## **IMPLEMENTATION PROCEDURES**

FOR THE

## **TECHNICAL ARRANGEMENT ON AVIATION MAINTENANCE**

**BETWEEN** 

CIVIL AVIATION ADMINISTRATION OF CHINA

AND

**CIVIL AVIATION AUTHORITY OF SINGAPORE** 





# IMPLEMENTATION PROCEDURES (IP) FOR CAAC-CAAS TECHNICAL ARRANGEMENT ON AVIATION MAINTENANCE (TA-AM) APPROVAL

THIS IS TO CERTIFY APPROVAL BY:

2 0

Date

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## **Revision History**

Revision	Date	Revision Description	Prepared By
0	30 April 2021	Original Version	CAAC & CAAS
1	16 August 2024	Section A Paragraph 6.5 – Removed. Procedure on accident/incident investigation request subsumed under new paragraph 7 on 'Technical Assistance' Paragraph 7 – New title on 'Technical Assistance' and included procedures on investigation support Appendix A1 – Updated CAAS contact details Appendix A2 – Updated the rating comparison tables to latest CCAR-145; Added new table for complete APU rating under 'Table A3' and amended indexing of tables.  Section B Appendix B2 – Added text for AMO to include procedures on safety management system in CAAC Supplement under new 'Chapter 16' Appendix B3 – Updated template on ARC Form AAC-0038.  Section C Appendix C2 – Update text in Chapter 7 to latest CAAS AC145-3 Appendix C2 – Added text for AMO to	CAAC & CAAS
		include procedures on safety management system in CAAS	
		Supplement under new 'Chapter 16'.	

## **List of Abbreviations / Acronyms**

AMO Approved Maintenance Organisation

ANO Air Navigation Order (CAAS)

CAAC Civil Aviation Administration of China
CAAS Civil Aviation Authority of Singapore

CCAR-145 China Civil Aviation Regulation Part 145 (CAAC)

CL Capability List

IP Implementation Procedures (for CAAC-CAAS TA-AM)

LOI Letter of Intent

MMM Maintenance Management Manual
MOA Maintenance Organisation Approval
MOC Maintenance Organisation Certificate
MOE Maintenance Organisation Exposition

POC Point of Contact

PMI Principal Maintenance Inspector

China People's Republic of China

SAR-145 Singapore Airworthiness Requirement Part 145 (CAAS)

Singapore Republic of Singapore

TA-AM Technical Arrangement on Aviation Maintenance

(between CAAC and CAAS)

TR Temporary Revision

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## **IMPLEMENTATION PROCEDURES**

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BETWEEN

## **CAAC AND CAAS**

# SECTION A Interaction Between CAAC and CAAS

(Not Applicable to Industry)

#### 1. INTRODUCTION

- 1.1 On 20 August 2019, the Civil Aviation Administration of China (CAAC) and Civil Aviation Authority of Singapore (CAAS) entered into a Technical Arrangement on Aviation Maintenance (TA-AM). The TA-AM allows for the reciprocal acceptance of each other's inspections and evaluation findings for the approval of maintenance organisations, thereby reducing duplication of regulatory oversight. The TA-AM permits each Authority to grant its own maintenance approval to the maintenance organisation based on the strength of the approval granted by the other Authority, provided these organisations are qualified under the provisions of the arrangement.
- 1.2 This Implementation Procedure (IP) document contains the procedures to support the TA-AM between CAAC and CAAS. It details the respective responsibilities and roles of CAAC and CAAS under the TA-AM. It describes the actions required of applicants located in the Republic of Singapore (Singapore) pursuing a CAAC maintenance organisation certificate (MOC) under the China Civil Aviation Regulation Part 145 (CCAR-145) and the actions required of applicants located in the People's Republic of China (China) seeking a CAAS maintenance organisation approval (MOA) under paragraph 8A of the Air Navigation Order (ANO), or other legislative provision enacted to replace paragraph 8A of the ANO and the Singapore Airworthiness Requirement Part 145 (SAR-145). To avoid doubt, the reference to SAR-145 includes a reference to the new legislative provision.

## 2. **DEFINITIONS**

Notwithstanding definitions contained in the CCAR-145 or SAR-145, for the purpose of this IP, the following definitions apply:

#### a) CAAS Coordinator

Assigned CAAS inspector who serves as the primary liaison for all matters with CAAC. The CAAS Coordinator establishes a line of communication with the assigned CAAC representative to coordinate and plan for the turnover of surveillance, oversee the renewal of certificates, and address any concerns raised by the CAAC/CAAS.

## b) CAAC Coordinator

Assigned CAAC inspector who serves as the primary liaison for all matters with CAAS. The CAAC Coordinator establishes a line of communication with the assigned CAAS representative to coordinate and plan for the turnover of surveillance, oversee the renewal of certificates, and address any concerns raised by the CAAC/CAAS.

## c) <u>Implementation Procedures (IP)</u>

The IP document which sets forth the implementation procedures and activities, as agreed between CAAC and CAAS, in fulfilling the terms and conditions as outlined in the CAAC-CAAS TA-AM.

## d) Participating AMOs

Approved maintenance organisations (AMOs) that are granted a CCAR-145 MOC or SAR-145 MOA under the provisions of CAAC-CAAS TA-AM.

#### 3. GENERAL IP INFORMATION

- 3.1 This IP document is divided into the following four sections:
  - a) Section A: Interaction between CAAC and CAAS that entails implementation procedures and compliance with the requirements of TA-AM.
  - b) Section B: Requirements for AMOs located in Singapore which presently hold or seek to apply for CCAR-145 MOC.
  - c) Section C: Requirements for AMOs located in China which presently hold or seek to apply for SAR-145 MOA.
  - d) Section D: Temporary revision (TR) to the IP pending the incorporation of a revision to the IP.
- 3.2 The IP document is electronically available to the respective officers of CAAC and CAAS. The IP document may be made available to the participating maintenance organisations by the respective Authority.
- 3.3 CAAC and CAAS agree to address interpretations and resolve issues through consultation or any other mutually agreed means.
  - a) For participating AMOs in China, CAAC Coordinator is the point-of-contact (POC), who will address any queries or matters raised by these AMOs. Similarly, CAAS coordinator is the POC for Participating AMOs in Singapore.
  - b) Both CAAC and CAAS Coordinators will consult each other on any issues raised by the participating AMOs in their respective State that may not have been addressed by the TA-AM.
  - c) Issues that require further attention may be raised for resolution between the CAAC Director General of Flight Standards Department and CAAS Director of Flight Standards Division.
- 3.4 Revisions by CAAC and CAAS to their respective regulations, alternative methods of compliance, guidance material, policies and procedures, and Organisational structure may affect the IP procedures. Accordingly, the IP may need a revision upon the notice of such changes by both CAAC and CAAS.
  - a) CAAC Director General of Flight Standards Department and CAAS Director of Flight Standards, or their designees, have the authority to approve proposed revisions to the IP. The revisions shall become effective from date signed by both signatories.
  - b) Any revision to the IP that affects CAAC and/or CAAS Supplements must be incorporated by the maintenance organisations within 60 days from effective date of the IP revision.

Revisions shall be approved by authorised signatories stated in paragraph 3.4(a). Revisions will be recorded in the IP's revision history page, including a brief

description of the changes made. In the body of the IP, a vertical change bar on the left margin of the page will reflect the location of changed text.

- 3.5 In certain instances, there may arise a need to institute a temporary amendment or revision to the IP. When agreed between CAAC and CAAS, a temporary revision (TR) will be introduced to expedite the revision process and shall be approved by the authorised signatories in paragraph 3.4(a).
  - a) TR is used for minor changes that do not have appreciable effect to the IP (e.g. typographical errors, clarification of procedures, interim procedures, etc.)
  - b) TR will be inserted and recorded on the 'Temporary Revision' document in Section D. The signatures on the 'Temporary Revision' document constitute approval. The effective date of TR is documented on the 'Temporary Revision' document.
  - c) Any TR revision that affects CAAC and/or CAAS Supplements must be incorporated by the maintenance organisation within 60 days from effective date of the revision.
  - d) Any TR in Section D will be reviewed and as appropriate, be removed or incorporated as a permanent revision of the IP, when necessary. The 'Revision History' page will reflect the TR number, a brief description and the affected section. Inclusion of a TR into the IP does not require physical signatures on the approval page.

## 4. TRANSITION OF MAINTENANCE ORGANISATIONS TO THE CAAC-CAAS TA-AM

- 4.1 The following procedures are applicable to existing approval holders who seek to participate in the TA-AM:
  - a) A CCAR-145 AMO located in Singapore will liaise with CAAC to process its application for participation in the TA-AM. CAAC will inform CAAS upon acceptance of the organisation under the TA-AM.
  - b) A SAR-145 AMO located in China will liaise with CAAS to process its application for participation in the TA-AM. CAAS will inform CAAC upon acceptance of the organisation under the TA-AM.
  - c) CAAC and CAAS may contact each other for assistance and to exchange information when necessary.
- 4.2 Maintenance organisations must submit an exposition supplement as outlined in Section B and C of this document;
  - a) The CAAC Supplement to the SAR-145 MOE must be approved by CAAC prior to the admission of CCAR-145 AMOs, in Singapore, into the TA-AM.
  - b) The CAAS Supplement to the CCAR-145 MMM must be approved by CAAS prior to the admission of SAR-145 AMOs, in China, into the TA-AM.

## 5. RATING ALIGNMENT

- 5.1 There are variations in the scope of approval granted to the AMOs by CAAC and CAAS. The alignment of the ratings and limitations in the AMOs' approved scope of work by CAAC and by CAAS can be found in the Rating Comparison Table (Appendix A2).
- 5.2 The maintenance capabilities, i.e. the ratings and scope of work granted to AMOs requesting to participate in the TA-AM, shall not exceed the ratings and scope of work granted by the local Authority in accordance with Appendix A2.

#### 6. CAAC AND CAAS RESPONSIBILITIES / ACTIONS

- 6.1 To promote continued understanding and acceptance of each other's maintenance surveillance systems, CAAC and CAAS should share safety information, consult each other on policy matters and update one another when there are regulatory changes.
- 6.2 Under the terms of the TA-AM, CAAC and CAAS will:
  - a) Process initial application, renewal and amendment of maintenance organisation approvals as described in the IP.
  - b) Perform surveillance of the AMOs, to ensure the terms and conditions outlined in the TA-AM are met, in their respective area of responsibility.
  - c) Review and approve the AMOs' application documents as described in the IP.
  - d) Comply with the procedures as specified in the IP.

## 6.3 Communication

CAAC and CAAS will keep each other informed of significant changes within its respective system, such as:

- a) Statutory responsibilities
- b) Organisational structure (e.g. personnel, management structure, technical training, staffing, office location etc.)
- c) Significant revisions to standards/procedures of maintenance organisation approval oversight system.

## 6.4 Reciprocal Acceptance of Findings of Compliance

CAAC and CAAS accept each other's inspections and system of surveillance of maintenance organisations; and would regard any finding of non-compliance issued by the other party as their own. These form the basis which allow each Authority to issue its own maintenance approval/certificate to the AMOs located in the other Authority's territory.

## 6.5 Continued Confidence of Compliance with IP

CAAC and CAAS shall continue to demonstrate effective surveillance according to the agreed procedures defined in the IP. In particular, CAAC and CAAS shall:

- a) Have the right to participate in each other's audits, inspections and investigations as an observer.
- b) Ensure that the participating AMOs provide access to CAAC and CAAS inspectors for audits, inspection and investigation activities.
- c) Upon request, make available the participating AMOs' records and/or audit/inspection/investigation reports including any enforcement actions taken, and provide interpretive assistance where necessary.
- d) Notify each other at the earliest opportunity in the event that either party is unable to meet the terms of the TA-AM.

## 6.6 Technical Consultations and Meetings

To ensure the IP remain effective over time, both CAAC and CAAS agree to meet up annually to consult each other on policy matters and to discuss any issues arose from the implementation of the TA-AM:

- a) The annual meeting is hosted and alternated between CAAC and CAAS, unless otherwise arranged.
- b) Meeting attendees should include the offices responsible for the technical coordination and implementation of this IP. Subgroups from CAAC and CAAS may participate in the meeting to address agenda items that involve specific technical issues.
- c) The host should be responsible for recording meeting minutes and action items tracking.

## 7. TECHNICAL ASSISTANCE

- 7.1 In the event of an incident or accident involving the civilian aeronautical products or the participating AMOs approved under the scope of the TA-AM, CAAC and CAAS will cooperate to address each other's urgent information needs and ensure timely communication occurs.
- 7.2 CAAC or CAAS may request technical assistance from the other to support in its investigation of a participating AMO involved in any reported occurrence that may be a safety concern (such as use of suspected unapproved parts or unairworthy conditions due to potential maintenance errors). The request will be subject to mutual agreement and resource availability of the assisting Authority. Each request will be handled on a case-by-case basis.
  - a) The Authority initiating the technical assistance should make a written request through its TA-AM Coordinator as outlined in Appendix A1. The written request should include sufficient details of the technical assistance that is being sought.

- b) Any supporting technical assistance activities will in no way relieve the requesting Authority of its responsibility for regulatory control over the involved AMO.
- c) The technical assistance activities may include gathering the factual evidence and verifying the implementation of corrective measures by the involved AMO on behalf of the requesting Authority. Information collected from these activities will be shared with the requesting Authority.
- d) Where the safety concern also involves the aeronautical products under its jurisdiction, the assisting Authority may, at its discretion, decide to conduct its own investigation. In such instance, the assisting Authority may share its investigation findings, including any identified non-compliance issues, with the requesting Authority.
- e) CAAC and CAAS will use their own policies and procedures when providing such technical assistance to each other unless other special arrangements are agreed upon in writing.

## 8. INDEPENDENT INSPECTIONS

- 8.1 CAAC and CAAS may conduct independent inspection of maintenance organisation when warranted by specific safety concern. CAAC and CAAS agree to coordinate with each other regarding any independent inspections and shall inform each other of the outcome of an independent inspection within 14 days after the inspection.
- 8.2 CAAC and CAAS may request to carry out an independent inspection involving a participating AMOs in the TA-AM when the authority deemed necessary, but not limiting to the followings:
  - a) A safety-related issue, such as an incident, accident or complaint;
  - b) Failure to comply with the TA-AM.
- 8.3 The cost incurred, as a result of independent inspection, shall be borne by the participating AMO.

#### 9. ENFORCEMENT ACTIONS

9.1 CAAC and CAAS agree, subject to applicable laws and regulations, to provide mutual cooperation and assistance in any investigation or enforcement proceedings of any alleged or suspected violation of any law and regulation under the scope of the TA-AM. CAAC and CAAS will inform each other of any enforcement action taken. All enforcement actions taken are open to regular joint review. The suspension, revocation, or surrender of a maintenance organisation approval/certificate affects the respective CAAC and CAAS surveillance and certificate management duties under the TA-AM. CAAC and CAAS may take the following actions as specified in paragraph 8.2 and 8.3.

## 9.2 CCAR-145 AMOs located in Singapore

In the event that a participating SAR-145 AMO's MOA is suspended, revoked or surrendered, CAAS shall notify CAAC as soon as practical. CAAS shall furnish CAAC with the reason for the suspension or revocation together with any relevant factual evidence accordingly to make recommendation to CAAC if the AMO is suitable to continue to participate in the TA-AM.

- a) An AMO surrendering its SAR-145 MOA, without the intention of surrendering its CCAR-145 Maintenance Organisation Certificate (MOC), no longer meets the terms of the TA-AM.
- b) Upon notification by CAAS of a suspension or revocation of a SAR-145 MOA, CAAC may open an investigation to determine appropriate action for possible non-compliance with CCAR-145 regulations.
- c) If a CAAS finding or discrepancy results in the reduction of SAR-145 AMO capabilities, the CAAC's approved work scope will be reduced in accordance with paragraph 5.2.

#### 9.3 SAR-145 AMOs located in China

In the event that a participating CCAR-145 AMO's MOC is suspended, revoked or surrendered, CAAC shall notify CAAS as soon as practical. CAAC shall furnish CAAS with the reason for the suspension or revocation together with any relevant factual evident accordingly to make recommendation to CAAS if the AMO is suitable to continue to participate in the TA-AM.

- a) An AMO surrendering its CCAR-145 MOC, without the intention of surrendering its SAR-145 MOA, no longer meets the terms of the TA-AM.
- b) Upon notification by CAAC of a suspension or revocation of a CCAR-145 MOC, CAAS may open an investigation to determine appropriate action for possible non-compliance with SAR-145 requirements.
- c) If a CAAC finding or discrepancy results in the reduction of CCAR-145 AMO capabilities, the CAAS' approved work scope will be reduced in accordance with paragraph 5.2.

