

**Federal Aviation Administration (FAA)**

**And**

**Agência Nacional de Aviação Civil  
Airworthiness Superintendent (ANAC/SAR)**

**MANAGEMENT PLAN**

**Technical Assistance for Surveillance of Suppliers of Embraer  
Executive Aircrafts (EEA) Melbourne, Florida, United States**

**with**

**Federal Aviation Administration (FAA) as the Civil Aviation Authority  
for the United States, as the**

**STATE OF MANUFACTURE**

**and**

**Brazilian Civil Aviation Authority (ANAC) as the Civil Aviation  
Authority for Brazil, as the**

**STATE OF DESIGN**

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## **CHAPTER 1: INTRODUCTION**

### **1.1 AUTHORIZATION**

This Management Plan (MP) is in accordance with the provisions of the Special Arrangement signed 13 September 2013 entitled “Production of Airplanes in Accordance with FAA Type Certificates A59CE and A60CE” between the Federal Aviation Administration (FAA) Aircraft Certification Service of the Government of the United States (U.S.) and the Agência Nacional de Aviação Civil (ANAC), Airworthiness Department (SAR) of the Government of Brazil, as the State of Manufacture and State of Design respectively. This MP is in support of aircraft produced by Embraer Executive Aircraft (EEA) LLC in Melbourne, Florida U.S., based on a license agreement from the Design Approval Holder Embraer S.A.

This MP, when signed, supersedes and cancels the 25 September 2014 MP entitled “Production of Airplanes in Accordance with FAA Type Certificates A59CE and A60CE” between FAA and ANAC/SAR.

### **1.2 PURPOSE**

The EEA, located in Melbourne, Florida, and certified by the FAA with the Production Certificate (PC) No. 346CE, has, as a supplier, Embraer S.A. located in Brazil and certified by ANAC with the Production Certificate COP E-7203-01.

This MP defines the processes and working procedures established to allow for technical assistance between ANAC/SAR and the FAA for the surveillance of EEA’s supplier Embraer S.A., and Embraer S.A.’s supplier’s activities. This MP also provides for the addition of Embraer Models EMB-545 and EMB-550 as listed in Appendix 4.

A. This MP defines:

1. The process by which the FAA may request ANAC/SAR technical assistance with surveillance activities of Embraer S.A. and its approved suppliers under the ANAC COP E-7203-01, as suppliers of EEA;
2. The process by which the FAA may request ANAC/SAR technical assistance on specific oversight tasks to be performed in Brazil necessary for the oversight of the EEA FAA PC No. 346CE; and
3. The procedures by which the ANAC/SAR will assist the FAA on the surveillance of Embraer S.A. certified facilities under ANAC COP E-7203-01. This surveillance includes approved suppliers of Embraer S.A. located in Brazil or a third Country.

B. This MP is specific to the U.S. type certificates (TCs) held by Embraer S.A. and licensed to EEA for production as listed in Appendix 4.

### **1.3 BACKGROUND**

EEA applied for and received a PC from the FAA to manufacture products at EEA's facility in Melbourne, Florida based on a licensing agreement from the Design Approval Holder Embraer S.A. This was permissible through Section III paragraph 3.1.3 of the FAA/ANAC Implementation Procedures for Airworthiness (IPA), revision 1, dated September 8, 2006. Familiarization training with the ANAC/SAR is viewed as minimal due to the high degree of mutual confidence in the FAA's and ANAC's technical competence and regulatory capabilities to perform these tasks as defined in Section 1 paragraph 1.2 of the IPA.

- 1.3.1 The FAA Orlando Manufacturing Inspection District Office (MIDO) conducted multiple supplier audits at EEA and at supplier Embraer S.A. The audits at Embraer S.A. were performed on 16 May 2011 and on 5 May 2013 respectively. Through the audits at EEA and at Embraer S.A, it was determined that both facilities were in compliance with the EEA quality and engineering requirements and with the Title 14 of the Code of Federal Regulations (14 CFR). The Orlando-MIDO performed the audits of EEA and EEA supplier Embraer S.A, for the models listed in the EEA Production Limitation Record (PLR): EMB-500 (U.S. TC A59CE) and EMB-505 (U.S. TC A60CE). The audits were completed at São José dos Campos, Gavião Peixoto, and Botucatu, Brazil. The FAA found that the supplier was in compliance with the EEA quality and engineering requirements and with 14 CFR respective to the FAA issued PC. The FAA may provide additional familiarization training to ANAC/SAR during future MIDO audits for the addition of EMB Models and at any other time deemed necessary by either party including other future additions to the EEA PLR.
- 1.3.2 The aircraft are completely assembled, test flown, and delivered under EEA's FAA PC No. 346CE. Since the issuance of the PC, EEA has applied for designees; the designees were appointed and are located at the EEA facility in order to certify the aircraft under the oversight of the FAA.

