### **MAINTENANCE AGREEMENT GUIDANCE**

BETWEEN THE

# FEDERAL AVIATION ADMINISTRATION

AND THE

### **CIVIL AVIATION AUTHORITY OF SINGAPORE**





Civil Aviation Authority of Singapore

MAINTENANCE AGREEMENT GUIDANCE U.S.-SINGAPORE

#### THE MAINTENANCE AGREEMENT GUIDANCE (MAG) APPROVAL

#### THIS IS TO CERTIFY APPROVAL BY:

207

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# MAINTENANCE AGREEMENT GUIDANCE

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### FEDERAL AVIATION ADMINISTRATION

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# **CIVIL AVIATION AUTHORITY OF SINGAPORE**

### Section A. Interaction Between the FAA and the CAAS

(Not Applicable to Industry)

#### **1.0 INTRODUCTION.**

- 1.1 The Maintenance Agreement Guidance (MAG) between the Federal Aviation Administration (FAA) and the Civil Aviation Authority of Singapore (CAAS) contains the procedures to support the Maintenance Implementation Procedures (MIP). The MAG details the respective responsibilities and procedures of the FAA and the CAAS under the MIP. The MAG also describes the actions required of applicants located in the Republic of Singapore (Singapore) pursuing an FAA Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair station certificate under 14 CFR part 145, section 145.53(b). The MAG also describes the actions required of applicants located in the United States seeking a CAAS Singapore Airworthiness Requirement (SAR) Part 145 (SAR-145) Maintenance Organizations Approval under paragraph 8A of the Air Navigation Order (ANO).
- 1.2 The FAA requirements for maintenance are contained in 14 CFR parts 43 and 145. Guidance material, policy, and procedures are contained in FAA advisory circulars (AC), orders, notices, and policy memoranda. Pursuant to 14 CFR part 145, section 145.53(b), the FAA may issue a repair station certificate under a Bilateral Aviation Safety Agreement (BASA). The technical standard requirements for SAR-145 Approved Maintenance Organizations (AMO) are contained in SAR-145. Guidance material, policy, and procedures are contained in acceptable means of compliance (AMC), Interpretative and Explanatory Material (IEM), Information Circulars (IC), and Airworthiness Notices.
- 1.3 The FAA and the CAAS have identified the differences between SAR-145 and 14 CFR part 145. These differences are listed as Special Conditions in the MIP as agreed to by the FAA and the CAAS. As a result, an FAA certificated 14 CFR part 145 repair station located in the United States, when in compliance with the CAAS Special Conditions, may apply for a CAAS SAR-145 Maintenance Organisation Approval. SAR-145 AMOs located in Singapore, when in compliance with the FAA Special Conditions, may apply for a 14 CFR part 145 repair station certificate.
- 1.4 The MIP permits reliance on the FAA and CAAS surveillance systems to the greatest extent possible. The FAA and the CAAS have agreed to conduct surveillance on one another's behalf to ensure compliance with the respective regulatory requirements for maintenance and the applicable Special Conditions. The frequency of FAA surveillance is described in FAA Order 8900.1, Flight Standards Information Management System (FSIMS), Volume 10. In addition, FAA Order 8900.1, Volume 10 also provides the policy for developing and executing baseline risk-based surveillance activities. The Safety Assurance System (SAS) uses risk-based concepts to identify hazards and manage risk through adjustment of the work program, which allows an aviation safety inspector (ASI) to target specific areas of elevated risk.
- 1.5 The CAAS surveillance program is a continuous function made up of two components. First, an annual audit is conducted prior to the renewal of the AMO's approval. Second, unscheduled surveillance visits to the AMO may be conducted when an organization requests for new or additional capabilities or the organization has undergone major

changes or expansion. Ad-hoc visits may also be conducted on randomly selected organizations and the areas for inspection will be decided during such visits.

#### 2.0 GENERAL MAG INFORMATION.

- 2.1 The MAG Sections. The MAG is divided into the following four sections:
  - a. Section A. Interaction between the FAA and the CAAS that entails implementation procedures and compliance with the terms of the MIP.
  - b. Section B. Requirements for SAR-145 AMOs located in the United States.
  - c. Section C. Requirements for 14 CFR part 145 repair stations located in Singapore.
  - d. Section D. Temporary revisions (TR) to the MAG pending the incorporation of a revision to the MAG.
- 2.2 Communications.
  - 2.2.1 The FAA and the CAAS will keep each other informed of significant changes within its respective system, such as:
    - a. Statutory responsibilities.
    - b. Organizational structure (e.g., personnel, management structure, technical training, staffing, office location).
    - c. Significant revisions to maintenance organization approval oversight systems standards or procedures.

**NOTE:** In case of an external audit by a U.S. or Singapore official entity (e.g., Office of Inspector General), the FAA and CAAS will coordinate the audit activities. The point of contact (POC) to coordinate these activities will be determined by the FAA Aircraft Maintenance Division (AFS-300) and the Continuing Airworthiness Section of the CAAS Airworthiness/Flight Operations (A/FO) Division.

- 2.2.2 Contact information for the various technical aspects of the MAG, including communication of urgent issues, is located in Section A, Appendix 1.
- 2.3 Special Conditions. The maintenance organizations must comply with all the applicable Special Conditions that are contained in Appendix 1 of the MIP.

- 2.3.1 FAA Special Conditions specify the requirements in 14 CFR parts 43 and 145 that do not have equivalent requirements in SAR-145.
- 2.3.2 CAAS Special Conditions specify the requirements in SAR-145 that do not have equivalent requirements in 14 CFR parts 43 and 145.
- 2.4 Websites. The MIP is located at the following websites:
  - a. FAA Website:
    - 1) <u>http://www.faa.gov/aircraft/air\_cert/international/bilateral\_agreements/baa\_basa\_l\_isting/</u>.
    - 2) http://www.faa.gov/aircraft/repair/.
  - b. CAAS Website:

http://www.caas.gov.sg/caas/en/About\_CAAS/Our\_Strategic\_Thrusts/Safety\_Oversig ht\_x\_Promotion/Mutual\_Recognition\_Agreements.html.

- 2.5 Interpretation and Resolution of Issues Between the FAA and the CAAS. The FAA and the CAAS agree to address interpretations and resolve issues through consultation or any other mutually agreed upon means. Every effort must be made to resolve the issues at the lowest level possible. The FAA and the CAAS have agreed to the following processes:
  - a. For U.S.-located facilities, the FAA Regional Coordinator (AXX-200) is the first POC, which will coordinate issues with the CAAS MIP Coordinator. Unresolved issues will be expeditiously forwarded to the FAA National Coordinator (AFS-300).
  - b. For Singapore-located facilities, the CAAS MIP Coordinator is the first POC, which will coordinate issues with the FAA Coordinator (International Field Office (IFO)). Unresolved issues will be expeditiously forwarded to the FAA Coordinator (International Field Office Management Branch (AFS-54)). AFS-54 may consult with AFS-300, as needed.
  - c. Issues that cannot be satisfactorily resolved between the FAA AFS-300 Division Manager and the CAAS Head of Continuing Airworthiness will be added to the next formal meeting agenda for further consideration.
  - d. Issues that are not resolved by the next formal meeting will be forwarded to the FAA Director of Flight Standards (AFS-1) and the CAAS Director (A/FO Division) for resolution.
- 2.6 Revisions to the MAG. Revisions by the FAA or the CAAS to its regulations, alternative methods of compliance (AMOC), guidance material, policies, procedures, and organizational structure may affect the MAG procedures. Accordingly, the MAG may need a revision upon notice of such changes by the FAA or by the CAAS.

- 2.6.1 The FAA Director of Flight Standards and the CAAS Director (A/FO Division), or their designees, have the authority to approve proposed revisions to the MAG. The revisions shall become effective 90 days after the effective date.
- 2.6.2 Any revision to the MAG that affects FAA or CAAS Supplements must be incorporated by the maintenance organizations within 90 days from the effective date of the revision.
- 2.6.3 The FAA (AFS-300) will record permanent revisions in the MAG's revision history section, including a brief description of the revision. In the body of the MAG, a vertical change bar on the left margin of the page will reflect the location of changed text. The approval page requires signatures by the authorized FAA and CAAS representatives.
- 2.7 Temporary Revision (TR). In certain instances, there may arise a need to institute a temporary amendment or revision to the MAG. Once agreed upon by the FAA and the CAAS, a TR will expedite the revision process.
  - 2.7.1 The TR is used for minor changes that do not have appreciable effect to the MAG (e.g., typographical errors, revisions to forms, clarification of procedures, interim procedures, etc.).
  - 2.7.2 The TR must be approved by the FAA and the CAAS for insertion into the MAG. The FAA and the CAAS Directors may delegate the approval as necessary.
  - 2.7.3 The TR will be inserted into Section D of the MAG and recorded on the Temporary Revision document in Section D. The signatures on the Temporary Revision document constitute approval. The effective date of the TR is documented on the Temporary Revision document.
  - 2.7.4 Any TR revision that affects the FAA or CAAS Supplements must be incorporated by the maintenance organizations within 90 days from the effective date of the revision.
  - 2.7.5 The FAA (AFS-300) will incorporate any TR in Section D on a yearly basis as a permanent revision to the MAG. The Revision History page will reflect the "TR" number, a brief description, and the affected section. Inclusion of a TR into the MAG does not require signatures on the MAG approval page.

#### **3.0 DEFINITIONS.**

- 3.1 Notwithstanding definitions contained in 14 CFR part 145 or the SAR-145, for the purposes of this MAG, the following definitions apply:
  - a. Accountable Manager. The Accountable Manager is normally intended to mean the chief executive officer (CEO) of the organization, who, by virtue of position, has overall responsibility for running the organization (in particular and applicable to the CAAS, financial responsibility) and ensuring that all maintenance is carried out to the standard required by the FAA and the CAAS. When the Accountable Manager is not the CEO, he/she must have direct access to the CEO and have a sufficiency of maintenance funding allocation.
  - b. Alteration or Modification. A design change to the construction, configuration, performance, environmental characteristics, or operating limitations of the affected civil aeronautical product.
  - c. CAAS MIP Coordinator. The CAAS MIP Coordinator serves as the primary liaison for all communications with the FAA. The CAAS MIP Coordinator establishes a line of communication with the appropriate FAA representative to coordinate and plan for the turnover of surveillance, oversee the renewal of certificates, and address any concerns raised by the FAA/CAAS.
  - d. Civil Aeronautical Product. Any civil aircraft, aircraft engine, propeller, subassembly, appliance, material, part, or component to be installed thereon.
  - e. FAA Coordinator (AFS-54). The FAA Coordinator in the International Field Office Management Branch (AFS-54) serves as the primary liaison for all communications with the CAAS on issues concerning CAAS AMOs located outside of the United States that hold a 14 CFR part 145 certificate. Additional duties and responsibilities of this position can be found in FAA Order 8900.1.
  - f. FAA Coordinator (IFO). The International Field Office (IFO) principal inspector (PI) is the first POC for oversight responsibilities for 14 CFR part 145 repair stations located in Singapore. The FAA Coordinator (IFO) establishes a line of communication with the appropriate CAAS representative to coordinate and plan for the turnover of surveillance responsibilities, oversee the renewal of certificates, and address any concerns raised by the FAA/CAAS.
  - g. FAA National Coordinator (AFS-300). The FAA National Coordinator supports the MIP/MAG at the headquarters (HQ) level and serves as the liaison among the FAA Regional Coordinator, FAA Coordinator (AFS-54), and the CAAS. The FAA National Coordinator also manages interactions pertaining to interpretation of policy issues and other related activities.

- h. FAA Regional Coordinators (AXX-200). The FAA Regional Coordinator serves as the primary POC for Flight Standards District Offices (FSDO) within their region with oversight responsibility of U.S.-based repair stations holding SAR-145 AMO approval. This position also provides a central POC for the CAAS relating to issues, such as SAR-145 AMO Sampling Inspection System (SIS) audits, communicating changes in FAA guidance to FSDOs, and sharing information related to CAAS-identified issues. When applicable, the FAA Regional Coordinator also resolves issues between the CAAS and the FAA at the regional level.
- i. Maintenance Agreement Guidance (MAG). The procedural document authorized by the MIP that sets forth the Special Condition requirements to be met by repair stations and AMOs. The MAG also defines the procedures and activities as agreed upon between the FAA and the CAAS.
- j. Maintenance Implementation Procedures (MIP). The document that defines the maintenance implementation procedures as agreed between the FAA and the CAAS authorized under a BASA. The MIP addresses issues in regards to findings of compliance, thereby reducing redundant regulatory oversight without adversely affecting aviation safety.
- k. Modification. Means alteration.
- 1. Monitoring. The periodic surveillance by the FAA and the CAAS to determine continuing compliance with the appropriate standards.
- m. Overhaul. A process that ensures the aeronautical article/item is in complete conformity with all applicable service tolerances specified in the type certificate (TC) holder's or the equipment manufacturer's instructions for continued airworthiness (ICA), or in the data that is approved or accepted by the FAA or CAAS.

**NOTE:** No person may describe an article/item as being overhauled unless it has been at least disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested in accordance with the above-specified data.

- n. Required Inspection Items (RII). Title 14 CFR part 121, sections 121.369(b)(2) and 135.427(b)(2) require U.S. air carriers to designate the items of maintenance and alteration that must be inspected (required inspection) as RIIs and list them in its manual. RIIs must include, at a minimum, those items that, if not properly performed or if improper parts or materials are used, could result in a failure, malfunction, or defect endangering the safe operation of the aircraft. The RIIs must be inspected by a person other than the one who performed the work, authorized it, and who is under the control of the air carrier inspection unit.
- o. Special Conditions. Those requirements in either 14 CFR parts 43 and 145 or in SAR-145 that have been found, based on a comparison of the regulatory maintenance systems, not to be common to both systems and that are significant enough that they must be addressed. The Special Conditions are contained in the MIP.

#### 4.0 FAA AND CAAS TRAINING/BRIEFINGS.

- 4.1 In order to comply with the MAG and the requirements of the MIP, FAA and CAAS inspectors must complete initial training or briefings prior to the turnover of surveillance. The initial training/briefing will introduce the BASA, MIP, and the applicable Special Conditions and certification procedures contained in the MAG.
- 4.2 The FAA Coordinator(s) and the CAAS MIP Coordinator must inform each other in writing that the assigned inspectors are adequately trained prior to the turnover of surveillance responsibilities.
- 4.3 Recurrent training or briefings should be conducted at 2-year intervals, or sooner, if necessary. The training or briefings should cover any revisions to the MIP or MAG, lessons learned from technical issues, and results from the SIS analysis.
- 4.4 Web-based training and briefings, PowerPoint presentations, or other methods are acceptable. FAA AFS-300 and the CAAS HQ will develop and control the training information.
- 4.5 The FAA or the CAAS may provide additional on-the-job training or briefings, as necessary.
- 4.6 The FAA and the CAAS will document training and briefing attendance. These records will be available upon request.

#### 5.0 TURNOVER OF SURVEILLANCE OF CERTIFICATES/APPROVALS.

- 5.1 Turnover Conditions. The FAA and the CAAS agree that the turnover of surveillance of certificates/approvals of repair stations and AMOs may commence on the effective date of the MIP. The FAA and the CAAS agree that the turnover must be accomplished in accordance with the following turnover conditions.
  - a. The FAA and the CAAS must complete and document training or briefing of personnel regarding procedures relating to the MIP, the Special Conditions, and the MAG prior to the turnover.
  - b. Inspecting, monitoring, and surveillance of eligible repair stations/AMOs may commence once a sufficient number of staff has completed the training or briefing.
  - c. The FAA Coordinators and the CAAS MIP Coordinators must establish a line of communication to coordinate and plan for the turnover of the surveillance of certificates/approvals and to address any concerns arising out of the turnover.
  - d. The FAA Coordinators and the CAAS MIP Coordinators will exchange written documentation, or other acceptable means, of documenting inspector training/briefings prior to the turnover.

- e. The ratings and limitations of the certificates/approvals must align within the scope of ratings within the cross-reference chart in Section A of the MAG.
- f. As soon as practicable, the FAA Coordinators and the CAAS MIP Coordinators must establish a schedule identifying the maintenance organization(s) whose certificates/approvals are to be turned over. The maintenance organizations' turnover dates must be agreed upon by the FAA and the CAAS. The following written correspondence should be included for each certificate/approval:
  - The FAA and the CAAS must prepare a letter for each maintenance organization to notify the maintenance organization of the scheduled turnover date under the MIP agreement and summarize the turnover conditions. The letter will also inform the maintenance organization of the requirement to provide a manual supplement prior to the turnover. This letter is titled "Notification of the Turnover of Surveillance under a BASA/MIP."
  - 2) The FAA and the CAAS must also provide each other written correspondence for acceptance of the transferred certificate and assume the surveillance responsibilities. This letter is titled "Acknowledgment of Surveillance Responsibility."
  - 3) Once the surveillance of the certificates/approvals is turned over, the FAA and the CAAS must notify their respective maintenance organizations that the turnover is complete under the MIP. This letter is titled "Turnover Completion Letter."
- g. The FAA and the CAAS will request each maintenance organization to review the MAG and prepare a manual supplement to be submitted 90 days prior to the turnover date. The FAA Coordinator (IFO) and CAAS MIP Coordinator must keep a record of the status of the manual supplements. Quarterly reports should be forwarded to respective coordinators.
- h. The turnover of inspections, monitoring, and surveillance will take place within 2 years of the effective date of the MIP. To allow additional time for the FAA and the CAAS to complete the turnover, written correspondence from the maintenance organization stating their intention of becoming certificated/approved under the MIP may be accepted to satisfy this requirement.
- i. Any maintenance organization that has a violation history within a 2-year period prior to turnover will not be completed until both the FAA and the CAAS are satisfied with the corrective actions.
- j. If there is any outstanding or pending violation that may result in an enforcement action, the turnover can only occur after the violation is resolved or mitigated.
- k. The FAA Coordinator (IFO) and CAAS MIP Coordinator may meet to exchange information and accept the turnover of surveillance responsibilities.

1. The FAA or the CAAS may provide additional internal or external clarification, briefings, joint inspections, or on-the-job training as necessary.

**NOTE:** The FAA National Coordinator (AFS-300) and the CAAS MIP Coordinator will review repair stations or AMOs that have regulatory exemptions on a case-by-case basis.

- 5.2 Title 14 CFR Part 145, Section 145.53(b) MIP Understanding. Pursuant to 14 CFR part 145, section 145.53(b), the FAA may issue a repair station certificate if the repair station is located in a country with which the United States has a BASA. The FAA must also find that the repair station meets the requirements of 14 CFR part 145 based on a certification from the civil aviation authority of that country. An understanding of this regulation is important to ensure clear communication when transitioning to a MIP. The following applies to maintenance organizations located in Singapore:
  - a. Any maintenance organization located in Singapore that applies for initial repair station certification under 14 CFR part 145 after August 15, 2016, must comply with the MIP and MAG. The certification will be conducted under the MIP and 14 CFR part 145, section 145.53(b).
  - b. Repair stations that originally applied to, or were certificated by, the FAA prior to August 15, 2016, may continue to reapply under 14 CFR part 145, section 145.51 and not under 14 CFR part 145, section 145.53(b) or the MIP.
  - c. Repair stations that originally applied to, or were certificated by, the FAA prior to August 15, 2016, and were subsequently certificated or renewed under 14 CFR part 145, section 145.53(b) may reapply under 14 CFR part 145, section 145.51. The FAA Coordinator (IFO) must notify AFS-54 and AFS-300 in these cases to ensure appropriate resources are available. The applicants will be entered into the Flight Standards Certification Services Oversight Process (CSOP). See FAA Order 8900.1, Volume 11, Chapter 13.
- 5.3 Unimpeded Access. The FAA and the CAAS will assist the other in gaining unimpeded access to the maintenance organizations under its jurisdiction.
- 5.4 Manual Supplement Requirements. Maintenance organizations must submit a manual supplement as outlined in the applicable section (Section B or C) of the MAG.
  - 5.4.1 The FAA Supplement to the Maintenance Organization Exposition (MOE) (MAG, Section C) must be approved by the CAAS on behalf of the FAA prior to the turnover. It is not necessary for the FAA to review an MOE or FAA Supplement if the FAA is satisfied with the training the CAAS received. The FAA may request to review the MOE when warranted.
  - 5.4.2 The CAAS Supplement to the Repair Station Manual/Quality Control Manual (RSM/QCM) (MAG, Section B) must be accepted by the FAA on behalf of CAAS prior to the turnover. It is not necessary for the CAAS to review the

repair station's RSMs/QCMs or the CAAS Supplement if the CAAS is satisfied with the training that the FAA received. The CAAS may request to review the RSM/QCM when warranted.

- 5.5 Certificate/Approval Expiration Date. A minimum of 6 months should be remaining on the certificate/approval before the certificate/approval surveillance is turned over. Once the certificate/approval is turned over, the surveillance for the next renewal must contain the applicable Special Conditions.
- 5.6 Exchange of Records. The FAA and the CAAS will exchange the last 2 years of certification and surveillance records. These records will include copies of the written correspondence, corrective action plans, and acceptance letter(s) for items that were identified during the past 2 years of surveillance. The FAA and the CAAS must ensure that the records indicate that the maintenance organizations are in compliance at the time of turnover.
  - 5.6.1 The Los Angeles IFO must transfer the following records to the CAAS:
    - a. Current copy of FAA Form 8310-3, Application for Repair Station Certificate and/or Rating.
    - b. Current copy of FAA Form 8000-4, Air Agency Certificate.
    - c. Current copy of operations specifications (OpSpecs).
    - d. Copy of the repair station letter titled "Notification of the Turnover of Surveillance under a BASA/MIP."
    - e. Copy of the letter titled "Acknowledgement of Surveillance Responsibility" from AFS-54 to the CAAS that includes requesting CAAS surveillance responsibility for FAA repair stations located in Singapore.
    - f. Copy of the letter titled "Completion of Turnover under a BASA/MIP."
    - g. Copies of the written correspondence, corrective action plans, and acceptance letter(s) for items identified during the past 2 years of surveillance.
    - h. Copy of hazardous material (hazmat) letter, if applicable.
    - i. Copy of the Capability List (CL), if applicable.
    - j. Copy of the current FAA-approved Contracted Maintenance Functions, if applicable.
    - k. The CAAS must transfer a copy of the FAA Supplement to the Los Angeles IFO prior to the turnover.

- 5.6.2 The applicable FAA certificate-holding district office (CHDO) must transfer a copy of the CAAS Supplement to the CAAS prior to the turnover.
- 5.6.3 CAAS records transferred to the applicable FAA CHDO shall include the following:
  - a. Current copy of the Maintenance Organisation Approval form CAAS(AW)83, and its Approval Schedule.
  - b. Copies of the written correspondence, corrective action plans, and acceptance letter(s) for items identified during the past 2 years of surveillance.
  - c. Copy of the AMO letter titled "Notification of the Turnover of Surveillance under a BASA/MIP."
  - d. Copy of the letter titled "Acknowledgment of Surveillance Responsibility" from the CAAS MIP Coordinator to AFS-54 that includes requesting FAA surveillance responsibility for CAAS AMOs located in the United States.
  - e. Current copy of CAAS(AW)21, Application Form for SAR-145 AMO.
  - f. Current copy of CAAS(AW)22, Personnel Résumé, for the Accountable Manager, Quality Manager, Base and/or Line Maintenance Manager, Workshop Managers, and Nondestructive Testing (NDT) level 3.
  - g. Current copy of the Capability List (CL), if applicable.
  - h. Copy of the letter titled "Completion of Turnover under a BASA/MIP."
- 5.7 Timeframe. As soon as practicable, the FAA and the CAAS must establish a schedule identifying the maintenance organization(s) to turn over. Records of the inspectors' initial training/briefings will be shared between the FAA and the CAAS. Once the inspectors have been adequately trained/briefed on the MIP and MAG, the turnover process may begin.
- 6.0 **RATING ALIGNMENT.** The FAA and the CAAS have agreed to conduct surveillance of the repair station/AMO's regulatory compliance, including compliance with the Special Conditions. To reduce duplicate inspections, the ratings and limitations of the repair station/AMO must be aligned for the FAA and the CAAS to have equivalent surveillance responsibilities. The Rating Comparison Matrix (see Section A, Appendix 2) is a tool to assist the FAA and the CAAS inspectors in determining rating comparisons.

- **7.0 FAA AND CAAS RESPONSIBILITIES/ACTIONS.** In order to promote continued understanding and compatibility with each other's maintenance surveillance systems, the FAA and the CAAS need to consult and share information to mitigate risks associated in aviation.
- 7.1 Terms of the MIP. Under the terms of the MIP, the FAA and the CAAS will:
  - a. Follow the initial certification requirements in the MAG for all initial repair station/AMO applications dated after August 15, 2016.
  - b. Provide recommendations for initial certification, renewal, and amendment of maintenance organizations approvals.
  - c. Perform surveillance and provide reports regarding the findings of compliance with the requirements outlined in the MAG.
  - d. Accept or approve, as appropriate, the maintenance organizations' supplements as described in the MAG.
  - e. Comply with the procedures as specified in the MAG.
- 7.2 Reciprocal Acceptance of Findings of Compliance. The FAA and the CAAS agree to accept each other's inspections and monitoring of maintenance organizations for findings of compliance with their respective requirements and the basis for the issuance and continued validity of certificates.
- 7.3 Accident/Incident Investigation Request. Chapter 3.7 of the MIP stipulates that the FAA and the CAAS will exchange, on request and in a timely manner, any information regarding accidents/incidents involving civilian aeronautical products or regulated entities.
- 7.4 Cooperation in Internal Quality Assurance Activities. The FAA and the CAAS agree to consult and share information on internal quality assurance programs. For this purpose, the FAA and the CAAS focal points should communicate to exchange internal audit reports and schedules to allow for mutual attendance as observers in each other's activities. They should also discuss significant safety findings and reports on matters pertaining to the MIP.
  - 7.4.1 Internal Quality Assurance Data and Requested Information. The FAA and CAAS must, upon either request and without prejudice to the discretionary power of the FAA and the CAAS, provide appropriate information regarding the summary of internal audit reports.
  - 7.4.2 Involvement as Observers. In order to assist the FAA and the CAAS in planning and managing the each other's internal inspection visit schedule and teams, the FAA and CAAS must notify each other in writing 2 months in advance indicating which audits to attend as observers.

