



Civil Aviation Administration of China

Advisory Circular

Issue No: CAAC (2023) 18
AC No: AC-145-FS-002 R2
Release Date: May 10, 2023

Application and Approval of Foreign Maintenance Organizations

AC-145-FS-002 R2

Table of Contents

| | |
|---|----|
| 1. Basis and Purpose..... | 1 |
| 2. Scope of Application | 1 |
| 3. Repeal | 1 |
| 4. Description | 1 |
| 5. General Information | 2 |
| 6. Specifications for Maintenance Rating Application | 4 |
| 6.1 Airframe Maintenance Rating | 4 |
| 6.2 Engine Maintenance Rating..... | 5 |
| 6.3 Propeller Maintenance Rating..... | 5 |
| 6.4 Components Maintenance Rating | 6 |
| 6.5 Other Maintenance Rating | 7 |
| 7. Normal Procedure | 7 |
| 7.1 Initial Application and Approval..... | 7 |
| 7.2 Application and approval for Changes..... | 9 |
| 7.3 Application and Approval for Renewal..... | 11 |
| 8. Simplified Procedure..... | 12 |
| 8.1 Applicable Conditions..... | 12 |
| 8.2 Initial Application and Approval..... | 12 |
| 8.3 Application and Approval for Changes..... | 14 |
| 8.4 Application and Approval for Renewal..... | 15 |
| 8.5 Cancellation of Simplified Procedures | 16 |
| 9. Charging Criteria..... | 16 |
| 9.1 Charges for Initial Approval (To)..... | 16 |
| 9.2 Charges for Renewal of Maintenance Organization Certificate (Ta) | 18 |
| 9.3 Charges for Changes to Maintenance Organization Certificate (Tc)..... | 18 |
| 10. Effectivity | 20 |

| | |
|---|----|
| Appendix A: Application for Issue of Maintenance Organization Certificate | 21 |
| Appendix B: Example of Maintenance Capability List..... | 23 |
| Appendix C: Interpretation of Typical Questions | 24 |
| C.1 Why can't a foreign maintenance organization apply for line maintenance function? | 24 |
| C.2 Is it permissible to conduct repair beyond the manual approved or recognized by the national aviation authority (NAA) of the home country (or region) (such as DER in the USA, DOA in Europe, etc.)? | 24 |
| C.3 Are all subcontractors required to apply for approval of CCAR-145 or are all parts to be subcontracted for repair required in the maintenance capability list? | 25 |
| C.4 If there are differences between the requirements of the Civil Aviation Administration of China(CAAC) and the local national aviation authority (NAA) of the country where the maintenance organization is located for Safety Management System (SMS), how does the maintenance organization meet the relevant requirements of CCAR-145?..... | 26 |
| C.5 If the local national aviation authority (NAA) of the country where the maintenance organization is located does not require and approve the Training Program of the Maintenance Organization, how does the maintenance organization meet the relevant requirements of CCAR-145? | 26 |
| C.6 Is the implementation of 《Technical Arrangement on Aviation Maintenance between CAAC and CAAS》 signed between CAAC and Civil Aviation Authority of Singapore same as the JMM? | 27 |
| C.7 How to determine the maintenance organization affiliated to an OEM and its products?..... | 28 |
| C.8 For the maintenance organizations belong to an aviation cooperate group which has established unified audit program, why they are not included in scope of applying through simplified approval procedures? | 28 |

1. Basis and Purpose

This Advisory Circular is formulated in accordance with China Civil Aviation Regulation (CCAR), the Certification Rules for Civil Aircraft Maintenance Organizations (CCAR-145 Part), aiming to regulate and provide guidance for foreign maintenance organizations to apply for, change and renew Maintenance Organization Certificate (MOC), and to publicize relevant charging criteria.

2. Scope of Application

This advisory circular is applicable to foreign maintenance organizations applying for Maintenance Organization Certificate in accordance with CCAR-145.

3. Repeal

AC-145-2R1, Application Guide for Foreign/Regional Maintenance Organization Certificate, dated 12th July 2011, shall be abolished from the date when this Advisory Circular was promulgated.

4. Description

The internationalization of aviation manufacturing and transport industries determines the inevitable trend for the internationalization of aviation maintenance industry. Although different countries have different regulations in respect of administration of maintenance organization certificates, they have the same goal on ensuring civil flight safety and consistent obligations to implement the standards and recommended measures provided for in the annexes to Convention on International Civil Aviation. To reduce resources for assessment and approval as much as possible, the maintenance organizations approval by the local National Aviation Authority (NAA) of countries for foreign applicant is a prerequisite. CAAC rely on the local NAA for routine supervision.

In addition, bilateral agreements about maintenance permission in the world include such two manners as direct recognition and recognition-based approval. The Civil Aviation Administration of China (CAAC) adopts the manner of recognition-based approval. Although it adopts simplified

procedures, approval is still required. Furthermore, to encourage foreign original equipment manufacturers to actively provide aftermarket maintenance service for their products, the CAAC also adopts simplified approval procedures when applicable, based on the risk analysis.

This AC, based on the above principles, provides guidance to foreign maintenance organizations applying for Maintenance Organization Certificate (MOC) from CAAC, and for facilitating understanding relevant procedures and policies. In order to focus on answering the common questions of foreign maintenance organizations, an appendix with such information is added to this AC, however the appendix only covers some typical questions currently encountered. In case of any other questions, written consultations can be sent to the CAAC Flight Standards Department, and additional information might be added to the appendix to this AC, subjected to the case.

