repair data has been previously used on an N-registered aircraft, an EU company cannot determine any data to be acceptable data under 14 CFR 43 for use on an EU-registered aircraft.

(2) Like the FAA, the process EASA uses to accept/approve repair design data depends on the criticality of the component being repaired. See paragraph a.(3) for the definition of a critical component.

(a) As paragraph a.(3) indicates, critical components lists may *not* exist

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for currently type certificated products. In this case, the applicant who wishes to have the repair design data exported to the European Union should assess the criticality of the component.

(b) The applicant should review the ICA and the Airworthiness Limitations and CMR sections to identify components with replacement times, inspection intervals, or related procedures and then identify truly critical components from this list.

(c) The applicant should then consult the FAA ACO to get their concurrence before proceeding. For U.S. products the ACO will consult the CMACO before making a final decision.

Note: The Engine and Propeller Directorate is developing guidance that will provide a list of generic flight safety critical engine parts that may be used as an aid in this process.

(3) Figure 2-2 illustrates the process EASA will use to accept/approve U.S. repair design data.

(4) Repair Data from TC/STC Holder and on Non-Critical Components from Other than the TC/STC Holder: EASA will use a streamlined process to *accept* data for major and minor repairs to non-critical components. EASA will also use it to *accept* design data developed by the TC and STC holders for repairs to critical components. Note: EASA classifies all repairs to critical components as major repairs.

(a) These data are considered to be approved by EASA following their approval or acceptance under the FAA system, provided they meet the criteria given in paragraph b.(1), above.

(b) This process does not require application to EASA or compliance findings to the EASA certification basis.

(5) Repair Data on Critical Component from Other than the TC/STC Holder: Data developed by someone *other than* the TC or STC holder to support major repairs to *critical* components will receive additional scrutiny. In addition to meeting the criteria given in paragraph b.(1) above, these applicants must apply to the EASA to have their data *approved*.

(a) The applicant shall complete an EASA Form 31, Application for Approval of Major Change/Major Repair Design, for each repair data approval sought. They shall submit the application to their cognizant FAA ACO and request that the application and required supporting information be forwarded to EASA.

(b) The EASA website prescribes the manner in which these applications are to be made.

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(c) EASA, like the FAA, recognizes that some applicants have arrangements with design approval holders that will insure that they have access to all the information necessary to design the repair.

i. The U.S. applicants should indicate that such arrangements exist in their application to EASA.

ii. The ACO must confirm the existence of the arrangements in its cover letter forwarding the package to EASA. These packages should be transmitted via email to MajorChange-Minor Repair@easa.europa.eu.

EASA shall issue a letter approving the repair data based on the FAA's repair data approval without further technical review if both of these conditions are satisfied.

(d) In cases where an applicant has *not* entered into an arrangement with the design approval holder, more information is required for EASA's approval.

i. The applicant must submit a justification that an arrangement is not necessary.

ii. The ACO must submit a statement that concurs with the applicant's justification.

iii. If we concur, we must ensure that the applicant also submits:

1) Drawings, specifications, and other data necessary to define the configuration and design features of the repair;
2) A compliance summary that identifies the applicable airworthiness standards, methods of compliance, and compliance results; and
3) Substantiation for continued applicability of existing Instructions for Continued Airworthiness (ICA) or supplemental ICAs, if any.

(e) In addition, the ACO must issue a statement that indicates that the repair brings the design back to its original or properly altered condition.

(f) EASA will review the information submitted and issue a major repair design approval based on the ACO's statement.

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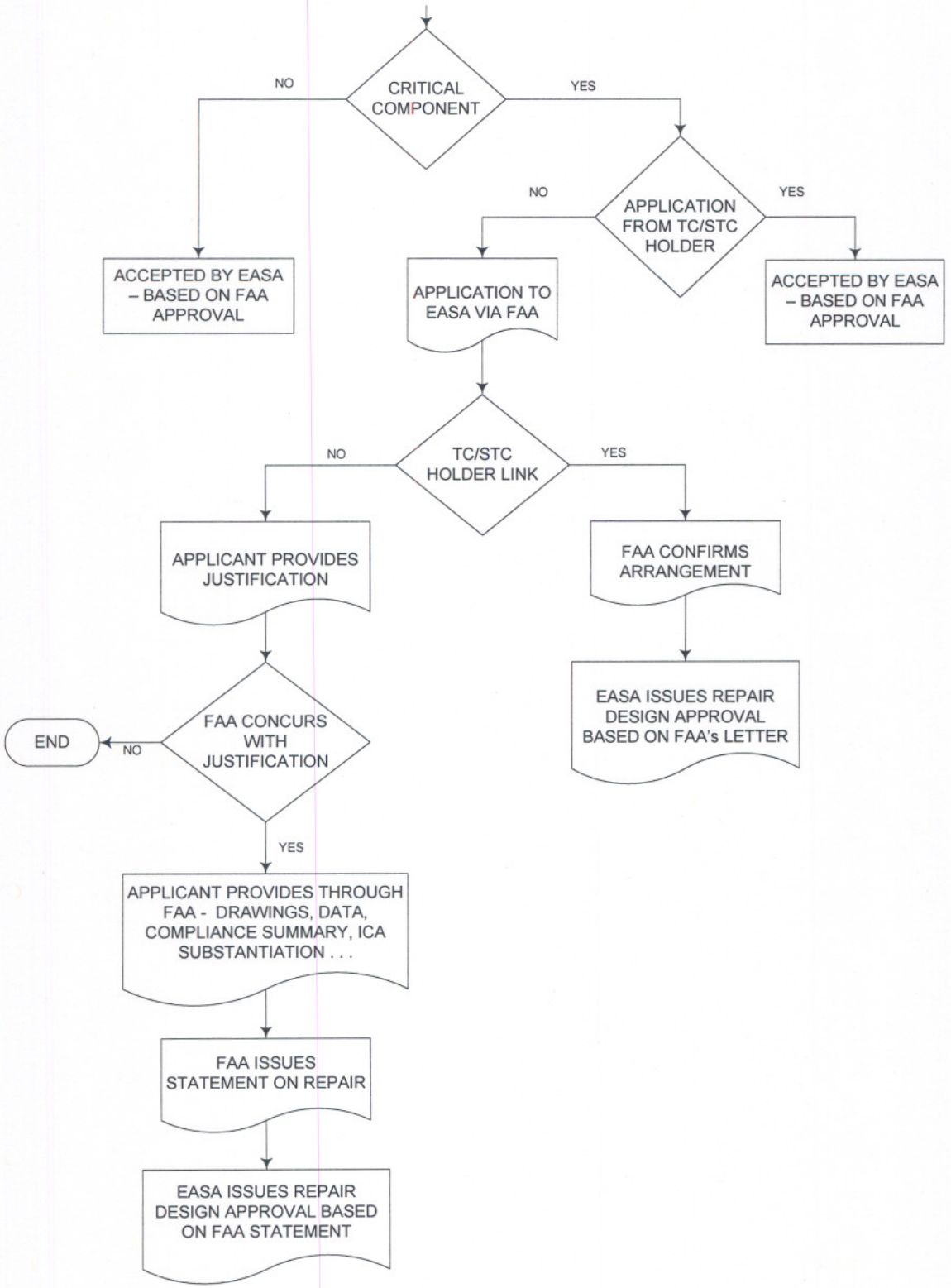
FIGURE 2-2. EASA ACCEPTANCE / APPROVAL OF FAA REPAIR DATA