- 7.4.3 Onsite Observation. The FAA or the CAAS onsite observations should include opening and closing briefings. The visit may include observations of inspections, surveillance responsibilities, and verification for compliance with the MIP. The respective coordinator must receive a copy of any identified items, concerns, or noted observations in the written report within 45 days after the closing session.
- 7.5 Continued Confidence of Compliance with the MAG. The FAA and the CAAS must continue to demonstrate effective surveillance according to the agreed procedures defined in the MAG. In particular, the FAA and the CAAS must:
  - a. Have the right to participate in each other's quality audits and sampling inspections.
  - b. Ensure that regulated entities provide access to the FAA and the CAAS for audits and SIS activities.
  - c. Make available the reports from quality audits and sampling inspections applicable to the MIP.
  - d. Make the appropriate personnel available to participate in the SIS.
  - e. Make available the maintenance organization's records and inspection reports, including completed enforcement actions.
  - f. Provide interpretive assistance where necessary at their office during the review of internal maintenance organization records and documentation.
  - g. As applicable, assist each other in closure of any findings from inspections.
  - h. Ensure sampling inspections are risk-based from analysis and objective criteria, without prejudice to the discretionary power of the authorities.
  - i. The FAA and the CAAS will notify each other at the earliest opportunity in the event that either the FAA or the CAAS is not able to meet a requirement in the MIP. In the event the FAA or the CAAS believes that technical competency is no longer adequate, the FAA and the CAAS must consult and propose a written action plan, including any necessary rectification activities, in order to address deficiencies.
    - 1) Either the CAAS or the FAA may propose to suspend the surveillance and oversight responsibilities under the MIP.
    - 2) The proposal is based upon the failure to demonstrate continued confidence in accordance with the terms of the MIP.
    - 3) If either the FAA or the CAAS proposes to suspend the surveillance and oversight responsibilities, it must discuss this at the first opportunity for a joint confidence-building measure.

- 4) The proposed suspension must be a written report, outlining the conditions not met in the MIP.
- 5) The proposal must also include a timeframe and recommended corrective actions to have the suspension removed.
- j. In the event that the FAA and the CAAS do not rectify deficiencies within the timeframe specified in the action plan, either the FAA or the CAAS may address the matter during periodic meetings, as specified in paragraph 3.0 of the MIP.
- 7.6 Technical Consultations and Meetings. To ensure the MAG remains effective over time, both the FAA and CAAS agree to consult annually to discuss any issues in the implementation of the MIP and to discuss any enhancements. This will include a discussion of technical issues and the resolution of technical disagreements.
  - 7.6.1 The annual meeting should rotate between the United States and Singapore, unless otherwise arranged.
  - 7.6.2 Meeting attendees should include the offices responsible for the technical coordination and implementation of this guidance (AFS-300 and AFS-54). Additional officials of the FAA and the CAAS may address the meeting agenda items.
  - 7.6.3 At the discretion of the joint leadership, staff and representatives of other appropriate organizations may participate.
  - 7.6.4 The host is responsible for meeting minutes and action items tracking.
  - 7.6.5 Subgroups should participate at the meetings to address specific technical issues and make recommendations for amendments to the MIP or revisions to the MAG.
  - 7.6.6 The subgroups from the FAA and the CAAS will report a consolidated SIS summary identifying systemic issues and the status of the SIS actions during the meeting. The subgroups will make any recommendations to the joint leadership.

#### 8.0 SAMPLING INSPECTION SYSTEM (SIS).

8.1 Objective of a SIS. The purpose of SIS inspections is to establish the open communication and continued confidence in the ability to comply with the requirements of the MIP and to ensure consistent application of the MAG procedures by the Aviation Authorities and the maintenance facilities. The SIS inspection must focus on the application of Special Conditions. It may also be used to document risk associated with the equivalent regulations that are beyond the scope of the Special Conditions.

- 8.1.1 The SIS should start with the Aviation Authority and may include maintenance facilities selected by risk-based decision making.
- 8.1.2 A SIS benefits the FAA, the CAAS, and industry in understanding the differences between 14 CFR part 145 and the relevant SAR-145 regulation(s) for maintenance organizations and any procedural differences associated with implementation of the MIP.
- 8.1.3 The FAA and the CAAS will assist each other in gaining unimpeded access to maintenance organizations. If the maintenance organization requires additional information because of security issues, they must promptly notify the FAA or CAAS to provide additional information. It is incumbent upon the maintenance organization to provide unimpeded access to all work areas having civil aviation application.
- 8.1.4 A consolidated SIS summary identifying systemic issues and the status of closure actions must be reported by the FAA National Coordinator (AFS-300) and the CAAS MIP Coordinator to the joint leadership. The report will contain the status of the SIS findings and any recommendations. The coordinators' signatures on the SIS forms indicates review of the form and understanding of the findings. This also gives the coordinator an opportunity to add any comments regarding the findings.
- 8.1.5 There are no fees charged to the maintenance organizations for a SIS inspection or any investigations performed.
- 8.2 SIS Team Composition. Each SIS Team should consist of two experienced, qualified inspectors. Each SIS Team may include a third inspector undergoing team familiarization.
  - 8.2.1 The FAA Coordinator (IFO) should be the SIS Team Lead for maintenance organizations located in Singapore.
  - 8.2.2 The CAAS MIP Coordinator should be the SIS Team Lead for maintenance organizations located in the United States.
  - 8.2.3 The appropriate in-country (host) coordinator must accompany the SIS Team during the visit to ensure consistency and standardization.
  - 8.2.4 The appropriate HQ coordinator may accompany the SIS Team during the visit to ensure cooperation and communication in the interpretation or application of maintenance standards or regulations.
  - 8.2.5 It is highly recommended the in-country (host) inspector who is responsible for the repair station/AMO join the SIS Team for the visit.

- 8.3 SIS Team Schedule. The FAA or the CAAS should establish a sampling visit schedule to verify that the implementation of the MIP is within the MAG guidance. SIS Team visits should ensure the standards are achieved. The frequency of the visits may vary based on risk assessments or may be established on a rotational basis.
  - 8.3.1 The FAA and the CAAS MIP Coordinators should notify each other 90 days prior to a SIS visit. This will allow sufficient time for scheduling and assigning appropriate resources for travel.
  - 8.3.2 If the SIS visit includes a maintenance organization, the name of each organization will be included in the schedule.
  - 8.3.3 The use of the appropriate checklist detailed in the MAG, Section A, will assist in determining confidence in the compliance with the terms of the MIP and MAG. Upon completion of the visit, copies of the checklist will be provided to the FAA and CAAS MIP Coordinators. Copies of the checklist will also be provided to maintenance organizations as a source of information useful for trend analysis and in determining future SIS inspections.
  - 8.3.4 Supplementary visits by a SIS Team may be necessary. If the schedule changes during the year, the FAA and the CAAS shall provide at least a 2-month notice.
- 8.4 Selection of SIS Sites to Visit. SIS Teams visit FAA or CAAS offices that have surveillance of maintenance organizations operating under the MAG provisions. The following are examples of criteria used when selecting locations and/or maintenance organizations to visit:
  - a. Reports of non-compliance by maintenance organizations, occurrences, incidents, or accidents.
  - b. Previous sampling inspections reports that indicate particular concerns.
  - c. Recent changes in manning, growth, downsizing, newly certificated, or other associated risks.
  - d. Internal FAA or CAAS risk analysis programs, SAS, rotational schedules, or SIS Risk Decision Tool for safety systems analyses.
- 8.5 CAAS SIS Audits in the United States. A SIS audit can be performed at an FAA CHDO and/or at any 14 CFR part 145 repair station located in the United States that also holds a SAR-145 approval. The SIS Team should conduct an in-briefing and out-briefing to the FAA CHDO. The briefing will cover the purpose of the SIS inspection, any recent changes in the MAG, prior lessons learned, and SIS corrective actions procedures. The FAA PI and the FAA Regional Coordinator (AXX-200) are highly encouraged and should participate in the briefings and accompany the CAAS during the visit to a repair station.

- 8.5.1 CAAS SIS Audits of an FAA CHDO. The CAAS SIS Team should start the SIS audit using the SIS Audit on FAA job aid (Section A, Appendix 3) for the CHDO visited.
  - a. The FAA will provide individual inspector training records for review, as well as make available individuals responsible for surveillance for interviews.
  - b. The FAA will provide access to surveillance records, reports, findings, and corrective actions for repair stations that hold SAR-145 AMO approvals.
  - c. As appropriate and when possible, the FAA should also make available FAA staff to assist CAAS in reviewing the above files and assist with interviews.
  - d. The CAAS SIS Team must brief the FAA CHDO and its management regarding the results of the SIS inspection. The briefing should disclose all identified items. Before leaving, the CAAS SIS Team must provide the FAA Regional Coordinator (AXX-200) and CHDO management a signed copy of the completed SIS forms.
  - e. The FAA Regional Coordinator (AXX-200) will forward a copy of all signed SIS forms to the FAA National Coordinator (AFS-300).
  - f. The FAA CHDO must document and correct the identified items in the FAA Quality Management System (QMS) listed on the signed SIS Audit on FAA job aid.
    - 1) The QMS must address the identified items in a timely manner, but not later than 90 days after the visit.
    - 2) The CHDO will provide a memorandum to the FAA Regional Coordinator regarding the CHDO's closure of the SIS items.

**NOTE:** Refer to the appropriate section of FAA Order 8900.1 for additional guidance regarding the participation in a SIS.

- 8.5.2 CAAS SIS Audit at a SAR-145 AMO. The CAAS SIS Team may conduct a SIS audit at a 14 CFR part 145 repair station that holds a SAR-145 AMO approval using the SIS Audit SAR-145 job aid (Section A, Appendix 3).
  - a. The AMO must take action on all identified items listed on the SIS Audit SAR-145 job aid and substantiate/report all SIS corrective actions to the FAA PI in a timely manner.
  - b. The CAAS SIS Team and FAA Regional Coordinator (AXX-200) must discuss the identified items and agree on a timetable for corrective actions. Corrective action should not exceed 90 days.

- c. A copy of the signed SIS Audit SAR-145 job aid listing the timeframe for corrective action(s) may be given to the AMO. The AMO must be debriefed to ensure expectations are conveyed and understood.
- d. In certain circumstances, and subject to the nature of the identified item, the FAA may request to extend the 90-day period. The FAA Regional Coordinator (AXX-200) will communicate with the CAAS MIP Coordinator of any requests for extensions.
- e. The FAA Regional Coordinator (AXX-200) will forward a copy of all signed SIS job aids to the FAA National Coordinator (AFS-300).
- f. The FAA PI must enter the identified items listed on the SIS Audit SAR-145 job aids that relate to, or are equivalent to, 14 CFR part 145 regulations into SAS as an element Dynamic Observation Report (DOR) or other DOR. Do not use SAS to document CAAS Special Conditions.
- g. The FAA PI must document and complete the necessary follow-up actions for items listed on the SIS Audit SAR-145 job aid.
- h. If the AMO fails to correct the identified items, or fails to provide the FAA PI with an acceptable corrective action plan within 90 days, the FAA PI may recommend non-approval to the CAAS on the CAAS MIP Audit Report.
  - 1) The report will be marked "other" SIS corrective actions not acceptable. Outstanding identified items that are not satisfactorily addressed must be documented on the report.
  - 2) Forward the report recommending non-approval to the FAA Regional Coordinator (AXX-200), who will communicate the issues to the CAAS MIP Coordinator for additional actions.
  - 3) The CAAS will take appropriate action as necessary.
- i. Once the corrective actions are acceptable to the FAA PI, the FAA PI will forward the corrective actions with a recommendation to close the SIS on the CAAS MIP Audit Report to the FAA Regional Coordinator (AXX-200). The report will be marked "other" SIS corrective actions or a corrective action plan was submitted and is acceptable.
- 8.5.3 CAAS SIS Closure Actions. The FAA Regional Coordinator (AXX-200) will review the SIS job aids and corrective actions. The FAA Regional Coordinator (AXX-200) will provide the SIS job aids and copies of the corrective actions/corrective action plan to the CAAS MIP Coordinator and the FAA National Coordinator (AFS-300) within 90 days after the visit.

- a. The CAAS will review the corrective actions and, once acceptable, will inform the FAA Regional Coordinator (AXX-200) in writing of CAAS acceptance of the corrective actions.
- b. The FAA Regional Coordinator (AXX-200) will forward the CAAS acceptance to the FAA National Coordinator (AFS-300) and the CHDO for closure.
- c. The FAA PI must provide written correspondence to the AMO acknowledging the corrective actions are acceptable and that the SIS is closed.
- d. The FAA completes the SAS DOR, as applicable.
- e. The CAAS MIP Coordinator will analyse the results of the SIS inspection and provide a consolidated SIS summary for the previous year to CAAS management. The SIS summary will identify any systemic issues, suggested MAG revisions, and the status of the SIS reports during the annual meetings.
- 8.6 FAA SIS Inspections in Singapore. A SIS inspection can be performed at the CAAS HQ and at any SAR-145 AMO located in Singapore that holds a 14 CFR part 145 certificate. The FAA Coordinator (AFS-54) will establish a SIS visit schedule based on risk. AFS-300 must concur with the sampling visit schedule prior to its submission to the CAAS. Review the MAG SIS forms and the repair station office file prior to the inspection. The FAA SIS Team should conduct an in-briefing and out-briefing to the CAAS HQ. The briefing will cover the purpose of the SIS, any recent changes in the MAG, prior lessons learned, and SIS corrective actions procedures. The CAAS PI and the CAAS MIP Coordinator are highly encouraged to participate at the briefings and at any visit to a repair station.
  - 8.6.1 FAA SIS Inspection at CAAS HQ. The FAA SIS Team should start the SIS inspection using the SIS Inspection on CAAS job aid (Section A, Appendix 3). The SIS inspection should focus on the CAAS processes, procedures, and surveillance in support of the MIP.
    - a. The CAAS will provide individual inspector/surveyor training records for review and make available individuals responsible for surveillance for interview.
    - b. The CAAS will provide access to all CAAS surveillance records, reports, findings, enforcements, and corrective action for AMOs that hold 14 CFR part 145 certificates.
    - c. As appropriate and when possible, the CAAS should also make available CAAS staff to assist the FAA in reviewing the above files and assist with interviews.

- d. The FAA SIS team must brief the CAAS office and its management regarding the results of the SIS inspection. The briefing should disclose all identified items. Before leaving, the FAA SIS Team must provide the CAAS MIP Coordinator with a signed copy of the completed SIS forms.
- e. The FAA SIS Team Lead will forward a copy of all signed SIS job aids to the FAA Coordinator (AFS-54).
- f. The CAAS must document and complete the necessary follow-up actions for items listed in the SIS inspection of CAAS job aid and provide written correspondence to the FAA Coordinator (IFO) within 90 days of the visit.

**NOTE:** The CAAS should use its internal quality control system to document the findings and corrective actions.

- 8.6.2 FAA SIS Inspection at a 14 CFR Part 145 Facility. The FAA SIS Team may complete SIS inspections by sampling repair stations using the SIS Inspection 14 CFR 145 job aid (Section A, Appendix 3). The FAA SIS Team is to check the achieved standards of SAR-145 and the FAA Special Conditions for the equivalence with 14 CFR part 145.
  - a. The repair station must take action on all identified items listed on the job aid (SIS Inspection 14 CFR 145) and substantiate/report all SIS corrective actions to the CAAS principal maintenance inspector (PMI) in a timely manner.
  - b. The FAA SIS Team and the CAAS MIP Coordinator must discuss the identified items and agree on a timetable for corrective actions. The corrective action should not exceed 90 days.
  - c. A copy of the signed SIS Inspection 14 CFR 145 listing the timeframe for corrective action(s) may be given to the repair station. The repair station must be debriefed to ensure expectations are conveyed and understood.
  - d. In certain circumstances, and subject to the nature of the finding, the CAAS MIP Coordinator may request to extend the 90-day period. The CAAS MIP Coordinator will communicate with the FAA Coordinator (IFO) any request for extensions.
  - e. The FAA SIS Team Lead will forward a copy of all signed SIS Inspection 14 CFR 145 job aids to the FAA Coordinator (AFS-54).
  - f. The FAA PI will enter all identified items recorded on the FAA SIS Inspection 14 CFR 145 job aid into SAS as an element DOR, or other DOR. The FAA PI will then upload all SIS job aids into SAS and file all supporting paperwork in the office file for the certificate holder.

- g. The CAAS must document and complete the necessary follow-up actions for items listed on the SIS Inspection 14 CFR 145 job aid.
- h. If the repair station fails to correct the identified items, or fails to provide the CAAS with an acceptable corrective action plan within 90 days, the CAAS may recommend a non-approval to the FAA on the FAA MIP Audit Report (Section C, Appendix 2).
  - 1) The report will be marked "other" SIS corrective actions not acceptable. Outstanding identified items that are not satisfactorily addressed must be documented on the report.
  - 2) The CAAS will forward the report recommending a non-approval to the FAA Coordinator (IFO) for additional actions.
  - 3) The FAA PI will take appropriate action as necessary.
- i. Once the corrective actions are acceptable to the CAAS PMI, forward the corrective actions with a recommendation to close the SIS on the FAA MIP Audit Report to the CAAS MIP Coordinator. The report will be marked "other" SIS corrective actions or a correction action plan submitted and is acceptable.

**NOTE:** Refer to FAA Order 8900.1, Volume 12 for additional guidance regarding conducting a SIS inspection.

- 8.6.3 FAA SIS Closure Action. The CAAS MIP Coordinator will review the SIS job aids and all corrective actions. A copy of the SIS job aids and corrective actions/accepted corrective action plan shall be forwarded to the FAA Coordinator (IFO) within 90 days after the visit.
  - a. The FAA SIS Team Lead will review the corrective actions and, if acceptable, inform the CAAS MIP Coordinator in writing the corrective action is acceptable to close the SIS.
  - b. The SIS Team Lead/SIS Team member, or PI, must complete the SAS DOR for the SIS inspection performed at the repair station.
  - c. CAAS will notify the repair station that the FAA SIS corrective actions are acceptable and closed.
  - d. The FAA Coordinator (IFO) will send a copy of the correspondence documenting FAA acceptance of the corrective actions to the FAA Coordinator (AFS-54) for closure.
  - e. The FAA Coordinator (AFS-54) will monitor the closure of the findings and forward a copy of the SIS job aids and correspondence to the FAA National Coordinator (AFS-300) for closure.

- f. The FAA Coordinator (AFS-54) will analyse the results of the SIS inspection and provide a consolidated SIS summary for the previous year to FAA management. The SIS summary will identify any systemic issues, suggested MAG revisions, and the status of the SIS reports during the annual meetings.
- g. AFS-300 will make any necessary revisions to the MAG or appropriate changes to training/briefings based on the SIS analysis.
- 8.7 SIS Flow Chart.



- **9.0 INDEPENDENT INSPECTIONS.** In accordance with the MIP, the FAA and the CAAS may conduct independent inspections of maintenance organizations when warranted by specific safety concerns. The FAA and the CAAS agree to coordinate with each other regarding any independent inspections. The FAA and the CAAS must inform each other of the outcome of an independent inspection within 15 days after the inspection.
- 9.1 Independent Inspection Factors. AFS-300 or the CAAS management may request an independent inspection based on the following risk factors:
  - a. Specific safety concerns resulting from a SIS inspection.
  - b. A safety-related issue, such as an incident, accident, or complaint.
  - c. Failure to comply with the MIP.
  - d. Downgrade of an International Aviation Safety Assessment (IASA) from a Category 1 to a Category 2.
  - e. Other associated risk decision tools.
- 9.2 International Civil Aviation Organization (ICAO) Category. The IASA for the FAA, or the CAAS Foreign Operators Surveillance Programme (FOSP), determines whether another country's oversight of air carriers that operate, or pursue to operate into another country, or codeshare with a countries air carrier, complies with safety standards established by ICAO. The program focuses on the country's ability to adhere to international aviation standards and recommended practices contained in ICAO annexes. If the United States or Singapore is downgraded from a Category 1 to a Category 2, the risks identified by failing to meet the aircraft maintenance oversight standards may affect the MIP or could impose heightened surveillance. The FAA and the CAAS may take the following actions accordingly:

- a. The FAA (AFS-300) and the CAAS (A/FO Division) will discuss the results and will conduct a risk assessment and action plan to mitigate any safety concerns. The FAA and CAAS may also conduct a joint risk assessment to determine the severity of the downgrade and any systemic issues.
- b. In the event risks are associated with the continued confidence of either country to implement the MIP, the FAA or the CAAS may immediately place initial certifications on hold. They should remain on hold until compliance and risks are mitigated appropriately.
- c. The FAA and the CAAS may perform heightened surveillance using the SIS inspection procedures in the applicable MAG.
- d. Depending on the results of the SIS inspections and identified risk imposed on air carriers, the FAA or the CAAS may temporarily heighten the surveillance frequency or conduct independent inspections to mitigate the risk for certifications, renewals, and amendment of certificates.
- **10.0 ENFORCEMENT ACTIONS.** The FAA and the 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 or regulation under the scope of the MIP. The FAA and the CAAS will inform each other of any enforcement action taken. All enforcement actions taken are subject to regular joint review. The suspension, revocation, or surrender of a maintenance organization's certificate affects the respective FAA and CAAS surveillance and certificate management duties under the MIP. The FAA or the CAAS may take the following actions.
- 10.1 Title 14 CFR Part 145 Repair Stations Located in Singapore. If a SAR-145 AMO approval is or may be subject to a suspension, revocation, or surrender, the CAAS must immediately notify the FAA. Based on any finding that results in suspension, revocation, or surrender of the SAR-145 AMO approval, the CAAS will submit an FAA MIP Audit Report and will include the factual evidence detailing the events and nature of the actions. The CAAS will immediately forward the report to the FAA Coordinator (IFO). The FAA Coordinator (IFO) and the CAAS MIP Coordinator will discuss the suspension, revocation, or surrender and notify the FAA Coordinator (AFS-54).
  - 10.1.1 A repair station surrendering its SAR-145 Maintenance Organisation Approval CAAS(AW)83, without the intention of surrendering its 14 CFR part 145 certificate, no longer meets the requirements of 14 CFR part 145, section 145.53(b).
  - 10.1.2 Repair stations that originally applied to, or were certificated by, the FAA prior to August 15, 2016, and intends to continue to hold its 14 CFR part 145 certificate, must submit an application under 14 CFR part 145, section 145.51. The repair station must submit the application 90 days prior to the date of surrender of the SAR-145 AMO approval. The FAA Coordinator (IFO) must notify AFS-54 and AFS-300 in these cases to ensure appropriate resources are

available. The applicants will be entered into the Flight Standards CSOP, per FAA Order 8900.1, Volume 11, Chapter 13.

- 10.1.3 Upon notification by the CAAS of a suspension or revocation of a SAR-145 AMO approval, the FAA shall open an investigation under the current edition of FAA Order 2150.3, FAA Compliance and Enforcement Program. The FAA will determine appropriate action for possible non-compliance of regulations. Fees per 14 CFR part 187 may not be assessed for FAA enforcement-related expenses.
- 10.1.4 If a CAAS finding/discrepancy results in the reduction of SAR-145 AMO capabilities, the FAA shall investigate any significant safety issues and will take appropriate action.
- 10.1.5 The FAA PI will make an entry into SAS and take appropriate action if 14 CFR part 145, section 145.53(b) requirements are no longer met based on a SAR-145 suspension, revocation, or surrender.
- 10.2 SAR-145 AMOs Located in the United States. If a U.S-based 14 CFR part 145 certificate is or may be subject to a suspension, revocation, or surrender, the FAA must immediately notify the CAAS. Based on any finding that results in suspension, revocation, or surrender of the 14 CFR part 145 certificate, the FAA will submit a CAAS MIP Audit Report and will include the factual evidence detailing the events and nature of the actions. The FAA will immediately forward the report to the CAAS MIP Coordinator. The CAAS MIP Coordinator and the FAA Regional Coordinator (AXX-200) will discuss the suspension, revocation, or surrender.
  - 10.2.1 An AMO surrendering its 14 CFR part 145 certificate, without the intention of surrendering its SAR-145 Maintenance Organisation Approval, no longer meets the requirements of the MIP.
  - 10.2.2 An AMO that originally applied for or was certificated by the CAAS prior to August 15, 2016, and intends to continue to hold a SAR-145 AMO approval, must apply to the CAAS for the SAR-145 AMO approval, provided there are no outstanding safety issues. The AMO must submit the application 90 days prior to the date of surrender of the 14 CFR part 145 certificate.
  - 10.2.3 Upon notification by the FAA of a suspension or revocation of a 14 CFR part 145 certificate, the CAAS shall open an investigation to determine appropriate action for possible non-compliance of SAR-145 requirements.
  - 10.2.4 If an FAA finding/discrepancy results in the reduction of 14 CFR part 145 capabilities, the CAAS shall investigate any significant safety issues and take appropriate action.

- 10.2.5 The FAA PI will make an entry into SAS and take appropriate action if any 14 CFR part 145, section 145.51 requirements are not met based on a SAR-145 suspension, revocation, or surrender.
- **11.0 NON-PAYMENT OF FEES.** The FAA or the CAAS may suspend or deny any application for certification service in the event of non-payment of required fees until such time the fees are paid. Fees may not be charged for expenses related to SIS inspections or enforcement investigations.
- **12.0 APPEALS.** A maintenance organization may appeal the suspension or revocation of its certificate. Appeals of FAA enforcement actions are made in accordance with 14 CFR part 13. Appeals of CAAS enforcement actions are made in accordance with the Air Navigation Act.