For the maintenance organizations located in Hong Kong and Macao Special Administrative Regions of the People's Republic of China, the Cooperation Agreement on Joint Maintenance Management (JMM) signed by and among CAAC, Civil Aviation Department of Hong Kong Special Administrative Region and Civil Aviation Authority of the Macao Special Administrative Region, instead of this AC, shall apply.

5. General Information

5.1 A foreign maintenance organization, as an applicant, shall be a maintenance organization that has obtained the approval of the national aviation authority (NAA) of the country where it is located, and the credit information record of the civil aviation industry contains no record of serious dishonest behavior of the applicant or its accountable manager, quality manager and production manager in relevant maintenance business fields.

Note: For the maintenance organization that performs maintenance work in multiple locations, please refer to AC-145-FS-016 "Multiple Locations Maintenance Organization and Offsite Maintenance" for the application acceptance and approval. The maintenance locations involved in the application of the foreign maintenance organization shall be located in the same country. For the case of setting up branches across countries, the

branch will be regarded as another maintenance organization.

5.2 When foreign maintenance organizations apply for changes or renewal of the "Maintenance Organization Certificate", an "Applications for Issue of Maintenance Organization Certificate" form (see Appendix A of this document for a sample) signed by the accountable manager shall be submitted formally to the CAAC, and the normal or simplified process should be chosen according to the applicable conditions.

5.3 The Flight Standards Department of CAAC is responsible for the acceptance and approval of the applications for the Maintenance Organization Certificate from foreign maintenance organizations. The contact information is as below:

Continuous Airworthiness Maintenance Division,

Flight Standards Department, CAAC

Address: No. 155, Dongsì West Street, Dongcheng District, Beijing

Postcode: 100710

E-mail: maintenance@caac.gov.cn

5.4 When applying for the Maintenance Organization Certificate for the first time, a maintenance organization shall provide information of the responsible contact person and contact method so as to receive relevant notifications and update it in time after the responsible contact person or contact information changes.

Note: The responsible contact shall be the quality manager of the maintenance organization, or the staff member of the maintenance organization authorized by the quality manager, to fill in and submit the application information online through the Flight Standards Oversight Program Platform (hereinafter referred to as the "FSOP System", URL: (<http://fsop.caac.gov.cn/>)). When applying for the first time, the responsible contact person should obtain the company account number in the FSOP through communicating with the CAAC Flight Standards Department by email (maintenance@caac.gov.cn).

5.5 The fees for application acceptance, audit and certification of maintenance organizations are calculated based on man-hour cost and relevant charging standards of the People's Republic of China. See Section 9

6. Specifications for Maintenance Rating Application

6.1 Airframe Maintenance Rating

Foreign maintenance organizations may apply for the following maintenance functions for airframe maintenance rating:

(1) Scheduled maintenance: which shall be determined with reference to the maintenance interval framework given in the Scheduled Maintenance Requirements (SMR) approved or recognized by the Aircraft Evaluation Group of CAAC, including the aircraft type and maintenance interval, and indicating the highest maintenance interval applied for. Scheduled maintenance automatically includes periodic maintenance under the maintenance interval applied for, and include repairs of defects detected during implementation of the scheduled maintenance tasks, and modifications that can be performed in conjunction with the scheduled maintenance, without special approval required.

(2) Overhaul: which is applicable only to aircraft types with airframe overhaul time requirements. Overhaul automatically includes scheduled maintenance under the overhaul interval and include repairs of defects detected during implementation of scheduled maintenance tasks, and modifications that can be performed in conjunction with the overhaul, without special approval required.

Note 1: Although the Scheduled Maintenance Requirements (SMR) gives the maintenance interval framework, it does not restrict the scheduled maintenance work package to include several individual maintenance tasks that exceed its applied/approved highest maintenance interval. If such a situation occurs, the quality department can evaluate the organization's specific actual maintenance capability, and it can be implemented together with the scheduled maintenance after confirming that the organization has the corresponding capability.

Note 2: When an application for aforesaid scheduled maintenance or overhaul includes individual maintenance tasks that the maintenance organization does not have capabilities, the maintenance organization shall attach a clear list of such maintenance tasks and indicate the planned

6.2 Engine Maintenance Rating

Foreign maintenance organizations may apply for the following maintenance functions for engine maintenance rating:

(1) Repair: It should be determined with reference to the maintenance interval or category framework given in the engine maintenance manual recognized by Aircraft Airworthiness Certification of CAAC. Repair automatically includes the inspection/test capability, and includes the repair of defects detected in the scheduled repair tasks, and the modification and replacement of units that can be performed in conjunction with the repair, without special approval required.

(2) Overhaul: only applicable to engine models with overhaul time limit requirements. Overhaul automatically includes repairs and inspections under the overhaul interval, as well as repairs of defects found in the implementation of scheduled repair tasks and modifications that can be performed in conjunction with the overhaul, without special approval required.

Note: When an application for aforesaid repair or overhaul includes individual maintenance tasks that the maintenance organization does not have capabilities, the maintenance organization shall attach a clear list of such maintenance tasks and indicate the planned subcontractor.