## 10. NON-PAYMENT OF FEES

CAAC and CAAS may suspend or deny any application for certification service of a maintenance organisation in the event of non-payment of required fees until such time the fees are paid.

## 11. APPEALS

A maintenance organisation may appeal the suspension or revocation of its certificate. Appeals of CAAC and CAAS enforcement actions are made in accordance with their respective regulations.

## **APPENDIX A1: CAAC AND CAAS CONTACTS**

	Director General (Flight Standards Department)	Signatory for IP Document
CAAC	CAAC Coordinator  Continued Airworthiness & Maintenance Division Flight Standards Department of CAAC 155# Dong Si Street West, Dong Cheng District, Beijing, 100710  Phone: +86-10-64092473 Fax: +86-10-64030972 Email: maintenance@caac.gov.cn	Primary liaison for all communication with CAAS
	Director (Flight Standards Division)	Signatory for IP Document
CAAS	CAAS Coordinator  Civil Aviation Authority of Singapore Flight Standards Division Maintenance Organisation Section Singapore Changi Airport, P.O. Box 1 Singapore 918141  Email: caas_am@caas.gov.sg	Primary liaison for all communication with CAAC

## **APPENDIX A2: RATING COMPARISON TABLE**

This table serves to assist in the comparison of CCAR-145 AMO and SAR-145 AMO approved work scope / ratings for alignment under the TA-AM. Every effort will be made to communicate with the participating AMOs to achieve alignment of ratings and limitations.

For SAR-145 AMOs located in China, the ratings and limitations of their SAR-145 approval may not exceed those of their CCAR-145 approval.

For CCAR-145 AMOs located in Singapore, the ratings and limitations of their CCAR-145 approval may not exceed those of their SAR-145 approval.

Table A1.
SAR-145 AMO Aircraft Ratings and CCAR-145 AMO Airframe Rating

AMO Ratings (SAR-145)		AMO Ratings (CCAR-145)		
Ratings	Limitations	Ratings	Limitations	
A1 Aeroplane above 5700 kg	Base or Line maintenance; and Will state aeroplane series or type and/or the maintenance task(s).			
A2 Aeroplane 5700 kg and below	Base or Line maintenance; and  Will state aeroplane manufacturer or group or series or type and/or the maintenance task(s).	Airframe	Detailed information on the manufacturer, type or series of the aircraft.  Will state maintenance function classification which may include  Scheduled Maintenance  Line maintenance*  Overhaul	
A3 Helicopter	Base or Line maintenance; and Will state helicopter manufacturer or group or series or type and/or the maintenance task(s).			

**NOTE:** [\*] Line maintenance only applicable to CAAC Air Operators which are holding CCAR-145 approvals.

Table A2. SAR-145 and CCAR-145 AMO Engine Ratings

AMO Ratings (SAR-145)		AMO Ratings (CCAR-145)		
Ratings	Limitations	Ratings	Limitations	
B1 Turbine	Will state engine series or type and/or the maintenance task(s).		Detailed information on the manufacturer, type or series of the engine.	
B2 Piston	Will state engine manufacturer or group or series or type and/or the maintenance task(s).	Engine	Will state maintenance function classification which may include Repair Overhaul	

Table A3.
SAR-145 AMO Engine Rating and CCAR-145 AMO Component Rating (for Complete APU)

AMO Ratings (SAR-145)		AMO Ratings (CCAR-145)		
Ratings	Ratings Limitations		Limitations	
B3 APU	Will state engine manufacturer or series or type and/or the maintenance task(s).	Components (other than complete Engine or Propeller)	Detailed information on the description, applicable ATA Chapter 49 reference and manufacturer of the APU, as well as the manufacturer and type or series of aircraft on which such APU installed, attached with the "Company Maintenance Capability list".  Will state maintenance function classification which may include  Inspection/Test  Repair  Overhaul	

Table A4. SAR-145 and CCAR-145 AMO Propeller Ratings

AMO Ratings (SAR-145)		AMO Ratings (CCAR-145)		
Ratings Limitations		Ratings	Limitations	
C16 Propellers	Will state aircraft type or aircraft manufacturer or component manufacturer or the particular components and/or cross reference to a capability list in the exposition and/or the maintenance task(s).	Propeller	Detailed information on the manufacturer, type or series of the propeller.  Will state maintenance function classification which may include  Scheduled Maintenance  Overhaul	

**NOTE:** Rotors installed on helicopters may be maintained under a CAAS aircraft or CAAC airframe rating. Rotors removed from the helicopter must be maintained under a CAAS component ratings (C10, C11) and CAAC component rating (ATA 62 to ATA 67).

Table A5.
SAR-145 and CCAR-145 AMO Component Ratings (Other than Complete Engine, APU or Propeller)

AMO Ratings (SAR-145)			AMO Ratings (CCAR-145)	
Ratings	Limitations	АТА	Ratings	Limitations
C1 Air Cond. & Pressurization		21		
C2 Auto Flight		22		
C3 Comms & Navigation		23, 34		Detailed information on the description, ATA Chapter* and
C4 Doors & Hatches	Will state aircraft type or aircraft manufacturer or	52	O man a manta	manufacturer of the component, as well as the manufacturer and type or series of aircraft on which
C5 Electrical Power	component manufacturer or the particular components and/or cross reference to a capability list in the exposition and/or the maintenance task(s).	24, 33, 85	Components (other than complete Engine or Propeller)	such component installed, attached with the "Company Maintenance Capability list".  Will state maintenance function classification
C6 Equipment		25, 38, 44, 45, 50		
C7 Engine - APU		49 <sup>1</sup> , 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83		which may include Inspection/Test Repair Overhaul
C8 Flight Control		27, 55, 57.40, 57.50, 57.60, 57.70		

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<sup>&</sup>lt;sup>1</sup> Complete APU must be maintained under a CAAS engine rating (B3 APU). Refer to previous Table A3.

# Table A5. (Continued) SAR-145 and CCAR-145 AMO Component Ratings (Other than Complete Engine, APU or Propeller)

AMO Ratings (SAR-145)			AMO Ratings (CCAR-145)	
Ratings	Limitations	АТА	Ratings	Limitations
C9 Fuel - Airframe		28, 47		
C10 Helicopter - Rotors		62, 64, 66, 67		Detailed information on the description, ATA
C11 Helicopter - Transmission		63, 65		Chapter* and manufacturer of the component, as well as the manufacturer and type or series of aircraft on which
C12 Hydraulic	Will state aircraft type or aircraft manufacturer or component manufacturer or the particular components and/or cross reference to a capability list in the exposition and/or the maintenance task(s).	29	Components (other than complete Engine or Propeller)	such component installed, attached with the "Company Maintenance Capability list".
C13 Instruments		31, 42, 46	of Frapeliery	Will state maintenance function classification which may include  Inspection/Test
C14 Landing Gear		32		Repair Overhaul
C15 Oxygen		35		
C16 Propellers		61	Note: Refer to Protable.	opeller rating in previous

# Table A5. (Continued) SAR-145 and CCAR-145 AMO Component Ratings (Other than Complete Engine, APU or Propeller)

AMO Ratings (SAR-145)			AMO Ratings (CCAR-145)	
Ratings	Limitations	ATA	Ratings	Limitations
C17 Pneumatic  C18 Protection (Ice/Rain/Fire)  C19 Windows	Will state aircraft type or aircraft manufacturer or component manufacturer or the particular components and/or cross reference to a capability list in the	36, 37 26, 30 56	Components (other than complete Engine or Propeller)	Detailed information on the description, ATA Chapter* and manufacturer of the component, as well as the manufacturer and type or series of aircraft on which such component installed, attached with the "Company Maintenance Capability list".
C20 Structural	to a capability list in the exposition and/or the maintenance task(s).	53, 54, 57.10, 57.20, 57.30		Will state maintenance function classification which may include Inspection/Test Repair Overhaul

## NOTE:

[\*] CAAC adopted the ATA Specification 100 Code to further specify the component within a particular aircraft system. This serves to facilitate the alignment process.

Table A6. SAR-145 and CCAR-145 AMO Specialised Services Ratings

AMO Ratings (SAR-145)		AMO Ratings (CCAR-145)	
Ratings	Limitations	Ratings	Limitations
D1 Nondestructive Testing (NDT)	Will state particular NDT method(s)		
D2 Other Specialised Services	Will state particular specialised service(s)	Other Maintenance	Specific description on the specialised service

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## **SECTION B**

REQUIREMENTS FOR AMOS LOCATED IN SINGAPORE

#### 1. INTRODUCTION

This section set forth the procedures for initial application, renewal, or amendments of a CCAR-145 Maintenance Organisation Certificate (MOC) under the provisions of the CAAC-CAAS Technical Arrangement on Aviation Maintenance (TA-AM) applicable to AMOs located in Singapore.

## 1.1 Eligibility

To be eligible for participation in the TA-AM, the applicant shall meet the following requirements:

- a) Hold a valid SAR-145 Maintenance Organisation Approval (MOA).
- b) Demonstrate a need to maintain China registered civil aircraft and/or aeronautical products for the fitment on a China registered aircraft. This may be in the form of a Letter of Intent (LOI) from a Chinese Air Operator Certificate (AOC) holder or a CCAR-145 Approved Maintenance Organisation (AMO).
- c) Agree to pay the applicable fees as required by the CCAR-145 regulations and the terms outlined in the TA-AM.
- d) Agree to comply with the terms of TA-AM and its implementation procedures.
- e) Possess knowledge of CCAR-145 regulations.

## 1.2 <u>Definitions</u>

The following terms and explanations apply to Section B of this IP document.

- a) Formal Application Letter
  - A formal letter addressed to Department of Flight Standards to notify the intention to apply for the CCAR-145 Maintenance Organisation Approval (for initial application only).
- b) Form F145-1

Application form for CCAR-145 Maintenance Organisation Certificate (for initial, renewal, and amendment to approval application).

- c) Letter of Intent (LOI)
  - CCAR-145 requires that the applicant shall submit a letter of intent from the Chinese customer(s) requesting maintenance services. The demonstration of this necessity shall be in the form of a Letter of Intent (LOI) from a Chinese AOC holder or a CCAR-145 Approved Maintenance Organisation (AMO) indicating their intention to engage the applicant for the maintenance of China registered aircraft and/or aircraft components intended for fitment on a China registered aircraft.
- d) Capability List (CL)

The CL contains the participating AMO's approved work scope. The CL shall be in a format that distinguishes the different ratings and the required Authority's Certification of Maintenance.

## e) CAAC Supplement

A supplement document, to CAAS Maintenance Organisation Exposition (MOE), which contains procedures detailing how the AMO fulfills the conditions set out in Annex 1 of TA-AM. Any revision to the CAAC Supplement must be submitted to CAAC for approval. The Return to Service procedures should be described in the manuals. The independent quality assurance system must have an audit plan to ensure all conditions of the TA-AM are met.

## 1.3 Scope of CCAR-145 Maintenance Organisation Certificate

A CCAR-145 MOC granted under the provisions of the TA-AM shall be bounded by following conditions.

- a) The CCAR-145 ratings and limitations are dependent on approved SAR-145 ratings and limitations. The level of capability authorised under the CCAR-145 ratings and limitations shall not exceed the SAR-145 ratings and limitations.
- b) Unless otherwise agreed between CAAC and CAAS, the participating AMO shall perform maintenance activities within Singapore. These must be under the direct surveillance of the CAAS.

## 1.4 Application

Application for initial, renewal and amendments to a CCAR-145 MOC granted under the provisions of the TA-AM shall be submitted to the CAAC. Details on the documents to be submitted during application can be found in Appendix B1.

#### 1.5 Revocation, Suspension or Surrender

In an event when an AMO located in Singapore, has its SAR-145 MOA revoked or suspended, its CCAR-145 MOC would also become invalid as the conditions specified in the TA-AM would no longer be met.

- a) The CCAR-145 AMO is responsible for notifying CAAC Flight Standards Department if its SAR-145 MOA is suspended, surrendered or revoked.
- b) Unless agreed by CAAC, a CCAR-145 MOC may be denied renewal, revoked, or suspended if the SAR-145 MOA becomes invalid under the conditions specified in the TA-AM, or other applicable regulations.
- c) The actions taken by CAAC and CAAS to address the revocation, suspension or surrender of a CCAR-145 MOC is detailed in Section A paragraph 8.2 of this IP.

## 1.6 <u>CAAC Contacts</u>

The Continued Airworthiness and Maintenance Division of CAAC Flight Standards Department is responsible for the CCAR-145 certification and certificate management. They can be contacted at the following address:

Continued Airworthiness & Maintenance Division Flight Standards Department of CAAC 155# Dong Si Street West, Dong Cheng District, Beijing, 100710 Phone: +86-10-64092473

Fax: +86-10-64030972

Email: maintenance@caac.gov.cn

## 2. APPROVAL APPLICATION PROCESSES

This part provides detailed information, relevant to the CAAC, CAAS and an applicant, for the initial, renewal, and amendment application of a CCAR-145 Maintenance Organisation Certificate (MOC). An applicant, as referred to in this part, may be an organisation applying for initial CCAR-145 MOC or an existing CCAR-145 AMO. An applicant must be familiar with Section B of this IP to understand the processes and responsibilities involved in the initial, renewal, or amendment application for CCAR-145 MOC.

## 2.1 Initial Application

New applicants located in Singapore that intend to apply for CCAR-145 MOC should follow the procedures as follows.

- a) A new applicant should familiarize themselves with the current editions of the following documents before requesting for the application:
  - CAAC-CAAS TA-AM Agreement (TA-AM);
  - ii. CAAC-CAAS Implementation Procedures (IP) Document;
  - iii. China Civil Aviation Regulation Part 145 (CCAR-145);
  - iv. CAAC Advisory Circulars (applicable to CCAR-145 AMO).
- b) The applicant should contact CAAC (maintenance@caac.gov.cn) when apply for CCAR-145 MOC for a FSOP account under the terms of TA-AM.
- c) To initiate the formal application process, the applicant is required to submit the relevant documents to CAAC FSOP system as indicated in Appendix B1.
  - i. CAAC will review the formal application submission to ensure completeness and acceptability. This should include an initial review of the proposed CAAC Supplement using the guidance in Appendix B2.
  - ii. CAAC Supplement, along with SAR-145 MOE, sets forth the structure and procedures of the maintenance organisation to meet the CCAR-145 requirements. The CAAC Supplement must describe how the maintenance organisation fulfilled the conditions as set out in Annex 1 of the TA-AM.
  - iii. CAAC Supplement, and its subsequent revisions, shall be reviewed and approved by CAAC. Incorporated references in the supplement must always be kept current.
  - iv. During the review, CAAC may seek clarifications from CAAS if deem necessary.
- d) Upon satisfied that the applicant is acceptable, CAAC will notify the applicant to make the applicable fee payment. CAAC will proceed to issue a CCAR-145 MOC to the applicant upon receipt of the fee payment. CAAC will also provide CAAS with a copy of the issued CCAR-145 MOC.

e) The applicant may only exercise the privileges granted under the CCAR-145 MOC.

## 2.2 Renewal Application

An application for CCAR-145 MOC renewal shall be submitted to CAAC. The CCAR-145 MOC is valid for a period as specified by CAAC. To allow sufficient processing time, it is recommended that the renewal package be submitted 60 days prior to the expiration of the CCAR-145 certificate.

- a) To start the renewal application, the participating AMO must submit the relevant documents, as indicated in Appendix B1, to CAAC.
  - i. Any revision or amendments to CAAC Supplement must be submitted to CAAC for approval.
  - ii. The participating AMO must provide the latest copies of the required documents, listed in Appendix B1, during the renewal application.
- b) CAAS should plan its surveillance audit on the SAR-145 AMO, holding a CCAR 145 MOC, at least once every 12 months. Participating AMOs must ensure they remain in compliance with the conditions specified in TA-AM and the SAR-145 requirements.
  - Participating AMO must ensure that all discrepancies, findings or identified items found during the CAAS's surveillance are satisfactorily addressed within the timeframe as agreed with CAAS.
  - ii. CAAS will notify CAAC on any enforcement actions taken due to discrepancies, findings, or identified items were not satisfactorily addressed in a timely manner.
  - iii. The participating AMO shall provide an annual report to CAAC. This report should include a summary of the CAAS' surveillance findings and their corresponding corrective status.
- c) CAAC will review the renewal application package and may seek clarifications from CAAS if deem necessary.
- d) When satisfied with the renewal application, CAAC will notify the applicant to make the applicable fee payment. CAAC will proceed to renew the CCAR-145 MOC upon receipt of the fee payment. CAAC will also provide CAAS with a copy of the renewed CCAR 145 MOC.
- e) The participating AMO will continue to exercise the privileges granted by the approval upon receipt of the renewed CCAR 145 MOC.