## **CHAPTER 2: RESPONSIBILITIES AND PROCEDURES**

It is understood by both FAA and ANAC/SAR that the EEA remains fully responsible for all its suppliers including Embraer S.A. and Embraer S.A.'s supplier chain employed in the manufacture of EEA aircraft. This responsibility includes the accountability for the use of the licensed approved type design data, manufacture and test to the approved type design data, use of approved type design data by supplied articles, notification of changes in their supply chain and continuing airworthiness for their products.

All aircraft system components (propulsion, electrical, navigational, hydraulics, etc.), structural, and interior articles are shipped from Embraer S.A. or its approved suppliers under ANAC Production Organization Certificate – COP E-7203-01 located in Brazil or a third Country, to the EEA facility in Melbourne, Florida, accompanied by the respective Certificate of Conformity.

### **2.1 FAA RESPONSIBILITIES AND PROCEDURES**

#### **2.1.1 The FAA will:**

- 2.1.1.1 Assign the Orlando-MIDO to perform certificate management with assistance from the ANAC/SAR in accordance with the FAA/ANAC IPA, revision 1 and the current FAA Order 8120.23, (*Certificate Management of Production Approval Holders*) or ANAC equivalent document. ANAC's production approval holder and supplier surveillance programs are described in ANAC MPR-300 (*Certificação de Produção e Vigilância, Production Approval and Surveillance Procedures Manual*). Information concerning the application and certification process of products, parts and articles is also found in ANAC's Information Circulars 21-005, 21-006, and 21-011;
- 2.1.1.2 Notify ANAC/SAR of any changes in FAA regulations, policy, or guidance that may affect the continued surveillance activities conducted by ANAC/SAR on FAA's behalf at Embraer S.A.;
- 2.1.1.3 Assign the Orlando-MIDO to conduct surveillance necessary to ensure that EEA is in overall compliance with 14 CFR §21.146. The FAA reserves the right to conduct designee management, service difficulty investigation, and other activities necessary to fulfill its regulatory responsibilities;
- 2.1.1.4 Determine the need for unscheduled quality control system evaluations and any investigation activity necessary to ensure continued compliance with all applicable regulatory requirements, and may request ANAC/SAR assistance in the conduct of these activities;

- 2.1.1.5 Assign the Orlando-MIDO to develop an annual Certificate Oversight Work Plan for the EEA/FAA production certificate and will share it with ANAC/SAR and will:
- a) Detail the support needed, the process and procedures to be used, the specific data required for input into the FAA's documentation and certificate management system, and the timeframe for the activity;
  - b) Include requests for technical assistance in writing (may be transmitted electronically) to the ANAC/SAR point of contact (POC) listed in Appendix 1; and
  - c) If ANAC/SAR is unable to support the FAA's new certificate management requirements via the Annual Certificate Oversight Work Plan, the FAA will request that ANAC fund inspections that ANAC/SAR cannot undertake.
- 2.1.1.6 Inform the ANAC/SAR of changes to EEA's PC or production activities at EEA-Melbourne that may affect technical assistance activities being conducted by ANAC/SAR. For changes to the PLR, the Orlando-MIDO may conduct an audit using the guidelines in paragraph 3-6 of FAA Order 8120.22A in lieu of a Production Certification Board (PCB). This audit will determine whether the quality system is adequate or has been appropriately changed to ensure positive control of the product to be added to the PLR. When changes to the quality system are substantial, the Principle Inspector (PI) may elect to request a nonscheduled Quality System Audit (QSA) to make this determination;
- 2.1.1.7 Provide practical training and/or provide information to the ANAC/SAR on the quality system processes at EEA related to conducting product audits or inspections at Embraer S.A. as necessary or requested;
- 2.1.1.8 Investigate regulatory violations and implement compliance and enforcement action as necessary per FAA Order 2150.03, *"Compliance and Enforcement Program"*. The FAA is responsible for appropriate compliance and enforcement action against EEA for any noncompliance detected at Embraer S.A. or at approved suppliers as necessary;
- 2.1.1.9 Notify ANAC/SAR of all visits by its personnel associated with this project; and
- 2.1.1.10 Ensure the activities performed under this MP do not impose undue burden to ANAC/SAR.