6.3 Propeller Maintenance Rating

Foreign maintenance organizations may apply for the following maintenance function categories for propeller maintenance rating:

(1) Scheduled Maintenance: which shall be determined with reference to the maintenance interval framework given in the Propeller Maintenance Manual (PMM) recognized by CAAC, including propeller type and maintenance interval, and indicating the highest maintenance interval to be applied. Scheduled maintenance automatically includes the periodic maintenance and inspection/testing under the aforesaid maintenance interval applied for, as well as repairs of defects detected during implementation of scheduled maintenance tasks and modifications that can be performed in

conjunction with the scheduled maintenance, without special approval required.

(2) Overhaul: only applicable to propeller models with overhaul time limit requirements. Overhaul automatically includes scheduled maintenance and inspections under the overhaul interval, as well as repairs of defects detected during implementation of scheduled maintenance tasks, and modifications that can be performed in conjunction with the overhaul, without special approval required.

Note: When an application for aforesaid repair includes individual maintenance tasks that the maintenance organization does not have capabilities, the maintenance organization shall attach a clear list of such maintenance tasks and indicate the planned outsourcing organizations.

6.4 Components Maintenance Rating

Foreign maintenance organizations may apply for the following maintenance function categories for component maintenance rating: Inspection/Testing, Repair (including Inspection/Testing) or Overhaul (including Inspection/Testing and Repair where applicable) of subsystems covered in certain ATA, with a specific capability list containing the following elements attached:

(1) Part number: the specific part number of a part. “XX” can be used as suffixes to represent several specific configurations.

(2) Name (Description): name of the part.

(3) ATA code: the code of ATA to which the part belongs to, which shall be specific to the subsystem code, e.g., XX- XX.

(4) Manufacturer: the original manufacturer of the part.

(5) Maintenance Category: Inspection/Testing, Repair or Overhaul (Repair is deemed as including Inspection/Testing capability; Overhaul is deemed as including Inspection/Testing and Repair capability).

(6) Remark: other maintenance basis documents (if any) in addition to CMM shall be specifically indicated.

Note 1: In consideration of the possible differences in the division of

specific ATA chapters defined by various original manufacturers, applying for the maintenance function category of component maintenance rating should be described in the form of "ATA chapter + first digital number of subchapters" (e.g., 21-20), but the four-digit chapter number should be indicated in the maintenance capability list, and correspond to the application rating.

Note 2: Capability of Component Repair or Overhaul automatically includes the modifications which can be implemented in conjunction with the repair or overhaul, it is not required to be specially specified.

Note 3: For the division of subsystems of ATA Section on a typical aircraft model, please refer to the corresponding ATA contents of the main aircraft model corresponding to such part.

6.5 Other Maintenance Rating

Foreign maintenance organizations may also apply for the following separate items as "Other Maintenance Rating" and specify, for example:

- (1) Specialized Service independently undertake the maintenance of the aforesaid airframe, engine, propeller, or component.
- (2) Painting of the whole aircraft.
- (3) Passenger-to Freighter(PTF) conversion ; and
- (4) Aircraft dismantling.

Note: If the Specialized Service of a maintenance organization are only to support the maintenance of a specific aircraft, engine, propeller or components, and the maintenance organization is not planning to undertake the Specialized Service work separately, it is not required to apply for it.

7. Normal Procedure

7.1 Initial Application and Approval

Foreign maintenance organizations applying for the first time should submit the "Application for Issue of Maintenance Organization Certificate" together with the following application materials:

(1) Letter of Intent for repairs from Chinese customers.

(2) A copy of the valid "Maintenance Organization Certificate" issued by its local National Aviation Authority (NAA), including the corresponding complete maintenance ratings and limitations.

(3) The Maintenance Organization's Management Manual and Training Program Manual approved by its local National Aviation Authority (NAA).

(4) Supplementary Manual developed in accordance with the latest revision of CAAC AC-145-FS-005.

(5) A list of specific component maintenance capabilities (only applicable to the application for component maintenance rating).

(6) Statement of compliance with CCAR-145, including relevant supporting materials.

Note: For the aircraft dismantling rating, please refer to the latest effective advisory circular AC-145-FS-017 "Aircraft Dismantling" for the application materials that should be submitted. The following 7.2 and 7.3 are the same when they involve the aircraft dismantling project.

After receiving the complete application materials, the CAAC Flight Standards Department will, within 5 working days, give feedback on acceptance and notification of charge to the applicant.

After accepting the formal application materials of the applicant, the CAAC Flight Standards Department will be in communication with the applicant's responsible contact to determine the audit plan, appoint an audit team, and conduct document and on-site audit after confirming receipt of the payment of audit fee.

Note: When determining an audit plan, the human resources of the CAAC and the processing time for entry visas of the country or region where the applicant is located will be comprehensively taken into account.

If noncompliance against the requirements of CCAR-145 is found in audit, the applicant will be formally notified by Notification of Audit Finding. For any problem listed in the Notification of Audit Finding, the applicant shall, through the responsible contact, feedback the corrective actions that have been taken to the audit team within 30 days. If the corrective actions are not

accepted, the audit team shall timely give feedback to the applicant and give the applicant another 30 days to supplement the corrective actions.

Note: In case that the applicant fails to feedback its corrective actions or supplementary corrective actions within 30 days, it will be deemed that the applicant has automatically given up the application, and the approval procedure shall be terminated. If there is any dispute between the applicant and the audit team with respect to any nonconformance found out or the recognition of corrective actions, the applicant may submit a written request of judgement directly to the CAAC Flight Standards Department.

