



**IMPLEMENTATION PROCEDURES FOR THE  
TECHNICAL ARRANGEMENT ON AVIATION MAINTENANCE  
BETWEEN CAAS AND HONG KONG CAD**

General.....	1
Purpose.....	1
Applicability.....	1
Cancellation.....	1
Effective date.....	1
References.....	1
Introduction.....	2
Transition for organisations currently holding CAAS or CAD approvals.....	2
Procedures for the acceptance of CAAS SAR-145 approved maintenance organisations.....	2
Procedures for the acceptance of CAD HKAR-145 approved maintenance organisations.....	4
Appendix 1: Supplement to the maintenance organisation exposition.....	7

- 1. GENERAL.** Advisory Circulars (ACs) are issued by the Civil Aviation Authority of Singapore (CAAS) and contain information about standards, practices and procedures acceptable to the Authority. The revision number of the AC is indicated in parenthesis in the suffix of the AC number.
- 2. PURPOSE.** This AC is issued to provide information and guidance relating to the Technical Arrangement on Aviation Maintenance (TA) between the CAAS and the Hong Kong Civil Aviation Department (CAD). This document provides:
  - a) Procedures for the acceptance of maintenance organisations under the terms of this TA;
  - b) Guidelines for Air Operator Certificate (AOC) Holders and Approved Maintenance Organisations (AMOs) contracting for or providing maintenance in accordance with this TA; and
  - c) Guidelines to maintenance organisations presently approved or accepted by either authority, on the transition to the new working arrangements.
- 3. APPLICABILITY.** This AC applies to any organisation intending to perform work under this TA or to any organisation intending to contract work to an organisation performing work under this TA.
- 4. CANCELLATION.** This AC supersedes AC 145-4(0) dated 16 December 2004.
- 5. EFFECTIVE DATE.** This AC is effective on 22 September 2008.
- 6. REFERENCES.** SAR-145; HKAR-145; TA between CAAS and HK CAD.

## **7. INTRODUCTION**

- 7.1 On 16 December 2004, the Civil Aviation Authority of Singapore (CAAS) entered into a Technical Arrangement on Aviation Maintenance with the Civil Aviation Department Hong Kong (CAD). The Technical Arrangement was limited to maintenance on aircraft components. On 29 August 2008, the Technical Arrangement was expanded to include maintenance on the aircraft and engine. This Technical Arrangement on Aviation Maintenance (TA) allows for the reciprocal acceptance of maintenance organisations, with ratings to perform maintenance, qualifying under the provisions of the arrangement.
- 7.2 The TA allows maintenance organisations, recognised under the provisions of this Arrangement, to perform maintenance on Hong Kong or Singapore aeronautical products in accordance with the maintenance regulations of the territory where the organisation performing the work is located.

## **8. TRANSITION FOR ORGANISATIONS CURRENTLY HOLDING CAAS OR CAD APPROVALS**

- 8.1 Current approvals authorising Hong Kong organisations to perform maintenance on Singapore aeronautical products and authorising Singapore organisations to perform maintenance on Hong Kong aeronautical products will expire upon the organisations' compliance with the procedures outlined in this AC.
- 8.2 SAR-145 maintenance organisations located in Singapore and currently holding a HKAR-145 approval should notify CAAS of their intention to seek recognition under the terms of this TA.
- 8.3 HKAR-145 maintenance organisations located in Hong Kong and currently holding a SAR-145 approval should notify CAD of their intention to seek recognition under the terms of this TA.

## **9. PROCEDURES FOR THE ACCEPTANCE OF CAAS SAR-145 APPROVED MAINTENANCE ORGANISATIONS**

### Purpose of this section

- 9.1 This section provide guidelines:
- 1) For the acceptance, under the provisions of the TA, of maintenance organisations currently under the jurisdiction of the CAAS; and
  - 2) To Hong Kong Air Operators and approved maintenance organisations contracting or intending to contract maintenance work with the aforementioned organisations.

### Hong Kong Regulatory Requirements

- 9.2 Hong Kong Airworthiness Notices (CAD 455) include provisions for the acceptance of maintenance performed on Hong Kong registered aircraft and components by foreign maintenance organizations where an agreement or arrangement, such as the TA, is in force.
- 9.3 By signing the TA, CAD acknowledges that maintenance organisations, approved in accordance with SAR-145 and qualifying under the terms of this TA are considered equivalent to a Hong Kong maintenance organisation approved under HKAR-145.