# Appendix 1. FAA and CAAS Contacts

# Table A-1.FAA and CAAS Contacts

FAA	Director of Flight Standards (AFS-1)	Signature for the MAG.
	National Coordinator (AFS-300)	Technical policy and procedure issues.
	FAA Coordinator (AFS-54)	International Field Office Management Branch.
	FAA Coordinator (IFO)	Designated aviation safety inspector (ASI) to communicate with the CAAS for repair stations located in Singapore.
	Flight Standards Quality Assurance Staff (AFS-40)	Quality and Standardisation issues and internal FAA audits.
	Regional Coordinators (AXX-200) and responsible regions:	
	• Eastern Region (AEA-230)	
	Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia	
	• Southern Region (ASO-230)	
	Alabama, Florida, Georgia, South Carolina, and the territory of Puerto Rico.	
	• Great Lakes Region (AGL-230)	
	Illinois, Indiana, Michigan, Minnesota, North Dakota, Ohio, South Dakota, Wisconsin	
	• Central Region (ACE-230)	
	Iowa, Kansas, Kentucky, Missouri, Nebraska, Tennessee	
	• Western Pacific Region (AWP-230)	
	Arizona, California, Hawaii, Nevada, American Samoa, Guam, Commonwealth of the Northern Mariana Islands	

	• Southwest Region (ASW-230)
	Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, Texas
	• Northwest Mountain Region (ANM-230)
	Colorado, Washington, Oregon, Idaho, Montana, Wyoming, Utah
	• Alaska Region (AAL-230)
	Alaska
CAAS	CAAS MIP Coordinator, Airworthiness/Flight Operations (A/FO) Division, Continuing Airworthiness Section.
	Singapore Changi Airport, P.O. Box 1 Singapore 918141 Phone: +65 6595 6764 Fax: +65 6545 6519 Email: caas_afo_infocenter@caas.gov.sg

**NOTE:** As there may be regular movement of personnel in the positions identified, the contact details are not included. The CAAS and the FAA Coordinator (AFS-54) and FAA National Coordinator (AFS-300) control a list on AFS-300's external SharePoint site. The FAA National Coordinator (AFS-300) may provide a current listing of FAA Regional Coordinators on request.

### Appendix 2. Rating Comparison Matrix

- **1.0 RATING COMPARISON MATRIX.** This matrix is for information only and is provided to assist in the comparison of 14 CFR part 145 repair station and SAR-145 Approved Maintenance Organization (AMO) ratings for proper alignment under the Maintenance Implementation Procedures (MIP). Every effort will be made to communicate with the repair stations and the AMOs to achieve alignment of ratings and limitations.
- 1.1 FAA Repair Stations Located in Singapore. Repair station ratings and limitations may not exceed the AMO ratings and limitations. Repair station class ratings should not be authorized in Singapore under the MIP.
- 1.2 SAR-145 AMOs Located in the United States. The AMO ratings and scope of approval may not exceed the repair station ratings and limitations. FAA class ratings in the United States are acceptable and reflected in this matrix for comparison purposes only.

AMO Ratings (SAR-145)		<b>Repair Station Ratings</b> (14 CFR part 145)			
Ratings	Limitations	Limited Ratings	Class Ratings	Limitations	
A-1 Aeroplanes above 5700 kg	Base or Line maintenance; and Will state aeroplane series or type and/or the maintenance task(s).	Airframes of particular make and model or parts thereof.	Class 2 or Class 4	Composite construction of large aircraft (above 12,500 lbs). All metal construction of large aircraft.	
A-2 Aeroplanes 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).		Class 1 or Class 3	Composite construction of small aircraft (below 12,500 lbs.). All metal construction of small aircraft.	
A-3 Helicopters	Base or Line maintenance; and Will state helicopter manufacturer or group or series or type and/or the maintenance task(s).		listed unde	Helicopters will be ader the appropriate Airframe rating.	

 Table A-2.

 AMO Aircraft Ratings and Repair Station Airframe Ratings

AMO Ratings (SAR-145)		<b>Repair Station Ratings</b> (14 CFR part 145)		
Ratings	Limitations	Limited Ratings	Class Ratings	Limitations
B-1 Turbine	Will state engine series or type and/or the maintenance task(s).	Engines of particular make and model or parts thereof.	Class 3	Turbine engines
B-2 Piston	Will state engine manufacturer or group or series or type and/or the maintenance task(s).		Class 1 or Class 2	Reciprocating engines of 400 HP or less. Reciprocating engines of more than 400 HP.
B-3 APU	Will state engine manufacturer or series or type and/or maintenance task(s).		<b>NOTE:</b> FAA Limited Acco	APU rating is a essory rating.

Table A-3.AMO Engine and Repair Station Powerplant Ratings

AMO Ratings (SAR-145)		<b>Repair Station Ratings</b> (14 CFR part 145)		
Ratings	Limitations	Limited Ratings	Class Ratings	Limitations
C-16 Propellers	Will state aircraft type or aircraft manufacturer or component manufacturer or the particular components and/or cross reference to a capability	Accessory of particular make and model or parts	Class 1	All fixed-pitch and ground adjustable propellers of wood, metal, or composite construction.
	list in the exposition and/or the maintenance task(s).		Class 2	All other propellers by make.

## Table A-4.AMO and Repair Station Propeller Ratings

**NOTE:** Rotors installed on helicopters may be maintained under an FAA or CAAS aircraft rating. Rotors removed from the helicopter must be maintained under a CAAS component rating (C-10, C-11) or FAA limited rotor blade rating.

AMO Ratings (SAR-145)			<b>Repair Station Ratings</b> (14 CFR part 145)		
1	Ratings	ATA	Limited Ratings	Class Ratings	Limitations
C-1 Air Cond. & Pressurization	Will state aircraft type or aircraft manufacturer or component manufacturer or the particular	21	Airframe and/or Accessory of particular make and model or parts thereof.	Accessory Class 1 Mechanical or Class 3 Electronic	Limited to approved scope of work and/or Capability List
C-2 Auto Flight	particular components and/or cross reference to a capability list in the exposition and/or the maintenance task(s)	22	Radio and/or Instrument of particular make	Instrument Class 3 Gyroscope	
C-3 Comms & Navigation		23, 34	and model or parts thereof.	Radio Class 1 Communication, Class 2 Navigation	
C-4 Doors & Hatches		52	Airframe, Fabric work of particular make and model or parts thereof.	Class rating not applicable—see Limited ratings	
C-5 Electrical Power		24, 33, 85	Airframe and/or Accessory of particular make and model or parts thereof.	Accessory Class 2 Electrical or Class 3 Electronic	
C-6 Equipment		25, 38, 44, 45, 50	Airframe and/or Emergency equipment of particular make and model or parts thereof, or any other purpose.	Class rating not applicable—see Limited ratings	
C-7 Engine—APU		49, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83	Engine and/or Accessory of particular make and model or parts thereof.	Class rating not applicable—see Limited ratings	

# Table A-5.AMO Component (Other than Complete Engines and APU) Ratings and<br/>Repair Station Radio, Instrument, and Accessory Ratings

AMO Ratin (SAR-145)	<b>Repair Station Ratings</b> (14 CFR part 145)			
Ratings	ATA	Limited Ratings	Class Ratings	Limitations
C-8 Flight Controls	27, 55, 57, 40, 57.50, 57.60, 57.70	Airframe, Fabric work of particular make and model or parts thereof.	Accessory Class 1 Mechanical, Class 2 Electrical, or Class 3 Electronic	
C-9 Fuel—Airframe	28, 47	Airframe and/or Accessory of particular make and model or parts thereof.	Accessory Class 1 Mechanical, Class 2 Electrical, or Class 3 Electronic	
C-10 Helicopter— Rotors	62, 64, 66, 67	Airframe and/or Rotor blades by make and model.	Class rating not applicable—see Limited ratings	
C-11 Helicopter— Transmission	63, 65	Airframe and /or Accessory of particular make and model or parts thereof.	Accessory Class 1 Mechanical	
C-12 Hydraulic	29	Airframe and/or Accessory of particular make and model or parts thereof.	Accessory Class 1 Mechanical	
C-13 Instruments	31, 42, 46	Instrument of particular make and model or parts thereof.	Instrument Class 1 Mechanical, Class 2 Electrical, Class 3 Gyroscope, Class 4 Electronic	
C-14 Landing Gear	32	Airframe and/or Landing gear components and/or Accessory, or floats of particular make and model or parts thereof.	Accessory Class 1 Mechanical	

А	MO Ratings (SAR-145)		<b>Repair Station Ratings</b> (14 CFR part 145)		
R	atings	ATA	Limited Class Ratings Limitation		
C-15 Oxygen		35	Airframe and/or Accessory of particular make and model or parts thereof.	Class rating not applicable—see Limited ratings	
C-16 Propellers		61	NOTE: Refer to Propeller ratings above		
C-17 Pneumatic		36, 37	Airframe and/or Accessory of particular make and model or parts thereof.	Accessory Class 1 Mechanical	Limited to approved scope of work and/or Capability List
C-18 Protection (Ice/Rain/Fire)		26, 30	Airframe and/or Accessory of particular make and model or parts thereof.	Accessory Class 1 Mechanical	
C-19 Windows		56	Airframe of particular make and model or parts thereof.	Airframe Class 1, Class 2, Class 3, or Class 4	
C-20 Structural		53, 54, 57.10, 57.20, 57.30	Airframe, Fabric work of particular make and model or parts thereof.	Airframe Class 1, Class 2, Class 3, or Class 4	

AMO Ratings (SAR-145)		<b>Repair Station Ratings</b> (14 CFR part 145)			
Ratings	Limitations	Limited Ratings	Class Ratings	Limitations	
D1 Nondestructive Testing (NDT)	Will state particular NDT method(s)	Nondestructive inspecting (NDI), testing, and processing. NOTE: FAA equivalent as an NDT Limited Rating, or a standalone or a function under a higher rating.	Class rating not applicable—see Limited rating	Limited to the particular method(s) used.	
D2 Other specialised services	Will state particular specialised service(s)	Welding, heat treating, plating, or a specific process, etc. Rating either stand-alone as a specialized services rating or a function under a higher rating.		Limited to the particular method(s) used with FAA-approved data.	

Table A-6.AMO Equivalent Repair Station Specialised Services Ratings

**NOTE:** If the FAA-approved data is not acceptable to the CAAS under the Special Conditions, the following or similarly worded statement must be included in the limitation section of the operations specifications (OpSpecs): *The data is not authorized for the use on Singapore-registered aircraft or aeronautical products intended for installation on Singapore-registered aircraft.* 

## Appendix 3. Sampling Inspection System (SIS) Job Aids

## Table A-7. SIS Job Aids

	SIS JOB AIDS						
SIS Audit on FAA	CAAS uses this job aid to conduct a SIS audit at an FAA certificate-holding district office (CHDO)	SIS Audit FAA					
SIS Audit SAR-145	CAAS uses this job aid to conduct SIS audits at Approved Maintenance Organizations (AMO) located in the U.S.	SIS Audit SAR-145					
SIS Inspection on CAAS	FAA uses this job aid to conduct a SIS inspections at the CAAS Office	SIS Inspection on CAAS					
SIS Inspection 14 CFR Part 145	FAA uses this job aid to conduct SIS inspections at repair stations located in Singapore.	SIS Inspection 14 CFR 145					

## MAINTENANCE AGREEMENT GUIDANCE

## BETWEEN THE

## FEDERAL AVIATION ADMINISTRATION

## AND THE

## **CIVIL AVIATION AUTHORITY OF SINGAPORE**

## Section B. Requirements for AMOs Located in the United States

**1.0 INTRODUCTION.** This section of the MAG sets forth procedures for initial application, renewal, or amendments of a SAR-145 Maintenance Organisation Approval under the provisions of the Maintenance Implementation Procedures (MIP) applicable to SAR-145 AMOs located in the United States.

**NOTE:** The term repair station and AMO are synonymous.

- 1.1 Basic Eligibility. To be eligible under the MIP, the applicant must meet all of the following requirements:
  - a. Hold a valid 14 CFR part 145 certificate to operate as an approved repair station in accordance with 14 CFR part 145. The CAAS ratings and limitations are dependent on the 14 CFR part 145 ratings and limitations. The level of capability authorized under the CAAS ratings or limitations shall not exceed the 14 CFR part 145 ratings and limitations.
  - b. Demonstrate a need to maintain Singapore registered aircraft and/or aeronautical products for 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 imposed by the Air Navigation Order (ANO) and the terms of the Agreement.
  - d. Agree to comply with the requirements of the MIP and the conditions as outlined in Section B of the MAG.
  - e. Have knowledge of SAR-145.

**NOTE:** The SAR-145 Maintenance Organization Approval shall only cover additional fixed locations or line stations located within the territories of the United States. The locations must be under the surveillance by the FAA. CAAS will not authorize maintenance facilities outside of the territories of the United States.

- 1.2 Terms and Explanation. The following terms and explanations apply to Section B of the MAG.
  - a. Formal Application Letter. The document addressed to Director of Airworthiness/Flight Operations (A/FO) to notify the intention to apply for the SAR-145 Maintenance Organization Approval (for initial application only).
  - b. CAAS(AW)114. Prospective Applicant's Pre-assessment Statement of Intent (PAPSI) (for initial application only).
  - c. CAAS(AW)21. Application Form for SAR-145 Approval of Organization (for initial, renewal, and amendment to approval application).

- d. CAAS(AW)22. Personnel Résumé (for initial application and change of management personnel only). This form is applicable and shall be submitted individually for the following personnel that are responsible for the maintenance activities performed under the SAR-145 approval:
  - 1) Accountable Manager.
  - 2) Quality Manager (Chief Inspector).
  - 3) Base and/or Line Maintenance Managers.
  - 4) Workshop Managers/Supervisors.
  - 5) Nondestructive Testing (NDT) Responsible Level 3.
- e. Letter of Intent (LOI). SAR-145.10(c) requires that the applicant show the necessity for a SAR-145 Maintenance Organization Approval. 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.
- f. Capability List (CL). Copy of the CL that is relevant to the repair station's SAR-145 scope of work shall be submitted. It must be in a format that identifies the difference in approval of CAAS articles from FAA articles as necessary. (Example: CAAS approved data only.)
- g. CAAS Supplement. The CAAS Supplement to the FAA Repair Station Manual/Quality Control Manual (RSM/QCM) must have detailed procedures to describe how the CAAS Special Conditions will be complied with to SAR-145 regulations. The CAAS Supplement should follow the format headings as given in the example in Section B, Appendix 1. Any revision to the CAAS Supplement must be submitted to the FAA for acceptance prior to performing operations under the revised procedures. The procedures used in the performance and certification of maintenance should be reflected accurately in the manuals. The independent quality assurance system must include all CAAS Special Conditions.
- 1.3 Application. Application for initial, renewal, and amendments to a SAR-145 Maintenance Organization Approval under the provisions of the MIP shall be submitted to the FAA in a form and manner acceptable to the CAAS. Details on the documents submission for application can be found in Section B, Appendix 2.
- 1.4 Privileges of the SAR-145 AMO. A SAR-145 AMO may only maintain aircraft or aircraft component for which it is approved at the locations identified in the SAR-145 certificate of approval. CAAS does not allow maintenance organizations in the United States that are granted the SAR-145 Maintenance Organization Approval under the MIP to work away from its approved locations. Any such procedures listed in the FAA

RSM/QCM and/or CAAS Supplement shall not be considered as approval/authorization to work away under the scope of the SAR-145 Maintenance Organization Approval.

- 1.5 Revocation, Suspension, or Surrender. The MIP permits reliance on each other's surveillance systems to the greatest extent possible. In the event of a revocation or suspension of a U.S.-based 14 CFR part 145 certificate, the CAAS SAR-145 certificate would become invalid due to it not meeting the conditions specified in the MIP.
  - 1.5.1 The CAAS may deny renewal, revoke, or suspend a SAR-145 AMO certificate if the 14 CFR part 145 certificate becomes invalid under the conditions specified in the MIP, or other applicable regulations.
  - 1.5.2 The SAR-145 AMO is responsible for notifying the CAAS A/FO Division if the FAA 14 CFR part 145 certificate is suspended, surrendered, or revoked.
  - 1.5.3 The actions taken by the FAA and CAAS to address the revocation, suspension or surrender of a SAR-145 Maintenance Organisation Approval is detailed in Section A of the MAG.
- 1.6 CAAS Contacts. The Continuing Airworthiness (CA) Section of the CAAS A/FO Division is responsible for the SAR-145 certification and certificate management. They can be contacted at the following address:

Civil Aviation Authority of Singapore Airworthiness/Flight Operations Division Continuing Airworthiness Section Singapore Changi Airport, P.O. Box 1 Singapore 918141

Phone: +65 6595 6764 Fax: +65 6545 6519 Email: caas\_afo\_infocenter@caas.gov.sg

- 2.0 APPROVAL APPLICATION PROCESSES. This part provides detailed information, relevant to the FAA, CAAS, and an applicant, for the initial, renewal, and amendment application of a SAR-145 Maintenance Organization Approval. An applicant, as referred to in this part, may be an organization applying for initial SAR-145 Maintenance Organization Approval or an existing SAR-145 AMO. The necessary steps for the application processes are illustrated in the diagrams contained within this section. An applicant must be familiar with Section B of the MAG to understand the processes and responsibilities involved in the initial, renewal, or amendment application for SAR-145 Maintenance Organization Approval.
- 2.1 Initial Application. The initial SAR-145 Maintenance Organization Approval application process is carried out over the following five phases:

- a. Preapplication.
- b. Formal application.
- c. Document Compliance.
- d. Demonstration and Inspection.
- e. Certification.
- 2.1.1 During the initial inquiry, the applicant should arrange a meeting with the FAA and familiarize themselves with the current editions of the following documents:
  - a. FAA-CAAS Maintenance Implementation Procedures (MIP).
  - b. FAA-CAAS Maintenance Agreement Guidance (MAG).
  - c. Singapore Airworthiness Requirements—Part 145 (SAR-145).
  - d. Air Navigation Order (ANO).
  - e. CAAS Airworthiness Notices.
  - f. CAAS Advisory Circulars applicable to SAR-145 AMO.
- 2.1.2 Preapplication. To proceed with the preapplication, the applicant is required to submit to the FAA the relevant documents for the preapplication phase as indicated in Section B, Appendix 2 and discuss the certification requirements and application process per the MAG requirements.
  - a. During the preapplication meeting, the applicant and the FAA should establish a timeframe for the certification process and communicate the certification expectations and requirements.
  - b. The applicant should inform the FAA at the earliest opportunity on its decision to proceed or to withdraw the application. Failure to do so within 60 days will render the application null and void.
  - c. The FAA will review the preapplication submission for eligibility.
- 2.1.3 Formal Application. To proceed to the formal application phase, the applicant is required to make the applicable fee payment, as notified by the CAAS, and submit the relevant documents to the FAA for the formal application phase as indicated in Section B, Appendix 2.

- a. The FAA will review the formal application submission to ensure completeness and acceptability. This should include an initial review of the proposed CAAS Supplement in comparison with the sample as indicated in Section B, Appendix 1.
- b. The CAAS Supplement, along with the RSM/QCM, sets forth the organizational structure of the maintenance organization and its procedures to meet the requirements of SAR-145. The CAAS Supplement example in Section B, Appendix 1 must be customized to the maintenance organization procedures and accurately describe how the maintenance organization meets the CAAS Special Conditions.

**NOTE:** The guidance and instructions for developing the CAAS Supplement is detailed in Section B, Appendix 1.

- c. The CAAS Supplement must be accepted by the FAA prior to conducting any operations and must be amended as necessary to keep the information contained therein up to date. Any revisions or amendments to the CAAS Supplement must also be accepted by the FAA prior to performing the operations under the revised procedures. Incorporated references in the CAAS Supplement must always be current. CAAS considers the FAA's acceptance as meeting the intent of SAR-145.70(c) under the MIP.
- d. Once the submission is verified, the FAA will make copies of the following completed forms/documents and forward them to the CAAS for review.
  - 1) Formal Application Letter.
  - 2) CAAS(AW)114.
  - 3) CAAS(AW)21.
  - 4) CAAS(AW)22.
  - 5) LOI.
- e. Upon review and satisfied that the applicant is eligible for SAR-145 certification under the MIP, the CAAS will notify and instruct the applicant to make the necessary payment for the applicable fees.
- 2.1.4 Document Compliance. The FAA will review all the submitted documents and, in particular, will conduct a thorough review of the draft CAAS Supplement in accordance with Section B, Appendix 1. The FAA will contact the applicant for any corrections that may be required.
- 2.1.5 Demonstration and Inspection. Upon reviewing the documents submitted by the applicant, the FAA will perform an inspection at the applicant's facility to

verify compliance to the CAAS Special Conditions and continued compliance with 14 CFR parts 43 and 145.

- a. Additional procedures or changes to the CAAS Supplement may be required based upon the results of the demonstration and inspection phase.
- b. The FAA inspection on the applicant will be carried out in accordance with the CAAS MIP Audit Report and a recommendation by the FAA will be provided within the same report.
- c. The applicant must ensure that all identified items noted during the inspection are corrected and verified by the FAA. In addition, any discrepancies in the application package found after the inspection must also be corrected and verified by the FAA.
- d. The FAA must ensure closure of any corrective action(s) before recommending the initial certification.
- e. If the applicant fails to correct the deficiencies within the timeframe that the FAA allows (normally 90 days), the FAA should terminate the application process and provide a non-recommendation to the CAAS Coordinator.
- f. In the event of unusual circumstances, the FAA Regional Coordinator (AXX-200) may notify the CAAS Coordinator to extend the period upon mutual agreement only if the applicant demonstrates an ability and willingness to correct the noted deficiencies.
- 2.1.6 Certification. When satisfied that the applicant is in compliance with all the CAAS Special Conditions and 14 CFR parts 43 and 145, the FAA will issue a recommendation through the CAAS MIP Audit Report. The FAA will forward the application package, including the summary of discrepancies found and corrective actions accepted, to the CAAS.
  - a. CAAS will review the recommendation and application package forwarded by the FAA to verify compliance with SAR-145 regulations and the MIP. Any issues arising from this review shall be resolved with the FAA.
  - b. CAAS will proceed with the issuance of a SAR-145 Maintenance Organization Approval upon verification that the application is acceptable and fee payment is made by the applicant.
  - c. CAAS will provide the FAA with a copy of the SAR-145 Maintenance Organization Approval issued to the applicant.
  - d. Once the applicant receives the SAR-145 Maintenance Organization Approval certificate, the applicant may then exercise the privileges of the approval.

2.1.7 Initial Application Flow Chart.



- 2.2 Renewal Application of Certificate. An application for the renewal of a SAR-145 Maintenance Organization Approval certificate shall be submitted in a form and manner acceptable to the CAAS.
  - 2.2.1 CAAS Approval Certificate. The SAR-145 Maintenance Organization Approval certificate is valid for 12 months. It is recommended that the renewal package be submitted 120 days prior to the expiration of the SAR-145 AMO's certificate. This will allow sufficient processing time.
    - a. To initiate the renewal application, the SAR-145 AMO must submit the relevant documents for the renewal as indicated in Section B, Appendix 2 to the FAA. The SAR-145 AMO must also make the applicable fee payment as notified by the CAAS.
    - b. Any revisions or amendments to the CAAS Supplement must be submitted to the FAA for acceptance. The SAR-145 AMO is required to submit the latest copy of their CAAS Supplement during the renewal application.

**NOTE:** Submission of the CAAS Supplement is not required if there were no revisions or amendments since the last renewal application.

- c. The SAR-145 AMO is required to demonstrate the continuing need for the SAR-145 Maintenance Organization Approval. In order to demonstrate this continued need, the SAR-145 AMO is required to:
  - 1) Provide a summary and copies of maintenance releases performed on Singapore-registered aircraft and/or aircraft components intended for fitment on a Singapore aircraft in the preceding year; or
  - 2) Provide 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. The FAA, upon receiving the renewal application, will notify and forward a copy of the CAAS(AW)21 application form and the demonstration of need to CAAS.
- e. The CAAS, upon verification that the SAR-145 AMO is eligible for renewal, will notify and instruct the applicant to make the necessary payment for the fees applicable to the renewal application.

- 2.2.2 Continued Compliance and FAA Recommendation. The MIP allows the FAA to perform inspections on behalf of the CAAS to verify continued compliance with the CAAS Special Conditions and 14 CFR parts 43 and 145.
  - a. The FAA must ensure that its surveillance schedule on the SAR-145 AMO is completed within 12 months from the last renewal. The FAA surveillance must include all the CAAS Special Conditions every 12 months. The FAA must also ensure the SAR-145 AMO is in continued compliance with the CAAS Special Conditions and 14 CFR parts 43 and 145.
  - b. The SAR-145 AMO must ensure that all discrepancies, findings, or identified items found during the FAA's surveillance are satisfactorily addressed within the timeframe allowed by the FAA. This can be achieved by the SAR-145 AMO implementing corrective actions that is acceptable to the FAA, or the SAR-145 AMO have in place a corrective action plan that is accepted by the FAA.

**NOTE:** The FAA may recommend a non-approval for the SAR-145 Maintenance Organisation Approval if discrepancies, findings, or identified items were not satisfactorily addressed in a timely manner.

- c. When satisfied that the applicant is in compliance with all the CAAS Special Conditions and 14 CFR parts 43 and 145, the FAA will issue a recommendation through the CAAS MIP Audit Report and forward the renewal application package to the CAAS.
- 2.2.3 Issuance of Certificate. The period of validity for a SAR-145 Maintenance Organization Approval certificate is 12 months from the expiry of the previous certificate.
  - a. The CAAS will review the recommendation and renewal application package forwarded by the FAA to verify compliance with SAR-145 regulations and the FAA–CAAS MIP. Any issues arising from this review shall be resolved with the FAA.
  - b. The CAAS will proceed with the renewal of the SAR-145 Maintenance Organization Approval upon verification that the application is acceptable and fee payment is made by the applicant.
  - c. The CAAS will provide the FAA with a copy of the renewed SAR-145 Maintenance Organization Approval issued to the applicant.
  - d. Once the applicant receives the SAR-145 Maintenance Organization Approval certificate, the applicant may then exercise the privileges of the approval.

2.2.4 Renewal Application Flow Chart.



- 2.3 Change/Amendment Application Process. The CAAS requires the SAR-145 AMO to notify the FAA to request an acceptance and/or approval for proposal to carry out the following changes at least 3 weeks before the changes take place.
  - a. Name of the organization.
  - b. Location of the organization.
  - c. Additional locations of the organization.
  - d. Change or addition of ratings.
  - e. Accountable Manager, Quality Manager, and any other management personnel listed in the SAR-145 AMO's CAAS Supplement.
  - f. The facilities, equipment, tools, materials, procedures, and work scope that could affect the approval.
  - 2.3.1 Change/Amendment Application. To initiate the application process, the SAR-145 AMO is required to submit the relevant documents for changes/amendments as indicated in Section B, Appendix 2 to the FAA. The SAR-145 AMO must also make the applicable fee payment as notified by the CAAS.
    - a. The FAA will notify the CAAS on the application of change/amendment by the SAR-145 AMO and forward a copy of the CAAS(AW)21 to CAAS.
    - b. Any change/amendment requiring the issuance of a new certificate will incur a fee. The CAAS will notify and instruct the SAR-145 AMO to make the necessary payment for the fees applicable upon receiving notification from the FAA on such change/amendment application.
  - 2.3.2 Compliance Verification and Recommendation. Depending on the change/amendment, the FAA may be required to perform an on-site audit or inspection to verify that the SAR-145 AMO remains in compliance with all the CAAS Special Conditions and 14 CFR parts 43 and 145.
    - a. The FAA will perform an on-site audit/inspection on the SAR-145 AMO for changes/amendments that will affect or alter the formed basis of the original certification (e.g., location, facilities, equipment, and/or addition of ratings).