In case that no nonconformance is found out, or the corrective actions for the nonconformance have been accepted, the CAAC Flight Standards Department shall approve the supplementary manual developed in accordance with AC-145-FS-005, and issue the Maintenance Organization Certificate to the applicant within 20 working days.

Note: The list of component maintenance capabilities for component maintenance rating is restricted and approved in conjunction with the approved maintenance ratings in the "Maintenance Organization Certificate", and no approval is required but it needs to be filed (to the FSOP system) and provided for public inquiries. Any change to the list of component maintenance capabilities (including adding and deleting part numbers) should be filed to the Flight Standards Department in a timely manner.

The "Maintenance Organization Certificate" is valid for 36 months, unless expressly restricted or revoked.

Note: The limitation of the validity period is determined in consideration of the circumstance that the validity period of the Maintenance Organization Certificate approved by the local national aviation authority (NAA) is less than 36 months. Such circumstance shall be subject to the validity period of the certificate issued by the local national aviation authority (NAA).

7.2 Application and approval for Changes

In case of any changes that may affect the validity of the Maintenance Organization Certificate, the maintenance organization shall submit a change application to the CAAC Flight Standards Department through the FSOP system, and submit the following application materials together with the

“Application for Issue of Maintenance Organization Certificate”:

(1) Circumstances involving the changes (including necessary transitional plan).

(2) Copy of the valid Maintenance Organization Certificate corresponding to the relevant changes issued by the national aviation authority (NAA) of the country where the maintenance organization is located, including corresponding complete maintenance ratings and limitations.

(3) Changes to the Maintenance Organization Management Manual and Training Program Manual approved by the national aviation authority (NAA) of the country where the maintenance organization is located.

(4) Changes to the supplementary Manual developed as per AC-145-FS-005 (if any).

(5) Changes to the maintenance capacity list for specific parts (if any).

(6) Other necessary explanations.

After receiving the aforesaid complete application materials, the Flight Standards Department will give feedback to the applicant on the acceptance status within 5 working days, including clarifying that only document review or on-site audit is required, and notice of charge will be attached. Onsite audit is generally not required if the change does not involve major changes in the maintenance management system and management documents, or changes in maintenance ratings, and the CAAC Flight Standards Department will process the changes through the document review. The charge is calculated according to the criteria set out in section 9 of this AC based on the changed items and assessment methods.

If only document review is needed, the CAAC Flight Standards Department will directly review the application materials after confirming the receipt of the paid review fee; if on-site audit is required, the Flight Standards Department will coordinate with the applicant's responsible contact to determine the audit plan, and assign an audit team, to conduct both document review and on-site audit after confirming receipt of the paid review fee.

The procedures from review/auditing to issuance of a modified "Maintenance Organization Certificate" are the same as the initial application,

AC-145-FS-002 R2 Application and Approval of Foreign Maintenance Organizations

but the validity period of the modified "Maintenance Organization Certificate" will remain unchanged.

7.3 Application and Approval for Renewal

If the maintenance organization plans to keep its "Maintenance Organization Certificate" continuously valid, it shall submit the " Application for Issue of Maintenance Organization Certificate " to the Flight Standards Department 6 months before the expiration of its "Maintenance Organization Certificate", accompanied with the following application materials:

(1) Copy of the latest and effective Maintenance Organization Certificate issued by the national aviation authority (NAA)of the country where the maintenance organization is located, including corresponding complete maintenance rating and limitation.

(2) Latest and valid maintenance organization management manual and training program manual approved by the national aviation authority of the country where the maintenance organization is located.

(3) Other necessary explanations.

After receiving the above application materials, the CAAC Flight Standards Department will provide acceptance of application to the applicant within 5 working days, accompanied by the notice of charges for the application. Charges will be calculated based on the renewed items and in accordance with the criteria set out in paragraph 9 of this AC.

Note: the CAAC Flight Standards Department, when accepting a renewal application, may refer to the annual reports submitted by the maintenance organization after the previous approval is obtained. Failure to submit annual report in accordance with relevant requirements or provide false annual report will result in the rejection of application.

The procedures from acceptance of application to issuance of the renewed Maintenance Organization Certificate are the same as the initial application.

8. Simplified Procedure

8.1 Applicable Conditions

The simplified procedures for foreign maintenance organizations are applicable to the following situations:

(1) In accordance with the bilateral cooperation agreement signed between the CAAC and the national aviation authority (NAA) of the country the maintenance organization located, CAAC recognizes the audit and approval of the maintenance organization by the national aviation authority (NAA) of the country.

(2) The maintenance organization affiliated to an OEM that has obtained the type design approval (Production Approval) from CAAC or equivalent approval recognized by CAAC, applies for providing aftermarket maintenance service for the products the OEM made.

Note: When a maintenance organization affiliated to an OEM applies for maintenance services for the products other than the products made by the OEM, the normal procedure is applied.

8.2 Initial Application and Approval

A foreign maintenance organization applying for the first time through the simplified procedure should submit the "Application for Issue of Maintenance Organization Certificate", accompanied with the following application materials:

(1) A copy of the valid "Maintenance Organization Certificate" issued by its local national aviation authority (NAA), including the corresponding complete maintenance ratings and limitations.

(2) The Maintenance Organization's Management Manual and Training Program Manual approved by its local national aviation authority (NAA).

(3) Supplementary Manual developed in accordance with the latest revision of CAAC AC-145-FS-005.