**Note:** The period of validity for a CCAR-145 MOC is valid for a period as specified by CAAC.

## 2.3 Change/Amendment Application

An application for change/amendment to the CCAR-145 MOC shall be submitted to the CAAC. The participating AMO should notify CAAC, within the timeline prescribed in CCAR-145, on any proposed changes that could affect its CCAR 145 MOC. These changes include:

- Name of the organisation;
- Address and/or location of the organisation;
- Additional locations of the organisation (within Singapore);
- Change of CCAR-145 approved maintenance ratings;
- Major changes to personnel, facilities, procedures, and work scope that could affect the approval.
- a) To initiate the application process, the participating AMO is required to submit the relevant documents, as indicated in Appendix B1, to CAAC.
  - The participating AMO must provide the perceived need for the CCAR-145 approval to add a new rating or to change an existing rating where a complete type-certificated product is being added (i.e. aircraft, engines or propellers).

**Note:** The approved additional ratings and work scope shall not exceed the ratings and work scope granted under the SAR-145 MOA.

- ii. All proposed changes should be reflected in the participating AMO's SAR-145 MOA, SAR-145 MOE and/or CAAC supplement where applicable.
- b) CAAC will review and approve the Change/Amendment application package. CAAC may require the participating AMO to pay a fee applicable for amendment of CCAR-145 MOC.
- c) CAAC will proceed to issue the revised CCAR-145 MOC after receipt of the fee payment, as applicable. CAAC will also provide CAAS with a copy of the revised CCAR-145 MOC.
- d) The participating AMO will continue to exercise the privileges granted by the approval upon receipt of the revised CCAR 145 MOC.

## 3. CONTINUED VALIDITY OF CERTIFICATE

- 3.1 Unless the CCAR-145 MOC has previously been surrendered, superseded, suspended, revoked, or expired by virtue of exceeding any expiry date that may be specified in the certificate, the continued validity of approval is dependent on:
  - a) The validity of SAR-145 MOA and its approved scope of work granted to the participating AMO; and
  - b) The participating AMO remains in compliance with the conditions prescribed in CAAC-CAAS TA-AM.
- 3.2 The participating AMO is responsible for notifying CAAC if it does not meet the aforementioned conditions for its CCAR-145 MOC to remain valid. Enforcement

actions referenced in Section A paragraph 8.2 will be taken against the participating AMO as appropriate.

#### 4. CAAS RESPONSIBILITIES

Under the TA-AM, CAAS is responsible for performing the surveillance and oversight on CCAR-145 AMOs located within Singapore.

## 4.1 <u>Administrative Duties</u>

a) CAAS Coordinator will be the point of contact (POC) for inquiries from CAAC on matters related to CCAR-145 AMOs in Singapore. In the event that the CAAS Coordinator is not able to provide a response to the query, he/she may refer CAAC to the assigned CAAS PMI who is responsible for safety oversight of the CCAR-145 AMO. In CAAC's communication with participating AMO in Singapore, it is recommended that the CAAS Coordinator be copied in all correspondence on CCAR-145 MOC certificate matters.

## 4.2 Safety Oversight and Surveillance

- a) CAAS must ensure that oversight and surveillance of CCAR-145 AMOs in Singapore are carried out in accordance with CAAS surveillance schedule.
- b) CAAS must verify that the participating AMOs comply with SAR-145 requirements and the conditions specified in the TA-AM.
- c) CAAS must ensure that the work scope performed under CCAR-145 MOC does not exceed the SAR-145 ratings and limitations.
- d) CAAS will ensure that all discrepancies and findings identified during the course of their oversight and surveillance of the participating AMOs are recorded and communicated, and that follow-up corrective actions are taken. The deficiencies identified shall be addressed within a reasonable timeframe. CAAS' acceptance of the corrective actions taken or the corrective action plans must be recorded and documented on formal written correspondence to the participating AMOs.
- e) CAAS will provide assistance to CAAC, to clarify any safety information or matters related to the SAR-145 MOA and CCAR-145 MOC.

## 4.3 Recordkeeping

CAAS must ensure that all records documenting the safety oversight of CCAR-145 AMOs are retained for at least 3 years. Such records may include but are not limited to:

- a) CCAR-145 AMOs audit records and non-conformance reports;
- b) Correspondences between CAAS and the participating AMOs with regard to organisational changes, such as personnel and work scope.

## 4.4 Surrender, Suspension or Revocation of a Certificate

In the event that a participating AMO's SAR-145 MOA or associated ratings and limitations is surrendered, suspended, or revoked by CAAS, the CCAR-145 MOC would become invalid.

- a) CAAS shall notify CAAC at the earliest opportunity.
- b) For any other non-compliance resulting in CAAS's enforcement actions, such as civil penalties and/or letters of warning issued to the CCAR-145 AMO, CAAS shall notify CAAC.

## 5. CAAC RESPONSIBILITIES

Under the TA-AM, CAAC remains responsible for the issuance or renewal of CCAR-145 MOC.

- 5.1 CAAC will directly liaise with the applicant on all fee matters relating to the issuance or renewal of CCAR-145 MOC.
- 5.2 For initial application of CCAR-145 MOC, CAAC is responsible for reviewing the application documents for the purpose of issuing CCAR-145 MOC.
  - a) After receiving the application documents from the applicant, CAAC will review the provided information to ascertain that the applicant fulfills the conditions as set out in TA-AM. CAAC may request CAAS to clarify any information related to application.
  - b) Upon satisfactory review and receipt of the applicable fee payment, CAAC will proceed to issue CCAR-145 MOC directly to the applicant.
  - c) All documents submitted for the CCAR-145 MOC application should be put on file by CAAS and CAAC in accordance with their internal procedures.
- 5.3 For CCAR-145 MOC renewal or amendment application, CAAC is responsible for reviewing the application documents submitted by the applicant.
  - a) For renewal and amendment that required the issuance of CCAR-145 MOC, the applicant will contact CAAC, and furnish evidence to demonstrate the application has been endorsed by CAAS.
  - b) Upon satisfactory review and receipt of applicable fee payment, CAAC will proceed to issue the renewed / revised CCAR-145 MOC directly to the applicant.
  - For amendment that does not require re-issuance of CCAR-145 MOC, CAAC will
    review the amendment and approve the revised CAAC Supplement accordingly,
    if necessary.

#### APPENDIX B1: CCAR-145 APPROVAL APPLICATION PACKAGE

For the purpose of applying a CCAR-145 Maintenance Organisation Certificate, the following list of documents, as applicable, shall be submitted.

#### **INITIAL APPLICATION**

- 1. Formal Application Letter
- 2. Application Form F145-1
- 3. SAR-145 MOE and CAAC Supplement
- 4. Copy of current SAR-145 Maintenance Organisation Approval (MOA)
- 5. Capability List (CL)
- 6. Letter of Intent (LOI)

#### **RENEWAL APPLICATION**

- 1. Application Form F145-1
- 2. Copy of current SAR-145 Maintenance Organisation Approval (MOA) \*\*
- 3. SAR-145 MOE and CAAC Supplement \*\*

## **CHANGE/AMENDMENT APPLICATION**

- 1. Application Form F145-1
- 2. SAR-145 MOE and CAAC Supplement with obvious revision markings to identify and highlight the changes of the amendment \*\*\*
- 3. Copy of current SAR-145 Maintenance Organisation Approval (MOA) \*\*\*
- 4. Capability List (CL) \*\*\*
- 5. Letter of Intent (LOI) (if applicable)
- 6. Other supporting documents, depending on request

<sup>\*\*</sup> Denotes documents that require submission if a revision has occurred since last renewal.

<sup>\*\*\*</sup>Denotes documents that may require submission depending on change request.

## APPENDIX B2: GUIDANCE AND INSTRUCTIONS FOR DEVELOPING THE CAAC SUPPLEMENT

- 1. The purpose of the CAAC Supplement is to set forth the procedures, means, and methods of the CCAR-145 Approved Maintenance Organisation (AMO) applicants to fulfill with the conditions specified in the Annex 1 of CAAC-CAAS TA-AM and its implementation procedures.
- 2. Compliance with its contents will assure compliance with the CAAC-CAAS TA-AM, which is a prerequisite to obtaining and retaining the CCAR-145 Maintenance Organisation Approval.
- 3. When developing the CAAC Supplement, it is important to ensure that it is customized to each organisation to demonstrate compliance and it should not merely contain policy statements.
- 4. The CAAC Supplement should address the following:
  - a) What must be done?
  - b) Who should do it?
  - c) When must it be done?
  - d) Where must it be done?
  - e) How must it be done?
  - f) Which procedure(s)/form(s) should be used?
- 5. References to the CAAS Maintenance Organisation Exposition (MOE) are acceptable, to reduce redundant procedures as long as the references are clearly identified.
- 6. The contents of the CAAC Supplement must follow the format headings and contain the information as stated in the example of the CAAC Supplement given below. The required contents that do not apply to the CCAR-145 AMO's operations must be included in the CAAC Supplement and stated as *Not Applicable*.

## **EXAMPLE OF CAAC SUPPLEMENT TO THE CAAS MOE**

(The cover page of the CAAC Supplement to the CAAS MOE must include the following)

# CIVIL AVIATION AUTHORITY OF CHINA APPROVED MAINTENANCE ORGANISATION SUPPLEMENT TO THE CAAS MOE FOR THE

## CCAR-145 MAINTENANCE ORGANISATION APPROVAL GRANTED UNDER THE CAAC-CAAS TA-AM

COMPANY NAME
CAAS SAR-145 APPROVAL NUMBER:
CAAC CCAR-145 CERTIFICATE NUMBER:

## **FACILITY ADDRESS**

CAAS MOE Document Number:		
CAAC Supplement Document Number:	Issue/Revision Number:	

## LIST OF CONTENTS

	of Contents of Effective Pages	Page	(i) (ii)
	ord of Revision		(iii)
1.	Introduction	Page	X/X
2.	Accountable Manager's Commitment Statement		X/X
3.	Scope of Work		X/X
4.	Notification Procedure to the CAAC Regarding Changes to the		
	Organisation's Activities/Approval/Location/Personnel		X/X
5.	Access by CAAC and CAAS		X/X
6.	CAAC Supplement Amendment Procedures		X/X
7.	Acceptable Aircraft Components/Parts/Materials		X/X
8.	Maintenance Data		X/X
9.	Repair and Modification Data		X/X
10.	Airworthiness Directives (AD) Control Procedures		X/X
11.	Release to Service Procedure		X/X
12.	Unairworthy Condition Report		X/X
13.	Annual report		X/X
14.	Subcontracted Work		X/X
15.	Internal Quality Assurance System		X/X
16.	Safety Management System		X/X
17.	Personnel Training Procedures		X/X
18.	Contracted AOC Operators		X/X
19.	Samples of Forms/Documents		X/X

# LIST OF EFFECTIVE PAGES

A List of Effective Pages (LEP) is used to ensure that every manual contains current, correct information. The LEP shows the revision status of each page. By checking the status of each page, users can ensure their information is up to date.

To facilitate the tracking of changes, each page should be identified by the part number, page number, date of issue or date of latest amendment/revision, and amendment/revision number (if applicable). The latest amendment/revision on a page should be highlighted by marginal lines against the amended areas on the left hand side of the page.

The CAAC Supplement must provide a means to identify each page of the supplement has been submitted to the CAAC for acceptance. This shall be in the form of an LEP, with each page numbered and either dated or marked with a revision number.

<u>PAGE</u>	REVISION	DATE	PAGE	REVISION	<u>DATE</u>
1	0	01 Jan 2021	13	0	01 Jan 2021
2	0	01 Jan 2021	14	0	01 Jan 2021
3	0	01 Jan 2021	15	0	01 Jan 2021
4	0	01 Jan 2021	16	0	01 Jan 2021
5	0	01 Jan 2021	17	0	01 Jan 2021
6	0	01 Jan 2021			
7	0	01 Jan 2021			
8	0	01 Jan 2021			
9	0	01 Jan 2021			
10	0	01 Jan 2021			
11	0	01 Jan 2021			
12	0	01 Jan 2021			

CAAC Supplement: [Document Number]

CCAR-145 AMO SIGNED:	CAAC SIGNED:
DATE:	DATE:

# **RECORD OF REVISION**

Amendment Number	Amendment Date	Details	Inserted By	Insertion Date

# 1. INTRODUCTION

Within this section, the CCAR-145 AMO must indicate that the CAAC Supplement, in conjunction with the approved CAAS Maintenance Organisation Exposition, defines the organisation and procedures upon which compliance with applicable regulations are based. Its content should address the following:

- a) State that the organisation shall operate under the provision of CAAC-CAAS TA-AM to obtain certification and renewal as a CCAR-145 approved maintenance organisation for performing maintenance on China registered civil aircraft and/or aeronautical products intended for fitment onto China registered civil aircraft.
- b) State that the validity and scope of its CCAR-145 approval is dependent on:
  - i. The validity of its SAR-145 Maintenance Organisation Approval and the associated work scope approved by CAAS; and
  - ii. The AMO remains in compliance with the TA-AM and its implementation procedures.
- c) State that the CAAC Supplement is intended to inform all staff of the AMO of additional considerations that need to be taken into account when working in accordance with the TA-AM and its implementation procedures.
- d) Identify the person (name, title and contact details) who will act as the liaison between the maintenance organisation and the CAAC. This liaison shall ensure compliance with the provisions of the CAAC Supplement.

# 2. ACCOUNTABLE MANAGER'S COMMITMENT STATEMENT

The corporate commitment by the Accountable Manager shall be expressed in the form of a signed statement indicating that he/she understands and will ensure that the organisation will comply with the CCAR-145 regulations, the CAAC-CAAS TA-AM and its implementation procedures.

The Accountable Manager's statement should embrace the intent of the following paragraph and it is recommended to be used without amendment. Any modification to the statement should not alter the intent.

Whenever the Accountable Manager is changed, it is important that the new Accountable Manager signs the statement at the earliest opportunity as part of his/her acceptance by the CAAC.

"This supplement, along with the CAAS Maintenance Organisation Exposition and any associated referenced manuals, define the organisation and procedures upon which the CAAC CCAR-145 approval is granted under the terms of the Technical Arrangement on Aviation Maintenance (TA-AM) between the Civil Aviation Administration of China (CAAC) and the Civil Aviation Authority of Singapore (CAAS). These procedures are approved by the undersigned and must be complied with, as applicable, when work/orders are being progressed under the terms of the CCAR-145 approval.

As the Accountable Manager, I undertake to ensure that this organisation fully understands that the issuance of the CCAR-145 Maintenance Organisation Certificate is subject to compliance with the CAAC-CAAC TA-AM, its implementation procedures and the SAR-145 regulations. Failure in doing so may result in the denial of renewal, suspension, or revocation of the CCAR-145 Maintenance Organisation Certificate.

It is accepted that these procedures do not override the necessity of complying with any new or amended regulations published by the CAAS and/or the CAAC from time to time where these new or amended regulations are in conflict with these procedures.

It is agreed that [name of company] will provide the CAAC and CAAS personnel with unimpeded access to its facilities for the purpose of determining compliance with the CAAC-CAAC TA-AM, its implementation procedures and/or any investigations for suspected violations.

I agree to ensure that this CAAC Supplement will be maintained and kept current by this organisation and is accessible to all relevant personnel. I further agree to submit revisions to this CAAC Supplement to the CAAC for acceptance before implementing any such revisions.

It is understood that the CAAC will approve this organisation if the CAAC is satisfied that the procedures are being followed and work standards maintained. It is further understood that the CAAC reserves the right to suspend, limit, or revoke the CCAR-145 approval of the organisation if the CAAC has evidence that procedures are not followed or standards not upheld.

Signed	
Dated	
Accountable Manager and	(quote position)
For and on behalf of	(quote organisation's name)

# 3. SCOPE OF WORK

Within this section, the CCAR-145 AMO shall specify the range of work carried out at each approved location within the scope of each approval rating as shown in the CCAR-145 certificate — Limitation of Maintenance Items. This section should also relate to approved locations in such a way that it can be clearly seen what tasks are performed at which locations.

It is important to note that the scope of work and level of capability authorised under the CAAC CCAR-145 ratings or limitations shall not exceed the AMO's CAAS SAR-145 ratings and limitations.