- b. The SAR-145 AMO must ensure that all identified items noted during the audit/inspection are corrected and verified by the FAA. In addition, any discrepancies in the change/amendment application package must also be corrected and accepted by the FAA.
- c. The FAA must ensure that all identified items noted during the inspection and any discrepancies in the application package found after the inspection is corrected before recommending the approval for the changes/amendments.
- d. If the applicant fails to correct the deficiencies within the timeframe that the FAA allows, the FAA should terminate the change/amendment application process and notify the CAAS Coordinator.
- e. When satisfied that the SAR-145 AMO is in compliance with all the CAAS Special Conditions and 14 CFR parts 43 and 145 for the proposed changes/amendments, the FAA will issue a recommendation through the CAAS MIP Audit Report and forward the changes/amendments application package to the CAAS.

**NOTE:** For a change/amendment that did not require an on-site inspection, the CAAS MIP Audit Report is still required to be submitted to the CAAS.

- 2.3.3 Approval and Issuance of Certificate. Subject to the type of changes/amendments applied for by the SAR-145 AMO, the CAAS may issue a new SAR-145 Maintenance Organization Approval certificate to reflect such changes/amendments.
  - a. The CAAS will review the recommendation and changes/amendments application package forwarded by the FAA to verify compliance with SAR-145 regulations and the MIP. Any issues arising from this review shall be resolved with the FAA.
  - b. For changes/amendments that require the issuance of a new SAR-145 Maintenance Organization Approval certificate, the CAAS will proceed with the issuance of the new certificate upon verification that the application is acceptable and fee payment is made by the applicant.
  - c. The CAAS will provide the FAA with a copy of the renewed SAR-145 Maintenance Organization Approval issued to the SAR-145 AMO.
  - d. For changes/amendments that do not require the issuance of a new SAR-145 Maintenance Organization Approval certificate, the CAAS will provide an official acknowledgement on the approval of such changes upon verification that the application is acceptable.

- e. Once the applicant receives the renewed SAR-145 Maintenance Organization Approval certificate or written acknowledgement from the CAAS, they can implement the proposed changes/amendments.
- 2.3.4 Change/Amendment Application Flow Chart.



## 3.0 SIGNIFICANT SAFETY ISSUES.

- 3.1 In the event that a significant safety issue is identified by the FAA, a recommendation of non-approval of the SAR-145 Maintenance Organization Approval may be issued by the FAA. This will occur if the SAR-145 AMO is not able to take corrective actions or provide a corrective action plan that is acceptable to the FAA.
- 3.2 Continued Validity of Approval. Unless the SAR-145 Maintenance Organization Approval certificate has previously been surrendered, superseded, suspended, revoked, or expired by virtue of exceeding any expiry date that may be specified in the certificate of approval, the continued validity of approval is dependent upon:
  - a. The FAA's 14 CFR part 145. The validity of the 14 CFR part 145 certificate and operations specifications (OpSpecs) issued/granted to the SAR-145 AMO; and
  - b. CAAS Special Conditions. The SAR-145 AMO remaining in compliance with the CAAS Special Conditions as listed in Appendix 1 of the MIP requirements.
- 3.3 Notification to the CAAS. The SAR-145 AMO is responsible for notifying the CAAS if it does not meet the aforementioned conditions for its SAR-145 Maintenance Organization Approval to remain valid. Enforcement actions referenced in Section A will be taken against the SAR-145 AMO.
- **4.0 FAA RESPONSIBILITIES.** Under the MIP, the FAA is responsible for performing surveillance and oversight on SAR-145 AMOs based in the United States and its territories. This includes the verification of documents for compliance and acceptance of the CAAS Supplement to the RSM/QCM. The CAAS remains responsible for the issuance or renewal of the SAR-145 Maintenance Organization Approval.
- 4.1 Administrative Duties. The FAA is the point of contact (POC) for SAR-145 AMOs based in the United States and its territories. All regulatory matters concerning the SAR-145 Maintenance Organization Approval will be managed by the FAA, unless otherwise stated by the CAAS.

- 4.1.1 The FAA Regional Coordinator (AXX-200) will be the POC for inquiries from the CAAS on SAR-145 AMOs in the United States and its territories. The list of the FAA Regional Coordinators and their responsible states can be found in Section A, Appendix 1. In the event that the FAA Regional Coordinator (AXX-200) is not able to provide a response to the query from the CAAS, he/she may refer the CAAS to the FAA principal inspector (PI) who is responsible for safety oversight on the SAR-145 AMO. It is recommended that the CAAS MIP Coordinator be copied in all the correspondence on SAR-145 certificate matters.
- 4.1.2 The FAA PI responsible for safety oversight of the SAR-145 AMOs shall establish communication via email with his or her counterpart in the CAAS through the CAAS MIP Coordinator for inquiries on SAR-145 certificate matters. It is recommended that the CAAS MIP Coordinator be copied in the correspondence on SAR-145 certificate matters.
- 4.2 Safety Oversight and Surveillance. The FAA must ensure that oversight and surveillance on SAR-145 AMOs are carried out in accordance with the schedule planned by the FAA.
  - 4.2.1 For the purpose of processing an application for initial, renewal, and/or amendment to the SAR-145 Maintenance Organization Approval, the FAA PI is responsible for reviewing the documents (listed in Section B, Appendices 2 and 3) submitted by the applicant to ensure proper submission and completion. The FAA will forward the necessary documents to the CAAS. The CAAS will review the application to verify the eligibility or continued need by the applicant.
  - 4.2.2 The CAAS Supplement, in conjunction with the latest revision of the RSM/QCM, defines the SAR-145 AMO's procedures to comply with the SAR-145 regulations. The FAA will review and accept the CAAS Supplement per the example listed in Section B, Appendix 1. The List of Effective Pages (LEP) will be used to document the acceptance of the CAAS Supplement. Alternatively, the acceptance of the CAAS Supplement can be in the form of a letter to inform the SAR-145 AMO on the acceptance or rejection of its CAAS Supplement. The letter will address the title, date, and revision number of the CAAS Supplement. If the supplement is rejected, the FAA PI will provide a detailed explanation of the deficiencies and advise the SAR-145 AMO not to perform any maintenance that could be affected by the deficiencies.
  - 4.2.3 The FAA must verify that the SAR-145 AMO complies with 14 CFR parts 43 and 145 by conducting an inspection or a series of inspections, which must be completed within a 2-year cycle. Verification of compliance with the CAAS MIP Special Conditions must be conducted at least once every year prior to the recommendation for renewal of the SAR-145 Maintenance Organization Approval.

- 4.2.4 The FAA PI will document all surveillance on the CAAS MIP Special Conditions on the CAAS MIP Audit Report (listed in Section B, Appendix 2). This report will be the means by which the FAA will provide any recommendations to CAAS.
- 4.2.5 The FAA's Safety Assurance System (SAS) Custom Data Collection Tool (C DCT) will be used each year to document the SAR-145 AMO inspection for the CAAS Special Conditions. The CAAS MIP Audit report should be uploaded into the C DCT.
- 4.2.6 For all discrepancies and findings identified during the course of the FAA's oversight and surveillance on the SAR-145 AMO, the FAA PI will ensure that they are recorded and communicated to the SAR-145 AMO for corrective actions to be taken. The FAA must ensure that the deficiencies identified are satisfactorily addressed within a reasonable timeframe. The FAA's acceptance of the corrective actions taken or corrective action plans must be recorded and officially documented on written correspondence to the SAR-145 AMO.
- 4.2.7 The FAA PI updates the SAS Configuration Module 1 Vitals Information and ensures the CAAS certificate number and renewal date is documented.
- 4.2.8 OpSpec D107 must list all line stations performing maintenance on Singapore air carriers. Singapore air carriers are issued an AOC and are listed in Part 3 of the CAAS Supplement. Line station authorization can only be issued within the United States and the locations must currently have authorization for U.S. air carriers.
- 4.3 Recordkeeping. The FAA must ensure that all records documenting the safety oversight on SAR-145 AMOs are retained for at least 3 years. Among the records to be retained are the following:
  - a. Acceptance for CAAS Supplement to the RSM/QCM.
  - b. Repair station inspection records.
  - c. Written correspondence from the FAA to the SAR-145 AMO accepting the corrective actions or corrective action plan.
  - d. Sampling Inspection System (SIS)-written correspondence to the SAR-145 AMO of findings and corrective actions.
  - e. Singapore air carriers listed in FAA OpSpec D107.

**NOTE:** All records must be furnished in a reasonable time for sampling checks during the CAAS SIS inspections.

- 4.4 Surrender, Suspension, or Revocation of a Certificate. In the event that the SAR-145 AMO's 14 CFR part 145 certificate, OpSpecs, or associated ratings and limitations is surrendered, suspended, or revoked by the FAA, the SAR-145 Maintenance Organization Approval would become invalid.
  - 4.4.1 The FAA PI responsible for safety oversight on the affected SAR-145 AMO will immediately notify the FAA Regional Coordinator (AXX-200). The FAA Regional Coordinator (AXX-200) will immediately notify the CAAS MIP Coordinator of this occurrence at the soonest possible time.
  - 4.4.2 Enforcement actions referenced in Section A of this MAG may be taken against the SAR-145 AMO.
  - 4.4.3 For any other non-compliance resulting in FAA enforcement actions, such as civil penalties and/or letters of warning to the SAR-145 AMO, the FAA PI and the FAA Regional Coordinator (AXX-200) will also immediately notify the CAAS MIP Coordinator.
- 4.5 Recommendation and Coordination. The CAAS relies on the recommendation by the FAA to issue or renew the SAR-145 Maintenance Organization Approval certificate under the conditions of the FAA–CAAS MIP.
  - 4.5.1 The FAA will provide the CAAS the recommendation for the issuance or renewal of the SAR-145 Maintenance Organization Approval certificate through the CAAS MIP Audit Report (see Section B, Appendix 2).
  - 4.5.2 The FAA PI will forward copies of all written correspondence addressing the accepted corrective actions/corrective action plans for items found during the FAA's surveillance to the assigned CAAS principal maintenance inspector (PMI) for review.
  - 4.5.3 The FAA PI must ensure that all discrepancies, findings, and identified items are satisfactorily addressed prior to the recommendation for issuance or renewal of the CAAS SAR-145 Maintenance Organization Approval certificate.

**NOTE:** If the SAR-145 AMO is not able to satisfactorily address all the discrepancies, findings, or identified items in a timely manner, the FAA should provide a non-recommendation for the SAR-145 Maintenance Organization Approval.

4.5.4 For situations that require the amendment and/or issuance of the 14 CFR part 145 certificate, OpSpecs, and SAR-145 Maintenance Organization Approval certificate at the same time, the issuance of the affected certificates should be coordinated. The FAA PI and the assigned CAAS PMI will coordinate to ensure that the amendments and/or changes to the certificate will take effect at the same time.

- **5.0 CAAS RESPONSIBILITIES.** Under the MIP, the CAAS is responsible for the issuance or renewal of the SAR-145 Maintenance Organization Approval, with consideration given to the FAA recommendation. The safety oversight and surveillance on these organizations will be undertaken by the FAA.
- 5.1 Administrative Duties. The FAA is the POC for SAR-145 AMOs based in the United States and its territories. However, the CAAS should provide the necessary assistance to the FAA with regard to SAR-145 regulatory matters under the MIP.
  - 5.1.1 The CAAS MIP Coordinator is the POC for the FAA for SAR-145 regulatory matters under the MIP.
  - 5.1.2 For SAR-145 AMOs that already have an assigned CAAS PMI, the CAAS MIP Coordinator will establish contact between the FAA and the CAAS PMI for the SAR-145 AMO. The CAAS PMI will then assume as the POC to the FAA for SAR-145 regulatory matters for the respective SAR-145 AMOs that the CAAS PMI are assigned.
- 5.2 SAR-145 Application Review/Fee Payment Notification. The CAAS PMI is responsible for performing a review to ensure that the applicant meets the criteria to apply for the SAR-145 Maintenance Organization Approval.
  - 5.2.1 Upon being notified by the FAA that an application for an initial, renewal, and/or amendment for a SAR-145 Maintenance Organization Approval has been received, the CAAS PMI will verify the eligibility or continued need by the applicant.
  - 5.2.2 Once verified that the applicant meets the criteria, the CAAS PMI will obtain the AWI/XXX approval number for the new applicant and create a new record in the CAAS A/FO file registry and CAAS Safety Oversight Management System.
  - 5.2.3 The CAAS PMI will contact the applicant and instruct the applicant on the applicable fees and how payment should be made.
  - 5.2.4 If the applicant does not meet the criteria to apply for the SAR-145 Maintenance Organization Approval, the CAAS PMI must notify the FAA immediately and provide the reason for rejection.
- 5.3 FAA Recommendation Review and Certificate Issuance Coordination. The CAAS PMI is responsible for reviewing the recommendation by the FAA PI for the purpose of issuing or denying the SAR-145 Maintenance Organization Approval certificate.
  - 5.3.1 Upon receiving the CAAS MIP Audit Report and substantiating documents, the CAAS PMI will review the information provided to verify that the applicant meets the requirements of the SAR-145 regulations.

- 5.3.2 The CAAS PMI may request more information from the FAA or may request the FAA to verify areas of discrepancies identified during the recommendation review to support the processing of the application.
- 5.3.3 FAA Recommends Approval.
  - a. Upon verifying that the applicant meets the requirements to be granted the SAR-145 Maintenance Organization Approval, the CAAS PMI will proceed to verify that the applicable fee has been paid.
  - b. Once the applicable fee payment has been paid, the SAR-145 Maintenance Organization Approval certificate can then be processed and issued.
  - c. The CAAS PMI must retain and file all documents submitted for the SAR-145 Maintenance Organization Approval accordingly.
- 5.3.4 FAA Recommends Non-Approval.
  - a. In some cases, the review for an initial application concludes that the applicant does not meet the requirements of the SAR-145 regulations despite the opportunity given to the applicant to amend its documents or procedures. In such cases, the CAAS PMI will close out the application by notifying the FAA PMI and provide the reason for rejecting the application.
  - b. If the applicant is already an existing holder of a SAR-145 Maintenance Organization Approval, the CAAS PMI will review the reason for non-approval by the FAA and will proceed with enforcement actions, if necessary.
  - c. If there were fee payments made for the issuance of a SAR-145 Maintenance Organization Approval certificate that is not recommended for approval, the CAAS PMI will inform the CAAS Finance Division to initiate a refund to the applicant of the fees paid.
- 5.3.5 Certificate Issuance Coordination.
  - a. The CAAS PMI will mail the original copy of the SAR-145 Maintenance Organization Approval certificate to the applicant. The CAAS PMI will also send an electronically scanned copy of the certificate to the applicant and to the FAA PI.
  - b. For situations that require the amendment and/or issuance of the 14 CFR part 145 certificate, OpSpecs, and SAR-145 Maintenance Organization Approval certificate at the same time, the issuance of the affected certificates should be coordinated. The CAAS PMI will coordinate with the FAA PI to ensure that the amendments and/or changes to the certificate will take effect at the same time.

- 5.4 Surrender, Suspension, or Revocation of a Certificate. In the event that the SAR-145 AMO's 14 CFR part 145 certificate, OpSpecs, or associated ratings and limitations cease to remain valid, the FAA will notify the CAAS and the SAR-145 AMO.
  - 5.4.1 The CAAS PMI assigned to the SAR-145 AMO will write officially (by letter) to the Accountable Manager of the SAR-145 AMO to inform him or her on the suspension of its SAR-145 Maintenance Organization Approval privileges until further notice.
  - 5.4.2 The CAAS PMI will mail the original letter to the SAR-145 AMO. The CAAS PMI will also send an electronically scanned copy of the letter to the SAR-145 AMO and to the FAA.
  - 5.4.3 Upon being by notified by the FAA for any other non-compliances resulting in FAA enforcement actions, such as civil penalties and/or letters of warning meted out to SAR-145 AMOs, the CAAS will conduct an investigation. If necessary, the CAAS will issue enforcement actions to the SAR-145 AMO.

## Appendix 1.

## **Guidance and Instructions for Developing the CAAS Supplement**

- The purpose of the CAAS Supplement is to set forth the procedures, means, and methods of the SAR-145 Approved Maintenance Organization (AMO) to comply with the relevant SAR-145 requirements and the Maintenance Implementation Procedures (MIP) requirements.
- 2. Compliance with its contents will assure compliance with the relevant SAR-145 requirements and the FAA–CAAS MIP requirements, which is a prerequisite to obtaining and retaining the SAR-145 Maintenance Organization Approval.
- 3. When developing the CAAS Supplement, it is important to ensure that it is customized to each organization 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 Repair Station Manual/Quality Control Manual (RSM/QCM) are acceptable to reduce redundant procedures as long as the references are clearly identified and the CAAS Special Conditions are fulfilled in the RSM/QCM.
- 6. The quality assurance system must include audits for the CAAS Special Conditions.
- 7. 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 FAA RSM/QCM

(The cover page of the CAAS Supplement to the RSM/QCM must include the following)

#### CIVIL AVIATION AUTHORITY OF SINGAPORE

## APPROVED MAINTENANCE ORGANISATION SUPPLEMENT TO THE FAA RSM/QCM

#### FOR THE

#### SAR-145 MAINTENANCE ORGANISATION APPROVAL

## **GRANTED UNDER THE FAA-CAAS MIP**

## COMPANY NAME

## FAA 14 CFR PART 145 CERTIFICATE NUMBER:

CAAS SAR-145 APPROVAL NUMBER:

## FACILITY ADDRESS

FAA RSM Document Number:				
FAA QCM Document Number:				
CAAS Supplement Document Number:	Issue/Revision Number:			

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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 FAA for acceptance. This shall be in the form of an LEP, with each page numbered and either dated or marked with a revision number.

PAGE	<b>REVISION</b>	DATE	PAGE	<b>REVISION</b>	DATE
1	0	10 Oct 2016	13	0	10 Oct 2016
2	0	10 Oct 2016	14	0	10 Oct 2016
3	0	10 Oct 2016	15	0	10 Oct 2016
4	0	10 Oct 2016	16	0	10 Oct 2016
5	0	10 Oct 2016	17	0	10 Oct 2016
6	0	10 Oct 2016			
7	0	10 Oct 2016			
8	0	10 Oct 2016			
9	0	10 Oct 2016			
10	0	10 Oct 2016			
11	0	10 Oct 2016			
12	0	10 Oct 2016			

CAAS Supplement: [Document Number] First Issue / Amendment 0 is accepted.

SAR-145 AMO SIGNED:	FAA SIGNED:
DATE:	DATE:

## AMENDMENT RECORD LIST

Amendment Number	Amendment Date	Details	Inserted By	Insertion Date

## PART 1. MANAGEMENT

1.1 Corporate Commitment by the Accountable Manager.

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 14 CFR parts 43 and 145, the relevant SAR-145 requirements, and the MIP requirements.

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 FAA.

This supplement, along with the FAA RSM/QCM and any associated referenced manuals, define the organisation and procedures upon which the Civil Aviation Authority of Singapore (CAAS) SAR-145 approval is granted under the terms of the FAA-CAAS Maintenance Implementation Procedures (MIP) and regulations issued by the Federal Aviation Administration and the Civil Aviation Authority of Singapore. 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 organization fully understands the terms of the MIP and that by complying with the CAAS Special Conditions and the 14 CFR parts 43 and 145, it will be complying with the corresponding sections of SAR-145 regulation. I understand that the issuance of the SAR-145 Maintenance Organisation Approval is subject to compliance with the CAAS Special Conditions and 14 CFR parts 43 and 145. Failure to comply with the requirements of the CAAS Special Conditions or 14 CFR parts 43 and 145 regulations 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 FAA 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 FAA and CAAS personnel with unimpeded access to its facilities for the purpose of determining compliance with the SAR-145 requirements and CAAS Special Conditions, SIS inspections, and/or investigations for suspected violations. I agree to ensure that this CAAS Supplement will be maintained and kept current by this organization and is accessible to all personnel. I further agree to submit revisions to this CAAS Supplement to the FAA 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)

1.2 Management Personnel.

Contained within this part of the CAAS Supplement should be the names of the management personnel that are responsible for the maintenance activities performed under the SAR-145 approval.

It should minimally include the following personnel, if applicable:

- a. Accountable Manager.
- b. Quality Manager.
- c. Base and/or Line Maintenance Managers.
- d. Workshop Maintenance Managers/Supervisors.
- e. Other personnel as determined by the SAR-145 AMO; e.g., Nondestructive Testing (NDT) Responsible Level 3.

The management personnel specified above is required to be identified and their credentials submitted on form CAAS(AW)22 to the CAAS.

Besides identifying the names of the respective management personnel, this part of the CAAS Supplement must also contain the procedures to make clear the identified personnel who will deputize for any particular manager in the case of lengthy absence of said manager(s). The length of absence to justify deputizing is the period beyond which the organization cannot function properly due to such absence.

1.3 Duties and Responsibilities of the Management Personnel.

The functions defined below are typical for management personnel of a SAR-145 AMO. Any additional duties and responsibilities may be added for an individual provided that they do not conflict with those of the other management personnel.

**NOTE:** It is important to note that the quality system of a SAR-145 AMO is required to be independent, which will mean that the Quality Manager and the Quality Monitoring Staff are not directly involved in the maintenance process or with maintenance certification.

- 1.3.1 Accountable Manager.
  - a. The Accountable Manager is responsible for ensuring that maintenance carried out by the approved organization meets the standards required by the CAAS.
  - b. He/She is responsible for ensuring that the necessary finance, manpower resources, and facilities are available to enable the organisation to perform the maintenance to which it is committed for contracted operators, and any additional work that may be undertaken.
  - c. He/She is responsible for ensuring that any applicable charges are paid, as prescribed by the CAAS in respect of the SAR-145 approval.
  - d. He/She is responsible for establishing and promoting the safety and quality within the SAR-145 AMO.
  - e. He/She is responsible for nominating the senior person for monitoring of the quality system.
  - f. He/She is responsible for ensuring the competence of all personnel, including management personnel, has been assessed.
- 1.3.2 Quality Manager.
  - a. The Quality Manager is responsible for establishing an independent quality system to monitor compliance with the terms of the MIP, in particular the CAAS Special Conditions and the requirements of the MAG between the FAA and the CAAS.
  - b. He/She is responsible for implementing a quality audit programme in which compliance with all maintenance procedures is reviewed at regular intervals, in relation to each type of aircraft (or component) maintained, and any observed non-compliances or poor standards are brought to the attention of the person concerned via his/her manager.

- c. The Quality Manager has direct access to the Accountable Manager in the event of any reported discrepancy not being adequately attended to by the relevant person, or in respect of any disagreement over the nature of a discrepancy.
- 1.3.3 Base, Line, and/or Workshop Maintenance Managers. The Maintenance Manager is responsible for:
  - a. The satisfactory completion and certification of all work required by contracted operators/customers, in accordance with the work specification.
  - b. Ensuring that the organisation's procedures and standards are complied with when carrying out maintenance.
  - c. Ensuring, through the workforce under his/her control, that the quality of workmanship in the final product is to a standard acceptable to the organisation and the CAAS.
  - d. Ensuring the competence of all personnel engaged in maintenance by establishing a programme of training and continuation training using:
    - 1. Internal and external sources.
    - 2. On-the-job instruction and evaluation.
    - 3. Examination/testing as necessary.
    - 4. Record retention of all training and experience of maintenance-related personnel.
  - e. Ensuring that all sub-contract orders are correctly detailed and that the requirements of the contract/order are fulfilled in respect of inspection and quality control.
  - f. Responding to quality deficiencies in the area of activity for which he/she is responsible that arise from independent quality audits.

1.4 Management Organization Chart. Some outline examples of organizational structures possible for a SAR-145 AMO are listed below.

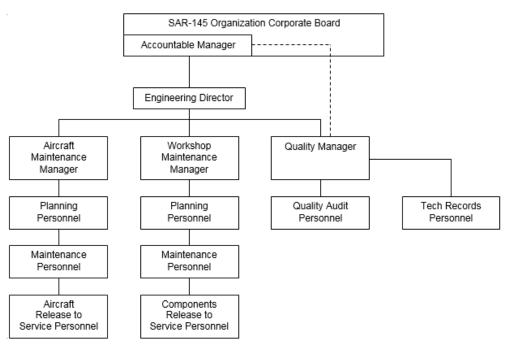


Figure B-1. Typical Large Organization

For a large organization, the Engineering Director may be the Accountable Manager if it is a Corporate Board position and meets the other requirements for an Accountable Manager. Typically, such a position is entitled Vice President (Engineering).

Quality Audit personnel must remain independent of the Maintenance Manager. Release to Service (RTS) personnel may report instead to the Quality Manager position.



Figure B-2. Typical Small Organization

- 1.5 List of Certifying Staff (RTS Personnel).
  - 1.5.1 Base Maintenance Certifying Staff (applicable for A1-rated SAR-145 AMO with Base Maintenance Privileges): List the nominated SAR-66 Category C personnel along with the privileges granted to the personnel.
  - 1.5.2 Base Maintenance Category B1 and B2 Qualified Support Staff (applicable for A1-rated SAR-145 AMO with Base Maintenance Privileges): List the Category B1 and B2 or equivalently approved certifying personnel who are nominated to support the maintenance of an aircraft undergoing base/heavy maintenance.
  - 1.5.3 Line Maintenance Certifying Staff (applicable for A1-rated SAR-145 AMO with Line Maintenance Privileges): List the nominated Category B1 and B2 or equivalently approved certifying personnel along with the privileges granted to the personnel.
  - 1.5.4 Component Maintenance Certifying Staff (applicable for B and C-rated SAR-145 AMO): List the nominated personnel authorized to issue form CAAS(AW)95.
- 1.6 Scope of Work.