(4) A list of specific component maintenance capabilities (only applicable to the application for component maintenance rating).

(5) For the maintenance organization affiliated to an OEM, a written

proof of relationship between the maintenance organization and the OEM is required to provided.

(6) For the CAAC recognition of the audit and approval of the maintenance organization by the national aviation authority (NAA) of the country where the maintenance organization is located under the bilateral cooperation agreement, a Letter of Intent from Chinese customer is required to provide.

CAAC Flight Standards Department will conduct necessary confirmation after receiving of the complete application materials as described above, and give feedback on acceptance status and notice of charges to the applicant, within 5 working days, upon confirmation that the simplified procedure is applicable to the applicant (only charges for the application acceptance and approval fee).

After the application is accepted, the CAAC Flight Standards Department will conduct a document review on the application materials. Noncompliance against the requirements of CCAR-145 will be formally notified to the applicant by the “Notification of Audit Findings”. For any findings listed in the Notification, the applicant shall, through the responsible contact, within 30 days, provide feedbacks to the CAAC Flight Standards Department for the corrective actions that have been taken. If the corrective actions are not accepted, the CAAC Flight Standards Department will provide the necessary feedbacks to the applicant in a timely manner, and another 30 days will be provided for the applicant to provide the supplementary corrective actions.

Note: if the applicant fails to feedback its corrective actions or supplementary corrective actions within 30 days, it will be deemed that the applicant has automatically given up the application, and the approval procedure shall be terminated.

In the case that nonconformance is found or the corrective actions for the nonconformance are accepted, the CAAC Flight Standards Department will approve the supplementary manual developed in accordance with AC-145-FS-005 and issue the “Maintenance Organization Certificate” to the applicant within 20 working days.

The "Maintenance Organization Certificate" is valid for 36 months, unless expressly restricted or revoked.

Note: The limitation of the validity period is determined in consideration of the circumstance that the validity period of the Maintenance Organization Certificate approved by the local national aviation authority (NAA) is less than 36 months. Such circumstance shall be subject to the validity period of the certificate issued by local national aviation authority (NAA).

8.3 Application and Approval for Changes

In the case of any changes that may affect the validity of the Maintenance Organization Certificate, the foreign maintenance organization who has obtained the Maintenance Organization Certificate under the simplified procedures shall apply of change to the CAAC Flight Standards Department through the FSOP system, and the following application materials shall be attached when the Application for Issue of Maintenance Organization Certificate is submitted:

(1) Circumstances introduction involving the changes (including necessary transitional plan).

(2) Copy of the valid Maintenance Organization Certificate corresponding to the relevant changes issued by the national aviation authority (NAA) of the country where the foreign maintenance organization is located, including corresponding complete maintenance ratings and limitations.

(3) Changes to the Maintenance Organization Management Manual and Training Program Manual approved by the national aviation authority (NAA) of the country where the foreign maintenance organization is located.

(4) Changes to the supplementary manual developed as per AC-145-FS-005 (if any).

(5) Changes to the maintenance capability list for specific parts (if any).

(6) Other necessary explanations.

After receiving the complete application material as mentioned above, the CAAC Flight Standards Department will feedback the acceptance result and notice of charges to the applicant within days within 5 working days

The procedures from review to issuance of a modified "Maintenance Organization Certificate" are the same as the initial application, but the validity period of the amended "Maintenance Organization Certificate" will remain unchanged.

8.4 Application and Approval for Renewal

If the foreign maintenance organization who has obtained the "Maintenance Organization Certificate" under the simplified procedure intends to keep the continuous validity of the Maintenance Organization Certificate, an Application for "Issue of Maintenance Organization Certificate" shall be submitted to the CAAC Flight Standards Department 6 months prior to the expiry of the Maintenance Organization Certificate, with following application materials attached:

- (1) Copy of the latest and valid "Maintenance Organization Certificate" issued by the national aviation authority (NAA) of the country where the maintenance organization is located, including corresponding complete maintenance rating and limitations.
- (2) The latest and valid Maintenance Organization Management Manual and Training Program Manual approved by the national aviation authority (NAA) of the country where the maintenance organization is located; and
- (3) other necessary explanations.

After receiving the complete application material as mentioned above, the CAAC Flight Standards Department will feedback the acceptance result and notice of charges to the applicant within days within 5 working days (only charges for the application acceptance and approval fee).

Note: the CAAC Flight Standards Department, when accepting a renewal application, will refer to the annual reports submitted by the maintenance organization after the previous approval is obtained. Failure to submit annual report in accordance with relevant requirements provide false annual report will result in the rejection of application.

The procedures from acceptance of application to issuance of the renewed Maintenance Organization Certificate are the same as what the initial

application.

8.5 Cancellation of Simplified Procedures

A Maintenance Organization Certificate obtained by a foreign maintenance organization through the simplified procedure may be cancelled in any of the following conditions:

(1) Not accepting or cooperating with the investigation organized by the CAAC regarding the Chinese air operators' service difficult incidents related to the use of the products relevant to the maintenance organization.

(2) Any serious maintenance errors occurred.

(3) Failing to comply with the maintenance criteria stipulated in CCAR-145.

When a foreign maintenance organization reapplies for the Maintenance Organization Certificate after cancellation under the simplified procedures, the normal application procedure shall be applied.

9. Charging Criteria

9.1 Charges for Initial Approval (To)

(1) Charges for initial approval (To) include the sum of the application acceptance fee (A), onsite audit fee (C) and supplementary fee (S).