The degree of definition within this section should provide clear identification of the maintenance activities that the CCAR-145 AMO is capable of and the limitations imposed whilst performing the intended maintenance activities under the CCAR-145 approval.

Using a Capability List (CL) is an effective way of providing detailed definition of the scope of work. The CL must identify the make, model, or other nomenclature designated by equipment manufacturer and the depth of maintenance work to which the CCAR-145 AMO is capable to perform. References can be made to a separately controlled CL so long as the procedure for controlling the CL acceptable to CAAC and

there is a clear identification of difference in approval for scope of work under the SAR-145 approval and the CCAR-145 approval.

In the case of aircraft maintenance, the relevant paragraph in this section of the CAAC Supplement must not be referenced to another separate document. It must be reflected within the CAAC Supplement and it must show what level of work is undertaken at each station. It must also include the limitations, which will state the aircraft series or type and/or maintenance task(s), i.e., Base Maintenance or Line Maintenance.

Any NDT activities or special processes that are carried out internally and not necessarily included on the CCAR-145 Approval Certificate should also be reflected within this section of the CAAC Supplement.

# 4. NOTIFICATION PROCEDURE REGARDING CHANGES TO THE ORGANISATION'S ACTIVITIES / APPROVAL / LOCATION / PERSONNEL AFFECTING CCAR-145 APPROVAL

Any significant changes to the management, organisation, resources, facilities, and scope of work will affect the conditions under which the approval was granted and has been allowed to continue. This section must provide details on how the company would go about notifying the CAAC of the following changes that may affect its CCAR-145 approval:

- a) Name of the organisation;
- b) Location of the organisation;
- c) Additional locations of the organisation;
- d) Change or addition of ratings;
- e) Accountable Manager, Quality Manager, and any other management personnel listed in the CCAR-145 AMO's CAAC Supplement;
- f) The facilities, equipment, tools, materials, procedures, and work scope that could affect the approval.

# 5. ACCESS BY CAAC AND CAAS

Within this section, the CCAR-145 AMO shall specify that CAAS and CAAC must be allowed access to their organisation for the purpose of assuring compliance with procedures and standards and to investigate specific problems.

There must also be an indication that, in case of a serious non-compliance with regulations or established standards, the CCAR-145 AMO must accept that it may be subject to enforcement action from CAAC. In addition, it must be indicated that any cost incurred as a result of any investigation activities involving CAAC's participation shall be borne by the organisation.

# 6. CAAC SUPPLEMENT AMENDMENT PROCEDURES

Within this section, the CCAR-145 AMO shall describe the procedures for management of the CAAC Supplement amendment. The CCAR-145 AMO must ensure that the CAAC supplement remains current and its procedures should address the following:

- a) Identify the sources of proposed amendments within the organisation.
- b) Provide a summary of referenced documents constituting the total CAAC Supplement.
- c) Identify the person responsible for amending and submitting the CAAC Supplement to the CAAC.

**NOTE**: Amendments to the CAAC Supplement may be initiated from any part of the CCAR-145 AMO, but it must be monitored for compliance with relevant regulatory requirements by the Quality Manager.

- d) Procedures for recording revisions, their distribution within the organisation and the method by which the AMO provide the revision to the CAAC before implementation.
- e) Procedures for the control and amendment of the CL.

# 7. ACCEPTABLE AIRCRAFT COMPONENTS / PARTS / MATERIALS

Within this section, the CCAR-145 AMO shall describe the procedures for ensuring only aircraft components / parts / materials, that are acceptable by CAAC, can be fitted onto a China registered aircraft.

Aircraft components/parts/materials that are acceptable by CAAC include the following:

- a) Standard parts or raw material shall come with the Certificate of Approval or Certificate of Conformity.
- b) The brand new non-standard part or non-raw material shall come with the Airworthiness Approval Tag or Authorised Release Certificate issued by the manufacturer approved by authority which has bilateral agreement with CAAC.
- c) Used material shall come with Authorised Release Certificate/Airworthiness Approval Tag AAC-038(12/94) issued by the maintenance organisation approved by CAAC.

# 8. MAINTENANCE DATA

The CCAR-145 AMO must use applicable current maintenance data in the performance of maintenance.

Within this section of the CAAC Supplement, the CCAR-145 AMO will describe procedures to ensure that only the following applicable maintenance data is used during the maintenance on a China registered aircraft and/or aeronautical products intended for fitment onto a China registered aircraft:

- a) The civil aviation regulation of the People's Republic of China, Civil Aviation Administration Procedure, Advisory Circulars, administration documents and other documents regarding the civil aircraft maintenance issued by the CAAC, including the relevant national standards quoted in the aforementioned documents;
- b) The relevant airworthiness data prescribed by the civil aircraft or aircraft component manufacturer(s) or other documents approved or accepted by the CAAC which are necessary for the maintenance work, including all kinds of manuals, documents, service bulletins, service letters as well as the relevant international or industrial standards quoted in the aforementioned documents;
- c) The relevant documents provided by the "operator/customer" pursuant to the maintenance rating(s)/item(s) specified in the maintenance contract, including the operator's maintenance program, manual and worksheet, etc.

### 9. REPAIR AND MODIFICATION DATA

Within this section of the CAAC Supplement, the CCAR-145 AMO will describe procedures to address the following requirement:

CCAR-145 AMO shall inform the operator in the case where the maintenance works that will be performed in compliance with the standards which exceed these prescribed in the airworthiness data. The data, process and instruction for such maintenance work or modification so developed shall be approved by CAAC via the operator prior to the maintenance work or modification.

# 10. AIRWORTHINESS DIRECTIVES (AD) CONTROL PROCEDURES

Within this section, the CCAR-145 AMO shall describe how it will:

- a) Ensure compliance with all ADs issued by the CAAC or the relevant authority of the State of Design, applicable to the work performed under the CCAR-145 approval.
- b) Manage and control the distribution and use of ADs issued by the CAAC or the relevant authority of the State of Design.
- c) Ensure that applicable ADs issued by the CAAC or the relevant authority of the State of Design will be made available to its personnel when they perform work under its CCAR-145 approval.
- d) Ensure customer approval / request is provided for the performance of applicable ADs issued by the CAAC or the relevant authority of the State of Design.

The work orders should clearly describe the scope of work to be accomplished from the customer prior to beginning work. If the repair station does not comply with an applicable AD, the record of its non-compliance must be documented in the item's maintenance records.

#### 11. RELEASE TO SERVICE PROCEDURE

Within this section, the CCAR-145 AMO must establish procedures to address the following key topics.

- a) On completion of maintenance work on the aircraft or aircraft component, the maintenance release certificate shall be issued by the certifying staff in such a way that is approved or accepted by the CAAC. The maintenance release certificates approved or accepted by the CAAC are as follows:
- b) The scheduled maintenance up to and including "A" check or equivalent as well as the modification incorporated thereof may be certified by the personnel so authorised by the operator via completing the records in the aircraft flight logbook on the completion of such works.
- c) For the scheduled maintenance work and the modification heavier than "A" check or equivalent, the format of the release certificate for such maintenance works may be devised by the maintenance organisation itself, but the format of the certificate shall be in a standard format and the following information shall be included at least:
  - i. Name, address of the maintenance organisation and its CAAC MOC number.
  - ii. Name and address of the "operator/customer" and the repair/purchase order number.
  - iii. Manufacturer, type and nationality registration number of the aircraft and the service time of the aircraft measured in flight hours, landing cycles, etc prior to the maintenance work.
  - iv. Subject of the scheduled maintenance, the significant defects found and the actions taken, together with the listing of parts replaced, deferred items and the completed airworthiness directives, service bulletins and other additional works incorporated into the scheduled maintenance works.
  - v. The compliance statement that all maintenance works completed for the aircraft and other maintenance works incorporated thereof comply with the requirements of the CAAC regulations.
  - vi. Name, the license number and the autographic signature of the certifying staff as well as the date of release.
- d) The release of aircraft components shall be in the form of the Release Certificate/Airworthiness Approval Tag (Form AAC-038) issued by the certifying staff so authorised by the maintenance organisation. In the case that the

maintenance of any component is just part of the whole process for another maintenance work performed by the maintenance organisation itself, the maintenance certificate required for such component may be in the form of the internal certificate used by the maintenance organisation itself only. The maintenance release certificates issued by the maintenance organisation shall meet the following requirements:

- i. The maintenance release certificates shall only be issued to the civil aircraft or aircraft components maintained by the maintenance organisation itself.
- ii. The maintenance release certificate shall not be amended randomly or used for other purposes.
- iii. The maintenance organisation may make adjustments on the maintenance release certificate only under the specific circumstance to ensure the information is complete; such adjustments, however, shall not change the information specified in the original certificate.
- iv. The usage of the maintenance release certificate shall not lead to the confusion on the airworthiness of the civil aircraft or aircraft component. The approved maintenance organisation shall provide the "operator/customer" with the maintenance release certificate together with the summary of all maintenance works carried out.
- e) The copy of the maintenance release certificate shall be kept together with the maintenance records.

# 12. UNAIRWORTHY CONDITION REPORT

Within this section, the CCAR-145 AMO must establish procedures to address the following key topics.

CCAR-145 AMO shall report to CAAC within 72 hours of the following significant defects, unairworthy conditions or other important incidents found during maintenance or occurring with maintenance that affect the operation safety of the aircraft and the airworthiness of the civil aircraft or aircraft components.

- a) Serious cracks, permanent deformation, burning damage or serious corrosion of structure found in the aircraft, engine, propeller or helicopter rotor systems.
- b) Any defect that may affect the functions of engine, landing gear and flight control systems.
- c) Any emergency system that failed the operational check or functional test.
- d) The significant defect or malfunction of the civil aircraft or aircraft component which occurred due to the maintenance errors.

The unairworthy conditions shall be reported with the "Unairworthy Condition Report" (Form F145-5). The maintenance organisation shall complete the form based on the facts encountered. In the case that the required form could not be completed within

the prescribed time frame, the report shall be made by fax, telex, telephone or e-mail etc. first and then followed with the formal report completed pursuant to the "Unairworthy condition report" (Form F145-5) in FSOP system.

The unairworthy conditions shall be reported to the "job-sender" at the same time. The relevant information shall also be reported to the civil aircraft or aircraft component manufacturer when such conditions have been deemed as design or manufacturing faults or defects.

# 13. ANNUAL REPORT

Within this section, the CCAR-145 AMO must establish procedures to address the following annual report requirement.

CCAR-145 AMO must submit Maintenance Organisation Annual Report (Form F145-4) for work performed in the previous year prior to Feb. 01 each year in FSOP system.

# 14. SUBCONTRACTED WORK

Within this section, the CCAR-145 AMO must establish procedures to address the following requirement.

Except for the major part of maintenance work, final test, certifying and releasing of maintenance, the maintenance organisation may subcontract the specific part of maintenance work out within the approved scope of work as specified in the CAAC MOC, such as the specialized working processes, sub-part repairs, etc.

Unless approved as a specialized service organisation in accordance with the national standards, the subcontractor to the approved maintenance organisation in Singapore shall be approved by CAAS or accepted by CAAC.

The maintenance organisation, which uses the subcontractors, shall make evaluate on the subcontracted maintenance work under the control of its quality system.

The procedure should address/include the following:

- a) Evaluation process and selection criteria for acceptance of new subcontractors;
- b) Management of purchase orders which should detail the work request, the maintenance data to be provided (for subcontractors) and the maintenance documentation to be returned after work completion.
- c) Receiving inspection procedures, particularly for the work from subcontractors.
- d) Quality monitoring of subcontractors which include audit inspections, frequency and records.
- e) List of subcontractors, if applicable. The list must contain their name, address, and maintenance function.

f) Procedure to ensure there is provision to allow the CAAC and the CAAS unimpeded access to facilities of subcontractors during the period when such activities are ongoing.

# 15. INTERNAL QUALITY ASSURANCE SYSTEM

Within this Section, the CCAR-145 AMO must describe how their internal quality assurance system will be extended to include continuous monitoring for compliance with the CAAC-CAAS TA-AM.

The content should address/include the following:

- a) Independent audit to monitor for compliance with the CAAC-CAAS TA-AM and adequacy of the procedures in CAAC Supplement. The audit schedule and methods to document the audit should be included.
- b) The independent audit should ensure all aspects of the compliance check are conducted every 12 months and this may be carried out as a complete single exercise or subdivided over the 12-month period in accordance with a scheduled plan.
- c) Method and timeframe to correct any findings / discrepancies / identified items arising from independent audits.
- d) Quality feedback reporting system to ensure all relevant management personnel, and importantly, the Accountable Manager are kept informed on all compliance matters.
- e) Management of records from independent audits and quality feedback system.

# 16. SAFETY MANAGEMENT SYSTEM

Within this section, the CCAR-145 AMO must establish procedures to address the following key topics of Safety Management System.

- a) Establish an incident and hazard reporting system, and conduct necessary sorting and analysis of the reported information to identify potential or occurred risks.
- b) Establish a risk management system, including risk analysis and assessment, risk control and risk monitoring, and serve as the basic basis for safety and quality management policies and measures.
- c) Establish an internal audit system to evaluate the effectiveness of the organisation's safety and quality management in a planned way, verify and perform self-improvement.
- d) Establish safety and quality supervision and assurance systems, implement effective monitoring and measurement of safety and quality levels, supervise the corresponding responsible departments and personnel to effectively evaluate

various hidden dangers and take effective corrective measures in time to reduce safety risks, prevent the occurrence of safety and quality problems.

e) Establish an efficient investigation and error management mechanism, conduct timely investigations of safety and quality problems occurred during the maintenance process or detected after maintenance work released. Report the situation based on facts, analyze the root cause, and propose preventive measures.

# 17. PERSONNEL TRAINING PROCEDURES

Within this Section, the CCAR-145 AMO must describe the procedures in ensuring all relevant personnel in the maintenance Organisation are trained and kept up-to-date on the TA-AM implementation procedures, applicable SAR-145 regulations and the organisation procedures in the CAAC Supplement.

The procedures should cover initial and continuation training program for the relevant personnel. Continuation training should be of sufficient duration in each 2-year period and it may be split into a number of separate elements.

The procedures should also include assessment of competency for certifying staff in ensuring that they are thoroughly familiar with the CAAC Supplement procedures and the air operators' procedures prior to granting of their authorizations.

# 18. CONTRACTED AOC OPERATORS

The AOC is a certificate granted to any person or operator whose principal place of business is in China to operate an aircraft for the purpose of public transport operations.

Within this section, the CCAR-145 AMO will list such operators for whom maintenance is provided, with details of the types of aircraft (and/or engines/APU) and the scope of work undertaken.

# 19. SAMPLE OF FORMS AND DOCUMENTS

Within this section, the CCAR-145 AMO must include those forms and documents with which it controls and records its maintenance work and procedures.

# APPENDIX B3: The Authorised Release Certificate - Form AAC-038

The appendix provides block-by-block instruction for filling in the CAAC Release Approval/Airworthiness Approval Tag Form AAC-038

# Sample of AAC-038

1 国家 Country	у	2. 中国民用航空局 CAAC □符合性 Conformity □透航性 Airworthiness 批准放行证书/适航批准标签 AUTHORIZED RELEASE CERTIFICATE/AIRWORTHINESS APPROVAL				PPROVAL TAG	3 证书编号 Certificate Ref. No.		
4 単位和地址 Organization Name and Address					5 工作单/合同单/5 Work Order/Contr				
6 序号 Item	7 内容 Description		8件号 Part No.	9 适用性 Eligibility		10 数量 Qty	11 系列号/批· Serial/Batch No		
13 备注 Remarks									
14 新产品 New Parts			兹声明 殊要求並 Certifies dance wi ments of	性行了工作, that the wo ith the airwo f the importi	第 13 项的其它规定总 该产品处于安全可用: rk specified above exce rthiness regulations of ng country and in resp	以外,已接照上述国家遊航条例和进口国道 改态可以批准放行使用。 pt as specified in block 13 was carried out in the stated country and the notified special ect to that work, the part (s) is (are) by for release to service.	n accor- require-		
16 批准人签名 Signature  17 批准人姓名(打印的) Name(Printed)			民用航空局表 y or on behal	受权 If of the CAAC					

AAC-038 (9/2022)

\*参阅产品目录详细查找适用性

Cross—check eligibility for more details with parts catalogue

# 批准放行证书/适航批准标签

AUTHORIZED RELEASE CERTIFICATE/AIRWORTHINESS APPROVAL TAG

#### 使用者/安装者职责

USER/INSTALLER RESPONSIBILITIES

- (1) 必须明确:本文件并不批准零件/组件/部件可以装到有关产品上。
- (2)当使用者/安装者使用的是所在国适就当局的条例,而不是本表第1项中所指国家适就当局的条例时,使用者/安装者必须保证所在国的活验当局龄接受所指国家活验当局批准出口的要件/组件/部件。
- (3) 表中第14項、第15項的陈述,并不说明本表是安装批准。在所有情况下,就空器使用前,航空器使用者/安装者应把按本国适航 条例颁发的安装批准放入维修记录中。
- $(1) \ \ It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.$
- (2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1
- it is essential that the user/installer ensure that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.
- (3) Statements 14 and 15 do not constitute installation certification. In all cases the aircraft maintenance record must contain an installation certification issued in accordance with the national regulation by the user/installer before the aircraft may be flown.
- (1) Fill in China. This column shall be preprinted.
- (2) Select "airworthiness". This column shall be preprinted.