## Acceptance of CAAS SAR-145 Approved Maintenance Organisations

9.4 SAR-145 approved maintenance organisations located in Singapore intending to perform maintenance on Hong Kong aeronautical products should follow the procedures detailed below:

- 1) All applications for recognition under the TA should be sent to the CAAS officer responsible for the oversight of the organisation (the principal maintenance inspector), who will ensure that all documentation relating to the application is acceptable under the provisions of the TA.
- 2) Applicants should include in their application a copy of the supplement to the Maintenance Organisation Exposition (MOE) as stipulated in Annex 1 of the TA. The supplement should clearly demonstrate how the organisation intends to meet any special provisions of the TA. Appendix 1 of this document provides some guidance on how to compile such a supplement;
- 3) The CAAS will acknowledge receipt of the application and commence a review of the documentation required in accordance with the TA. The CAAS review will confirm that the organisation has been inspected in accordance with the inspection cycle of the CAAS and has been subject to an audit covering all aspects of the organisation's activities within the past 36 months. Where these criteria have not been met, the CAAS will conduct an audit of the company prior to acceptance.
- 4) Once the above criteria are met and have been found acceptable, the CAAS will accept the organisation by approving the MOE supplement for recognition under the TA and the scope of work that may be performed.
- 5) CAAS will inform CAD of the acceptance of the maintenance organisation under the TA.

## Work performed on Hong Kong aeronautical products by Singapore approved maintenance organisations under the TA

9.5 Organisations approved under this TA to perform work on Hong Kong aeronautical products, shall do so in accordance with the following provisions:

- 1) All maintenance of Hong Kong aeronautical products shall be performed in accordance with the conditions specified by the owner or operator of the aeronautical products maintained;
- 2) CAD regulations on Airworthiness Directives, related to the work undertaken, must be complied with;
- 3) The design of major repairs and major modifications shall be in accordance with CAD approved data;
- 4) CAD criteria shall be used to determine whether a repair or modification is major or minor;
- 5) Maintenance shall be released in accordance with CAAS requirements. A SAR 145.50 certificate of release shall be used for complete aircraft and a Singapore Authorised Release Certificate CAAS Form (AW) 95 shall be used for aeronautical products other than complete aircraft. The release certificate shall clearly state that the maintenance performed is released in accordance with the TA;
- 6) Technical records shall be completed in accordance with CAD requirements;
- 7) Any part installed pursuant to the TA shall be manufactured and maintained by organisations that are approved by or acceptable to CAD; and
- 8) The maintenance organisation shall comply with all the requirements specified in Annex 1 of the TA.

### Contracted and Subcontracted Work

- 9.6 CAAS approved maintenance organisations recognised by CAD to maintain aeronautical products under the TA may contract work to other CAAS approved maintenance organisations accepted under this TA and located within Singapore.
- 9.7 Where work is contracted to organisations outside of Singapore, the organisation shall be approved by CAD or be otherwise acceptable to CAD under the terms of an existing TA or a bi-lateral maintenance agreement.
- 9.8 The approved maintenance organisation may subcontract work to any other organisation provided it extends its quality system to that organisation and that the work is within the scope of the ratings and limitations of the approved maintenance organisation.
- 9.9 It is the organisation's responsibility to ensure that the customer is informed when the subcontracting of work is required.

### Revocation of CAD Recognition

- 9.10 Each authority has a responsibility under the TA to notify the other authority of any instances of non-compliance, investigations or enforcement action that might impact the organisation's ability to comply with the provisions of the TA. Upon receipt of a notification of such an event, CAD will review the case to determine whether the organisation still meets the provisions of the TA.
- 9.11 Notwithstanding any of the foregoing, CAD or CAAS may revoke recognition of an organisation pursuant to the TA, where CAD or CAAS finds that an organisation is not maintaining the applicable standards or is otherwise not achieving the intent of the TA.

### Oversight

- 9.12 Oversight of maintenance organisations located in Singapore recognised under the TA shall be conducted by CAAS. CAAS shall make the results of all audits and inspections available to CAD upon request.
- 9.13 CAD may, subject to reasonable prior notification, inspect the approved maintenance organisation, to investigate safety issues. CAD may also participate in CAAS audits and inspections of approved maintenance organisations.

## **10. PROCEDURES FOR THE ACCEPTANCE OF CAD HKAR-145 APPROVED MAINTENANCE ORGANISATIONS**

### Purpose of this section

- 10.1 This section provide guidelines:
- 1) For the acceptance, under the provisions of the TA, of maintenance organisations currently under the jurisdiction of the CAD; and
  - 2) To Singapore Air Operators and approved maintenance organisations contracting or intending to contract maintenance work with the aforementioned organisations.