(2) The application acceptance fee (A) and onsite audit fee (C) is calculated according to charge criteria of standard working hours (man-hour) multiplied by standard working hour (man-hour).

(3) Standard working hours (man-hour) is equal to benchmark working hour (man-hour) multiplied by a weighting coefficient.

(4) Benchmark working hours (H) are categorized to benchmark working hour for application acceptance (Ha) and benchmark working hour for maintenance ratings (Hc). The benchmark working hour for application acceptance (Ha) is standardized to 12 man-hours, and calculations for benchmark working hour for maintenance ratings (Hc) are specified as followings:

(a) Airframe rating: 40 man-hours per each maintenance production line, and an 12 extra man-hours for each additional aircraft model added to the

same maintenance production line. For the whole aircraft painting and aircraft dismantling ratings, the man-hours are calculated by half of the aforesaid standard.

(b) Engine rating (including APU): 24 man-hours for each maintenance production line and an extra 8 man-hours for each engine model added to the same maintenance production line.

(c) Propeller rating: 16 man-hours for each maintenance production line and an extra 4 man-hours for each propeller model added to the same maintenance production line.

(d) Components rating: 24 man-hours for 30 items (inclusive) or less, 48 man-hours for items ranging from 30 to 100 (inclusive), 72 man-hours for items ranging from 100-200 (inclusive), 96 man-hours for items ranging from 200-500 (inclusive), 120 man-hours for items ranging from 500-1,000 (inclusive), 144 man-hours for items ranging from 1,000-3,000 (inclusive), 168 man-hours for items ranging from 3,000-5,000(inclusive), 192 man-hours for items ranging from 5,000-10,000(inclusive). For items more than 10,000, on the basis of 192 man-hours, an extra 24 man-hours are added for every additional 10,000 items (in the case of less than 10,000 items, it is calculated as 10,000 items).

(e) Specialized Service: 4 man-hours for each special technology.

(5) Weighting coefficient for standard working hours (K1): It is 1 if the working language is Chinese, and It is 4 if working language is English or any other languages.

(6) Standard Charging for working hours (N): RMB 200 YUAN per man-hour.

(7) Supplementary fee (S): including expenses for transportation, accommodation, and meeting room etc. Such expense shall be provided directly by the applicants and not be included in the application charge indicated in the “Notification of Acceptance for Application”. Flights tickets and transportation shall be purchased or arranged directly by applicants. Corresponding standards for accommodations and transportations should be followed in accordance with the staff policy of the applicant to be audited.

The calculation formula:

$$T_o = A + C + S = H \times K_1 \times N + S = (H_a + H_c) \times K_1 \times N + S$$

Note: H_a is the benchmark working hour for application acceptance, and H_c is the benchmark working hour for the category of a maintenance rating.

9.2 Charges for Renewal of Maintenance Organization Certificate (T_a)

(1) Charges for renewal of Maintenance Organization Certificate (T_a) will include the sum of the application acceptance fee (A), onsite audit fee (C) and supplementary fee (S).

(2) For the application acceptance fee (A) and onsite audit fee (C), the standard working hours is calculated according to standard working hours (man-hour) aforesaid for initial approval multiplied by coefficient K_2 ($K_2=0.6$).

(3) Supplementary fee (S): same as charges for initial approval.

The calculation formula:

$$T_a = A + C + S = H \times K_1 \times N \times K_2 + S = (H_a + H_c) \times K_1 \times N \times K_2 + S$$

Note: H_a is the benchmark working hour for application acceptance, and H_c is the benchmark working hour for the category of a maintenance rating.

9.3 Charges for Changes to Maintenance Organization Certificate (T_c)

(1) In the case of changes to the name or address of the maintenance organization only (refer to that address is changed due to administrative reasons while the actual physical location remains unchanged), only the application acceptance fee (A) will be charged.

The calculation formula:

$$T_c = A = H_a \times K_1 \times N$$

Note:

H_a is the benchmark working hour for application acceptance, which is 12 man-hours.

K_1 is the weighted coefficient of standard working hours, which is 1 if

the working language is Chinese and 4 if the working language is English or any other languages.

N is the standard charging for working hours, which is RMB 200 Yuan per man-hour. The actual working hours spent may be affected by factors such as the plant layout of the maintenance organization, cooperation, and discussions on the issues found, etc., which may result in difference from the standard working hour. However, it is unpredictable at the time of notification of charge, therefore the charge shall be calculated based on standard working hours while the actual working hours will not be considered.

(2) Charge for change to address include the sum of application acceptance fee (A), charge for onsite audit fee (C) and Supplementary fee (S).

(a) For the application acceptance fee (A) and the onsite audit fee (C), the standard working hours is calculated according to standard working hours (man-hour) aforesaid for initial approval multiplied by coefficient K3 (K3=0.8).

(b) Supplementary fee (S): same as charges for initial approval.

The calculation formula:

$$T_c = A + C + S = H \times K1 \times N \times K3 + S = (H_a + H_c) \times K1 \times N \times K3 + S$$

Note: H_a is the benchmark working hour for application acceptance, and H_c is the benchmark working hour for the category of a maintenance rating.

(3) Changes to maintenance ratings or items. The charge for adding new items is the same for initial approval. The charge for removing items, no charge is required, and no more charge for the removed items in the next renewal of Maintenance Organization Certificate. If changes to the maintenance capability list only without changing the Maintenance Organization Certificate, the change is counted in the next renewal of the Maintenance Organization Certificate instead of being charged separately.