- (3) Fill in Tag Number. For the purpose of control and tracing of this document, the tag numbers shall be preprinted sequentially by means of running numbers, unless the serial number is established by the use of computer program, in which case the serial numbers may not be preprinted.
- (4) Fill in the full name and address of the maintenance organisation which uses this tag to release component/part. This column shall be preprinted.
- (5) Fill in relevant work-order number/contract number/bill number as decided by the organisation. The purpose of this column is for the organisation to establish a quick search system by means of referring to work-order number/contract number/bill number or in respect to internal procedures of the organisation.
- (6) Fill in the item number of the component/part released by this tag. Entry to this column is not compulsory. The item number is provided for the convenience of note making in column 13.
- (7) Fill in the nomenclature of the component/part. The nomenclature in Illustrated Part Catalogue (IPC) shall be used preferably.
- (8) Fill in the part number of the component/part. The part number in IPC shall be used preferably.
- (9) Fill in the type/model of aircraft, engine or propeller on which the component/parts is applicable to be installed. If a component/part is applicable to multiple types/models of aircraft, engine or propeller, "APPLICABLE TO MULTIPLE TYPES" may be filled in. If the type/model to which the component/part is applicable is not known, "NOT KNOWN" may be filled in.

**Note:** Any information contained in Column 9 must not be used as the instruction approval of the component/part for specified types/models of aircraft, engine or propeller. The component/part user/installer must assure the applicable types/models effectively by means of IPC, service bulletins or other pertinent documents.

- (10) Fill in the quantity of the component/part released.
- (11) Fill in serial number or batch number of the component. If there is no such number, fill in "NOT APPLICABLE.
- (12) Fill in technical status of the component/part in 4 categories:
  - (a) Inspected/Tested
  - (b) Repaired
  - (c) Overhauled
- (13) In this column, the approved data/manual/technical standards on which the 4 categories contained in Column 12 are based, and the specific data and limitation to the part/component released must be entered to help the user/installer determine the

final airworthiness of the part/component. Each involved item shall be pointed out in each description. In case there is no such description available, mark "NONE".

Some examples are listed below to show what contents shall be included in this column:

- (a) Identification and revision number of CMM;
- (b) Operation limits of repaired product;
- (c) Standards for modification;
- (d) Approved serviceable spare part/component;
- (e) Compliance or non-compliance with AD or service bulletins;
- (f) Life time limits;
- (g) Condition of the part/component or the referred documents containing such condition in detail;
- (h) Effective date;
- (i) Date of storage;
- (j) Existing defects;
- (14) Line through by diagonal to show not applicable;
- (15) Self-explainable;
- (16) The release must be signed by the individuals authorised by CAAC approved maintenance organisation. Autographic signature must be used;
- (17) The name of the person who signs shall be printed formally;
- (18) Fill in the date on which the release is signed;
- (19) Fill in the certificate number issued to the organisation/individual by CAAC.

# **IMPLEMENTATION PROCEDURES**

FOR THE

# **TECHNICAL ARRANGEMENT ON AVIATION MAINTENANCE**

BETWEEN

# **CAAC AND CAAS**

# SECTION C REQUIREMENTS FOR AMOS LOCATED IN CHINA

# 1. INTRODUCTION

This section set forth the procedures for initial application, renewal, or amendments of a SAR-145 Maintenance Organisation Approval (MOA) under the provisions of the CAAC-CAAS Technical Arrangement on Aviation Maintenance (TA-AM) applicable to SAR-145 AMOs located in China.

# 1.1 Eligibility

To be eligible under the TA-AM, the applicant must meet all the following requirements:

- a) Hold a valid CCAR-145 MOC.
- b) Demonstrate a need to maintain Singapore registered aircraft and/or aeronautical products for the fitment on a Singapore registered aircraft. This may be in the form of a Letter of Intent (LOI) from a Singapore Air Operator Certificate (AOC) holder or a SAR-145 AMO.
- c) Agree to pay the fees prescribed in the Singapore Air Navigation Order (ANO) and the terms outlined in the TA-AM.
- d) Agree to comply with the terms of TA-AM and its implementation procedures.
- e) Possess knowledge of SAR-145 requirements.

# 1.2 Definitions

The following terms and explanations apply to Section C of this IP document.

- a) Formal Application Letter
  - A formal letter addressed to Director of Flight Standards to notify the intention to apply for the SAR-145 Maintenance Organisation Approval (for initial application only).
- b) CAAS(AW)21

Application form for SAR-145 Approval of Organisation (for initial, renewal, and amendment to approval application).

- c) Letter of Intent (LOI)
  - SAR-145.10(c) requires that the applicant show the necessity for a SAR-145 MOA. The demonstration of this necessity shall be in the form of an LOI from a Singapore AOC holder or another SAR 145 AMO indicating their intention to engage the applicant for the maintenance of Singapore aircraft and/or aircraft components intended for fitment on a Singapore aircraft.
- d) Capability List (CL)

The CL contains the participating AMO's approved work scope. The CL shall be in a format that distinguishes the different ratings and the required Authority's Certification of Maintenance.

e) CAAS Supplement

A supplement document to the CAAC MMM, which contains procedures detailing how the AMO fulfills the conditions set out in Annex 1 of TA-AM. Any revision to the CAAS Supplement must be submitted to CAAS for approval.

# 1.3 <u>Scope of SAR-145 Maintenance Organisation Approval</u>

A SAR-145 MOA granted under the provisions of the TA-AM shall be bounded by following conditions.

- a) The SAR-145 ratings and limitations are dependent on approved CCAR-145 ratings and limitations. The level of capability authorised under the SAR-145 ratings and limitations shall not exceed the CCAR-145 ratings and limitations.
- b) Unless otherwise agreed between CAAC and CAAS, the participating AMO shall perform maintenance activities within China under the direct surveillance of CAAC.

# 1.4 Application

Application for initial, renewal and amendments to a SAR-145 MOA granted under the provisions of the TA-AM shall be submitted to the CAAS. Details on the documents to be submitted during application can be found in Appendix C1.

# 1.5 Revocation, Suspension or Surrender

In an event when an AMO located in China has its CCAR-145 MOC revoked or suspended, its SAR-145 MOA would also become invalid as the conditions specified in the TA-AM would no longer be met.

- a) The SAR-145 AMO is responsible for notifying CAAS Flight Standards Division if its CCAR-145 MOC is suspended, surrendered or revoked.
- b) Unless CAAS decides otherwise, a SAR-145 MOA may be revoked, suspended or denied renewal if the CCAR-145 MOC becomes invalid under the conditions specified in the TA-AM, or other applicable regulations.
- c) The actions taken by CAAC and CAAS to address the revocation, suspension or surrender of a SAR-145 MOA is detailed in Section A paragraph 8.3 of this IP.

# 1.6 CAAS Contacts

The Maintenance Organisation (MO) Section of the CAAS Flight Standards Division is responsible for the SAR-145 certification and certificate management. They can be contacted at the following address:

Civil Aviation Authority of Singapore Flight Standards Division Maintenance Organisation Section Singapore Changi Airport, P.O. Box 1 Singapore 918141

Email: caas\_am@caas.gov.sg

# 2. APPROVAL APPLICATION PROCESSES

This part provides detailed information, relevant to the CAAC, CAAS and an applicant, for the initial, renewal, and amendment application of a SAR-145 Maintenance Organisation Approval (MOA). An applicant, as referred to in this part, may be an organisation applying for initial SAR-145 MOA or an existing SAR-145 AMO. An applicant must be familiar with Section C of this IP to understand the processes and responsibilities involved in the initial, renewal, or amendment application for SAR-145 MOA.

# 2.1 Initial Application

New applicants that are located in China and intending to apply for SAR-145 MOA should follow the procedures as follows.

- a) A new applicant should familiarize themselves with the current editions of the following documents before requesting for the application:
  - i. CAAC-CAAS TA-AM Agreement (TA-AM);
  - ii. CAAC-CAAS Implementation Procedures Document (IP);
  - iii. Singapore Airworthiness Requirements Part 145 (SAR-145);
  - iv. Air Navigation Order (ANO);
  - v. CAAS Advisory Circulars (applicable to SAR-145 AMO).
- b) The applicant should contact CAAS (via caas\_am@caas.gov.sg) directly when apply for SAR-145 MOA under the terms of TA-AM.
  - i. The applicant could clarify on the certification process and discuss any TA-AM requirements that could possibly exclude them from participating in the TA-AM. The applicant should also propose a timeline, highlighting the key schedule of events in the certification process, that is acceptable to CAAS.
  - ii. The applicant is required to provide CAAS with the LOI in demonstrating the potential to maintain Singapore registered civil aircraft and/or aeronautical products for fitment on a Singapore registered civil aircraft.
  - iii. CAAS will make a preliminary assessment on whether the applicant is eligible to participate the TA-AM.
- c) To initiate the formal application process, the applicant is required to submit the relevant documents to CAAS as indicated in Appendix C1.
  - CAAS will review the formal application submission to ensure completeness and acceptability. This should include an initial review of the proposed CAAS Supplement using the guidance in Appendix C2.
  - ii. CAAS Supplement, along with CCAR-145 MMM, sets forth the structure and procedures of the maintenance organisation to meet the SAR-145 requirements. The CAAS Supplement must describe how the maintenance organisation fulfilled the conditions as set out in Annex 1 of TA-AM.

- iii. CAAS Supplement, and its subsequent revisions, shall be reviewed and approved by CAAS. Incorporated references in the supplement must always be kept current.
- iv. During the review, CAAS may seek clarifications from CAAC if deem necessary.
- d) Upon satisfied that the application is acceptable, CAAS will notify the applicant to make the applicable fee payment. CAAS will proceed to issue a SAR-145 MOA to the applicant upon receipt of the fee payment. CAAS will also provide CAAC with a copy of the issued SAR-145 MOA.
- e) The applicant may only exercise the privileges granted under the SAR-145 MOA.

# 2.2 Renewal Application

An application for the renewal for a SAR-145 MOA shall be submitted to the CAAS. The SAR-145 MOA is valid for 12 months. To allow sufficient processing time, it is recommended that the renewal package be submitted 60 days prior to the expiration of the SAR-145 certificate.

- a) To initiate the renewal application, participating AMO must submit the relevant documents, as indicated in Appendix C1, to CAAS.
  - i. Any revision or amendments to the CAAS Supplement must be submitted to CAAS for approval.
  - ii. The participating AMO must provide the latest copies of the required documents, listed in Appendix C1, during the renewal application.
- b) CAAC should plan its surveillance audit on the CCAR-145 AMO, holding a SAR-145 MOA, at least once every 3 years. Participating AMO must ensure they remain in compliance with the conditions specified in TA-AM and the CCAR-145 regulations.
  - i. Participating AMO must ensure that all discrepancies, findings or identified items found during the CAAC's surveillance are satisfactorily addressed within the timeframe as agreed with CAAC.
  - ii. CAAC will notify CAAS on any enforcement actions taken due to discrepancies, findings, or identified items were not satisfactorily addressed in a timely manner.
  - iii. The participating AMO shall provide an annual report to CAAS in its application for SAR-145 MOA renewal. This report should include a summary of the CAAC's surveillance findings and their corresponding corrective status.
- c) CAAS will review the renewal application package and may seek clarifications from CAAC if deem necessary.
- d) When satisfied with the renewal application package, CAAS will notify the participating AMO to make the applicable fee payment. CAAS will proceed to issue the renewed SAR-145 MOA upon receipt of the fee payment. CAAS will also provide CAAC with a copy of the renewed certificate.

e) The participating AMO will continue to exercise the privileges granted by the approval upon receipt of the renewed SAR 145 MOC.

Note: The period of validity for a SAR-145 MOA certificate is 12 months from the expiry of the previous certificate.

# 2.3 Change/Amendment Application

An application for change/amendment to the SAR-145 MOA shall be submitted to the CAAS. The participating AMO should notify CAAS, within the timeline prescribed in SAR-145, on any proposed changes that could affect its SAR-145 MOA. These changes include:

- Name of the organisation;
- Address and/or location of the organisation;
- Additional locations of the organisation (within China);
- Change of SAR-145 approved maintenance ratings;
- Major changes to personnel, facilities, procedures, and work scope that could affect the approval.
- a) To initiate the application process, the participating AMO is required to submit the relevant documents, as indicated in Appendix C1, to CAAS.
  - i. The participating AMO must provide the perceived need for the SAR-145 approval to add a new rating or to change an existing rating where a complete type-certificate product is being added (i.e. aircraft, engines or propellers).

Note: The approved additional ratings and work scope shall not exceed the ratings and work scope granted under the CCAR-145 MOC.

- ii. All proposed changes should be reflected in the participating AMO's CCAR-145 MOC, CCAR-145 MMM and/or CAAS supplement where applicable.
- b) CAAS will review and approve the Change/Amendment application package. CAAS may require the participating AMO to pay a fee applicable for amendment of SAR-145 MOA.
- c) CAAS will proceed to issue the revised SAR-145 MOA after receipt of the fee payment, as applicable. CAAS will also provide CAAC with a copy of the revised SAR-145 MOA.
- d) The participating AMO will continue to exercise the privileges granted by the approval upon receipt of the revised SAR-145 MOA.

# 3. CONTINUED VALIDITY OF CERTIFICATE

3.1 Unless the SAR-145 MOA has previously been surrendered, superseded, suspended, revoked, or expired by virtue of exceeding any expiry date that may be specified in the certificate, the continued validity of approval is dependent on:

- a) The validity of CCAR-145 MOC and its approved scope of work granted to the participating AMO; and
- b) The participating AMO remains in compliance with the conditions prescribed in CAAC-CAAS TA-AM.
- 3.2 The participating AMO is responsible for notifying CAAS if it does not meet the aforementioned conditions for its SAR-145 MOA to remain valid. Enforcement actions referenced in Section A paragraph 8.3 will be taken against the participating AMO as appropriate.

# 4. CAAC RESPONSIBILITIES

Under the TA-AM, CAAC is responsible for performing the surveillance and oversight on SAR-145 AMOs located within China.

# 4.1 Administrative Duties

a) CAAC Coordinator will be the point of contact (POC) for inquiries from CAAS on matters related to SAR-145 AMOs in China. In the event that the CAAC Coordinator is not able to provide a response to the query, he/she may refer CAAS to the assigned CAAC PMI who is responsible for safety oversight of the SAR-145 AMO. In CAAS' communication with participating AMO in China, it is recommended that the CAAC Coordinator be copied in all correspondence on SAR-145 MOA certificate matters.

# 4.2 Safety Oversight and Surveillance

- a) CAAC must ensure that oversight and surveillance on SAR-145 AMOs in China are carried out in accordance with CAAC surveillance schedule.
- b) CAAC must verify that the participating AMOs comply with CCAR-145 regulations and the conditions specified in the TA-AM.
- c) CAAC must ensure that the work scope performed under SAR-145 approval does not exceed the CCAR-145 ratings and limitations
- d) CAAC will ensure that all discrepancies and findings identified during the course of their oversight and surveillance of the SAR-145 AMOs are recorded and communicated, and that follow-up corrective actions are taken. The deficiencies identified shall be addressed within a reasonable timeframe. CAAC's acceptance of the corrective actions taken or the corrective action plans must be recorded and documented on formal written correspondence to the participating AMOs.
- e) CAAC will provide assistance to CAAS, to clarify any safety information or matters related to the SAR-145 MOA and CCAR-145 MOC.

# 4.3 Recordkeeping

CAAC must ensure that all records documenting the safety oversight on SAR-145 AMOs are retained for at least 3 years. Such records may include but not limited to:

a) SAR-145 AMOs audit records and non-conformance reports;

b) Correspondences between CAAC and the participating AMOs with regards to organisational changes, such as personnel and work scope.