This section of the supplement must show 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 ratings or limitations shall not exceed the 14 CFR part 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 is accepted by the FAA and there is a clear identification of difference in approval for scope of work under the SAR-145 approval and FAA repair station 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.

1.7 Notification Procedure to the CAAS Regarding Changes to the Organization's Activities/Approval/Location/Personnel.

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

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

The SAR-145 AMO must establish procedures to ensure that the CAAS Supplement remains current and it should identify the following:

a. Person responsible for amending the CAAS Supplement.

**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.

- b. Sources of proposed amendments within the organisation.
- c. Summary of referenced documents, including lower order documents, constituting the total CAAS Supplement.
- d. Procedures for the control and amendment of the CL.

# PART 2. MAINTENANCE PROCEDURES

2.1 Acceptable Aircraft Components/Parts/Materials.

The SAR-145 AMO can only use aircraft components/parts/materials that are acceptable to the CAAS. This section of the CAAS Supplement will contain procedures on how the SAR-145 AMO will comply with this CAAS Special Conditions.

- 2.1.1 New Parts. The SAR-145 AMO will describe the procedures to ensure only new aircraft parts that have at least one of the following Authorised Release Certificates (ARC) can be fitted onto a Singapore-registered aircraft:
  - a. CAAS(AW)95.
  - b. CAAS(AW)96 in the case of re-issued parts.
  - c. European Aviation Safety Agency (EASA) Form 1, Authorised Release Certificate.
  - d. FAA Form 8130-3, Application for Repair Station Certificate and/or Rating.
  - e. Joint Aviation Authority (JAA) Form One issued prior to 28 November 2003 by a production organisation approved by a JAA Full Member State.
  - f. JAA Form One issued prior to 28 November 2005 by a production organisation approved by a competent authority in accordance with its national regulations.
- 2.1.2 Maintained Parts. The SAR-145 AMO will describe the procedures to ensure only maintained aircraft parts that have the following ARC can be fitted onto a Singapore-registered aircraft:

Types of Parts	Maintenance Release Documents/Equivalent Release Documents
Maintained parts and components, excluding	1. CAAS(AW)95.
engines, engine modules, and auxiliary power units (APU)	2. Transport Canada Civil Aviation (TCCA) Form One, Authorized Release Certificate, issued by an organisation accepted by the CAAS under the Technical Arrangement on Aviation Maintenance between TCCA and CAAS.
	3. FAA Form 8130-3 issued by a 14 CFR part 145 repair station located in the United States.
	<ol> <li>EASA Form 1 issued by an EASA Part-145 approved maintenance organisation located in an EASA Member State*.</li> </ol>
	<ol> <li>JAA Form One issued before 1 June 2009 by a JAR-145 approved maintenance organisation located in a JAA Full Member State.</li> </ol>
	<ol> <li>Hong Kong Civil Aviation Department (HK CAD) Form One, Authorised Release Certificate, issued by an organisation accepted by the CAAS under the Technical Arrangement on Aviation Maintenance between CAAS and HK CAD.</li> </ol>
	7. Australia's Civil Aviation Safety Authority (CASA) Form 1, Authorised Release Certificate, issued before 1 July 2014 by a Civil Aviation Safety Regulation (CASR) Part 145 approved maintenance organisation located in Australia, or issued by an organisation accepted by the CAAS under the Technical Arrangement on Aviation Maintenance between CAAS and CASA.
Maintained engines, engine modules, APU, and propellers	1. CAAS(AW)95.
modules, Ar 0, and properties	2. TCCA Form One issued by an organisation accepted by the CAAS under the Technical Arrangement on Aviation Maintenance between TCCA and CAAS.
	3. HK CAD Form One issued by an organisation accepted by the CAAS under the Technical Arrangement on Aviation Maintenance between CAAS and HK CAD.
	4. CASA Form 1 issued by an organisation accepted by the CAAS under the Technical Arrangement on Aviation Maintenance between CAAS and CASA.

# Table B-1.Maintained Parts and Release Documents

2.2 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:

- 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 refers 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 operator- or customer-provided maintenance data, it is not necessary to hold such provided data.

#### 2.3 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 are used.

- 2.3.1 Minor repairs may be carried out with repair data designed and approved by the following:
  - a. Holder of a Design Organisation Approval under SAR-21 subpart H with the relevant scope of approval as specified in the certificate.
  - b. Holder of a CAAS letter of type acceptance for a product or article associated with the product or article that is to be repaired.
  - c. Holder of a design approval issued by the FAA.
  - d. Design approval holder (DAH) of that product or article. The design approval in this case means the holder of a design approval issued by the State of Design for the aircraft and the TC of the aircraft is accepted by the CAAS under a letter of type acceptance.

- 2.3.2 Major repairs may only be carried out in accordance with repair data approved by the CAAS, except when the repair data is issued by:
  - a. An FAA TC holder (i.e., Boeing, Pratt & Whitney, Rolls Royce, etc.).
  - b. An FAA-approved Organization Designation Authorization (ODA).
  - c. An FAA-approved Designated Engineering Representative (DER).

For such repair data, the CAAS approval is not required. However, the CAAS will need to be informed within 1 month after the completion of the repair using such repair data.

- 2.3.3 Minor modification to a product may be made in accordance with data approved by the CAAS or by a CAAS-approved SAR-21 Design Organisation.
- 2.3.4 Major modification to a product must not be made without CAAS approval.
- 2.4 Airworthiness Directives (AD) Control Procedures.

Within this section of the CAAS Supplement, the SAR-145 AMO will 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.

**NOTE:** 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.

2.5 Maintenance Documentation in Use and Its Completion.

Within this section of the CAAS Supplement, the SAR-145 AMO must 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 work 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 work cards or worksheets to indicate what was actually accomplished by each individual person.

2.6 Release to Service Procedure.

Within this section of the CAAS Supplement, 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.

- 2.6.1 The following are conditions that will require a CRS to be issued:
  - a. A CRS is necessary before flight at the completion of any package of maintenance specified by the aircraft operator in accordance with such operator's responsibility in the Air Operator Certificate (AOC) requirements. 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.
  - b. A CRS is necessary before flight at the completion of any defect rectification whilst the aircraft operates flight services between scheduled maintenance.
  - c. A CRS is necessary at the completion of any maintenance on an aircraft component whilst off the aircraft.
- 2.6.2 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:
  - a. The person who carried out the scheduled line maintenance tasks and unscheduled defect rectification should carry out the inspection function. This 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.

- b. 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.
- 2.6.3 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:
  - a. The authorised base maintenance Category B1 and B2 support staff 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 sign-offs support the issue of a release to service by the authorised base maintenance Category C certifying staff following base maintenance.
  - b. 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.
  - c. The base maintenance Category C 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.
- 2.6.4 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:
  - a. 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.
  - b. 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.
  - c. The ARC identified as form CAAS(AW)95 (see Section B, Appendix 4) constitutes the aircraft component CRS when an aircraft component is maintained off an aircraft and in a component workshop environment.

2.6.5 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 authorized certifying staff on behalf of the SAR-145:

a. 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.

**NOTE:** The Release to Service statement in Block 19 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.

- b. 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.
- c. 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.
- d. 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.
- e. 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.
- f. 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 FAA and the CAAS will need to be satisfied that only the particular person can electronically issue the release to service.

2.6.6 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:

- a. Inform the aircraft operator that all maintenance required to be accomplished cannot be achieved within the operator's limitation.
- b. Seek agreement from the aircraft operator to defer the required maintenance task(s).
- c. 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.

2.6.7 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.

2.7 Mandatory Reporting of Defects to the CAAS/Operator/Manufacturer.

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

The SAR-145 AMO must ensure 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.

The SAR-145 AMO should ensure 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:

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

# PART 3. INDEPENDENT QUALITY SYSTEM

3.1 Independent Quality Audit.

An essential element of the quality system is the independent audit. The independent audit is an objective process of routine sample checks of all aspects of the SAR-145 AMO's ability to carry out all maintenance to the required standards and includes some product sampling as this is the end result of the maintenance process. It represents an objective overview of the complete maintenance-related activities and is intended to complement the requirement for certifying staff to be satisfied that all required maintenance has been properly carried out before issuance of the CRS. Independent audits should include a percentage of random audits carried out on a sample basis when maintenance is being carried out. This means some audits during the night for those organisations that work at night.

As such, the SAR-145 AMO must describe in the CAAS Supplement the procedures to establish an independent quality system. It must include independent audits to monitor compliance with required aircraft/aircraft component standards and adequacy of the procedures. This ensures that such procedures invoke good maintenance practices and airworthy aircraft/aircraft components.

The independence of the audit should be established by always ensuring that audits are carried out by personnel not responsible for the function, procedure, or products being checked.

It, therefore, follows that a SAR-145 AMO should have a dedicated quality group whose functions include conducting audits, raising finding reports, and following up to check that findings are being rectified. In addition, the SAR-145 AMO may use competent personnel from one section/department not responsible for the production function, procedure, or product to audit the section/department that is responsible, subject to the overall planning and implementation being under the control of the quality manager.

The SAR-145 AMO must establish procedures to perform an independent audit and that:

- a. The independent audit should ensure that all aspects of SAR-145 compliance are checked 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 independent audit does not require each procedure to be checked against each product line when it can be shown that the particular procedure is common to more than one product line and the procedure has been checked every 12 months without resultant findings. Where findings have been identified, the particular procedure should be audited more frequently against other product lines until the findings have been rectified. Once the findings are satisfactorily mitigated, the independent audit schedule may revert back to the 12-month schedule for the particular procedure.
- b. The independent audit should sample check one product on each product line every 12 months as a demonstration of the effectiveness of maintenance procedures compliance. It is recommended that procedures and product audits be combined by selecting a specific product example (such as an aircraft, engine, or instrument) and sample checking all the procedures and requirements associated with the specific product example to ensure that the end result should be an airworthy product.

For the purpose of the independent audit, a product line includes any product under an approval class rating as specified in the SAR-145 approval schedule issued to the particular organisation.

It, therefore, follows for example that a SAR-145 AMO with a capability to maintain aircraft (A1), repair engines (B1), brakes (C14), and autopilots (C2) would need to carry out four complete audit sample checks each year.

The sample check of a product means to witness any relevant testing and visually inspect the product and associated documentation. The sample check should not involve repeat disassembly or testing unless the sample check identifies findings requiring such action.

Where the SAR-145 AMO has additional facilities, the quality system should describe how these are integrated into the system and include a plan to audit each listed additional facility at a frequency consistent with the extent of flight activity at the particular line station. Except otherwise as agreed by the CAAS, the maximum period between audits of a particular additional facility should not exceed 24 months.

A report should be raised each time an audit is carried out describing what was checked and the resulting findings against applicable requirements, procedures, and products.

3.2 Quality Audit Feedback and Remedial Actions.

An essential element of the quality system is the quality feedback system. The quality feedback system may not be contracted to outside persons. The principal function of the quality feedback system is to ensure that all findings resulting from the independent quality audits of the organisation are properly investigated and corrected in a timely manner. The quality feedback system must also enable the Accountable Manager to be kept informed of any safety issues and the extent of compliance with the CAAS Special Conditions and 14 CFR parts 43 and 145.

As such, the SAR-145 AMO must describe in the CAAS Supplement the procedures to establish a quality system that includes a quality feedback reporting system to all the relevant management personnel and, ultimately, to the Accountable Manager. This ensures proper and timely corrective action is taken in response to reports resulting from the independent quality audits.

The independent quality audit reports should be sent to the relevant department(s) for rectification action giving target rectification dates. Rectification dates should be discussed with such department(s) before the quality department or nominated quality auditor confirms such dates in the report. The relevant department(s) are required to rectify findings and inform the quality department or nominated quality auditor of such rectification.

The Accountable Manager should hold regular meetings with staff to check progress on rectification. In large organisations, however, such meetings may be delegated on a day-to-day basis to the quality manager subject to the Accountable Manager meeting at least twice per year with the senior staff involved to review the overall performance and receiving at least a half-yearly summary report on findings of non-compliance.

All records pertaining to the independent quality audit and the quality feedback system should be retained for at least 2 years after the date of clearance of the finding to which they refer.

3.3 Quality Audit Personnel.

The SAR-145 AMO must describe within the CAAS Supplement the procedures to establish the competency for personnel identified to perform audits and surveillance.

Such quality audit personnel should be able to monitor compliance with the CAAS Special Conditions and 14 CFR parts 43 and 145, and identify non-compliance in an effective and timely manner. This would allow the SAR-145 AMO to remain in compliance with the CAAS Special Conditions and 14 CFR parts 43 and 145.

The SAR-145 AMO should also establish procedures to ensure initial and continuation trainings are provided for quality audit personnel. This ensures that they are competent and up-to-date with the relevant regulatory requirements, organisation procedures, and human factor issues identified from any internal or external analysis of incidents.

3.4 Line and Base Maintenance Certifying Staff (RTS Personnel) Qualification and Training Procedures.

The SAR-145 AMO must establish procedures to ensure that the Certifying Staff (RTS personnel) that will be issuing the CRS on behalf of the SAR-145 AMO are appropriately qualified and met the experience requirements as indicated in the following paragraphs.

The Quality Manager is normally responsible for the granting of authorization to a Certifying Staff (RTS personnel). He/she will ensure that the due process of reviewing the qualification and assessment of competency is accomplished prior to granting the authorization to the Certifying Staff (RTS personnel).

3.4.1 Qualifications.

For Line Maintenance, Line Maintenance Certifying Staff (RTS personnel) must hold the FAA Airframe and Powerplant (A&P) license and must receive the relevant aircraft type training to the standard of Air Transport Association (ATA) 104 Level III for the type of aircraft for which he/she will perform maintenance and issue the CRS.

Where it is only necessary to authorize the Line Maintenance Certifying Staff (RTS personnel) for tasks that do not exceed those of routine servicing and minor troubleshooting, the Certifying Staff (RTS personnel) may receive the relevant aircraft type training to the standard of ATA 104 Level II Ramp and Transit standard in lieu of ATA 104 Level III training.

For Base Maintenance, Base Maintenance Certifying Staff (RTS personnel) is required to hold an appropriately rated SAR-66 Category C Aircraft Maintenance License.

Base Maintenance Qualified Support Staff must hold the FAA A&P license and must receive type training to the standard of ATA 104 Level III.

3.4.2 Experience Requirements.

When authorising a person as a new line maintenance certifying staff (RTS personnel) or a base maintenance qualified support staff, the SAR-145 AMO should ensure that the FAA A&P license holder has held an appropriate license and has been exercising its privileges for at least 2 years.

When authorising a person as a new base maintenance certifying staff (RTS personnel), the SAR-145 AMO should ensure that the FAA A&P license holder has held an appropriate license and been exercising its privileges for at least 3 years.

The SAR-145 AMO must ensure that all aircraft release Certifying Staff (RTS personnel) are involved in at least 6 months of aircraft maintenance experience in the preceding 2-year period.

3.5 Training Procedures.

The SAR-145 AMO must ensure that all certifying staff have adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained together with the associated organisation procedures.

3.5.1 Initial Training. The SAR-145 AMO must establish procedures for certifying staff to receive initial training and pass an examination or has relevant maintenance experience and passed an examination on the product type and associated organisation procedures such that the person understands how the product functions and what are the more common defects with associated consequences.

The procedures should also ensure that the certifying staff undergoes human factors training with an adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained together with the associated organisation procedures. The person must have received training and passed an examination, or has relevant maintenance experience and passed an examination on the product type and associated organisation procedures. The person must understand how the product functions and what are the more common defects with associated consequences.

3.5.2 Continuation Training. The SAR-145 AMO must establish procedures for certifying staff to receive continuation training, which covers changes in relevant regulatory requirements, such as the CAAS Special Conditions and 14 CFR parts 43 and 145. Training must include changes in organisation procedures, the modification standard of the products being maintained, and human factor issues identified from any internal or external analysis of incidents.

The continuation training should also address instances where staff failed to follow procedures and the reasons why particular procedures are not always followed. In many cases the continuation training will reinforce the need to follow procedures and ensure that incomplete or incorrect procedures are identified to the company in order that they can be corrected. This does not preclude the possible need to carry out a quality audit of such procedures.

Continuation training should be of sufficient duration in each 2-year period and it may be split into a number of separate elements.

# PART 4. APPENDICES TO THE CAAS SUPPLEMENT

4.1 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.

4.2 Sample of Forms/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 2. SAR-145 Approval Application Package

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

FORM NUMBER	TITLE	URL
CAAS(AW)114	Prospective Applicant's Pre-assessment Statement of Intent (PAPSI)	http://www.caas.gov.sg/caasWeb20 10/export/sites/caas/en/eServices F orms/Organisations_Approval.html? locale=en
CAAS(AW)21	Application Form for SAR-145 Approval of Organisation	http://www.caas.gov.sg/caasWeb20 10/export/sites/caas/en/eServices F orms/Organisations Approval.html? locale=en
CAAS(AW)22	Personnel Résumé	http://www.caas.gov.sg/caasWeb20 10/export/sites/caas/en/eServices_F orms/Organisations_Approval.html? locale=en
CAAS MIP Audit Report	FAA completes this report for Initial, Renewal, Change/Amendment, or other recommendations on the SAR-145 AMO	CAAS MIP Audit Report

Table B-2.CAAS Forms and Websites

# Appendix 3. Reference Documents

# Table B-3.

## Summary of Forms/Documents to be Submitted for SAR-145 Approval

# **INITIAL APPLICATION:**

**Preapplication Phase** 

- 1. Letter of Intent (LOI)
- 2. CAAS(AW)114

Formal Application Phase

- 1. Formal Application Letter
- 2. CAAS(AW)21
- 3. CAAS(AW)22
- 4. Copy of current FAA 14 CFR part 145 certificate and operations specifications (OpSpecs)
- 5. CAAS Supplement
- 6. Capability List (CL)

# **RENEWAL APPLICATION:**

- 1. CAAS(AW)21
- 2. Copy of current FAA 14 CFR part 145 certificate and OpSpecs
- 3. CAAS Supplement
- 4. Capability List (CL)
- 5. Demonstration of Continuing Need for SAR-145 Maintenance Organisation Approval

# CHANGE/AMENDMENT APPLICATION:

- 1. CAAS(AW)21
- 2. Copy of current FAA 14 CFR part 145 certificate and OpSpecs
- 3. CAAS Supplement, if changes were required
- 4. Capability List (CL)

# Appendix 4. 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 release assemblies/items/components/parts (hereafter referred to as "item(s)") after manufacture and to release maintenance work carried out on such items under the approval of the CAAS to allow items removed from one aircraft/aircraft component to be fitted to another aircraft/aircraft component.
- 2.2 The Certificate referenced form CAAS(AW)95 is called the Authorised Release Certificate (ARC).
- 2.3 The Certificate is to be used for export/import purposes, as well as for domestic purposes, and serves as an official certificate for items from the manufacturer/maintenance organisation to users. The certificate is not a delivery or shipping note.
- 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 may be used as a rotable tag by utilising the available space on the reverse side of the Certificate for any additional information and despatching the item with two copies of the Certificate so that one copy may be eventually returned with the item to the maintenance organisation. The alternative solution is to use existing rotable tags and also supply a copy of the Certificate.
- 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 Organizations (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 13, a clear statement of limitation should be endorsed in Block 13.
- 2.8 Aircraft may not be released using the Certificate.

# 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 Completion of the Certificate shall be 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 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 **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 Pre-printed "Singapore."
  - Block 2 Pre-printed as shown in the sample copy of the Certificate.
  - 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.
  - 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 reference work order/contract/invoice or any other internal organisational process such that a fast traceability system can be established.
  - Block 6 This block is provided for the convenience of the organisation issuing the Certificate to permit easy cross-reference to the "Remarks" Block 13 by the use of item numbers. Completion is not mandatory.

Where a number of items are to be released on the Certificate, it is permissible to use a separate listing cross-referring Certificate and list to each other. 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 The name or description of the item shall be given. Preference should be given to use of the Illustrated Parts Catalogue (IPC) designation.
- Block 8 State the part number. Preference shall be given to use of the IPC number designation.
- Block 9 Used to indicate the type-approved products for which the released items are eligible for installation. Completion of this block is optional. But if used, the following entries are permitted:
  - a. The specific or series aircraft, engine, propeller, or auxiliary power unit (APU) model, or a reference to a readily available catalogue or manual that contains such information. For example, "A300."
  - b. "Various," if known to be eligible for installation on more than one model of type-approved product, unless the originator wishes to restrict usage to a particular model installation when it should so state.

c. "Unknown," if eligibility is unknown. This category being primarily for use by maintenance organisations.

**NOTE:** Any information in Block 9 does not constitute authority to fit the item to a particular aircraft, engine, propeller, or APU. The user/installer must confirm via documents, such as the parts catalogue, service bulletins, etc., that the item is eligible for the particular installation.

- Block 10 State the number of items being released.
- Block 11 State the item Serial Number and/or Batch Number, if applicable. If neither is applicable, state "N/A."
- Block 12 The following words, with their definitions, indicate the status of the item being released. One or a combination of these words shall be stated in this block:
  - 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 13 to the approved data/manual/specification used during maintenance.

Block 13 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 a customer work order.
- g. Identity of national regulation if not SAR-145.

**NOTE:** A "Dual Release" documenting an FAA release on the CAAS(AW)95 form is not allowed.

- 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 14–18 Must not be used for maintenance tasks by SAR-145 AMOs and should be crossed out. These blocks are specifically reserved for the release/certification of newly manufactured items by manufacturing organisations approved under Section 6 of the SAR.
- Block 19 Contains the required SAR-145.50(b) release to service statement for all maintenance by SAR-145 AMOs. When non-SAR-145 maintenance is being released, Block 13 should specify the particular national regulation. In any case, the appropriate box should be ticked to validate the release.

The certification statement except as otherwise stated in Block 13 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 13.

Block 20 For the signature of the certifying staff authorised by the SAR-145 AMO. This signature can be computer printed, subject to the Authority being satisfied that only the signatory can direct the computer and that a signature is not possible on a blank computer-generated form.

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

- Block 21 The SAR-145 AMO approval number given by the Authority.
- Block 22 The name of the Block 20 signatory and personal authorisation reference shall be typed or printed in a legible form.
- Block 23 The date of signing the Block 19 release to service. The format should be d/m/y. 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.

#### 5 Effectivity.

- 5.1 Except as stated in paragraph 5.2, the ARC form CAAS(AW)95 published in the first issue of SAR-145, dated 1 January 1996, should be used for the release of all parts from the date that the maintenance organisation received its SAR-145 approval.
- 5.2 Issue 2 of the ARC form CAAS(AW)95 should be used for the release of all items from 1 January 2004, but may be used prior to that date if available to the SAR-145 AMO and approved by the Authority.

# Figure B-3. Sample of Form CAAS(AW)95

1. Country SINGAPORE 2. CIVIL AVIATION AUTHORITY OF SINGAPORE AUTHORISED RELEASE CERTIFICATE CAAS(AW)95					3. Form Tracking Number					
4. Approved Organisation Name and Address								5. Work Order/Contract/Invoice		
6. Item 7.	6. Item 7. Description		8. Part No.	9. Eligibility *		10. Quantity	11. Serial/Batch No.		12. Status/Work	
13. Remarks	5									
14. NEW PARTS Certifies that the items identified above were manufactured in conformity				conformity	19. USED PARTS □ SAR-145.50 Release to Service					
to: Approved design data and are in condition for safe operation				eration	□ Other regulation specified in Block 13					
Non-approved design data specified in Block 13				Certifies that unless specified in Block 13, the work identified in Block 12 and described in Block 13, 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.						
15. Authorised Signature 16. CAAS Approval No.			20. Authorised Signature 21. CAAS Approval No.			oroval No.				
17. Name 18. Date (d/m/y)			22. Name 23. Date (d/m/y)							
CAAS(AW)95 - Issue 2 * Installer must cross check eligibility with applicable technical data										

(Front)

US	SER / INSTALLER RESPONSIBILITIES
NC	DTE:
1.	It is important to understand that the existence of the Certificate 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 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.
3.	Statements 14 and 19 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)

# MAINTENANCE AGREEMENT GUIDANCE

# BETWEEN THE

# FEDERAL AVIATION ADMINISTRATION

# AND THE

# **CIVIL AVIATION AUTHORITY OF SINGAPORE**

# Section C. Requirements for Repair Stations Located in Singapore

**1.0 INTRODUCTION.** This section of the MAG sets forth procedures for initial application, renewal, or amendment of a 14 CFR part 145 certificate under the provisions of the Maintenance Implementation Procedures (MIP) applicable to FAA repair stations located in Singapore.