Note 1: "The same maintenance production line" refers to the same maintenance area with the same factory facilities, personnel and management.

Note 2: The above charges are calculated in RMB. The “Notification of Acceptance for Application” issued by CAAC converts RMB into USD based on the foreign currency exchange rate released by the Bank of China.

10. Effectivity

This AC is required to implement on the date of issue, and the transition period is set to Dec 31, 2023.

Appendix A: Application for Issue of Maintenance Organization Certificate

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

维修许可证申请书

APPLICATION FOR ISSUE OF MAINTENANCE ORGANIZATION CERTIFICATE

1. 单位名称/Name of Applicant

2. 单位地址/Address

3. 单位类别/Category of Organization

- ☐ 航空运营人维修单位/Maintenance Organization of Operator
☐ 原制造厂家维修单位/Maintenance Organization of Original Equipment Manufacturer
☐ 其他/Other

4. ☐ 初次申请/Initial Application

维修项目类别 (详见 9) /Maintenance Item Category (Detailed as in 9):

- ☐ 机体/Airframe ☐ 发动机/Engine
☐ 螺旋桨/Propeller ☐ 航空器部件/Components
☐ 其它/Other

5. ☐ 变更申请/Application for Change

☐ 增加维修项目类别 (详见 9) /Change in Maintenance Item Category (Detailed as in 9):

- ☐ 机体/Airframe ☐ 发动机/Engine
☐ 螺旋桨/Propeller ☐ 航空器部件/Components
☐ 其它/Other
☐ 其他变更 (具体说明) /Other Change (Detailed as):

6. ☐ 更新证件有效期/Renewal of Effectiveness of Certificate

7. 授权联系人/Delegate Point of Contact

姓名/Name:

电子邮件/E-mail:

8. 责任经理签署/Accountable Manager

姓名/Name:

职务/Title:

签名/Signature:

日期/Date:

9. 具体维修地点及项目/Location and Specific Maintenance Items

| <u>地点/Location</u> | <u>具体维修项目/Specific Maintenance Items</u> |
|--------------------|--|
| A: | |
| B: | |
| C: | |

10. 其他说明/Other Information

Appendix B: Example of Maintenance Capability List

| 序号 No. | 件号 P/N | 名称 Description | ATA 章节 ATA Code | 制造厂家 OEM | 维修工作类别 Maintenance Category | 备注 Remark |
|-----------|-----------|-------------------|--------------------|-------------|-----------------------------------|--------------|
| 1 | XXXXXXXX | XXXX XXXXX | XX-X X | XX XXX XXXX | XX | XXXX |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Appendix C: Interpretation of Typical Questions

C.1 Why can't a foreign maintenance organization apply for line maintenance function?

Because line maintenance is a supportive maintenance closely related to the daily operation of air operators, the compliance with CCAR-145 mainly depends on the management and control of air operators, and it is not suitable to separately approve the line maintenance function of a foreign maintenance organization. However, a foreign maintenance organization or an individual is not restricted from undertaking line maintenance work consigned by an air operator or the maintenance organization of an air operator.

When undertaking consigned line maintenance, the foreign maintenance organization or an individual is deemed as working under the “Maintenance Organization Certificate” of the air operator or maintenance organization of the air operator, and shall comply with the requirements of the MOC holder who shall undertake the management responsibility.

Although as mentioned above, if a foreign maintenance organization or an individual commits any seriously dishonest behavior in undertaking consigned line maintenance, it may be listed in the CAAC's credit record system, and the air operator may be restricted from consigning airline maintenance work.

C.2 Is it permissible to conduct repair beyond the manual approved or recognized by the national aviation authority (NAA) of the home country (or region) (such as DER in the USA, DOA in Europe, etc.)?

The normal basis for CAAC's approval of a maintenance organization is based on the continuous airworthiness documents publicly released by the aircraft manufacturer. A maintenance organization may carry out repair beyond the manual after the air operator has evaluated and approved the repair beyond the manual in accordance with the provisions of CAAC. However, the maintenance organization should not decide to repair beyond the manual at its own discretion.

The above requirement is not to deny the relevant bilateral airworthiness

agreement, but rather because the repair beyond the manual may affect the subsequent configuration control and maintenance tasks, the air operator must be aware of this and take necessary controls, otherwise it may bring potential safety risks.

C.3 Are all subcontractors required to apply for approval of CCAR-145 or are all parts to be subcontracted for repair required in the maintenance capability list?

In compliance with subcontracted limitation of CCAR145 on the maintenance rating(s)/item(s) applied for, subcontractor does not need to apply for approval of CCAR-145 or issue airworthiness approval tag (Form AAC-038) for individual professional work portion (such as surface treatment, heat treatment, etc.); For subcontracted maintenance of sub-components (such as blades in engine scheduled maintenance, structural units in aircraft scheduled maintenance), the subcontractor shall be local maintenance organization with the sub-components maintenance capability approved by local national aviation authority (NAA), which is divided into the following situations:

(1) If the original part returned for installation back (on original product) after subcontracted maintenance, it may be an item that is not included in CAAC maintenance capability list, and there is no need to issue an airworthiness approval tag (Form AAC-038) after maintenance.