## **2.2 ANAC/SAR RESPONSIBILITIES AND PROCEDURES**

### **2.2.1 ANAC/SAR will:**

- 2.2.1.1 Evaluate how to accommodate the FAA annual Certificate Oversight Work plan within the ANAC/SAR annual Certificate Oversight Work Plan. The ANAC/SAR will inform the FAA of the activities that can or cannot be undertaken;
- 2.2.1.2 Acknowledge receipt of all information sent by the FAA regarding Embraer S.A.;
- 2.2.1.3 Conduct oversight activities according to ANAC/SAR Oversight Work Plan, including audits/inspections of the manufacturing activity at Embraer S.A. and its approved suppliers under the PC No. COP E-7203-01. These oversight activities may be considered to be on behalf of the FAA in accordance with the FAA/ANAC IPA revision 1, current FAA Order 8120.23, (*Certificate Management of Production Approval Holders*) or ANAC equivalent document. Supporting documents for these activities are listed in Appendix 2;
- 2.2.1.4 Use its own procedures and plans for oversight activities, unless the FAA asks for additional activities or to perform an activity in a different way. ANAC/SAR will then use the FAA procedures for certificate management accordingly;
- 2.2.1.5 Evaluate requests from the FAA for oversight activities, and place special emphasis on the following:
  - a) Embraer S.A. controls on design/configuration changes;
  - b) Embraer S.A. use of approved suppliers at the facility; and
  - c) Conducting product audit/inspections of completed or in-process assemblies, to include special process audits and witnessing re-inspection conducted by Embraer S.A. personnel of completed assemblies.
- 2.2.1.6 Provide copy of oversight activities reports to the FAA POC listed in Appendix 1 after the completion of each oversight activity performed in support of the FAA annual Certificate Oversight Work Plan and after each requested specific task. ANAC/SAR will provide reports using its own format if bilingual and if bilingual does not exist, will use the FAA forms specified in Appendix 3;
- 2.2.1.7 Notify the FAA of known nonconforming parts or assemblies produced at Embraer S.A. or its approved supplier chain for delivered material to EEA, using the most expeditious means of communications (e.g. electronic mail, facsimile, telephone, etc.);

- 2.2.1.8 Notify the FAA of significant Embraer S.A. organizational changes observed during the oversight activities;
- 2.2.1.9 ANAC/SAR will provide an annual summary report of all specific task activities conducted on behalf of the FAA. The report should include, at the minimum, the following information:
  - a) The number of product audits/inspections conducted, according the specific task requested by FAA;
  - b) All detected non-compliances to the approved data (drawings, specifications, processes, or certification-related items); and
  - c) Any supporting documentation associated with a detected non-compliance to the approved data or certification-related items.
- 2.2.1.10 Provide assistance with conducting investigations of service difficulties at Embraer S.A.; verify the implementation of corrective actions; and verify the implementation of changes, as notified to the FAA accepted quality control system as requested;
- 2.2.1.11 Provide the FAA with all available information to support the FAA planning of the annual Certificate Oversight Work Plan. This information includes the current and previous ANAC annual oversight plans and any other relevant information; and
- 2.2.1.12 Ensure the activities performed under this MP do not impose undue burden to the FAA.