### Singapore Regulatory Requirements

- 10.2 The *Singapore Airworthiness Requirements Part 145* (SAR-145) requires Singapore aircraft and aircraft components to be maintained by a maintenance organisation appropriately approved in accordance with the SAR-145. The SAR-145 also contains a provision to allow the acceptance of a maintenance organisation located outside Singapore.

- 10.3 By signing the TA, CAAS acknowledges that maintenance organisations, approved in accordance with HKAR-145 and qualifying under the terms of this TA are considered equivalent to a Singapore maintenance organisation approved under the SAR-145.

Acceptance of CAD HKAR-145 Approved Maintenance Organisations

- 10.4 HKAR-145 maintenance organisations located in Hong Kong and intending to perform work on Singapore aeronautical products should follow the procedures detailed below:
- 1) All applications for recognition under this TA should be sent to the CAD official responsible for the oversight of the organisation (the principal maintenance inspector), who will ensure that all documentation relating to the application is acceptable under the provisions of the TA;
  - 2) Applicants should include in their application a copy of the Maintenance Organisation Exposition (MOE) supplement as stipulated in Annex 1 of the TA. The supplement should clearly demonstrate how the organisation intends to meet any special provisions of the TA. Appendix 1 of this AC provides some guidance on how to compile such a supplement;
  - 3) The CAD will acknowledge receipt of the application and commence a review of the documentation required in accordance with this TA. The CAD review will confirm that the organisation has been inspected in accordance with the inspection cycle of CAD and has been subjected to an audit covering all aspects of the organisation's activities within the past 36 months. Where these criteria have not been met, the CAD will conduct an audit of the company prior to the acceptance;
  - 4) Once the above criteria are met and have been found acceptable, the CAD will accept the HKAR-145 organisation by approving the MOE supplement for recognition under the TA and the scope of work that may be performed; and
  - 5) CAS will inform CAAS of the acceptance of the maintenance organisation under the TA.

Work performed on Singapore aeronautical products by Hong Kong approved maintenance organisations under the TA

- 10.5 Organisations approved under this TA to perform work on Singapore aeronautical products, shall do so in accordance with the following provisions:
- 1) All maintenance of Singapore aeronautical products shall be performed in accordance with the conditions specified by the owner or operator of the aeronautical products maintained;
  - 2) CAAS regulations on Airworthiness Directives, related to the work undertaken, must be complied with;
  - 3) The design of major repairs and major modifications shall be in accordance with CAAS approved data;
  - 4) CAAS criteria shall be used to determine whether a repair or modification is major or minor;
  - 5) Maintenance shall be released in accordance with CAD requirements. A HKAR 145.50 certificate of release shall be used for complete aircraft and a CAD Form One shall be used for aeronautical products other than complete aircraft. The release certificate shall clearly state that the maintenance performed is released in accordance with the TA;
  - 6) Technical records shall be completed in accordance with CAAS requirements;
  - 7) Any part installed pursuant to the TA shall be manufactured and maintained by organisations that are approved by or acceptable to CAAS; and

- 8) The maintenance organisation shall comply with all the requirements specified in Annex 1 of the TA.

#### Contracted and Subcontracted Work

- 10.6 CAD approved maintenance organisations recognised by CAAS to maintain aeronautical products under the TA may contract work to other CAD approved maintenance organisations accepted under this TA and located within Hong Kong.
- 10.7 Where work is contracted to organisations outside of Hong Kong, the organisation shall be approved by CAAS or be otherwise acceptable to CAAS under the terms of an existing TA or a bi-lateral maintenance agreement.
- 10.8 The approved maintenance organisation may subcontract work to any other organisation provided it extends its quality system to that organisation and that the work is within the scope of the ratings and limitations of the approved maintenance organisation.
- 10.9 It is the organisation's responsibility to ensure that the customer is informed when the contracting or subcontracting of work is required.

#### Revocation of CAAS Recognition

- 10.10 Each authority has a responsibility under the TA to notify the other authority of any instances of non-compliance, investigations or enforcement action that might impact the organisation's ability to comply with the provisions of the TA. Upon receipt of a notification of such an event, CAAS will review the case to determine whether the organisation still meets the provisions of the TA.
- 10.11 Notwithstanding any of the foregoing, CAAS or CAD may revoke recognition of an organisation pursuant to the TA, where CAAS or CAD finds that an organisation is not maintaining the applicable standards or is otherwise not achieving the intent of the TA.

#### Oversight

- 10.12 Oversight of maintenance organisations located in Hong Kong recognised under the TA will be conducted by CAD. CAD will make the results of all audits and inspections available to CAAS upon request.
- 10.13 CAAS may, subject to reasonable prior notification, inspect the approved maintenance organisation, to investigate safety issues. CAAS may also participate in CAD audits and inspections of approved maintenance organisations.