**NOTE:** The term repair station and Approved Maintenance Organization (AMO) are synonymous.

- 1.1 Basic Eligibility. To be eligible under the MIP, an applicant must meet all of the following requirements:
  - a. Hold a current CAAS SAR-145 approval in the Republic of Singapore. The FAA ratings and limitations are dependent on the SAR-145 ratings and limitations. The level of capability authorized under the FAA ratings or limitations will not exceed the SAR-145 approval and its approval schedule.
  - Demonstrate that the certificate and rating is necessary to maintain or alter U.S.-registered aircraft and/or aeronautical products to be installed on U.S.-registered aircraft.
  - c. Pay the fees imposed by the FAA in accordance with 14 CFR part 187 and the terms of the Agreement.
  - d. Comply with the requirements of the MIP and the conditions in the MAG.
  - e. Have knowledge of the MIP, MAG, and FAA regulations.
- 1.2 Terms and Explanations. The following terms and explanations apply to Section C of the MAG.
  - a. Capability List (CL). The CL, as required by SAR-145.70(a)(9), must be in a format that identifies any difference in approval of CAAS articles from FAA articles, and must identify the level of capability of each article. (Example: overhaul, repair, inspect, test, \*FAA only.) If using a CL, the list is authorized in FAA operations specification (OpSpec) A003.
  - b. FAA Contacts. The Los Angeles International Field Office (IFO) is responsible for 14 CFR part 145 certificates and applicable fees. The IFO may be contacted at the following:

Los Angeles International Field Office 15000 Aviation Blvd, Suite 3026 Lawndale, CA 90261

Phone: (310) 725-7330 Fax: (310) 725-6679 Email: 9-LAX-IFO-SINGAPORE-MAG@FAA.GOV

- c. FAA Form 8310-3. This form is the Application for Repair Station Certificate and/or Ratings. This form is required for initial, renewal, and change/amendment to the certificate or OpSpecs. Instructions for completing the form are included with the form.
- d. FAA Form 8400-6. This form is the Preapplication Statement of Intent (PASI). This form is completed by an applicant and used only for initial certification.
- e. FAA MIP Audit Report. This report is completed by the CAAS to document surveillance and recommendations of the repair station to the FAA. The CAAS is required to complete this report for each initial, renewal, and change/amendment to the 14 CFR part 145 certificate or OpSpecs. Sampling Inspection System (SIS) corrective actions may also be documented on this report to recommend closure of the SIS items to the FAA.
- f. Repair Station Vital Information. This job aid is completed by the repair station. Submission of the Repair Station Vital Information provides valuable data to the FAA for certification and/or for amending the certificate and OpSpecs. The job aid is required for initial certification, renewal, and for request of change in operations.
- g. FAA Supplement to the Maintenance Organization Exposition (MOE). The FAA Supplement to the MOE must have detailed procedures describing how to comply with the FAA Special Conditions. Any revision to the FAA Supplement must be approved by the CAAS prior to performing operations under the revised procedures. See Section C, Appendix 1 for additional requirements.
- h. Hazardous Materials (Hazmat) Letter. If the repair station and/or its contractors and subcontractors perform a job function that concerns transportation of dangerous goods (i.e., hazmat), the repair station must train its employees to the hazmat standards. A letter from the repair station certifying that the appropriate employees have been trained as outlined in the current edition of the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air as specified in Annex 18 and technical instructions in Doc 9284 is required to be submitted to the CAAS. If the repair station is involved in the loading or handling of dangerous goods on a U.S.-registered aircraft, the repair station's employees must be trained in accordance with the air carrier's hazmat training program.
- i. Perceived or Continuing Need. Title 14 CFR part 145, section 145.51(c)(1), requires that the applicant show the necessity for a certificate and rating. The applicant must have a current or future operational or economic need (i.e., a perceived need) for the maintenance, preventive maintenance, or alteration of aeronautical articles subject to the FAA's regulatory oversight. The applicant can express this perceived need by including a statement from an operator of U.S.-registered aircraft; a foreign-registered aircraft operated under the provisions of 14 CFR part 121 or 135; a company that maintains or alters articles to be installed on these aircraft indicating that the repair station's services are required; or documentation from a leasing company or a

supplier/distributor showing that the applicant's services are necessary provided the applicant can confirm in writing that the leasing company or supplier/distributor is doing business with operators of U.S.-registered aircraft.

- 1) A continued need with the above requirements is required at each renewal.
- 2) If the repair station is adding a new aircraft make/model, engine make/model, or propeller make/model (type-certificated product), or is asking for an additional rating, the repair station must provide a copy of the perceived need.
- 3) If a repair station adds a component, appliance, or part thereof to an existing rating authorized under a CL, the repair station is not required to show a perceived need for the additional item.
- j. TSA Aircraft Repair Station Security. Pursuant to Title 49 of the United States Code (49 U.S.C.) section 44924, the FAA must notify the U.S. Transportation Security Administration (TSA) when a 14 CFR part 145 certificate is issued outside of the United States.
- k. Work Away. A repair station may perform work away for special circumstances or on a recurring basis to support U.S.-registered aircraft or aircraft components for the fitment onto U.S.-registered aircraft. The following conditions must be adhered to:
  - The 14 CFR part 145 certificate will only cover additional fixed locations or line stations located within the Republic of Singapore. The fixed locations must be under surveillance by the CAAS. The FAA will not authorize permanent maintenance facilities outside of Singapore.
  - 2) The FAA must pre-authorize work outside of Singapore that is expected to take more than 30 days.
  - 3) The responsibility for the CAAS to conduct surveillance only within Singapore.
- 2.0 INITIAL APPLICATION PROCESS. This section of the MAG provides information for initial certification for obtaining a 14 CFR part 145 repair station certificate. The application process is illustrated in the diagram contained in the Initial Certification Flow Chart of this section. An applicant should be familiar with Section C of the MAG to understand the processes and responsibilities involved in the initial approval.
- 2.1 Initial Application.
  - 2.1.1 The initial 14 CFR part 145 repair station application process consists of the following five phases:
    - a. Preapplication.
    - b. Formal application.

- c. Document Compliance.
- d. Demonstration and Inspection.
- e. Certification.
- 2.1.2 Initial Inquiry. The applicant must arrange a preliminary meeting with the CAAS and discuss the certification requirements. During the preapplication phase, the applicant must familiarize themselves with the current editions of the following:
  - a. FAA-CAAS MIP.
  - b. FAA-CAAS MAG, specifically Section C.
  - c. Title 14 CFR Parts 43 and 145.
  - d. FAA Advisory Circular (AC) 187-1, Flight Standards Service Schedule of Charges Outside the United States.
- 2.2 Preapplication. To proceed with the initial application, the applicant is required to submit to the CAAS the relevant documents for preapplication as indicated in Section C, Appendix 2, Table C-4, Initial Application Documents, Preapplication.
  - 2.2.1 During the preapplication meeting, the applicant and the CAAS establish a timeframe for the certification process and communicate the certification expectations and requirements.
  - 2.2.2 The applicant should inform the CAAS at the earliest opportunity on its decision to proceed or to terminate the application. Failure to do so within 60 days will terminate the application.
  - 2.2.3 The CAAS will review the preapplication forms for eligibility. Blocks 1 through 5 of FAA Form 8310-3 must be completed.
- 2.3 Formal Application. To proceed to the formal application phase, the applicant is required to submit to the CAAS the documents listed in Section C, Appendix 2, Table C-4, Initial Application Documents, Formal Application.
  - 2.3.1 The CAAS will review the formal application to ensure completeness and acceptability. This will include an initial review of the proposed FAA Supplement in comparison with the sample in Section C, Appendix 1.
    - a. The FAA Supplement, along with the MOE, sets forth the structure and procedures of the repair station to meet the requirements of 14 CFR part 145. The FAA Supplement (as seen in the example in Section C) must be customized to the repair station procedures and accurately describe how the repair station meets the FAA Special Conditions.

- b. Instructions and a sample of the FAA Supplement are contained in Section C, Appendix 1.
- 2.3.2 Once the submission is verified, the CAAS will make copies of the following completed forms and forward them to the FAA's Los Angeles IFO for review.
  - a. FAA Form 8400-6 (PASI).
  - b. FAA Form 8310-3 (application).
  - c. Perceived Need Statement.
  - d. Repair Station Vital Information Job Aid (Section C, Appendix 2).
  - e. Hazmat Letter. If the repair station does not perform hazmat job functions, a letter is still required to declare this condition does not apply.
- 2.3.3 The FAA will communicate the certificate number to the CAAS. The CAAS will give the applicant the certification number and advise the applicant that it must only be used for the creation of forms/tags to support the final certification.
- 2.4 Document Compliance. The CAAS will review all submitted documents and will conduct a thorough review of the FAA Supplement in accordance with the MAG, Section C, Appendix 1. The CAAS will contact the applicant for any corrections.
- 2.5 Demonstration and Inspection. Once the documents are acceptable, the CAAS will perform an audit at the applicant's facility to verify SAR-145 continued compliance and compliance with the FAA Special Conditions.
  - 2.5.1 Verify that the FAA Supplement procedures will be followed. Additional procedures or changes to the FAA Supplement may be required based upon the results of the demonstration and inspection phase.
  - 2.5.2 If the CAAS discovers deficiencies in the application package, or after conducting an audit, the CAAS must ensure closure of any corrective action(s) before recommending the initial certification.
  - 2.5.3 If the applicant fails to correct the deficiencies within the timeframe (the CAAS allowed normally 30 days), the CAAS may terminate the application process and recommend non-approval to the FAA.
  - 2.5.4 In the event of unusual circumstances, the CAAS MIP Coordinator may notify and discuss an extension with the FAA Coordinator (IFO) if the applicant demonstrates an ability and willingness to correct the noted deficiencies. The extension must be mutually agreed upon.

- 2.6 Certification. When satisfied that the applicant is in compliance with all the FAA Special Conditions and SAR-145 regulations, the CAAS will recommend approval to the FAA.
  - 2.6.1 The Los Angeles IFO will review the completed package and send an invoice to the applicant for the fees applicable to the certification. Once the fees are paid, the FAA will issue the 14 CFR part 145 certificate and OpSpecs to the repair station.
  - 2.6.2 The Los Angeles IFO will provide the CAAS MIP Coordinator with a copy of the 14 CFR part 145 certificate and OpSpecs.
  - 2.6.3 Once the applicant receives the certificate and OpSpecs, the applicant may then exercise the privileges of the certificate.
  - 2.6.4 The expiration date will be printed on the certificate. The CAAS should receive the request to renew the 14 CFR part 145 certificate at least 120 days prior to the expiration date to allow sufficient time to renew. In most cases, the expiration date of the repair station certificate will be aligned with the expiration date of the SAR-145 approval.
  - 2.6.5 Depending on the type of operations, the TSA may contact the applicant for security requirements.
- 2.7 Initial Application Flow Chart.



- **3.0 RENEWAL APPLICATION PROCESS.** An application for the renewal of the 14 CFR part 145 certificate must be submitted in a form and manner acceptable to the FAA. To allow sufficient processing time, it is recommended that the renewal package be submitted to CAAS 120 days prior to the expiration date of the 14 CFR part 145 certificate. The repair station certificate will be issued for 12 months. The Renewal Flow Chart in this section illustrates the necessary steps for the renewal.
- 3.1 Renewal. The repair station must submit the documents listed in Section C, Appendix 2, Table C-4, Renewal Application Documents.
  - 3.1.1 Only authorized persons listed in OpSpec A007 may sign Block 5 of FAA Form 8310-3.
  - 3.1.2 The FAA Supplement must reflect current procedures and activities. Any revisions must be submitted to the CAAS for approval.

- 3.1.3 Repair Station Vital Information. This information is used by the FAA to populate the OpSpecs and the Safety Assurance System (SAS). The Repair Station Vital Information is required at each renewal to verify the data and to update any changes since the last renewal. This is also used for any new request of OpSpec authorizations.
- 3.2 Continued Compliance and CAAS Recommendation. The MIP allows the CAAS to perform audits on behalf of the FAA to verify continued compliance with FAA Special Conditions and SAR-145.
  - 3.2.1 When the CAAS is satisfied that the repair station is in compliance with all the FAA Special Conditions and SAR-145 regulations, the CAAS will recommend approval and forward the renewal application package to the FAA.
  - 3.2.2 Corrective action plans must be submitted to the CAAS in the allowable time period and must properly address all discrepancies and identified items.
  - 3.2.3 The CAAS may recommend a non-approval to the FAA if the discrepancies or identified items were not satisfactorily addressed in a timely manner, or if the CAAS has not accepted a corrective action plan.
- 3.3 Issuance of Certificate. Once satisfied with the renewal package and the CAAS recommendation, the FAA will send an invoice to the repair station for the applicable fees.
  - 3.3.1 FAA AC 187-1 establishes these fees.
  - 3.3.2 Once the repair station settles the fees, the FAA will issue the repair station the certificate and any revised OpSpecs.
  - 3.3.3 The FAA will provide the CAAS a copy of the new certificate and any revised OpSpecs. Any revision made to the OpSpecs will be reflected in the current Table of Contents. Destroy only the superseded OpSpecs.
- 3.4 Renewal Application Flow Chart.



**4.0 CHANGE/AMENDMENT APPLICATION PROCESS.** To apply for an amendment of the certificate or OpSpecs, the Change/Amendment Flow Chart in this section illustrates the necessary steps. The repair station must notify the CAAS 30 days in advance of any proposed changes.

- 4.1 Conditions. The following conditions will require the repair station to notify the CAAS for a change/amendment to the 14 CFR part 145 certificate or OpSpecs:
  - a. Name Change of Repair Station (OpSpec A001).
  - b. Change in ownership.
  - c. Change of location or mailing address (OpSpec A001).
  - d. Change or amend of ratings (OpSpec A003).
  - e. Change to the Accountable Manager (OpSpec A007).
  - f. Use of electronic maintenance records, electronic maintenance signature, or electronic MOE/FAA Supplement (OpSpec A025).
  - g. Adding or deleting an additional fixed location (OpSpec A101).
  - h. Authorization to perform work away from main facility on a recurrent basis. This is only required if the work is part of everyday business rather than under a special circumstance (OpSpec D100).
  - i. Adding or revising the Line Maintenance Authorization. Documentation for the perceived need from the U.S. air carrier must include the make/model/series of aircraft (OpSpec D107).
- 4.2 Change/Amendment Application. The repair station must submit the documents in Section C, Appendix 2 to the CAAS.
  - 4.2.1 Depending on the request, the FAA Supplement may need an amendment submitted along with other applicable documents. See Section C, Appendix 1 for required FAA Supplement procedures.
  - 4.2.2 Repair Station Vital Information. Only the applicable sections that apply to the amendment or OpSpecs request are required to be updated.
  - 4.2.3 Depending on the request, the CAAS may have to perform an on-site audit.
  - 4.2.4 Subject to the type of change/amendment applied for by the repair station, the FAA may issue an amended FAA Form 8000-4 or revised OpSpecs to reflect such a change/amendment.
  - 4.2.5 Any revision made to the OpSpecs will be reflected in the current Table of Contents. Destroy only the superseded OpSpecs.
- 4.3 Change/Amend Requirements. The following requirements for changes/amendments are explained below.

- 4.3.1 Addition of Ratings. The CAAS must receive documentation for the perceived need for the FAA 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).
- 4.3.2 Change of Location or Mailing Address. The CAAS will review the application and may authorize continued work while the applicant moves to another facility. The applicant should provide a written contingency plan to the CAAS. If only the mailing address changed, complete the FAA Form 8310-3, Blocks 1, 2, and 5. For Block 2, mark "other" and insert the mailing address change.
- 4.3.3 Change in Ownership. When the amendment to a certificate involves a change in ownership, the following apply:
  - a. If the sale or transfer of assets (e.g., financial takeover), does not significantly affect or alter the formed basis of the original certification in regards to employees, facilities, equipment, or daily operation of the repair station, only a new application is required for an amendment to the existing certificate.
  - b. In situations that involve a change in ownership that affect or alter the basis of the original certification (e.g., location, facilities, or personnel), or disrupts the work performed in a way that could inherit risk due to the sale, the CAAS may have to perform an on-site audit and approve the MOE revisions prior to making a recommendation to the FAA. The new owner should propose a written contingency plan to the CAAS for the transition of the significant changes.
  - c. The new owner should stipulate in writing to the CAAS for the issuance of a new certificate number, or to request to keep the existing certificate number.
    - If the new owner's written request is to keep the existing certificate number, they should clearly understand the liability for the work performed under previous management. The new owner should also understand the potential release of information under the Freedom of Information Act (FOIA) (refer to Title 5 of the United States Code (5 U.S.C.) section 552 before receiving permission to retain the existing certificate number.
    - 2) If the new owner's written request is for obtaining a new certificate number, the repair station should provide a written contingency plan describing the transition to the new certificate number and a planned date for the surrender of the old certificate. This will ensure maintenance entries for current and future maintenance releases reflect the proper certificate number.

- 4.3.4 Contracted Maintenance Function. When the repair station adds or deletes a subcontracted maintenance function, the request is made to the CAAS for approval in the MOE. At the next FAA renewal, the current function(s) must be listed on the FAA Form 8310-3.
- 4.4 Compliance, Verification, and CAAS Recommendation. The CAAS will perform an on-site inspection of changes to the 14 CFR part 145 repair station that could affect or alter the formed basis of the original certification (e.g., location, facilities, equipment and/or addition of ratings) to ensure compliance with all the FAA Special Conditions and SAR-145 regulations.
  - 4.4.1 The repair station must ensure that all identified items noted during the inspection are corrected and agreed upon by the CAAS.
  - 4.4.2 If the repair station fails to correct the deficiencies within the allotted timeframe by the CAAS (normally 60 days), the CAAS should terminate the change/amendment application process and notify the FAA.
  - 4.4.3 When satisfied that the repair station is in compliance with all the FAA Special Conditions and SAR-145 regulations for the proposed change/amendment, the CAAS will issue a recommendation to the FAA.
  - 4.4.4 When the CAAS is satisfied, it will recommend approval and forward the application package to the FAA.
- 4.5 Change/Amendment Application Flow Chart.



- **5.0 CAAS RESPONSIBILITIES.** Under the MIP, the CAAS is responsible for performing surveillance and oversight on 14 CFR part 145 repair stations based in Singapore. This includes the verification of documents for compliance and acceptance of the FAA Supplement to the MOE. The FAA remains responsible for the issuance or renewal of the 14 CFR part 145 certificate and OpSpecs.
- 5.1 Administrative Duties. The flow charts in Section C illustrate the steps necessary for initial, renewal, and amendments to the 14 CFR part 145 certificate. The introduction in Section C contains the basic eligibility requirements and additional explanations of forms and terms used in the MAG. Additional responsibilities are contained in the actual certification procedures in this section. The CAAS is the point of contact (POC) for 14 CFR part 145 repair stations based in Singapore. All regulatory matters will be managed by the CAAS, unless otherwise stated by the FAA.

- 5.1.1 For the purpose of processing an application for initial, renewal and/or amendment to the 14 CFR part 145 repair station certificates, the CAAS principal maintenance inspector (PMI) is responsible for reviewing the documents (listed in Section C, Appendix 2) submitted by the applicant to ensure proper completion.
- 5.1.2 The CAAS will forward copies of all documents (listed in Section C, Appendix 2) to the FAA for review. The FAA Supplement, including any revisions, is only required to be forwarded to the FAA during initial certification or for significant changes to the repair stations operating procedures.
- 5.1.3 The CAAS MIP Coordinator will be the POC for inquiries from the FAA on 14 CFR part 145 repair stations located in Singapore. In the event the CAAS MIP Coordinator is not able to provide a response to the query from the FAA, they may refer the FAA to the CAAS PMI that is responsible for safety oversight on the repair station. It is recommended that the FAA Coordinator (IFO) be copied in all correspondence on 14 CFR part 145 significant matters.
- 5.1.4 The CAAS must obtain a statement from the repair station demonstrating the continued need. If the repair station is unable to establish the continued need, the CAAS will advise the repair station that the FAA may renew the certificate based on its previous statement of continued need. If at the time of its next renewal the repair station is still unable to show continued need, it could jeopardize the eligibility for renewal.
- 5.1.5 The CAAS will review and approve the FAA Supplement per the example listed in Section C, Appendix 1. The FAA Supplement, in conjunction with the latest revision of the MOE, defines the repair station's procedures, organizational charts, rosters, duty positions, quality system, and training requirements to comply with the 14 CFR part 145 regulations. The approval of the FAA Supplement will be on the MOE List of Effective Pages (LEP), and in the form of a letter to the organization. The letter will address the title, date, and revision number of the MOE. If the supplement is rejected, the CAAS PMI will provide a detailed explanation of the deficiencies and advise the repair station to not perform any maintenance that could be affected by the deficiencies. The MOE will be made available to the FAA when warranted.
- 5.2 Safety Oversight and Surveillance. The CAAS must ensure that oversight and surveillance on 14 CFR part 145 repair stations is carried out in accordance with the CAAS surveillance schedule.
  - 5.2.1 The CAAS must verify that the repair stations comply with SAR-145 by conducting an audit or a series of audits, which must be completed within a 1-year cycle. Verification of compliance with the FAA Special Conditions must be conducted during the 1-year cycle prior to making a recommendation for renewal of the 14 CFR part 145 certificate.

- 5.2.2 Ensure the work performed under 14 CFR part 145 ratings and limitations do not exceed the SAR-145 AMO approval and scope of work.
- 5.2.3 The CAAS will ensure all discrepancies and findings identified during the course of the CAAS's oversight and surveillance on the 14 CFR part 145 repair stations are recorded and communicated, and that the proper corrective actions are taken. The CAAS must ensure that the deficiencies identified are satisfactorily addressed within a reasonable timeframe. The CAAS's acceptance of the corrective actions taken or the corrective action plans must be recorded and officially documented on written correspondence to the repair station. The CAAS must ensure final corrective actions listed in a corrective action plan are tracked and closed in a timely manner.
- 5.3 Recordkeeping. The CAAS must ensure that all records documenting the safety oversight on 14 CFR part 145 repair stations are retained for at least 3 years. The following records are to be retained by CAAS:
  - a. CAAS approval of the FAA Supplement to the MOE.
  - b. SAR-145 AMO audit records and nonconformance reports.
  - c. FAA MIP audit records.
  - d. Copies of current 14 CFR part 145 certificates and OpSpecs.
  - e. Written correspondence from the CAAS to the repair station accepting the corrective actions or corrective action plans.
  - f. SIS written correspondence to the repair station accepting the corrective actions or corrective action plans.
  - g. Original FAA Form 8400-6 and Form 8310-3.
- 5.4 Recommendation and Coordination. The FAA relies on the recommendation by the CAAS to issue the 14 CFR part 145 certificate under the conditions of the FAA–CAAS MIP. Based on its surveillance and oversight, the CAAS may recommend approval or non-approval for the 14 CFR part 145 certificates.
  - 5.4.1 The CAAS PMI must ensure that all discrepancies, findings, and identified items are satisfactorily addressed prior to the recommendation. For initial FAA certification and turnover of the surveillance of certificates, the CAAS audit schedule for SAR-145 AMO requirements must be current and must not have any unresolved findings.

- 5.4.2 The CAAS PMI will provide a recommendation on the FAA MIP Audit Report (Section C, Appendix 2). The report must be signed, dated, and include a recommendation to the FAA. Copies of all accepted corrective actions or corrective action plans must be included. All documents will be sent to the attention of the FAA principal inspector (PI) at the Los Angeles IFO. The Los Angeles IFO general email address may be used (9-LAX-IFO-SINGAPORE-MAG@FAA.GOV).
  - a. For initial certification, a summary of discrepancies and corrective actions that originated during the certification process will be included.
  - b. A separate FAA MIP Audit Report is required during initial certification for each additional fixed location and line station.
  - c. For changes/amendments that do not require an on-site audit, the FAA MIP Audit Report is still required to be submitted to the FAA for the recommendation.
  - d. The CAAS will complete the FAA MIP Audit Report recommending non-approval for applications in which the applicant does not meet the requirements of the MIP despite the opportunity given to correct the deficiencies.
  - e. The CAAS will complete the FAA MIP Audit Report recommending non-approval for any findings that may result in revocation, limitation, or suspension, in whole or in part, of the SAR-145 AMO approval. The CAAS recommendation of non-approval will be immediately forwarded to the attention of the FAA Coordinator (IFO) at the Los Angeles IFO. Additional information can be found in Section A under Enforcement Actions.
- 5.4.3 For situations that require the amendment and/or issuance of the 14 CFR part 145 certificate and SAR-145 AMO approval at the same time, the issuance of the affected certificates should be coordinated. The FAA PI and the assigned CAAS PMI will coordinate to ensure that the amendments and/or changes to the certificate will take effect at the approximate same time.
- 6.0 FAA RESPONSIBILITIES. Under the MIP, the CAAS is responsible for performing surveillance and oversight on 14 CFR part 145 repair stations based in Singapore, including the verification of documents for compliance and approval of the FAA Supplement to the MOE. The FAA remains responsible for the issuance or renewal of the 14 CFR part 145 certificate and OpSpecs with consideration given to the CAAS recommendation.
- 6.1 Administrative Duties.
  - 6.1.1 The flow charts in Section C illustrate the necessary steps for initial, renewal, and amendments to the 14 CFR part 145 certificates. The introduction in

Section C contains the basic eligibility requirements and additional explanations of forms and terms used in the MAG. The CAAS is the POC for 14 CFR part 145 repair stations based in Singapore. All regulatory matters will be managed by the CAAS, unless otherwise stated by the FAA. The CAAS will provide the necessary assistance with regard to SAR-145 regulatory matters.

- 6.1.2 The CAAS MIP Coordinator will be the POC for inquiries on 14 CFR part 145 repair stations located in Singapore. In the event the CAAS MIP Coordinator is not able to provide a response to the query, they may refer to the CAAS PMI that is responsible for safety oversight on the repair station. The FAA Coordinator (IFO) should be included in all correspondence with significant concerns.
- 6.2 Title 14 CFR Part 145 Application Review. The FAA PI is responsible for performing a review to ensure that the applicant meets the criteria to apply for the 14 CFR part 145 certification.
  - 6.2.1 For the purpose of processing an application for initial, renewal, and/or amendment to the 14 CFR part 145 repair station certificates, the CAAS PMI is responsible for reviewing the documents (listed in Section C, Appendix 2) submitted by the applicant to ensure proper completion. The CAAS will forward the necessary documents to the FAA for review and to verify the eligibility or continued need by the applicant.
  - 6.2.2 The FAA PI must review the documents (listed in Section C, Appendix 2) to verify the documents are complete and acceptable. It is not necessary for the FAA to review the FAA Supplement. The FAA may request a copy of the MOE when warranted.
  - 6.2.3 If the documents are incomplete or unsatisfactory, prepare a letter or email to the CAAS MIP Coordinator or CAAS PMI indicating the deficiencies.
    - a. Minor discrepancies may occasionally be noted because of various interpretations or misunderstandings on the documents submitted. Discuss the minor discrepancies with the CAAS, but do not delay the issuance of the 14 CFR part 145 certificate.
    - b. Major deficiencies in the renewal application package must be discussed with the CAAS as soon as possible.
    - c. The FAA MIP Audit Report (Section C, Appendix 2) must be completed by the CAAS for initial, renewal, and any change/amendments requiring a recommendation by the CAAS. A separate FAA MIP Audit Report is required during initial certification for each additional fixed location and line station that utilizes the 14 CFR part 145 privileges.

- 6.2.4 The Repair Station Vital Information (Section C, Appendix 2) contains all the required information for SAS Configuration data input. Input this information into SAS and/or verify as necessary.
- 6.2.5 For turnover of surveillance of certificates under a MIP, review additional guidance in FAA Order 8900.1, Volume 12 (IFO Turnover Provisions of Repair Stations under a BASA/MIP).