### **CHAPTER 3: CHANGES TO THIS MANAGEMENT PLAN**

- 3.1 The MP and Appendices are intended to be flexible and will be revised as necessary when agreed to by both the FAA and ANAC/SAR.
- 3.2 Changes that may necessitate a revision in this plan include, but are not limited to:
  - a) Quality control or service difficulty problems at EEA or its suppliers facilities;
  - b) Increased/decreased production volume at the EEA facilities;
  - c) Changes in Risk-Based Resource Targeting assessments conducted by the FAA for EEA;
  - d) Changes in the production/fabrication of parts and assemblies at the Embraer S.A. facilities or its suppliers;
  - e) Changes in the organizational structure or management at EEA; and
  - f) Additions to the PLR.

## **CHAPTER 4: AUTHORITY**

Any further clarifications or revision to this document will only be made after consultation with both Authorities.

### **FEDERAL AVIATION ADMINISTRATION**

By \_\_\_\_\_  
Jeff Duven

Title Director,  
System Oversight Division

Date September 18, 2017

### **NATIONAL CIVIL AVIATION AGENCY**

By \_\_\_\_\_  
Mário Igawa

Title General Manager,  
General Management of  
Aeronautical Product  
Certification

Date September 18, 2017

**ORIGINAL SIGNED COPY WITH ANAC AIRWORTHINESS DEPARTMENT - SAR**

## **APPENDIX 1**

### **POINTS OF CONTACT**

#### **FAA**

Mr. John Kolin, Manager  
Orlando MIDO Section  
5950 Hazeltine National Drive, No. 405, Orlando, FL 32822  
Phone 407-855-6090  
Fax 407-438-1900  
E-mail [john.kolin@faa.gov](mailto:john.kolin@faa.gov)

Mr. Gregory Gaulin, Aviation Safety Inspector  
Inspector for EEA  
Orlando MIDO Section  
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Fax 407-438-1900  
E-mail [gregory.gaulin@faa.gov](mailto:gregory.gaulin@faa.gov)

Mr. Thomas Hayden, Aviation Safety Inspector  
Inspector for EEA  
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Orlando MIDO general email address is:  
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#### **ANAC/SAR**

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Phone 55 (12) 3797-2386  
Fax 55 (12) 3797-2330  
E-mail [pedro.paludo@anac.gov.br](mailto:pedro.paludo@anac.gov.br)

NOTE: These points of contact may be changed through written notification. This notification may be electronic.

## APPENDIX 2

### SUPPORTING DOCUMENTATION

The FAA and ANAC/SAR should reference the following documents as appropriate when carrying out their respective responsibilities under this MP:

- a. The EEA quality procedures including any revisions or changes made.
- b. Embraer S.A. quality procedures local to the various Embraer S.A. facilities and or suppliers.
- c. A list of pertinent assemblies, and drawings required to assemble and test the EMB-500 and the EMB-505 components.
- d. Appropriate FAA Orders: Order 8120.23, *Production Approval and Certificate Management Procedures*, Quality System Audits (QSA), Order 2150.3, *Compliance and Enforcement Program*, and any other deemed appropriate or equivalent ANAC documents (Form F-300-28, MPR 121, MPR 221, and others). These may be located on the FAA website: <http://rgl.faa.gov/> or on ANAC website: <http://anac.gov.br/>.

## APPENDIX 3

### FORMS

FAA FORMS	ANAC EQUIVALENT FORMS
Form 8100-1, Conformity Inspection Record	F-300-19 – Registro de Inspeção de Conformidade
Form 8100-6, Noncompliance Record	F-300-33 – Relatório de Não Conformidade and F-300-38 – Relatório de Auditoria
Form 8120-14, Certificate Management Activity	No ANAC equivalency.

NOTE: These forms will be provided to the ANAC/SAR by the FAA, as necessary, and may be generated electronically and submitted by e-mail. Sample forms and instructions are available in FAA Order 8120.23A, Production Approval and Certificate Management Procedures. If not specified by FAA, ANAC/SAR will use equivalent forms provided it is in both English and Portuguese language.

## **APPENDIX 4**

### **FAA TYPE CERTIFICATES**

This MP covers the activities related to the Embraer Executive Aircraft, Inc. production of the following Embraer S.A. aircraft models, according to the respective FAA Type Certificates:

- |               |                           |
|---------------|---------------------------|
| a) TC A59CE   | Model EMB-500             |
| b) TC A60CE   | Model EMB-505             |
| c) TC 00062IB | Model EMB-545 and EMB-550 |