# 4.4 Surrender, Suspension or Revocation of a Certificate

In the event that a participating AMO's CCAR-145 MOC or associated ratings and limitations is surrendered, suspended, or revoked by CAAC, the SAR-145 MOA would become invalid.

- a) CAAC shall notify CAAS at the earliest opportunity.
- b) For any other non-compliance resulting in CAAC's enforcement actions, such as civil penalties and/or letters of warning issued to the SAR-145 AMO, CAAC shall notify CAAS.

# 5. CAAS RESPONSIBILITIES

Under the TA-AM, CAAS remains responsible for the issuance or renewal of the SAR-145 MOA.

- 5.1 CAAS will directly liaise with the applicant on all fee matters relating to the issuance or renewal of SAR-145 MOA.
- 5.2 For initial application of SAR-145 MOA, CAAS is responsible for reviewing the application documents for the purpose of issuing SAR-145 MOA.
  - a) After receiving the application documents from the applicant, CAAS will review the provided information to ascertain that the applicant fulfills the conditions as set out in TA-AM. CAAS may to clarify any information related to the application.
  - b) Upon satisfactory review and receipt of the applicable fee payment, CAAS will proceed to issue SAR-145 MOA directly to the applicant.
  - c) All documents submitted for the SAR-145 MOA application should be filed by CAAC and CAAS in accordance with their internal procedures.
- 5.3 For SAR-145 MOA renewal or amendment application, CAAS is responsible for reviewing the application documents submitted by the applicant.
  - a) For renewal and amendment that required the issuance of SAR-145 MOA, the applicant will contact CAAS, and furnish evidence to demonstrate that the application has been endorsed by CAAC.
  - b) Upon satisfactory review and receipt of the applicable fee payment, CAAS will proceed to issue the renewed / revised SAR-145 MOA directly to the applicant.
  - For amendment that does not require re-issuance of SAR-145 MOA, CAAS will
    review the amendment and approve the revised CAAS Supplement accordingly,
    if necessary.

# APPENDIX C1: SAR-145 APPROVAL APPLICATION PACKAGE

For the purpose of applying a SAR-145 Maintenance Organisation Approval, the following list of documents, as applicable, shall be submitted.

#### **INITIAL APPLICATION**

- 1. Formal Application Letter
- 2. Letter of Intent (LOI)
- 3. CAAS(AW)21 Application Form
- 4. Copy of current CCAR-145 Maintenance Organisation Certificate (MOC)
- 5. CCAR-145 MMM and CAAS Supplement
- 6. Capability List (CL)

# **RENEWAL APPLICATION**

- 1. CAAS(AW)21 Application Form
- 2. Copy of current CCAR-145 Maintenance Organisation Certificate (MOC).
- 3. CCAR-145 MMM and CAAS Supplement\*\*
  4. Capability List (CL)\*\*
- 5. Maintenance Organisation Annual Report

# CHANGE/AMENDMENT APPLICATION

- 1. CAAS(AW)21 Application Form
- 2. Copy of current CCAR-145 Maintenance Organisation Certificate (MOC)
- 3. CCAR-145 MMM and CAAS Supplement\*\*\*
- 4. Capability List (CL)\*\*\*
- 5. Letter of Intent (LOI)\*\*\*
- 6. Other supporting documents, depending on request

<sup>\*\*</sup> Denotes documents that require submission if a revision has occurred since last renewal.

<sup>\*\*\*</sup> Denotes documents that may require submission depending on change request.

# APPENDIX C2: GUIDANCE AND INSTRUCTIONS FOR DEVELOPING THE CAAS SUPPLEMENT

- 1. The purpose of the CAAS Supplement is to set forth the procedures, means, and methods of the SAR-145 Approved Maintenance Organisation (AMO) to fulfill with the conditions specified in the Annex 1 of CAAC-CAAS TA-AM and its implementation procedures.
- 2. Compliance with its contents will assure compliance with the CAAC-CAAS TA-AM, which is a prerequisite to obtaining and retaining the SAR-145 Maintenance Organisation Approval.
- 3. When developing the CAAS Supplement, it is important to ensure that it is customized to each Organisation to demonstrate compliance and it should not merely contain policy statements.
- 4. The CAAS Supplement should address the following:
  - a) What must be done?
  - b) Who should do it?
  - c) When must it be done?
  - d) Where must it be done?
  - e) How must it be done?
  - f) Which procedure(s)/form(s) should be used?
- 5. References to the CAAC Maintenance Management Manual (MMM) are acceptable to reduce redundant procedures as long as the references are clearly identified.
- 6. The contents of the CAAS Supplement must follow the format headings and contain the information as stated in the example of the CAAS Supplement given below. The required contents that do not apply to the SAR-145 AMO's operations must be included in the CAAS Supplement and stated as *Not Applicable*.

# **EXAMPLE OF CAAS SUPPLEMENT TO THE CAAC MMM**

(The cover page of the CAAS Supplement to the CAAC MMM must include the following)

# CIVIL AVIATION AUTHORITY OF SINGAPORE APPROVED MAINTENANCE ORGANISATION SUPPLEMENT TO THE CAAC MMM FOR THE

# SAR-145 MAINTENANCE ORGANISATION APPROVAL GRANTED UNDER THE CAAC-CAAS TA-AM

# CAAC CCAR-145 CERTIFICATE NUMBER: CAAS SAR-145 APPROVAL NUMBER:

# **FACILITY ADDRESS**

CAAC MMM Document Number:		
CAAS Supplement Document Number:	Issue/Revision Number:	

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	Organisation's Activities/Approval/Location/Personnel	X/X
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# LIST OF EFFECTIVE PAGES

A List of Effective Pages (LEP) is used to ensure that every manual contains current, correct information. The LEP shows the revision status of each page. By checking the status of each page, users can ensure their information is up to date.

To facilitate the tracking of changes, each page should be identified by the part number, page number, date of issue or date of latest amendment/revision, and amendment/revision number (if applicable). The latest amendment/revision on a page should be highlighted by marginal lines against the amended areas on the left hand side of the page.

The CAAS Supplement must provide a means to identify each page of the supplement has been submitted to the CAAS for acceptance. This shall be in the form of an LEP, with each page numbered and either dated or marked with a revision number.

<u>PAGE</u>	<u>REVISION</u>	<u>DATE</u>	<u>PAGE</u>	<b>REVISION</b>	<u>DATE</u>
1	0	01 Jan 2021	13	0	01 Jan 2021
2	0	01 Jan 2021	14	0	01 Jan 2021
3	0	01 Jan 2021	15	0	01 Jan 2021
4	0	01 Jan 2021	16	0	01 Jan 2021
5	0	01 Jan 2021	17	0	01 Jan 2021
6	0	01 Jan 2021			
7	0	01 Jan 2021			
8	0	01 Jan 2021			
9	0	01 Jan 2021			
10	0	01 Jan 2021			
11	0	01 Jan 2021			
12	0	01 Jan 2021			

CAAS Supplement: [Document Number]

SAR-145 AMO SIGNED:	CAAS SIGNED:	
DATE:	DATE:	

# **RECORD OF REVISION**

Amendment Number	Amendment Date	Details	Inserted By	Insertion Date

#### 1. INTRODUCTION

Within this section, the SAR-145 AMO must indicate that the CAAS Supplement, in conjunction with other chapters of the approved CAAC Maintenance Management Manual, defines the organisation and procedures upon which compliance with applicable regulations are based. Its content should address the following:

- a) State that the organisation shall operate under the provision of CAAC-CAAS TA-AM to obtain certification and renewal as a SAR-145 approved maintenance organisation for performing maintenance on Singapore registered civil aircraft and/or aeronautical products intended for fitment onto Singapore registered civil aircraft.
- b) State that the validity and scope of its SAR-145 approval is dependent on:
  - i. The validity of its CCAR-145 Maintenance Organisation Certificate and the associated work scope approved by CAAC; and
  - ii. The AMO remains in compliance with the TA-AM and its implementation procedures.
- c) State that the CAAS Supplement is intended to inform all staff of the AMO of additional considerations that need to be taken into account when working in accordance with the TA-AM and its implementation procedures.
- d) Identify the person (name, title and contact details) who will act as the liaison between the maintenance organisation and the CAAS. This liaison shall ensure compliance with the provisions of the CAAS Supplement.

#### 2. ACCOUNTABLE MANAGER'S COMMITMENT STATEMENT

The corporate commitment by the Accountable Manager shall be expressed in the form of a signed statement indicating that he/she understands and will ensure that the organisation will comply with the CCAR-145 regulations, the CAAC-CAAS TA-AM and its implementation procedures.

The Accountable Manager's statement should embrace the intent of the following paragraph and it is recommended to be used without amendment. Any modification to the statement should not alter the intent.

Whenever the Accountable Manager is changed, it is important that the new Accountable Manager signs the statement at the earliest opportunity as part of his/her acceptance by the CAAS.

"This supplement, along with the CAAC Maintenance Management Manual and any associated referenced manuals, define the organisation and procedures upon which the CAAS SAR-145 approval is granted under the terms of the Technical Arrangement on Aviation Maintenance (TA-AM) between the Civil Aviation Administration of China (CAAC) and the Civil Aviation Authority of Singapore (CAAS). These procedures are approved by the undersigned and

must be complied with, as applicable, when work/orders are being progressed under the terms of the SAR-145 approval.

As the Accountable Manager, I undertake to ensure that this Organisation fully understands that the issuance of the SAR-145 Maintenance Organisation Approval is subject to compliance with the CAAC-CAAS TA-AM, its implementation procedures and the CCAR-145 regulations. Failure in doing so may result in the denial of renewal, suspension, or revocation of the SAR-145 Maintenance Organisation Approval.

It is accepted that these procedures do not override the necessity of complying with any new or amended regulations published by the CAAC and/or the CAAS from time to time where these new or amended regulations are in conflict with these procedures.

It is agreed that [name of company] will provide the CAAC and CAAS personnel with unimpeded access to its facilities for the purpose of determining compliance with the CAAC-CAAS TA-AM, its implementation procedures and/or any investigations for suspected violations.

I agree to ensure that this CAAS Supplement will be maintained and kept current by this Organisation and is accessible to all personnel. I further agree to submit revisions to this CAAS Supplement to the CAAS for acceptance before implementing any such revisions.

It is understood that the CAAS will approve this organisation if the CAAS is satisfied that the procedures are being followed and work standards maintained. It is further understood that the CAAS reserves the right to suspend, limit, or revoke the SAR-145 approval of the organisation if the CAAS has evidence that procedures are not followed or standards not upheld.

Signed	
Dated	
Accountable Manager and	(quote position)
For and on behalf of	(quote organisation's name)"

# 3. SCOPE OF WORK

Within this section, the SAR-145 AMO shall specify the range of work carried out at each approved location within the scope of each approval rating as shown in the SAR-145 certificate – Schedule of Approval. This section should also relate to approved locations in such a way that it can be clearly seen what tasks are performed at which locations.

It is important to note that the scope of work and level of capability authorised under the CAAS SAR-145 ratings or limitations shall not exceed the AMO's CAAC CCAR-145 ratings and limitations.

The degree of definition within this section should provide clear identification of the maintenance activities that the SAR-145 AMO is capable of and the limitations

imposed whilst performing the intended maintenance activities under the SAR-145 approval.

Using a Capability List (CL) is an effective way of providing detailed definition of the scope of work. The CL must identify the make, model, or other nomenclature designated by equipment manufacturer and the depth of maintenance work to which the SAR-145 AMO is capable to perform. References can be made to a separately controlled CL so long as the procedure for controlling the CL acceptable to CAAS and there is a clear identification of difference in approval for scope of work under the SAR-145 approval and the CCAR-145 approval.

In the case of aircraft maintenance, the relevant paragraph in this section of the CAAS Supplement must not be referenced to another separate document. It must be reflected within the CAAS Supplement and it must show what level of work is undertaken at each station. It must also include the limitations, which will state the aircraft series or type and/or maintenance task(s), i.e., Base Maintenance or Line Maintenance.

Any NDT activities or special processes that are carried out internally and not necessarily included on the SAR-145 Approval Certificate should also be reflected within this section of the CAAS Supplement.

# 4. NOTIFICATION PROCEDURE REGARDING CHANGES TO THE ORGANISATION'S ACTIVITIES / APPROVAL / LOCATION / PERSONNEL AFFECTING SAR-145 APPROVAL

Any significant changes to the management, Organisation, resources, facilities, and scope of work will affect the conditions under which the approval was granted and has been allowed to continue. This section must provide details on how the company would go about notifying the CAAS of the following changes that may affect its SAR-145 approval:

- a) Name of the Organisation;
- b) Location of the Organisation;
- c) Additional locations of the Organisation;
- d) Change or addition of ratings;
- e) Accountable Manager, Quality Manager, and any other management personnel listed in the AMO's CAAS Supplement;
- f) The facilities, equipment, tools, materials, procedures, and work scope that could affect the approval.

# 5. ACCESS BY CAAC AND CAAS

Within this section, the SAR-145 AMO shall specify that CAAC and CAAS must be allowed access to their organisation for the purpose of assuring compliance with procedures and standards and to investigate specific problems.

There must also be an indication that, in case of a serious non-compliance with regulations or established standards, the SAR-145 AMO must accept that it may be subject to enforcement action from CAAS. In addition, it must be indicated that any cost incurred as a result of any investigation activities involving CAAS' participation shall be borne by the organisation.

# 6. CAAS SUPPLEMENT AMENDMENT PROCEDURES

Within this section, the SAR-145 AMO shall describe the procedures for management of the CAAS Supplement amendment. The SAR-145 AMO must ensure that the CAAS supplement remains current and its procedures should address the following:

- a) Identify the sources of proposed amendments within the organisation.
- b) Provide a summary of referenced documents, including lower order documents, constituting the total CAAS Supplement.
- c) Identify the person responsible for amending and submitting the CAAS Supplement to the CAAS.

**NOTE**: Amendments to the CAAS Supplement may be initiated from any part of the SAR-145 AMO, but it must be monitored for compliance with relevant regulatory requirements by the Quality Manager.

- d) Procedures for recording revisions, their distribution within the organisation and the method by which the AMO provide the revision to the CAAS before implementation.
- e) Procedures for the control and amendment of the CL.

# 7. ACCEPTABLE AIRCRAFT COMPONENTS / PARTS / MATERIALS

Within this section, the SAR-145 AMO shall describe the procedures for ensuring only aircraft components / parts / materials, that are accepted by CAAS, can be fitted onto a Singapore registered aircraft.

# a) New Parts

For new aircraft parts that are fitted onto Singapore registered aircraft, the acceptable authorised release certificate (ARC)<sup>2</sup> are:

- i. Form CAAS(AW)95
- ii. Form CAAS(AW)96, in the case of re-issued parts
- iii. European Aviation Safety Agency (EASA) Form 1
- iv. Federal Aviation Administration (FAA) Form 8130-3

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<sup>&</sup>lt;sup>2</sup> Refer to latest in CAAS Advisory Circular AC145-3 (link)

- v. Joint Aviation Authority (JAA) Form 1 issued prior to 28 November 2005
- vi. Australian Civil Aviation Safety Authority (CASA) Form 1 where CAAS has issued a STC or STSO certificate for the article

In addition to the new aircraft parts listed in above, a new aircraft part may also be used on a Singapore registered aircraft if the part is:

- i. Provided by a vendor listed in the illustrated parts catalogue (IPC) as approved vendor for that particular part; and
- ii. Accompanied with an authorised release certificate issued by the vendor.
- b) Maintained Parts and Components (exclude Engines, Engine Modules, Auxillary Power Units (APUs) and Propellers)

For maintained parts and components excluding engines, engine modules, APUs and propellers, the acceptable ARC<sup>3</sup> shall be as follows.

- i. Form CAAS(AW)95
- ii. Form One issued by an organisation accepted by the Authority under the Technical Arrangement on Aviation Maintenance between CAAS and Transport Canada
- iii. FAA Form 8130-3 issued by a FAR-145 repair station located in United States
- iv. EASA Form 1 issued by an EASA Part-145 approved maintenance organisation located in an EASA Member State or issued before 1 January 2021 by an EASA Part 145 approved maintenance organisation located in the United Kingdom
- v. JAA Form One issued before 1 June 2009 by a JAR-145 approved maintenance organisation located in a JAA Full Member State
- vi. CAD Form One issued by an organisation accepted by the authority under the Technical Arrangement on Aviation Maintenance between CAAS and Hong Kong Civil Aviation Department (HK CAD)
- vii. CASA Form 1 issued before 1 July 2014 by a CASR Part 145 approved maintenance organisation located in Australia, or issued by an organisation accepted by the Authority under the Technical Arrangement on Aviation Maintenance between CAAS and CASA
- viii. JCAB Form 18 issued by an organisation accepted by the Authority under the Technical Arrangement on Aviation Maintenance between CAAS and Japan Civil Aviation Bureau (JCAB)

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<sup>&</sup>lt;sup>3</sup> Refer to latest in CAAS Advisory Circular AC145-3 (<u>link</u>)

- ix. CAA Form 1 issued by a UKCAA Part 145 maintenance organisation located in the United Kingdom
- x. CAANZ Form 1 issued by an organisation accepted by the Authority under the Technical Arrangement on Maintenance between CAAS and CAANZ
- c) Maintained Engines, Engine Modules, APUs, and Propellers

For maintained engines, engine modules, APUs and propellers, the acceptable ARC<sup>4</sup> shall be as follows.