**NOTE:** If a procedure in FAA Order 8900.1 guidance conflicts with the MAG, the MAG takes precedence.

- 6.3 CAAS Recommendation. The FAA PI is responsible for reviewing the recommendation by the CAAS for the purpose of issuing or denying the issuance of the 14 CFR part 145 certificate.
  - 6.3.1 CAAS Recommends Approval.
    - a. For renewal of the certificate, repair station corrective actions or a corrective action plan must be accepted by the CAAS within the allotted timeframe.
    - b. The corrective action(s) or corrective action plans must be submitted in conjunction with the FAA MIP Audit Report. This data is an important tool in the continued support of CAAS surveillance activities. This data should not be used to oppose corrective actions previously accepted by the CAAS. The FAA PI may request for additional data or communicate follow-up actions with the CAAS to support the processing of the application.
    - c. The PI will renew a repair station certificate only after the CAAS has accepted the corrective actions or an acceptable corrective action plan.
    - d. If necessary, the FAA may issue a new certificate for 90 days if necessary for additional corrective actions. In such cases, the extension should be issued only with the CAAS concurrence. Once the corrective actions are satisfactory to both the FAA and the CAAS, the PI will renew the certificate for the remaining 9 months in order to maintain the alignment of the certificates for the next renewal.
  - 6.3.2 CAAS Recommends Non-Approval. If the repair station does not meet the requirements of the MIP based on the CAAS surveillance and oversight, the CAAS may recommend non-approval.
    - a. The FAA MIP Audit Report will be used for the CAAS recommendation of a non-approval.
    - b. The FAA PI will review the reason for non-approval and determine any significant safety issues. The FAA PI will take appropriate action as necessary.

- c. If a CAAS finding/discrepancy results in the reduction of SAR-145 AMO capabilities, the FAA must investigate any significant safety issues.
- d. Any CAAS finding resulting in a CAAS revocation, suspension, or surrender of a SAR-145 AMO approval must be expeditiously communicated to the FAA Coordinator (IFO). See Section A, Enforcement Actions.
- 6.4 Issuance of OpSpecs. The OpSpecs must be aligned with the SAR-145 ratings and limitations. The FAA ratings must be under the direct surveillance of the CAAS to comply with the MIP. The FAA ratings and limitations cannot exceed the CAAS ratings and scope of work. The cross-reference chart (listed in Section A, Appendix 2) may be used to assist in the alignment.
  - 6.4.1 The Ratings and Limitations paragraph (OpSpec A003) must contain the authorized FAA ratings (limited airframe, engine, etc.). The make/model of complete type-certificated products should be listed. The rating and limitation must not allow the level of capability to exceed the SAR-145 AMO authorized scope of work as prescribed in the MOE.
  - 6.4.2 OpSpec A003 limitation column should state *Limited to CAAS(AW)83 (insert number) and approved scope of work detailed in the MOE.* 
    - a. The CAAS SAR-145 AMO approval on form CAAS(AW)83 and its Approval Schedule will include the CAAS MOE document number that list details of the approved scope of work. These are the limitations that are comparable to OpSpec A003 limitations. A copy of the page(s) from the MOE are included and list the approved scope of work.
    - b. An exception to the ratings and limitation alignment apply to 14 CFR part 91, sections 91.411 and 91.413 tests and inspections. If the SAR-145 AMO does not hold the appropriate airframe rating, they must hold a C3 and C13 component rating to perform this task. In this case, issue or amend OpSpec A003 and add these aircraft in the limitations under limited radio and/or instrument ratings to align to the SAR-145 AMO C3 and C13 rating. This will authorize on-wing test and inspections for U.S.-registered aircraft.
    - c. The FAA will only recognize line stations that are located in Singapore and under the direct surveillance of the CAAS and holding the CAAS line station approval.
  - 6.4.3 The Repair Station Vital Information job aid (listed in Section C, Appendix 2), along with the page(s) of scope of work in the MOE, can be used to validate OpSpecs.

- 6.5 Issuance of the 14 CFR Part 145 Certificate. When all of the documents are reviewed and found to meet the requirements of the MAG, and the repair station has settled the appropriate fees, the following will be accomplished:
  - a. FAA Form 8310-3, Blocks 6 through 10, will be completed by the FAA.
    - 1) In Block 6 insert *Refer to the applicable FAA MIP Audit Report completed by the CAAS under the MIP* and reference any other applicable relevant information.
    - 2) In Block 8, "Date of Inspection" will be the date the CAAS signed the FAA MIP Audit Report.
  - b. Upload a copy of the completed FAA MIP Audit Report into the SAS Data Collection Tool (DCT). The written correspondence documenting the CAAS acceptance of corrective actions may also be uploaded.
  - c. Document reimbursable expenses and settle the appropriate fees in accordance with FAA AC 187-1.
  - d. Complete the SAS DCT for Peer Group H, and update the Vitals Information as required.
  - e. Complete FAA Form 8000-4, paying particular attention to the following: under the ratings, ensure the following statement is entered on the FAA Form 8000-4: Subject to the U.S.-Singapore BASA-MIP. This statement must be used to identify the repair stations that are certificated under the MIP and 14 CFR part 145, section 145.53(b).
  - f. Send the originally signed FAA Form 8000-4 and the repair station OpSpecs to the repair station. Electronic scanned copies may be electronically sent to expedite certification as long as the originals are mailed.
  - g. Forward copies of the certificate and OpSpecs to the CAAS.
  - h. Notify the TSA when an initial 14 CFR part 145 is issued. Follow the applicable TSA guidance in FAA Order 8900.1 for the notification procedures.
  - i. Retain all records on repair station certificate management per the FAA record retention policy.
- 6.6 SIS Inspections. Complete SIS inspections per the MAG, Section A.

## Appendix 1. Guidance and Instructions for the Development of the FAA Supplement

- **1.0 FAA SUPPLEMENT TO THE MOE.** The FAA Supplement to the Maintenance Organization Exposition (MOE) must be written in a manner that explains repair station operations and must not merely contain policy statements. The procedures set forth in the FAA Supplement describe the methodology used to document and carry out policy. The FAA Supplement example in this appendix is a guide to assist in developing customized procedures for the maintenance organization.
- 1.1 Written procedures should explain, as applicable:
  - a. What must be done?
  - b. Who must 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) are used?
- 1.2 The format of the FAA Supplement must include the contents in this appendix. Required contents that do not apply to the type of operations must still be included in the FAA Supplement, but stated as such. The FAA Supplement and MOE must be maintained in the English language.
- 1.3 To reduce redundant procedures, it is permissible to refer to the relevant section of the MOE, provided the references are clearly identified and satisfy the requirements of the FAA Special Conditions.
- 1.4 The quality assurance procedures must include audits for the FAA Special Conditions.
- 1.5 The FAA Supplement must be amended as necessary to reflect current operations. Any amendment to the supplement must be approved by the CAAS prior to performing operations under the revised procedures. Incorporated references in the FAA Supplement must be current.
- 1.6 The table below lists the safety attributes to be considered when developing the FAA Supplement.

Responsibility	A clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of a process.
Authority	A clearly identifiable, qualified, and knowledgeable person who has the authority to set up and change a process.
Procedures	Documented methods to accomplish a process.
Controls	Checks and restraints designed into a process to ensure a desired result.
Process Measurements	Used to validate a process and identify problems or potential problems in order to correct them.
Interfaces	Interactions between processes that must be managed in order to ensure a desired outcome.

# Table C-1.Safety Attributes to Consider

# **2.0 EXAMPLE OF AN FAA SUPPLEMENT TO THE MOE.** The cover page of the FAA Supplement to the MOE must include the following:

#### Federal Aviation Administration

#### **Repair Station Supplement to the MOE**

Company Name and Facility Address

MOE Document Number\_\_\_\_\_

FAA Supplement Document Number\_\_\_\_\_

CAAS SAR-145 AMO Approval No.\_\_\_\_\_

FAA 14 CFR Part 145 Certificate No.\_\_\_\_\_

This FAA Repair Station Supplement, together with the MOE, forms the basis of acceptance by the FAA for maintenance, alterations, or modifications carried out by this maintenance organization on aircraft and/or aircraft components under the regulatory control of the FAA.

Maintenance, alterations, or modifications performed in accordance with the MOE (hereinafter referred to as manual), including this FAA Supplement, are considered to be in compliance with 14 CFR parts 43 and 145.

All revisions to the FAA Supplement must be approved by the CAAS. The FAA Supplement should be inserted as an appendix to the MOE, or as Part 7 of the MOE.

The contents of the FAA Supplement to the manual (MOE) must include at least the following contents listed below.

- **3.0 LIST OF CONTENTS.** The contents of each section of an FAA Supplement are explained below.
  - a. List of Effective Pages (LEP).
  - b. Revision Procedures.
  - c. Introduction.
  - d. Accountable Manager.
  - e. Scope of Work.
  - f. Notification to the FAA.
  - g. Summary of the Quality Systems.
  - h. Approvals for Return to Service and Maintenance, Alteration, and Modification Records.
  - i. Acceptability of Parts.
  - j. Reporting of Unairworthy Conditions to the FAA.
  - k. Additional Operating Locations.
  - 1. Contracting/Subcontracting Maintenance.
  - m. Major Repairs and Major Alterations.
  - n. Compliance with 14 CFR Part 121 Air Carrier Continuous Airworthiness Maintenance Program (CAMP) or 14 CFR Part 125 Operator Inspection Program.

- o. Compliance with Manufacturers' Maintenance Manuals, Instructions for Continued Airworthiness (ICA), and Airworthiness Directives (AD).
- p. Qualification of Personnel.
- q. Forms.
- 3.1 List of Effective Pages (LEP). The MOE LEP will be used for the FAA Supplement. The MOE will begin with a list of the sections it contains, the page number, and the current revision date. The supplement must contain the same formatted headings as the example supplement contents and must describe the applicant's operating procedures and its means and methods to assure compliance with the regulatory requirement. The LEP should demonstrate the latest MAG revision was reviewed and any necessary changes were incorporated.
- 3.2 Revision Procedures. The revision procedures section must describe the procedures the repair station will use to ensure that the FAA Supplement remains current. It must contain the following:
  - a. Identify, by title, the person responsible for initiating, writing, and submitting the FAA Supplement to the CAAS.
  - b. Describe the procedures the repair station will use to record revisions, distribution within the facility, and the method (electronic, paper, mail, etc.) the revisions are provided to the CAAS before implementation.
  - c. Procedures to ensure that the repair station's management system maintains currency and ensures that revised procedures are incorporated into the quality assurance system.
  - d. MAG revisions that affect repair station operations must be implemented within 90 days after the effective date of the MAG.
- 3.3 Introduction. This section must indicate that the FAA Supplement, in conjunction with other chapters of the approved MOE, defines the organization and procedures upon which compliance with applicable regulations are based.
  - a. The Maintenance Implementation Procedures (MIP). State that the repair station is operating under the MIP to obtain certification and renewal as a repair station under 14 CFR part 145, section 145.53(b) for performing maintenance on aeronautical products subject to 14 CFR. Without prejudice to the FAA Administrator's discretion under 14 CFR part 145, an applicant shall be issued a 14 CFR part 145 certificate and operations specifications (OpSpecs) if the repair station:

- 1) Has been approved for maintenance by the CAAS in accordance with the SAR-145;
- 2) Complies with the conditions set forth in the MIP and MAG, including the FAA Special Conditions; and
- 3) The CAAS has issued a recommendation to the FAA for certification.
- b. Supplement. State that the FAA Supplement describes the methods and procedures the repair station will use to ensure compliance with the FAA Special Conditions. The Special Conditions are specified in the MIP, Appendix 1.
- c. Point of Contact (POC). Include the following:
  - 1) The name,
  - 2) Title,
  - 3) Telephone number, and
  - 4) Email of the person who will act as the liaison between the maintenance organization and the CAAS. This liaison will ensure compliance with the provisions of the supplement.
- 3.4 Accountable Manager. The Accountable Manager means the person designated by the certificated repair station who is responsible for and has the authority over repair station operations that are conducted under 14 CFR part 145. This includes ensuring that repair station personnel follow the regulations and serves as the primary contact with the FAA.
  - a. The Accountable Manager Responsibilities. Title 14 CFR part 145, section 145.151 requires an individual responsible for the maintenance organization's compliance with 14 CFR parts 43 and 145. Compliance is demonstrated by adhering to the SAR-145 regulations, and associated material, and the FAA Special Conditions. This section must contain the signed statement by the Accountable Manager.
    - The statement indicates that the maintenance organization agrees to comply with the FAA Special Conditions specified in the MIP while operating under its CAAS Approved Maintenance Organization (AMO) approval. The Accountable Manager's statement ensures that the responsibilities under the MIP are established and understood.
    - 2) The statement must be signed and dated by the current Accountable Manager.
    - 3) Whenever the maintenance organization's Accountable Manager is replaced, the new Accountable Manager must sign and date a new Accountable Manager's statement at the earliest opportunity. The maintenance organization will forward a FAA Supplement revision to the CAAS.

b. The Accountable Manager's Statement. The statement must contain the following or equivalent language:

"As the Accountable Manager, I understand to ensure this organization, [name of company], when performing maintenance, alterations, or modifications on U.S.-registered aircraft or aeronautical products for use on such aircraft, must perform that work under the terms of the Maintenance Implementation Procedures and regulations issued by the Federal Aviation Administration and the Civil Aviation Authority of Singapore. I understand my responsibilities under the MIP, the MAG associated guidance material, and the FAA Special Conditions. My responsibilities are described in this organization's Maintenance Organization Exposition (MOE) and the FAA Supplement to the MOE.

As the person with overall control of [name of company], I have reviewed the MAG (Section C), the MIP requirements, and the FAA Special Conditions. This organization fully understands that by complying with the FAA Special Conditions and the SAR-145 regulations, it will be complying with the MIP. I understand that the issuance of the 14 CFR part 145 certificate and ratings is contingent upon holding a SAR-145 AMO approval, and failure to comply with the requirements of the FAA Special Conditions or SAR-145 regulations may result in the FAA denial of renewal, suspension, or revocation of the 14 CFR part 145 certificate.

This organization will provide the CAAS and FAA personnel with unimpeded access to our facilities, or facilities performing contracted maintenance under our approval. Unimpeded access may include FAA inspections for 14 CFR compliance, SIS inspections, FAA Special Conditions, or to investigate specific problems.

I understand that investigation and enforcement by the FAA regarding suspected violations of 14 CFR by this organization will be undertaken in accordance with FAA rules and directives, and that this organization must cooperate with any investigation or enforcement action.

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

**NOTE:** The statement must be signed and dated by the current Accountable Manager.

- 3.5 Scope of Work. For the scope of work listed in the MOE, provide the following:
  - a. Ratings. State that the scope of work of FAA approval will not exceed the ratings and scope of work permitted under the CAAS SAR-145 AMO approval. (Section A, Appendix 2 contains the rating comparison.)
  - b. Specialized Service. FAA issuance of a specialized services rating requires FAA-approved data that is not part of a manufactures maintenance manual or ICA. The FAA will identify the specific data on OpSpecs, thereby authorizing the repair station to perform the specialized service. In this section the maintenance organization will describe the following, as applicable:
    - 1) The procedures must ensure all work performed under the provisions of specialized services rating is done in accordance with FAA-approved data.
    - 2) The procedures the maintenance organization will use to ensure that only FAA-approved processes are used on U.S.-registered aircraft or aeronautical products intended for installation on U.S.-registered aircraft.
    - 3) Return to service (RTS) procedures to ensure the data is acceptable for the work performed.
  - c. Capability List (CL). Using a CL is an effective way of identifying articles for which a repair station has an established repair capability. The manual's CL will contain all the elements described in this section:
    - 1) The CL must identify by make, model, or other nomenclature designated by the article's manufacturer. Once the component or subassembly is identified on the CL, there is no need to list the "individual series" contained under the same make and model.
    - 2) The CL may be located in the MOE, or as a referenced stand alone, controlled document.
    - 3) The CL must be included as part of the repair station's quality audit system.
    - 4) Under the provisions of a MIP, the CL scope of work permitted under the FAA ratings must not exceed the CAAS SAR-145 AMO approval. (See the ratings comparison in Section A, Appendix 2 for details.)
    - 5) The CL procedures need to identify (by title) the position that will maintain the CL.
      - a) Procedure for adding and removing articles from the list.
      - b) Procedures for conducting self-audits, documenting the self-audits, and reporting of audits to management.

- c) Describe how the repair station determines the proper equipment, personnel, housing/facilities, materials, and technical data to maintain each article listed on the CL.
- d) Procedures that describe the method to identify any difference in approval of CAAS articles from FAA articles as necessary. For example, FAA-approved data can be marked by an asterisk (\*).
- e) Procedures for notification to the CAAS of the revision of a CL.

**NOTE:** After the CAAS has approved the repair station's internal evaluation program and procedures for a self-auditing program, the repair station will use these procedures for revisions to a CL. When the repair station has completed a self-audit for a new article being added in accordance with the approved procedures, the repair station is authorized to revise and submit the list to the CAAS for approval. This approval will remain in effect unless the CAAS or the FAA objects in writing.

- 3.6 Notification to the FAA. There must be procedures to notify the FAA by submitting the applicable documents listed in Section C regarding any change to the following to the CAAS:
  - a. Line stations.
  - b. Addition or deletion of fixed locations.
  - c. Change in ownership.
  - d. Changes that affect OpSpecs or the 14 CFR part 145 certificate.
  - e. Procedures to notify the FAA regarding employment of former FAA employees who meet the conditions of 14 CFR part 145, section 145.160 in the preceding 2 years.

**NOTE:** The application to make a change will be submitted to the CAAS on behalf of the FAA. The CAAS will forward the recommendation to the FAA. (See the change/amendment procedures for further details.)

- 3.7 Summary of the Quality Systems. The quality system procedures must describe and cover the main facility, additional fixed locations, and FAA line maintenance authorizations. The summary will contain an overview of how the repair station included the FAA Special Conditions in its quality system audit conducted every 12 months.
  - a. Procedures must include the schedule of the audit for the FAA Special Conditions, and the method to document the audit.
  - b. Procedures are required for the method and timeframe to correct any findings or identified items related to the FAA Special Conditions.

c. Include procedures to provide feedback from the audits to prevent future discrepancies of FAA Special Conditions.

**NOTE:** If the repair station has quality procedures in its MOE that meet the FAA Special Conditions requirements, a reference to the MOE is acceptable. The audit schedule and reports must document the FAA Special Conditions included in the plan.

- 3.8 Approvals for Return to Service (RTS) and Maintenance, Alteration, and Modification Records.
  - a. U.S.-Registered Aircraft Inspections. This paragraph must contain procedures for performing inspections on U.S.-registered aircraft. The repair station must ensure that the applicable inspection program is accomplished and recorded appropriately. The U.S.-registered aircraft inspections applicable in Singapore include:
    - 1) Annual inspections in accordance with 14 CFR part 43.
    - 2) 100-hour inspections for aircraft-for-hire or flight instructions-for-hire in an aircraft for hire.
    - An Approved Aircraft Inspection Program (AAIP) under 14 CFR parts 125 or 135.
    - 4) A progressive inspection program approved by the FAA.
    - 5) For large airplanes (to which 14 CFR part 125 is not applicable), turbojet multi-engine airplanes, turbopropeller-powered multi-engine airplanes, and turbine-powered rotorcraft: A selected inspection program by the registered owner to consist of:
      - a) A Continuous Airworthiness Maintenance Program (CAMP).
      - b) An AAIP under 14 CFR part 135, section 135.419.
      - c) An inspection program recommended by the manufacturer.
      - d) Any other approved inspection program approved by the FAA.
  - b. Maintenance Record Entry.
    - 1) Procedures are required to describe the methods used for maintenance record entries. The type of inspection and brief description of the extent of the inspection are required.

- a) A description (or reference to the data acceptable to the FAA) of the work performed.
- b) The date of the inspection and total time in service.
- c) The signature of the person authorized by the repair station for RTS.
- d) The FAA repair station certificate number.
- e) Additional requirements specified by the operator, and
- f) Specify the recordkeeping requirements for major repairs and major alterations.

**NOTE:** The term alteration and modification are synonymous.

2) The entry must identify the inspection program, the part of the inspection program accomplished, and contain a statement that the inspection was performed in accordance with the particular inspection program. With the exception of progressive inspections or aircraft on a CAMP, procedures to ensure the following or a similarly worded statement is documented:

*I certify that this aircraft has been inspected in accordance with (insert type) inspection and was determined to be in airworthy condition.* 

or,

I certify that this aircraft has been inspected in accordance with (insert type) inspection and a list of discrepancies and unairworthy items dated (date) has been provided for the aircraft owner or operator.

- c. Altimeter System Test and Inspection. Each person performing the altimeter system test and inspection required by 14 CFR part 91, section 91.411 shall comply with the parameters outlined in 14 CFR part 43 appendix E. Procedures are required to ensure the test and inspection are performed and documented correctly.
  - 1) Procedures to ensure the altimeter has the date and maximum altitude recorded on the actual altimeter. This data must also be entered in the airplane log or other permanent record.
  - 2) Procedures to ensure the acceptable release, or similarly worded statement (example below), meets the requirements of 14 CFR part 91, section 91.411.

I certify that the Altimeter System and Altitude Reporting System Test and Inspection required by 14 CFR part 91, section 91.411 have been performed in accordance with 14 CFR part 43 appendix E.

d. Air Traffic Control (ATC) Transponder Test and Inspections. Each person performing the altimeter system test and inspection required by 14 CFR part 91, section 91.413 shall comply with the parameters outlined in part 43 appendix F. Procedures are required to ensure the test and inspection is performed and documented correctly. Procedures to ensure the acceptable release, or similarly worded statement (example below), meets the requirements of 14 CFR part 91, section 91.413.

I certify that the Altimeter System and Altitude Reporting System Test and Inspection required by 14 CFR part 91, section 91.413 have been performed in accordance with 14 CFR part 43 appendix F.

**NOTE:** The 14 CFR part 91, sections 91.411 and 91.413 tests and inspections may be performed under an FAA airframe rating that aligned to the SAR-145 airframe rating. If the SAR-145 AMO does not hold the appropriate airframe rating, they must hold a C3 and C13 component rating. In this case, the FAA will issue or amend OpSpec A003 and add these aircraft under limited radio and/or instrument ratings to align to the SAR-145 C3 and C13 rating for authorizing the same approvals.

- e. RTS of Components (FAA Form 8130-3). Procedures for approval for RTS must describe the use of acceptable release documents for components and parts. Describe the use of the FAA Form 8130-3 and block-by-block instructions for completing the form. Ensure procedures describe the following:
  - 1) The procedures should describe how the customer's maintenance request is determined and the type of maintenance release requested, prior to maintenance.
  - 2) Procedures must contain a description for the use of Block 11 "Status/Work" for specific situations. The term below should be used to reflect the majority of the work performed.

Term	Description	
OVERHAULED	A process that ensures the product or article is in complete conformity with the applicable service tolerances specified in the type certificate (TC) holder's or equipment manufacturer's ICA, or in the data approved or accepted by the authority. The product or article will be at least disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested in accordance with the FAA-approved or FAA-accepted data.	
REPAIRED	Repair of defect(s) using an applicable standard(s).	
INSPECTED and/or TESTED	Examination or measurement in accordance with an applicable standard (e.g., visual inspection, functional testing, or bench testing).	
MODIFIED	Alteration of a product or article to conform to an applicable standard.	

# Table C-2.Terms for the Work Performed

- 3) Block 12 must contain a description of the work performed in Block 11 and associated results necessary for the user or installer to determine the work being certified. Block 12 must include the following:
  - a) Maintenance manual reference and revision status. If the data required by 14 CFR part 43, sections 43.9 and 43.11 include references (such as work orders, air carrier data, compliance with ADs, service bulletins, or FAA Form 337, Major Repair and Alteration), they must be specifically referenced in this block.
  - b) The form must include the following:
    - *1*. The date of approval.
    - 2. The name/signature of the person authorized for RTS signs Block 14b of the form. This signature approves aircraft components for RTS with respect to the work performed.
    - 3. The FAA repair station certificate number.

**NOTE:** A "Dual Release" documenting a CAAS release on an FAA Form 8130-3 shall not be used.

**NOTE:** FAA Form 8130-3, Block 14a, the sub clause "unless otherwise specified in block 12" is intended for using deviations. If all the required maintenance was not carried out, list the maintenance not carried out in Block 12 and/or attachments.

- 3.9 Acceptability of Parts. Describe the procedures to ensure the acceptability of parts authorized for use during maintenance comply with the following requirement.
  - a. Receiving Inspection. Describe the receiving inspection system used to ensure that articles, components, standard parts, consumables, and raw materials are an acceptable quality.
    - 1) Procedures for proper identification, traceability, conformity, shelf life, contamination, shipping damage, and life limitations must be described.
    - 2) Identify the responsible person (by title) who performs the receiving inspection and documentation.
    - 3) Describe procedures for identifying acceptable or not acceptable materials and articles.
    - 4) Describe procedures for hidden damage inspections. Identify the responsible position (by title) who performs the inspection and documentation. The hidden damage inspection includes a search for any secondary damage that could have resulted from an aircraft accident, such as fire or heat damage, or any suspicious damage to include areas adjacent to obvious damage.
  - b. New Parts. Describe the procedures to ensure that new parts consumed during maintenance on U.S.-registered aircraft and/or aircraft components for the fitment onto U.S.-registered aircraft have acceptable authorized release documents.
    - 1) The new parts manufactured outside of the territories of the United States are subject to the provisions of a Bilateral Agreement with the United States addressing the performance of design, production approval, and airworthiness for the acceptance of that part, and airworthiness for the acceptance of that part.
    - 2) New parts must be in satisfactory condition for installation.
    - An authorized release document as specified in the current Bilateral Aviation Safety Agreement Implementation Procedures for Airworthiness (BASA IPA) between the governments of the United States and Singapore is acceptable for new parts.
    - 4) New parts provided by a U.S. air carrier may have documentation in accordance with the U.S. air carrier's CAMP.

**NOTE:** Evidence of direct shipment authorizations extended to approved suppliers is required. If a replacement part is shipped under direct ship authorization, the Authorized Release Certificates must indicate that the Production Approval Holder (PAH) has authorized direct shipment. This indication may be a supplemental "remark" entry on the Authorized Release Certificate indicating the authorization to the supplier for direct shipment of replacement parts from the supplier's location.