(2) If the original part returned is not for installation back after subcontracted maintenance but is planned to be used in the next maintenance, the subcontractor needs to hold a Maintenance Organization Certificate in accordance with CCAR-145, and needs to issue an airworthiness approval tag (Form AAC-038).

(3) If the used aircraft parts are provided by purchasing or exchanging, the provider of the parts needs to hold a Maintenance Organization Certificate in accordance with CCAR-145, and needs to issue an airworthiness approval tag (Form AAC-038).

In addition, for subcomponents subcontracted maintenance involving subcontractor outside the country where the maintenance organization is

located, the foreign maintenance organizations need to hold a Maintenance Organization Certificate in accordance with CCAR-145.

C.4 If there are differences between the requirements of the Civil Aviation Administration of China(CAAC) and the local national aviation authority (NAA) of the country where the maintenance organization is located for Safety Management System (SMS), how does the maintenance organization meet the relevant requirements of CCAR-145?

AC-145-FS-015 specifies that "For foreign maintenance organizations approved by CCAR-145, their Quality and Safety Management system (QSMS) can be developed in accordance with similar regulations of the local national aviation authority (NAA) of the country where the maintenance organization is located." There are two options for complying with:

(1) If the local national aviation authority (NAA) of the country where the maintenance organization is located has established similar regulations and the Maintenance Organization has complied with, it is not required to demonstrate compliance with the requirements of AC-145-FS-015.

(2) If the local national aviation authority (NAA) of the country where the maintenance organization has not established similar regulations, the maintenance organization shall demonstrate fully complying with the requirements of AC-145-FS-015.

C.5 If the local national aviation authority (NAA) of the country where the maintenance organization is located does not require and approve the Training Program of the Maintenance Organization, how does the maintenance organization meet the relevant requirements of CCAR-145?

AC-145-FS-013 specifies that "The Training Program of a Maintenance Organization shall be submitted to the Principal Maintenance Inspector (PMI) for review and approval in conjunction with the application for the Maintenance Organization Certificate", with the format not limited, provided that it is a formal controlled document, signed and approved by the accountable manager of the Maintenance Organization. Therefore, the relevant requirements of CCAR-145 can be met regardless of whether the

local national aviation authority (NAA) requires or approves Training Program Manual.

It is generally recommended that the maintenance organization can develop a summary document based on various internal training requirements in order to indicate compliance, and identify the alternative trainings corresponding to the equivalent Training Program (required by local CAA).

C.6 Is the implementation of 《Technical Arrangement on Aviation Maintenance between CAAC and CAAS》 signed between CAAC and Civil Aviation Authority of Singapore same as the JMM?

According to the Technical Arrangement on Aviation Maintenance between the CAAC and the CAAS concluded in August 2019, maintenance organizations in Singapore are still required to apply to the CAAC for approval, but no onsite audit and ongoing supervision are required; and vice versa. In addition, maintenance organizations in China shall issue the airworthiness approval tag (CAAS Form One) in accordance with SAR-145 for maintenance services relating to Singapore's aircraft. Conversely, when the maintenance services of Chinese aircraft are sent to a maintenance organization in Singapore, the maintenance organization in Singapore is also required to issue the airworthiness approval tag (CAAC Form AAC-038) in accordance with CCAR-145.

According to the Joint Maintenance Management Cooperation Arrangement (JMM) signed on November 30, 2021, the approvals of maintenance organizations in the China Mainland, Hong Kong and Macao regions have reached full mutual recognition, and there is no need for duplicate approval. That is, when a maintenance is sent to a maintenance organization in Hong Kong or Macao region, the airworthiness approval tag issued by the maintenance organization in Hong Kong or Macao (HKCAD or AACM Form One) can be directly used; Conversely, the airworthiness approval tag (CAAC Form AAC-038) issued as per CCAR-145 can be directly used for the maintenance concerning Hong Kong or Macao region.

C.7 How to determine the maintenance organization affiliated to an OEM and its products?

The key to determine the maintenance organization affiliated to a manufacturer is to define who is the OEM.

The OEM mentioned in this AC refers to a manufacturer who holds the Production Approval (Production Approval Holder-PAH) in accordance with CCAR-21 or holds the recognized corresponding production approval certificate issued by the national aviation authority (NAA) of the country where the organization is located under the bilateral airworthiness agreement. The OEM (PAH)'s products include the products directly made by the OEM and the products made by its (PAH's) supplier who does not have Production Approval certificate. When a supplier holding a Production Approval certificate, itself is deemed as an OEM (PAH), the products made by the supplier are no longer deemed as the uplevel OEM's products.

It is specially noticed that, if a supplier without a Production Approval certificate has obtained the Direct Shipping Authorization from the OEM (PAH), for the product made by the supplier and within the authorized direct shipping list, the supplier can be deemed as the OEM of the product, and the product also can be deemed as the uplevel OEM (PAH)'s product.

C.8 For the maintenance organizations belong to an aviation cooperate group which has established unified audit program, why they are not included in scope of applying through simplified approval procedures?

The situations listed in the simplified procedure of this AC should be universally applicable. However, the actual situation of each aviation cooperate group varies, so it is not appropriate to simply include such situation into the condition to which the simplified procedures apply.

CAAC always encourages and supports enterprises in strengthening their self-discipline measures, and is studying relevant applicable policies in response to the situation that an aviation corporate group has established a unified audit and surveillance system to its maintenance organization. Specifically, to sign a Partnership for Safety Program (PSP) with an aviation corporate group will be considered on a case-by-case basis.