- i. Form CAAS(AW)95
- Form One issued by an organisation accepted by the authority under the Technical Arrangement on Aviation Maintenance between CAAS and Transport Canada
- iii. CAD Form One issued by an organisation accepted by the authority under the Technical Arrangement on Aviation Maintenance between CAAS and HK CAD
- iv. CASA Form 1 issued by an organisation accepted by the Authority under the Technical Arrangement on Aviation Maintenance between CAAS and CASA
- v. JCAB Form 18 issued by an organisation accepted by the Authority under the Technical Arrangement on Aviation Maintenance between CAAS and JCAB
- vi. CAA Form 1 issued by an organisation accepted by the Authority under the Technical Arrangement on Aviation Maintenance between CAAS and UKCAA

#### d) Standard Parts

Acceptable standard parts as specified in the CAAS Airworthiness Notice No. C42 (Acceptance of Aircraft Standard Parts by Users).

# 8. MAINTENANCE DATA

The SAR-145 AMO must use applicable current maintenance data in the performance of maintenance.

Within this section of the CAAS Supplement, the SAR-145 AMO will describe procedures to ensure that only the following applicable maintenance data is used during the maintenance on a Singapore registered aircraft and/or aeronautical products intended for fitment onto a Singapore registered aircraft:

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<sup>&</sup>lt;sup>4</sup> Refer to latest in CAAS Advisory Circular AC145-3 (<u>link</u>)

- a) Any applicable requirement, procedure, Airworthiness Directive (AD), airworthiness notice, or information issued by the CAAS.
- b) Any applicable AD issued by the relevant authority of the State of Design.
- c) Any applicable data, such as, but not limited to, maintenance and repair manuals, issued by an organisation under the approval of the CAAS, including type certificate (TC) and Supplemental Type Certificate (STC) holders and any other organisation approved to publish such data by the CAAS.
- d) Unless specified otherwise by the CAAS, any applicable data, such as, but not limited to, maintenance and repair manuals, issued by an organisation under the approval or authority of the State of Design.

Examples of applicable maintenance data relevant to the respective approval class ratings are as follows:

1) SAR-145 AMOs with an Approval Class Rating in Category A. Aircraft should hold and use the following maintenance data where published:

Appropriate sections of the operator's aircraft maintenance programme, aircraft maintenance manual, repair manual, supplementary structural inspection document, corrosion control document, service bulletins, service letters, service instructions, modification leaflets, nondestructive inspection (NDI) manual, parts catalogue, TC data sheet, and any other specific document issued by the TC or STC holder as maintenance data. However, in the case of operator- or customer-provided maintenance data, it is not necessary to hold such provided data.

Appropriate sections refer to maintenance data relevant to the maintenance work scope at each particular maintenance facility. In other words, for example, a base maintenance facility should have almost complete set(s) of the maintenance data whereas a line maintenance facility may need only the maintenance manual and the parts catalogue.

2) SAR-145 AMOs with an Approval Class Rating in Category B. Engines/auxiliary power units (APU) should hold and use the following maintenance data where published:

Appropriate sections of the engine/APU maintenance and repair manual, service bulletins, service letters, modification leaflets, NDI manual, parts catalogue, TC data sheet, and any other specific document issued by the TC holder as maintenance data. However, in the case of operator- or customer-provided maintenance data, it is not necessary to hold such provided data.

3) SAR-145 AMOs with an Approval Class Rating in Category C. Components other than complete engines/APUs should hold and use the following maintenance data where published:

Appropriate sections of the vendor maintenance and repair manual, service bulletins, service letters, and any document issued by the TC holder as maintenance data on whose product the component may be fitted when applicable. However, in the case of operator- or customer-provided maintenance data, it is not necessary to hold such provided data.

4) SAR-145 AMOs Only Approved in Class Rating Category D. Specialised services should hold and use the following maintenance data where published in respect of the particular specialised service(s) specified in the approval schedule:

Specialised service(s) process specification. However, in the case of operatoror customer-provided maintenance data, it is not necessary to hold such provided data.

#### 9. REPAIR AND MODIFICATION DATA

For any other maintenance, repairs, or modifications outside the scope of the applicable maintenance data, the SAR-145 AMO must provide details to ensure that only the following approved data<sup>5</sup> are used.

- a) Under SAR Part-21.117, a person may use data, in support of a design change or repair on a product or article, regardless of major or minor classification, if such data meets one of the following criteria below:
  - i. Approved by the FAA under the scope of an agreement between CAAS and FAA; or
  - ii. Approved by the European Aviation Safety Agency (EASA) under the scope of agreement between CAAS and EASA; or
  - iii. Issued by a holder of a FAA's type certificate and CAAS' letter of type acceptance; or
  - iv. Approved by a holder of an EASA's type certificate and CAAS' letter of type acceptance.

**NOTE:** For all major repairs, the FAA approved design data must be supported with applicable FAA approval forms such as the FAA 8110-3, 8100-9, or Form 337 (block 3).

- b) Unless the data is acceptable under SAR-21.117, the data for a:
  - Major repair to a product or article is to be approved under Subpart F of the SAR-21;
  - ii. Minor repair to a product or article is to be approved by CAAS, or a holder of a SAR-21 Design Organisation Approval with the appropriate scope of approval.
  - iii. Major change to a product is to be approved under Subpart C (Supplemental Type Certificates) of the SAR-21;

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<sup>&</sup>lt;sup>5</sup> Refer to latest in CAAS Advisory Circular AC21-1 (<u>link</u>)

iv. Minor change to a product is to be approved by the CAAS or a holder of a SAR-21 Design Organisation Approval with the appropriate scope of approval.

# 10. AIRWORTHINESS DIRECTIVES (AD) CONTROL PROCEDURES

Within this section, the SAR-145 AMO shall describe how it will:

- a) Ensure compliance with all ADs issued by the CAAS or the relevant authority of the State of Design, applicable to the work performed under the SAR-145 approval.
- b) Manage and control the distribution and use of ADs issued by the CAAS or the relevant authority of the State of Design.
- c) Ensure that applicable ADs issued by the CAAS or the relevant authority of the State of Design will be made available to its personnel when they perform work under its SAR-145 approval.
- d) Ensure customer approval/request is provided for the performance of applicable ADs issued by the CAAS or the relevant authority of the State of Design.

The work orders should clearly describe the scope of work to be accomplished from the customer prior to beginning work. If the repair station does not comply with an applicable AD, the record of its non-compliance must be documented in the item's maintenance records.

#### 11. MAINTENANCE DOCUMENTATION IN USE AND ITS COMPLETION

Within this section, the SAR-145 AMO shall describe how it will ensure completeness of, and compliance with, the customer or operator's work order, including the accomplishment of applicable ADs issued by the CAAS or the State of Design and other notified mandatory instructions.

For complex maintenance tasks, the SAR-145 AMO may transcribe them onto internal documents, such as job cards or worksheets, and sub-divide the tasks into clear stages to ensure a record of the accomplishment of the maintenance task. The SAR-145 AMO must establish procedures to ensure that these internal documents and the corresponding technical publication from which it was transcribed are current and controlled.

In the case of a lengthy maintenance task involving a succession of personnel to complete such a task, it may be necessary to use supplementary job cards or worksheets to indicate what was actually accomplished by each individual person.

### 12. RELEASE TO SERVICE PROCEDURE

Within this section, the SAR-145 AMO must establish procedures to ensure an appropriately authorised certifying staff will issue a Certificate of Release to Service (CRS) on behalf of the SAR-145 AMO when satisfied that all maintenance required by

the customer of the aircraft or aircraft component has been properly carried out by the SAR-145 AMO. The procedures should address the following key topics.

### a) Issuance of CRS

The following conditions will require a CRS:

- 1) A CRS is necessary before flight at the completion of any package of maintenance specified by the aircraft operator in accordance with Division 7 of the Air Navigation (91-General Operating Rules) Regulation 2018. The package of maintenance may include any one or combination of the following elements: a check or inspection from the operator's aircraft maintenance programme, AD, overhauls, repairs, modifications, aircraft component replacements, and defect rectification.
- 2) A CRS is necessary before flight at the completion of any defect rectification whilst the aircraft operates flight services between scheduled maintenance.
- 3) A CRS is necessary at the completion of any maintenance on an aircraft component whilst off the aircraft.

In respect of aircraft line maintenance under the approval class rating in category A, the inspection and release to service should be carried out as follows:

- i. The authorised person who carried out the scheduled line maintenance tasks and unscheduled defect rectification should carry out the inspection function. Such person should issue a release to service for the tasks completed only when satisfied by self-inspection that the tasks have been properly carried out in accordance with the approved maintenance instructions.
- ii. If the aircraft maintenance task(s) requires a specific inspection in addition to the initial inspection performed, this duplicate inspection should be accomplished by another competent person who should certify for the second inspection when satisfied.

In respect of aircraft base maintenance under the approval class rating in Category A, the maintenance work and the certification of release to service for the aircraft should be carried out as follows:

- i. The authorised person who carried out the particular base maintenance task should sign that he/she has accomplished the task only when satisfied by self-inspection that the task has been properly carried out in accordance with the approved maintenance instructions. Such task signoffs support the issue of a release to service by the authorised base maintenance certifying staff following base maintenance.
- ii. If the aircraft maintenance programme/task(s) requires a specific inspection in addition to the initial inspection performed, this duplicate inspection should be accomplished by another competent person who should certify for the second inspection when satisfied.

iii. The base maintenance certifying staff should issue release to service for the aircraft when satisfied that the complete maintenance process has been carried out in accordance with the approved procedures.

In respect of aircraft engine and component workshop maintenance under the approval class rating in Category B and Category C respectively, the inspection and release to service should be carried out as follows:

- i. The person who carries out a maintenance task specified in the maintenance instructions should sign that he/she has accomplished the task only when satisfied by self-inspection that the task has been properly carried out in accordance with the approved maintenance instructions.
- ii. The workshop component certifying staff should issue release to service (including the ARC as appropriate) for the aircraft component after the completion of all tasks when satisfied that the complete maintenance process has been carried out in accordance with the approved procedures, including additional inspection, when required.
- iii. The ARC identified as form CAAS(AW)95 (see Appendix C3) constitutes the aircraft component CRS when an aircraft component is maintained off an aircraft and in a component workshop environment.

#### b) Details on a CRS

A CRS must contain basic details of the maintenance carried out, the date such maintenance was completed, and the identity, including approval reference (AWI/XXX), of the SAR-145 AMO and certifying staff issuing such a certificate. The SAR-145 AMO must establish procedures to ensure that the following details are provided within the CRS issued by the authorised certifying staff on behalf of the SAR-145:

i. The CRS must contain the following statement:

"Certifies that the work specified, except as otherwise specified, was carried out in accordance with SAR-145 and the Air Navigation Order and in respect to that work the aircraft/aircraft component is considered ready for release to service."

The Release to Service statement in Block 14a of the ARC (CAAS(AW)95 form) is slightly at variance with the above statement in that it refers to particular boxes on the form.

- ii. The CRS should relate to the task specified in the manufacturer's or AOC holder's instruction or the aircraft maintenance programme, which itself may cross-refer to a manufacturer's/operator's instruction in a maintenance manual, service bulletin, etc.
- iii. Where such instructions include a requirement to ensure a dimension or test figure is within a specific tolerance as opposed to a general tolerance, the dimension or test figure should be recorded unless the instruction

permits the use of GO/NO GO gauges. It is not normally sufficient to state that the dimension or the test figure is within tolerance.

- iv. The date such maintenance was carried out should include when the maintenance took place relative to any life or overhaul limitation in terms of date/flying hours/cycles/landings, etc., as appropriate.
- v. When extensive maintenance has been carried out, it is acceptable for the CRS to summarise the maintenance so long as there is a unique cross-reference to the work-pack containing full details of maintenance carried out. Dimensional information should be retained in the work-pack record.
- vi. The person issuing the CRS should use his normal signature except in the case where a computer release to service system is used. In this latter case, the CAAC and the CAAS will need to be satisfied that only the particular person can electronically issue the release to service.
- c) Certification of Maintenance (Incomplete Maintenance)

When a SAR-145 AMO approved to maintain the aircraft is unable to complete all maintenance required, the aircraft operator must then be informed and agree to the deferment of the uncompleted tasks before the CRS is issued by the AMO. Details of the deferred tasks, and the aircraft operator's authorization for deferment, must be endorsed on the CRS.

In the event that the maintenance required by the aircraft operator could not be completed due to insufficient aircraft maintenance downtime for the scheduled check or by virtue of the condition of the aircraft requiring additional maintenance downtime, the SAR-145 AMO must establish procedures to:

- i. Inform the aircraft operator that all maintenance required to be accomplished cannot be achieved within the operator's limitation.
- ii. Seek agreement from the aircraft operator to defer the required maintenance task(s).
- iii. Record details of such deferment onto the CRS prior to issuance of the CRS.

The procedure should state what action the mechanic, supervisor, and certifying staff should take to bring the matter to the attention of the relevant department or person responsible for technical coordination with the aircraft operator so that the issue may be discussed and resolved with the aircraft operator.

#### d) Hazard to Flight Safety

Notwithstanding the conditions for the issuance of the CRS as mentioned in the above paragraphs, a CRS must not be issued in the case of any non-compliance known to the SAR-145 AMO that could hazard flight safety.

A non-compliance that could hazard flight safety means any instances where safe operation could not be assured or which could lead to an unsafe condition.

It typically includes, but is not limited to, significant cracking, deformation, corrosion or failure of primary structure, any evidence of burning, electrical arcing, significant hydraulic fluid or fuel leakage, and any emergency system or total system failure. An AD overdue for compliance is also considered a hazard to flight safety.

The SAR-145 AMO must establish procedures to ensure that the CRS must not be issued under such circumstances.

# 13. MANDATORY REPORTING OF DEFECTS TO THE CAAS / OPERATOR / MANUFACTURER

Within this section, the SAR-145 AMO must establish procedures to report to the CAAS and the aircraft type certificate holder on any condition of the aircraft or aircraft component identified by the SAR-145 AMO that could seriously hazard the aircraft.

The content should include:

- a) Procedures in ensuring that such reports are made as soon as practicable, but in any case within 3 days of the SAR-145 AMO identifying the condition to which the report relates.
- b) Procedures in ensuring that the reports are made in a form and manner prescribed by the CAAS and contain all pertinent information about the condition known to the SAR-145 AMO. This can be achieved by submitting the report on form CAAS(AW)152.

Conditions that could seriously hazard the aircraft include, but are not limited to:

- 1) Serious cracks, permanent deformation, burning or serious corrosion of structure found during scheduled maintenance of the aircraft, engine, propeller, or helicopter rotor system:
- 2) Failure of any emergency system during scheduled testing;
- 3) Suspected unapproved parts (SUP) received from a part supplier, Original Equipment Manufacturer (OEM), an operator, or on an aircraft or aircraft component.

### 14. CONTRACTED / SUBCONTRACTED WORK

Within this Section, the SAR-145 AMO shall establish the control procedures for situations where it intends to engage the maintenance services of other organisation.

A SAR-145 AMO, performing work on Singapore registered aircrafts and/or components intended for fitment onto Singapore registered aircrafts under the CAAC-CAAS TA-AM, must adhere to the following in relation to contracted/subtracted work activities.

- The SAR-145 AMO may contract work to other SAR-145 AMOs located in China. Where the work is contracted to organisation outside of China, the organisation shall be approved by CAAS or be otherwise acceptable to CAAS under the terms of an existing bilateral maintenance agreement with the Competent Authority of the country in which the organisation is located.
- 2) The SAR-145 AMO may subcontract work to any other organisation provided it extends its quality system to that organisation and that the work is within the scope of the ratings and limitations of the SAR-145 AMO. It is the SAR-145 AMO's responsibility to ensure that the customer is informed when the subcontracting work is required.