- c. Other than New Parts. Describe the procedures to ensure the following maintained parts consumed during maintenance are acceptable. Parts consumed in maintenance must be traceable to approved FAA-certificated persons authorized under 14 CFR part 43, section 43.7. The signature, certificate number, and type of certificate held by the person approving the work must be documented. The part must be in an airworthy condition and be eligible for installation. An authorized release document, as provided below, may be acceptable to accompany the part.
  - 1) FAA Form 8130-3 issued as a maintenance release that accompany a part from a 14 CFR part 145 repair station.
  - 2) European Aviation Safety Agency (EASA) Form 1 issued as a dual maintenance release that accompany a part from a 14 CFR part 145 repair station.
  - Transport Canada Form One maintenance release for a part from a Canadian-based AMO. Work performed outside of Canada and approved for RTS on a Canada Form One may not be used.
  - 4) A 14 CFR part 43, section 43.9 maintenance record entry that accompanies a product or part from a person authorized under 14 CFR part 43, section 43.7.
- 3.10 Reporting of Unairworthy Conditions to the FAA. This section must explain the procedures the maintenance organization will use to report (within 96 hours) any serious failures, malfunctions, or defects on a component or part of an aircraft (e.g., powerplants, propellers, or appliances) that occur as a result of aircraft/system operation.
  - a. Service Difficulty Reports (SDR).
    - The repair station may submit the reports in the form of a letter, email, or by accessing the SDR reporting system online (<u>http://av-info.faa.gov/sdrx/</u>) in a form and manner acceptable to the FAA containing the information required by 14 CFR part 145, section 145.221.
    - 2) Procedures must include the title of each position responsible for completing and submitting reports (within 96 hours) of unairworthy conditions to the FAA.
  - b. Suspected Unapproved Parts (SUP) Program Reporting Requirements. The SUP reporting requirements section must:
    - 1) Describe the maintenance organization's procedures to report all SUPs. The maintenance organization must submit reports to the FAA under the FAA SUP as detailed in the current edition of AC 21-29, Detecting and Reporting Suspected Unapproved Parts.

2) In addition, this section should include the title of each position responsible for completing and submitting SUP notifications to the FAA.

**NOTE:** The Aviation Data Exchange (AVDEX) may be used for reporting these issues once available.

- 3.11 Additional Operating Locations. Procedures are required for the following conditions, as applicable:
  - a. Additional Fixed Locations Within the Republic of Singapore. If the repair station has additional fixed locations located in Singapore that are operating under one CAAS approval certificate, the facilities can also operate under one 14 CFR part 145 certificate. This section of the FAA Supplement must describe the facilities' operations, the layouts, additional managers/supervisors, and must ensure each location operates under the same MOE and FAA Supplement as the parent facility.
    - 1) The procedure must describe how each separate location is under the full control and quality system of the parent facility. The procedure must include how these locations are audited and must ensure they do not exceed the parent facility's scope of work.
    - 2) The additional fixed locations must be located within Singapore, approved on the CAAS SAR-145 approval schedule, and each location must be listed on the FAA's OpSpecs (A101).
  - b. Line Station Authorizations. If the repair station has line stations, the FAA Supplement must address the procedures the repair station will use to ensure that each location operates under the same MOE and FAA Supplement as the parent facility.
    - 1) The repair station must address how and when it will audit the location.
    - 2) The procedure must describe how each separate location is under the full control of the parent facility and ensures that the quality system includes the U.S. air carrier activities.
    - 3) The procedures must ensure that the repair station employees receive proper training from the U.S. air carrier for the applicable make/model/series aircraft.
    - 4) The line station location(s) must be located within Singapore, approved on the CAAS SAR-145 AMO scope of work, and the FAA must issue OpSpec D107 to authorize the line station approval.
    - 5) The procedures must describe the process for adding or removing line station locations.

- c. Work Away from a Fixed Location. A repair station may perform work away for special circumstances or on a recurring basis to support U.S.-registered aircraft or aircraft components for the fitment onto U.S.-registered aircraft. This subsection describes the procedures for conducting work away from the repair station.
  - Temporary Basis. The procedures must address how a repair station will perform work at a place other than its fixed location for a special circumstance. Describe the occasion or the need for this type of work, and procedures for moving material, equipment, and technical personnel to perform specific maintenance. The repair station cannot establish a permanent location or use these procedures for operations that occur on a recurring basis. Describe how the work will be accomplished in the same manner as work performed at the repair station's main location. Include the following:
    - a) Procedures for directly notifying the CAAS. Once procedures are developed, the notification does not have to be in advance to begin operations.
    - b) Describe the procedures used to ensure that technical data, such as manufacturers' manuals, service bulletins, and letters, are current and accessible at the location where the work is performed.
    - c) Describe the procedures used by the maintenance organization to control tools and ensure proper equipment calibration when away from the repair station's main location.
    - d) Describe how the maintenance organization will ensure that records for work performed away from the repair station will be maintained in the same manner as at the repair station's main location.
    - e) Describe how the maintenance organization will ensure that personnel performing work away from the repair station's main location will be trained and qualified to perform the required work.
    - f) List by title the position authorized to approve an item for RTS when working away from the repair station's main location.
    - g) List by title the position responsible for organizing and supervising work away from the repair station's main location.
    - h) Describe how the maintenance organization will ensure that all required personnel, equipment, materials, and parts will be made available at the place where the work is to be performed.
    - i) State the maintenance organization's responsibility to maintain a record of work performed away from the repair station, both within the country and outside the country. Any record of this work must be maintained for at least 2 years.

- 2) Recurring Basis. Recurring basis is a normal day-to-day business (e.g., mobile field services, fuel cell repair, engine-on-wing repair, etc.) performed away from the repair station's main location. The FAA will issue OpSpec D100. A repair station may perform work away from its main location on a recurring basis as part of everyday business rather than only under special circumstances.
  - a) Describe how work will be accomplished in the same manner as work performed at the repair station's main location. The topics listed above on temporary basis should be developed and tailored to a recurring basis.
  - b) After OpSpec D100 is issued and work away procedures are in the FAA Supplement, the work performed does not require CAAS notification.

**NOTE:** Notification directly to the FAA International Field Office (IFO) is required for any work performed outside of Singapore for more than 30 consecutive days.

- 3) Extended Periods Outside of Singapore. A repair station may perform work away from its fixed location for extended periods of time provided it does not establish permanency at the location. The FAA recognizes that this type of operation involves contracted work that may require several months to complete. This type of operation is temporary in nature and must not be used to circumvent obtaining a 14 CFR part 145 certificate at that location. After the maintenance is completed, the repair station must transport its tools, equipment, and personnel back to its fixed location.
  - a) The FAA must pre-authorize work outside of Singapore that is expected to take more than 30 consecutive days.
  - b) The procedure must ensure the repair station request this type of operation directly to the FAA IFO. The FAA will evaluate each request on a case-by-case basis.
  - c) Previous approved work away procedures that comply with the regulations and procedures in the MOE and FAA Supplement must already be established.
  - d) Procedures to ensure the request to the FAA include the aircraft (make/model/series), the project to be accomplished, the duration of the work, the location of the work, and a statement that the temporary facilities are suitable for the repair station's work.
- 4) Without Procedures. No work away may be performed without written procedures as required by the MIP and MAG.

3.12 Contracting/Subcontracting Maintenance. An FAA-certificated 14 CFR part 145 repair station may contract a maintenance function pertaining to an article to an outside source. The use of an outside source that is not appropriately authorized and certificated by the FAA must have the maintenance function (e.g., plating, welding surface treatment, etc.) listed in the MOE, which must be approved by the CAAS. This requires approval because the outside source (subcontractor) is working under the quality system of the approved repair station. The repair station is exercising the privileges of its 14 CFR part 145 certificate by assuming responsibility for the work performed by the contracted source.

**NOTE:** The purchase of maintained parts (including exchanges), brokerage, or using another 14 CFR part 145 certificated repair station to perform the work and approve that work for RTS are not maintenance functions and do not require approval. This is due to the originating repair station would not be exercising the privileges of their certificate for the work performed.

- a. Conditions. The FAA Supplement must include procedures to ensure the following conditions are adhered to.
  - 1) A subcontract maintenance provider for a maintenance function approval must not provide a complete repair of a type-certificated product.
  - 2) The repair station verifies, through testing and/or inspection, that the maintenance functions performed are satisfactory and ensures its airworthiness.
  - 3) The test or inspection must be documented.
  - 4) If the test or inspection is not possible to verify the work performed, or if the work is not readily visible without substantial re-work, then the originating repair station may have to observe the maintenance function, or develop an acceptable procedure to ensure the quality of the maintenance function was performed properly.
  - 5) Explain that the repair station is responsible for approval for RTS of the subcontracted maintenance function.
  - 6) The certificated repair station remains directly in charge of the subcontracted maintenance function.
  - 7) The certificated repair station must be appropriately rated to perform the subcontracted maintenance function.
  - 8) The subcontracted maintenance function must be identified in the MOE and listed in Block 4 of FAA Form 8310-3 during initial application and renewal of the 14 CFR part 145 certificate.
  - 9) Procedures the maintenance organization will use to qualify and audit subcontractors. Procedures to ensure the subcontractors quality system is equivalent to the repair stations system.

10) The procedures must ensure the contract contains a provision that allows the CAAS and the FAA unimpeded access during the performance of contract maintenance functions.

**NOTE:** A maintenance function is a step or series of steps in the process of performing maintenance, preventive maintenance, or alterations (e.g., Nondestructive Testing (NDT), plating, welding, machining, etc.).

- b. List of Subcontractors. The FAA accepts the CAAS SAR-145 AMO requirements for the MOE to contain a list of all subcontractors utilized by the AMO and approved by the CAAS. The MOE list must contain the name, address, function, and certificate(s) and rating(s), if applicable.
  - 1) The FAA can accept this practice when the list identifies, by an asterisk or other means of identification, those subcontractor(s) the repair station will use to support maintenance activities for U.S.-registered aircraft or aeronautical products to be installed on such aircraft.
  - 2) Once the CAAS approves the list in the MOE, the list is considered approved on behalf of the FAA. The list must be available to the FAA on request.
- c. Receiving Inspections. This subsection must:
  - 1) Describe the maintenance organization's procedures for inspecting or testing the work performed by a subcontractor.
  - 2) Describe the procedures the maintenance organization uses to provide technical training for receiving inspection personnel who inspect subcontracted work.
  - 3) Explain the procedures the maintenance organization will use to ensure that items on which subcontracted work has been performed are properly processed through its receiving inspection procedures.
  - 4) Explain receiving inspection procedures in enough detail to enable a receiving inspector to make an airworthiness determination of any item received based on a technical review of the subcontractor's source documentation.
  - 5) Describe the method of recording the subcontractor's work and the record retention period.
- d. Audits. This subsection must:
  - 1) Describe the procedures the maintenance organization uses when auditing subcontractors and the frequency of such audits. It also should explain the procedures for recording the results of such audits, to include the record retention period for the results of each audit.

- 2) Describe the procedures the maintenance organization will use to ensure that subcontractors comply with operators' manuals, manufacturers' manuals, and ICA.
- 3) Describe how subcontractors are informed of any changes to these manuals and procedures.
- 3.13 Major Repairs and Major Alterations.
  - a. All major repair or alteration data must be FAA approved. Technical data is approved under 14 CFR part 21 for Design Approval Holders (DAH). Design approvals include, but are not limited to, type certificates (TC), Supplemental Type Certificates (STC), Parts Manufacturer Approvals (PMA), and Technical Standard Order Authorizations (TSOA). Other approvals can be issued under 14 CFR part 21, section 21.305. The methods, techniques, and practices contained in a component maintenance manual (CMM), or similarly named document, are developed using approved technical data. Therefore, they comply with 14 CFR part 43, section 43.13(a) and 14 CFR part 145, section 145.201(c).
  - b. Technical Repair Data. Repair design data that is not automatically approved under a DAH requires procedures to ensure that the major repair and/or alteration (modification) data being used to perform work on a U.S. customer's product is approved by the FAA prior to performing maintenance.
    - Technical data can also be approved in support of repairs and alterations, such as a field approval by an FAA inspector in Block 3 of FAA Form 337; by a Designated Engineering Representative (DER) on FAA Form 8110-3, Statement of Compliance with Airworthiness Standards; or pertinent Organization Designation Authorization (ODA) on FAA Form 8100-9, Statement of Compliance with Airworthiness Standards.

**NOTE:** Technical data approved under 14 CFR part 21 may or may not contain the methods, techniques, and practices. They usually define a design configuration and may not contain the how-to instructions and may not meet performance standards under 14 CFR part 43, section 43.13(a). Additional information on approved and acceptable data is contained in the current edition of FAA Order 8300.16, Major Repair and Alteration Data Approval, Chapter 4.

- 2) Procedures the repair station will use to determine when FAA-approved data is required (i.e., procedures for determining what is a major repair or a major alteration as detailed in 14 CFR part 43 appendix A).
- 3) Procedures for obtaining FAA-approved data for major repairs and/or major alterations.

- 4) Procedures used for documentation and use of FAA forms for recording major repairs and/or major alterations (i.e., FAA Form 337, customer's work order for repairs only, or any records required by an air carrier).
- 5) Procedures to ensure the title of each person responsible for completing and submitting FAA Form 337 to the FAA.
- 3.14 Compliance with 14 CFR Part 121 Air Carrier CAMP or 14 CFR Part 125 Operator Inspection Program.
  - a. Procedure. This procedure will describe how the maintenance organization will comply with appropriate portions of a U.S. air carrier's CAMP or 14 CFR part 125 operator's manual as provided by that operator.
    - 1) Procedures to ensure the repair station's personnel have been properly trained and qualified to perform work in accordance with the operator's requirements.
    - 2) Procedures to ensure the repair station understands that any deviation from the U.S. air carrier's maintenance manuals or supplemental instructions will require documented approval from the operator.

**NOTE:** Under 14 CFR part 145, section 145.205, the repair station is required to comply with the air carrier's CAMP (e.g., approval for RTS procedures, parts, tagging, shelf life of expendable materials, tool and equipment calibration intervals, etc.). This is normally accomplished by the air carrier auditing the repair station and providing a written agreement accepting the repair station's processes and procedures as meeting or exceeding the air carrier's requirements. It is imperative that the repair station receive and retain copies of the written agreement from the air carrier and have it available for review by the CAAS or FAA.

- 3) If applicable (14 CFR part 125, section 125.71), a 14 CFR part 125 operator is required to have an FAA-approved inspection program (14 CFR part 125, section 125.247). This section must address how the repair station will comply with the 14 CFR part 125 operator's inspection program. (The repair station will request the operator to provide them with the appropriate section of the inspection program prior to performing that inspection.)
- 4) If the repair station is required to perform maintenance within the territories of the United States, the repair station must have a procedure that describes how to comply with the U.S. operator's drug and alcohol program. This applies for maintenance performed on U.S.-registered aircraft operated under 14 CFR part 121, 125, or 135, or the article for the installation onto these aircraft.

- b. Required Inspection Items (RII). Under this subsection of the manual, the repair station will state how the separation between maintenance and inspection is managed. Explain the following:
  - 1) How the RII requirements are identified and communicated from the U.S. air carrier.
  - 2) Procedures to ensure the RIIs identified in the U.S. operator's manual and accomplished by authorized personnel who are not involved in performing the work on the item to be inspected.
  - 3) The RII-qualified inspectors must work under the quality control system/inspection organization of the repair station.
  - 4) Procedures to ensure the maintenance department cannot overrule the findings of the RII-qualified inspector.
  - 5) Procedures to ensure that any person performing RIIs is trained, qualified, and authorized by the air carrier for which the RII is being conducted.
- 3.15 Compliance with the Manufacturer's Maintenance Manual, ICAs, and ADs. The repair station must comply with manufacturers' maintenance manuals and ICAs. Procedures must ensure the following:
  - a. Internally Developed Documents.
    - The repair station may convert technical data (i.e., ICAs, manufacturers' maintenance manuals, or TC holders' continued airworthiness data) into internal documents such as work cards, work sheets, and shop travelers. The repair station will retain a copy of internally developed technical data.
    - 2) The repair station will establish procedures to ensure that technical data and any internal documents developed from this technical data are current and controlled.
  - b. FAA Airworthiness Directives (AD). Any AD performed on U.S. aircraft or components for the fitment onto such aircraft must be performed by the state of registry and issued by the FAA. The FAA AD section will:
    - 1) Explain how the repair station will ensure it will comply with all ADs issued by the FAA and be applicable to the work performed.
    - 2) State how the repair station will manage and control the distribution and use of ADs issued by the FAA.
    - 3) Identify how the maintenance organization will ensure that applicable ADs issued by the FAA will be made available to its personnel when they perform work under its 14 CFR part 145 certificate and rating.

- 4) List by title each position responsible for compliance with these requirements.
- 5) Include repair station procedures to ensure customer approval/request of the performance of applicable ADs.

**NOTE:** 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.

- 3.16 Qualification of Personnel. The training and qualification procedures in Part 3 of the MOE are acceptable to the FAA once approved by the CAAS. This will be used as the basis for an equivalent FAA-approved training program under 14 CFR part 145, section 145.163. The FAA Supplement qualification of personnel section must make a reference to Part 3 of the MOE and ensure the following procedures are included:
  - a. Training. The procedures the maintenance organization uses to ensure that its personnel have been properly trained and qualified to perform work in accordance with the U.S. customer or air carrier requirements (procedures such as RII). It is the responsibility of the repair station to assure that these requirements are met.
    - 1) The procedures the repair station uses to ensure initial and recurrent training (continuation training) for management, supervisors, inspectors, and RTS personnel are thoroughly familiar with applicable FAA regulations (14 CFR parts 43 and 145) and MAG requirements.
    - 2) Procedures for determining minimum qualifications of these personnel.
    - 3) Procedures to ensure supervisory, inspection, and RTS personnel are thoroughly familiar with inspection methods, techniques, and practices to determine airworthiness.
    - 4) Procedures the repair station uses to ensure that its employees, contractors, and subcontractors have received initial and recurrent training in the transportation of dangerous goods in accordance with International Civil Aviation Organization (ICAO) standards in Annex 18 and the technical instructions in Doc 9284. This requirement is applicable if the repair station is involved with the transportation of dangerous goods, including shipping, handling, and receiving of such items. If the repair station is involved in the loading or handling of dangerous goods on a U.S. air carrier's aircraft, the employees must be trained in accordance with the air carrier's hazardous materials (hazmat) training program. Explain how this is accomplished.

b. Records/Roster. Describe the procedures used for the records of management, supervisors, inspection, and RTS personnel.

**NOTE:** Names and positions listed in the MOE, along with the man-hour planning and employee training records may be used as an equivalent means to satisfy the FAA personnel roster and employment summary required by 14 CFR part 145, section 145.161. Ensure the procedures describe the following:

- 1) Maintaining employee records for qualifications, authorizations, and training.
- 2) Summary of employment and qualifications of experience for the scope of employment.

**NOTE:** The required employment summary may reference the employee's training folder and résumé on file.

- 3) Ensure any change (termination, change in duties, scope of employment, or addition of personnel) to management, supervisors, inspectors, or RTS personnel are updated within 5 days.
- 4) Procedures to ensure that these personnel can read, write, and understand English.
- 3.17 Forms.
  - a. The forms section must include examples of all forms referred to in the supplement, (e.g., FAA Form 8130-3, FAA Form 337, work orders, shop travelers), procedures for completing the forms, and the title of any person authorized to execute such forms. It is acceptable to refer to other sections of the MOE where the copies and procedures for completing the forms are located.
  - b. Ensure the procedures for work orders clearly describe the customer's request for the scope of work and the requirements for the type of release prior to the repairs.

## Appendix 2. FAA Forms and Required Documents

For the purpose of meeting the MAG requirements for a 14 CFR part 145 certificate, the following forms and documents are available at the following websites or embedded into the MAG, as applicable.

Form Name/Number	Title/Instructions	URL
FAA Form 8310-3	Application for Repair Station Certificate and/or Rating Form	http://www.faa.gov/forms
FAA Form 8400-6	Preapplication Statement of Intent (PASI)	
Service Difficulty Reporting (SDR)	SDR reporting system online	http://av- info.faa.gov/sdrx/Default.aspx
FAA MIP Audit Report	CAAS completes the report for initial, renewal, change/amendment, or other purposes for the 14 CFR part 145 recommendations	FAA MIP Audit Report
Repair Station Vital Information Job Aid	Vital information the repair station supplies	Repair Station Vital Information

# Table C-3.FAA Forms and Websites

#### Table C-4.

#### Summary of Forms/Documents for Making an Application

#### **INITIAL APPLICATION DOCUMENTS**

#### Preapplication

- 1. FAA Form 8400-6, Preapplication Statement of Intent (PASI).
- 2. FAA Form 8310-3, Application for Repair Station Certificate and/or Rating. Blocks 1 through 5 completed.
- 3. Statement of Perceived Need for 14 CFR part 145 certificate.
- 4. Hazmat Letter.

#### **Formal Application**

- 1. FAA Supplement to the MOE.
- 2. Repair Station Vital Information (Section C, Appendix 2)—All sections must be completed.
- 3. Copy of the current SAR-145 AMO Approval, form CAAS(AW)83, and its Approval Schedule. Include the page(s) in the approved CAAS MOE that list details of the approved scope of work.
- 4. Copy of Capability List (CL), as required by SAR-145.70(a)(9) (If applicable).

#### **RENEWAL APPLICATION DOCUMENTS**

- 1. FAA Form 8310-3, Application for Repair Station Certificate and/or Rating. Check Block 2 "other" for renewal of certificate.
- 2. Copy of the current SAR-145 AMO Approval, form CAAS(AW)83, and its Approval Schedule. Include the page(s) in the approved CAAS MOE that details the approved scope of work.
- 3. Statement of Continued Need for 14 CFR part 145 certificate.
- 4. Repair Station Vital Information. All sections must be current.
- 5. Hazmat Letter.\*\* Required if changes to name, location, ownership, or added or amended rating.
- 6. FAA Supplement to the MOE.\*\*
- 7. Copy of Capability List (CL).\*\*

\*\*Denotes documents that require submission if a change has occurred since the last renewal.

#### **CHANGE/AMENDMENT APPLICATION DOCUMENTS**

- 1. FAA Form 8310-3, Application for Repair Station Certificate and/or Rating. (Amend the certificate, change in name, change in ownership, change in location or housing/facility, change in ratings, addition of line station, change in mailing address.)
- 2. Copy of the current SAR-145 AMO Approval, form CAAS(AW)83, and its Approval Schedule. Include the page(s) in the approved CAAS MOE that details the approved scope of work.\*\*
- 3. Statement of Perceived Need for 14 CFR part 145 certificate.\*\*
- 4. Repair Station Vital Information job aid.\*\*
- 5. Hazmat Letter.\*\* Required if changes to name, location, ownership, or added or amended rating.
- 6. FAA Supplement to the MOE.\*\*
- 7. Copy of Capability List (CL).\*\*

\*\*Denotes documents may require submission depending on the request.

# MAINTENANCE AGREEMENT GUIDANCE

### BETWEEN THE

## FEDERAL AVIATION ADMINISTRATION

### AND THE

# **CIVIL AVIATION AUTHORITY OF SINGAPORE**

Section D. Temporary Revisions

## Figure D-1. Temporary Revisions

TEMPORARY REVISION(S)				
The FAA and the CAAS have determined a temporary revision is needed to make minor corrections or to provide temporary procedures until the MAG is revised. Both the FAA and the CAAS must agree to the change before implementation.				
Corrections:				
FAA Signature:	Date:			
FAA Name:				
CAAS Signature:				
CAAS Name:	Date:			
Additional comments:	-			
MAG Section:				
Comments:				
TR #:				
<b>Entry into Operation.</b> Both authorities agree to the changes and are effective on the following date.	Date:			

### Figure D-2. Temporary Revision 1

TEMPORARY REVISION(S)				
The FAA and the CAAS have determined a temporary revision is needed to make minor corrections or to provide temporary procedures until the MAG is revised. Both the FAA and the CAAS must agree to the change before implementation.				
Corrections: The following corrections are required. CAAS website update, FAA Regional				
Coordinator titles, Ratings Matrix.				
FAA Signature	Date: 5/25/2018			
FAA Name: John S. Duncan				
Flight Standards Services, Executive Director, AFX-1				
CAAS Signature:				
CAAS Name: Edward Yeo	Date:			
Head (Continuing Airworthiness) Airworthiness/Flight	31/5/2018			
Operations Division	51/0/2010			

### **TEMPORARY REVISION(S)**

The FAA and the CAAS have determined a temporary revision is needed to make minor corrections or to provide temporary procedures until the MAG is revised. Both the FAA and the CAAS must agree to the change before implementation.

**Temporary Revised Section(s):** This temporary revision must be included into the following section of the MAG and must remain in effect until the MAG revision is implemented.

Additional comments:

1) Section A, paragraph 2.4(b):

Changed from: http://www.caas.gov.sg/caas/en/About\_CAAS/Our\_Strategic\_Thrusts/Safety\_Oversig ht\_x\_Promotion/Mutual\_Recognition\_Agreements.html.

Changed to: https://www.caas.gov.sg/docs/default-source/default-document-library/ussingapore-mip-(signed-16-feb-2016).PDF

2) In Section B, Appendix 2, Table B-2:

Changed from: http://www.caas.gov.sg/caasWeb2010/export/sites/caas/en/ eServices\_Forms/Organisations\_Approval.html?\_\_locale=en

Changed to: https://www.caas.gov.sg/e-services-forms/forms/aircraft

3) Sections A, B, and C: To align with Future of Flight Standards, the following is a global change throughout the document.

Changed all reference from: FAA Regional Coordinator (AFS-AXX)

Changed all references to: FAA Coordinators (AFS-370)

#### 4) Section A, Appendix A, Table A-5:

- The FAA limited "Accessory" rating was added to CAAS rating C-3, C-4, C-6, C-8, and C-13.
- FAA limited "Instrument" rating was added to CAAS rating C-1, C-7, C-8, C-12, C-14, and C-16.
- FAA limited "Radio" rating was added to CAAS rating C-6

## TEMPORARY REVISION(S)

The FAA and the CAAS have determined a temporary revision is needed to make minor corrections or to provide temporary procedures until the MAG is revised. Both the FAA and the CAAS must agree to the change before implementation.

MAG Section: All	
Comments: See above details for applicable sections	
TR #: 1	
<b>Entry into Operation.</b> Both authorities agree to the changes and are effective on the following date.	Date: June 1, 2018