The content should address/include the following:

- a) Evaluation process and selection criteria for acceptance of new contractors/subcontractors
- b) Management of purchase orders which should detail the work request, the maintenance data to be provided (for subcontractors) and the maintenance documentation to be returned after work completion.
- c) Receiving inspection procedures, particularly for the work from subcontractors.
- d) Quality monitoring of subcontractors which include audit inspections, frequency and records.
- e) List of contractors/subcontractors, if applicable. The list must contain their name, address, and maintenance function.
- f) Procedure to ensure there is provision to allow the CAAC and the CAAS unimpeded access to facilities of subcontractors during the period when such activities are ongoing.

#### 15. INTERNAL QUALITY ASSURANCE SYSTEM

Within this Section, the SAR-145 AMO must describe how their internal quality assurance system will be extended to include continuous monitoring for compliance with the CAAC-CAAS TA-AM.

The content should address/include the following:

 Independent audit to monitor for compliance with the CAAC-CAAS TA-AM and adequacy of the procedures in CAAS Supplement. The audit schedule and methods to document the audit should be included.

The independent audit should ensure all aspects of the compliance check are conducted every 12 months and this may be carried out as a complete single exercise or subdivided over the 12-month period in accordance with a scheduled plan. The audit should also sample check one product per product line under each class rating as specified in the AMO's SAR-145 approval schedule.

- b) Method and timeframe to correct any findings / discrepancies / identified items arising from independent audits.
- Quality feedback reporting system to ensure all relevant management personnel, and importantly, the Accountable Manager are kept informed on all compliance matters.
- d) Management of records from independent audits and quality feedback system.

#### 16. SAFETY MANAGEMENT SYSTEM

Within this Section, the SAR-145 AMO must describe on the procedures for a safety management system (SMS) that aligns with the CAAS SMS requirements<sup>6</sup>.

The content should address/include the following:

- a) Safety policy and objectives on the system is based, endorsed by the Accountable Manager, and setting out the:
  - i. Management commitment towards aviation safety;
  - ii. Safety accountability and responsibilities;
  - iii. Appointment of key safety personnel;
  - iv. Documentation on all SMS processes; and
  - v. Coordination of emergency response planning.
- b) Processes for safety risk management, including:
  - i. Identification of hazards to aviation safety; and
  - ii. Conduct of safety risk assessment and mitigation.
- c) Processes for providing safety assurance, including:
  - i. Safety performance monitoring and measurement;
  - ii. The management of change; and
  - iii. Continuous improvement of its SMS.
- d) Processes for safety promotion, including:
  - i. Training and education for its personnel on SMS; and
  - ii. Safety communication.
- e) Processes for conducting periodic reviews or audits of the SMS.

Procedures on SMS that have complied with CAAC SMS requirements may be referenced in the CAAS Supplement provided that these procedures can adequately address the above listed SMS elements.

#### 17. PERSONNEL TRAINING PROCEDURES

Within this Section, the SAR-145 AMO must describe the procedures in ensuring all relevant personnel in the maintenance organisation are trained and kept up-to-date on

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<sup>&</sup>lt;sup>6</sup> Refer to latest in CAAS Advisory Circular 1-3 and 145-11 (link)

the TA-AM implementation procedures, applicable CCAR-145 regulations and the organisation procedures in the CAAS Supplement.

The procedures should cover initial and continuation training program for the relevant personnel. Continuation training should be of sufficient duration in each 2-year period and it may be split into a number of separate elements.

The procedures should also include assessment of competency for certifying staff in ensuring that they are thoroughly familiar with the CAAS Supplement procedures and the air operators' procedures prior to granting of their authorizations.

### 18. CONTRACTED AOC OPERATORS

The AOC is a certificate granted to any person or operator whose principal place of business is in Singapore to operate an aircraft for the purpose of public transport operations.

Within this section, the SAR-145 AMO will list such operators for whom maintenance is provided, with details of the types of aircraft (and/or engines/APU) and the scope of work undertaken.

### 19. SAMPLE OF FORMS AND DOCUMENTS

Within this section, the SAR-145 AMO must include those forms and documents with which it controls and records its maintenance work and procedures.

# APPENDIX C3: THE AUTHORISED RELEASE CERTIFICATE (ARC) – FORM CAAS(AW)95

### 1. Introduction

1.1 This appendix only covers the use of form CAAS(AW)95 for maintenance purposes.

# 2. Purpose and Scope

- 2.1 The purpose of the Certificate is to attest to the airworthiness of maintenance work undertaken on assemblies/items/components/parts (hereafter referred to as "item(s)") under the approval of the Civil Aviation Authority of Singapore (CAAS).
- 2.2 The Certificate referenced form CAAS(AW)95 is called the Authorised Release Certificate (ARC).
- 2.3 The Certificate may be accepted by other Civil Aviation Authorities (CAA) for the items to be installed on their aircraft, depending on the conditions of bilateral agreements between CAAS and the CAA or the policy of the importing CAA.
- 2.4 The Certificate can only be issued by organisations approved by the CAAS within the scope of the approval, or by the CAAS itself.
- 2.5 The Certificate does not constitute approval to install the item on a particular aircraft, engine, propeller or component, but assists the end user to determine its airworthiness approval status.
- 2.6 Under no circumstances may the Certificate be issued for any item when it is known that the item has a defect considered a serious hazard to flight safety.
- 2.7 A Certificate should not be issued for any item when it is known that the item is unserviceable. An exception is in the case of an item undergoing a series of maintenance processes at several SAR-145 Approved Maintenance Organisations (AMO) and the item needs a Certificate for the previous maintenance process carried out for the next SAR-145 AMO to accept the item for subsequent maintenance processes. As mentioned for Block 12, a clear statement of limitation should be endorsed in Block 12.
- 2.8 The Certificate may not be used to release an aircraft to service.
- 2.9 A single Certificate may not be used to release both newly produced items and maintained items.
- 2.10 Items fabricated during the course of maintenance for modification and repair purposes under SAR-145.65(b) by an approved maintenance organisation may not be released using the Certificate.
- 2.11 Where a single Certificate is used to release multiple items and those items are subsequently issued separately, a copy of the original Certificate should accompany each of the separately issued item(s).

#### 3. General

- 3.1 The Certificate must comply with the format attached including block numbers in that each block must be located as per the layout. The size of each block may, however, be varied to suit the individual application, but not to the extent that would make the Certificate unrecognisable. The overall size of the Certificate may be significantly increased or decreased so long as the certificate remains recognisable and legible. If in doubt, consult the CAAS.
- 3.2 All printing must be clear and legible to permit easy reading.
- 3.3 The Certificate must either be pre-printed or computer generated. But in either case, the printing of lines and characters must be clear and legible. Pre-printed wording is permitted in accordance with the attached model, but no other certification statements are permitted.
- 3.4 The Certificate must be completed in English.
- 3.5 The details to be entered on the Certificate can be either machine/computer printed or handwritten using block letters and should permit easy reading.
- 3.6 To aid clarity, the use of Abbreviations should be restricted to a minimum.
- 3.7 The space remaining on the reverse side of the Certificate may be used by the originator for any additional information, but must not include any certification statement.
- 3.8 The original Certificate should accompany the items and correlation should be established between the Certificate and the items. A copy of the Certificate must be retained by the organisation that manufactured or maintained the item. Where the Certificate format and data is entirely computer generated, subject to acceptance by the Authority, it is permissible to retain the Certificate format and data on a secure database.

**Note:** There is no restriction in the number of copies of the Certificate sent to the customer or retained by the originator.

3.9 The Certificate that accompanies the item may be attached to the item by being placed in an envelope for durability.

# 4. Error(s) on a Certificate

- 4.1 If the end-user finds an error(s) on a Certificate, he/she must inform the originator of the Certificate in writing. The originator may issue a new Certificate only if the error(s) can be verified.
- 4.2 The new Certificate issued to correct the error must bear a new tracking number, signature and date.
- 4.3 The originator of the Certificate may issue a new Certificate without re-verification of the condition of the item(s). The new Certificate is not a statement of current condition and should refer to the previous Certificate in block 12 with the following statement:

"THIS CERTIFICATE CORRECTS THE ERROR(S) IN BLOCK(S) [ENTER BLOCK(S) CORRECTED] OF THE CERTIFICATE [ENTER ORIGINAL TRACKING NUMBER] DATED [ENTER ORIGINAL ISSUANCE DATE] AND DOES NOT COVER CONFORMITY/CONDITION/RELEASE TO SERVICE.".

# 5. Completion of the Release Certificate by the Originator

Except as otherwise stated, there must be an entry in all blocks to make the document a valid certificate.

- Block 1 State "CAAS/Singapore".
- Block 2 State "Form CAAS(AW)95".
- Block 3 A unique number should be pre-printed in this block for Certificate control and traceability purposes except that in the case of a computer-generated document, the unique number need not be pre-printed where the computer is programmed to produce the number. This may include alphanumeric characters.
- Block 4 The full name and address plus mailing address, if different than the approved organisation releasing the items covered by this Certificate. This block may be pre-printed. Logos, etc., are permitted if the logo can be contained within the block.
- Block 5 The purpose of this block is to provide a reference to the work order/contract/invoice or any other internal organisational process to enable paperwork and processes related to the maintenance performed on the item(s) identified in the certificate to be traced if required. When not used, state N/A.
- Block 6 The information in this block provides easy cross-referencing to the "Remarks" Block 12. Enter line item numbers when there is more than one-line item. If necessary, a separate sheet/listing may be used. If a separate sheet/listing is used enter 'List Attached'. The separate sheet/listing must include cross-referencing to the form tracking number located in Block 3. The total number of pages of the list should be reflected in the Certificate. The list should also be properly paginated and each page must bear the endorsement of the originator.
- Block 7 State the name or description of the item(s) released under this Certificate. Preference should be given to the term used in the instructions for continued airworthiness or maintenance data (e.g. Illustrated Parts Catalogue, Aircraft Maintenance Manual, Service Bulletin, Component Maintenance Manual).
- Block 8 State the part number as it appears on the item or tag/packaging. Preference should be given to the use of the IPC number designation. In the case of an engine or propeller, the type designation may be used.
- Block 9 State the quantity of each item being released.

- Block 10 State the item Serial Number and/or Batch Number, if applicable. If neither is applicable, state "N/A."
- Block 11 The following words, with their definitions, indicate the status of the item being released. State only one of these terms; or where more than one may be applicable, use the one that most accurately describes the majority of the work performed, and/or the status of the items:
  - a. OVERHAULED: The process that ensures that the aircraft component is in complete conformity with all the applicable service tolerances specified in the type certificate (TC) holder's or equipment manufacturer's instructions for continued airworthiness (ICA), or in the data that is approved or accepted by the Authority. The aircraft component will be at least disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested in accordance with the above-specified data.
  - b. INSPECTED/TESTED: The examination of an item to establish conformity with an approved standard.
  - c. MODIFIED: The alteration of an item in conformity with an approved standard.
  - d. REPAIRED: The restoration of an item to a serviceable condition in conformity with an approved standard.
  - e. RETREADED: The restoration of a used tyre in conformity with an approved standard.
  - f. REASSEMBLED: The reassembly of an item in conformity with an approved standard.

The above statements must be supported by reference in Block 12 to the approved data/manual/specification used during maintenance.

Block 12 It is mandatory to state any information in this block, either directly or by reference, to supporting documentation that identifies particular data or limitations relating to the items being released that are necessary for the user/installer to make the final airworthiness determination of the item. Information should be clear, complete, and provided in a form and manner that is adequate for the purpose of making such a determination.

Each statement must be clearly identified as to which item it relates.

If there is no statement, state "None".

Some examples of the information to be quoted are as follows:

a. The identity and revision/issue of maintenance documentation used as the approved standard.

- b. Airworthiness Directives (AD) carried out and/or found carried out, as appropriate.
- c. Repairs carried out and/or found carried out, as appropriate.
- d. Modifications carried out and/or found carried out, as appropriate.
- e. Replacement parts installed and/or parts found installed, as appropriate.
- f. Deviations from customer work order.
- g. Identity of national regulation if not SAR-145.
- h. Usage restriction for repaired items.
- i. Concessions applicable.
- j. Life-limited parts history.
- k. Exceptions to the notified special requirements of the importing country.

### Blocks 13a – 13e

Must not be used for maintenance tasks by SAR-145 AMOs and should be crossed out, shaded, darkened or otherwise marked to preclude inadvertent or unauthorised use. These blocks are specifically reserved for the release/certification of newly manufactured items by manufacturing organisations approved under SAR-21.

#### Block 14a

Mark the the appropriate box(es) indicating which regulations apply to the completed work. If the box 'other regulations specified in Block 12' is marked, then the regulations of the other airworthiness authority(ies) must be identified in Block 12. At least one box must be marked, or both boxes may be marked, as appropriate.

The certification statement 'EXCEPT AS OTHERWISE STATED IN BLOCK 12' is intended to address the following situations:

- a. The case where the maintenance could not be completed.
- b. The case where the maintenance deviated from the standard required by SAR-145.
- c. The case where the maintenance was carried out in accordance with a non-SAR-145 requirement.

Whichever case or combination of cases should be specified in Block 12.

#### Block 14b

Only certifying staff who are specifically authorised by the SAR-145 approved maintenance organisation identified in Block 4 are permitted to sign this block. This signature can be applied electronically provided the manner of use of such signatures is acceptable to the Authority.

A rubber stamp signature is not allowed. An impression of the authorised person's stamp may be made in addition to the signature.

- Block 14c Enter the SAR-145 AMO approval number given by the Authority.
- Block 14d Enter the name of the person signing Block 14b in a legible form.

# Block 14e The date of signing the Block 14b release to service. The format should be dd/mmm/yyyy (dd = 2-digit day, mmm = first 3 letters of the

month, yyyy = 4-digit year). The release to service should be signed at the completion of maintenance.

Note that the User Responsibility Statements are on the reverse side of the Certificate. These statements may be added to the front of the Certificate below the bottom line by reducing the depth of the form.

# Sample of Form CAAS(AW)95

Approving Civil Aviation Authority/Country CAAS/SINGAPORE		AUTHORISED RELEASE CERTIFICATE CAAS(AW)95				3. Form Tracking Number		
4. Approved	Organisation Nam	5. Work Order/Contract/Invoice						
6. Item	7. Description		8. Part No.		9. Quantity	10. Serial/Batch No.	11. Status/Work	
12. Remarks								
13a. <b>NEW PARTS</b> Certifies that the items identified above were manufactured in conformity to:  ☐ Approved design data and are in condition for safe operation					14a. USED PARTS  ☐ SAR-145.50 Release to Service ☐ Other regulation specified in Block 12			
□ Non-approved design data specified in Block 12				Certifies that unless specified in Block 12, the work identified in Block 11 and described in Block 12, was accomplished in accordance with SAR-145 and the Air Navigation Order and in respect to that work the items are considered ready for release to service.				
13b. Authorised Signature 13c. CAAS Approval No.			14b. Authorised Signature		14c. CAAS Approval No.			
13d. Name 13e. Date (dd/mmm/yyyy)			14d. Name	14d. Name 14e. Date (dd/mmm/yyyy)		ууу)		

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(Front)

#### **USER / INSTALLER RESPONSIBILITIES**

#### NOTE:

- It is important to understand that the existence of the Certificate alone does not automatically constitute authority to install the part/component/assembly.
- Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different from the Civil Aviation Authority of Singapore (CAAS), it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the CAAS.
- Statements 13a and 14a do not constitute installation certification. In all cases, the aircraft
  maintenance record must contain an installation certification issued in accordance with the national
  regulations by the user/installer before the aircraft may be flown.

(Reverse)

# **IMPLEMENTATION PROCEDURES**

FOR THE

# **TECHNICAL ARRANGEMENT ON AVIATION MAINTENANCE**

**BETWEEN** 

# **CAAC AND CAAS**

# **SECTION D**

# **TEMPORARY REVISIONS**

(Not Applicable to Industry)

# **Appendix D1: Temporary Revision Document**

TEMPORARY REVISION(S)							
The CAAC and the CAAS have determined a temporary revision is needed to make minor corrections or to provide temporary procedures until the IP is revised. Both the CAAC and the CAAS must agree to the change before implementation.							
TR #:							
Amendments:							
CAAC Name, Signature & Date	CAAS Name, Signature & Date						
Temporary Revised Section(s): This temporary revision must be included into the following section of the IP and must remain in effect until the IP revision is implemented.  Additional Comments:							
<b>Entry into Operation.</b> Both Authorities agree to the changes and are effective on the following date.	Effective Date:						