**APPENDIX 1 : SUPPLEMENT TO THE MAINTENANCE ORGANISATION EXPOSITION**

---

**Purpose**

This appendix provides guidance for SAR-145 organisations based in Singapore on the development of a supplement to the SAR-145 MOE required under the Hong Kong-Singapore TA. Where the material required by this supplement is already incorporated into the manual/exposition, the supplement need only contain a reference to where in the manual/exposition the requirement is located.

---

**COVER PAGE**

**CAD SUPPLEMENT TO SAR-145 AMO**

**MAINTENANCE ORGANISATION EXPOSITION**

**REF** \_\_\_\_\_

**Company Name and Facility Address**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CAAS SAR-145 APPROVAL NO.** \_\_\_\_\_

**DATE OF SUPPLEMENT** \_\_\_\_\_

This Supplement, together with the CAAS SAR-145 MOE, form the basis of acceptance by the CAD for maintenance carried out by this organisation on aircraft and/or engine and/or aircraft components under the regulatory control of the CAD.

Maintenance carried out and certified in accordance with the referenced MOE and this supplement is accepted as meeting the requirements of HKAR-145.

## 1. INTRODUCTION

This paragraph should address why the manual/exposition amendment or supplement is necessary.

“The Civil Aviation Authority of Singapore and the Civil Aviation Department Hong Kong signed a Technical Arrangement (TA) on 29 August 2008 that allows for the reciprocal acceptance of maintenance organisations qualifying under the provisions of the arrangement.

This amendment/supplement is therefore intended to inform the staff of the AMO of additional considerations that need to be taken into account when working in accordance with the TA.”

## 2. ACCOUNTABLE MANAGER'S COMMITMENT STATEMENT

This paragraph represents the agreement by the Accountable Manager that the AMO will comply with the conditions specified in the manual/exposition/supplement. The accountable manager is usually the AMO's Chief Executive Officer (CEO) but can be the person holding another responsible position as long as he/she has full financial authority.

An acceptable statement might be as follows:

“This Supplement defines in conjunction with the CAAS Approved Maintenance Organisation Exposition Ref ..... the organisation and procedures upon which CAD acceptance is based.

These procedures are approved by the undersigned and must be adhered to when maintenance work is being performed for any customer that operates under the jurisdiction of the CAD and the TA.

It is recognised that the organisation's procedures do not override the necessity of complying with any additional requirements formally published by the CAD and notified to this organisation from time to time.

It is further understood that the CAD reserves the right to withdraw acceptance (suspend or cancel any privileges granted pursuant to the TA) if it is considered that procedures are not followed or that the standards are not maintained.

Signed by the Accountable Manager

For and on behalf of [the AMO].

\_\_\_\_\_ (name) \_\_\_\_\_ (signature) \_\_\_\_\_ (date)”

*Note: When the Accountable Manager is replaced, the new Accountable Executive/Manager must, within 30 days, sign the statement so as not to invalidate the acceptance.*

## 3. ACCEPTANCE BASIS AND LIMITATION

CAD acceptance is based upon full compliance with SAR-145 and the CAAS Maintenance Organisation Exposition.

This acceptance of maintenance is limited to the scope of work permitted under the current approval granted by CAAS to the AMO in accordance with SAR-145 and to the Singapore locations specified therein.

#### **4. INTERNAL QUALITY ASSURANCE SYSTEM**

This paragraph should reference the location in the AMO's MOE or Quality Assurance Manual of the internal quality assurance system description and procedures.

#### **5. ACCESS BY CAAS AND CAD**

This paragraph should identify the fact that CAAS and CAD staff must be allowed access to the AMO for the purpose of assuring compliance with procedures and standards and to investigate specific problems.

There must also be an indication that in the case of a serious non-compliance with regulations or established standards the organisation must accept that it may be subject to CAD enforcement action in order to maintain status with CAD.

#### **6. WORK ORDERS / CONTRACTS**

This paragraph addresses the subject of work orders/contracts. The AMO must ensure that the maintenance contract is understood and agreed to by both parties. The customer must ensure that the work orders/contracts are detailed and clear, and the AMO must ensure it receives work orders that it understands.

The work order should specify the inspections, repairs, alterations, overhauls to be carried out, the Airworthiness Directives to be complied with and parts to be replaced.

Replacement parts must be manufactured and maintained by organisation acceptable to CAD and shall have been certified in accordance with HKAR-145.

#### **7. CONTRACTING AND SUBCONTRACTING**

This paragraph should address the procedures for contracting and subcontracting as specified in the provisions in Annex 1 of the TA.

#### **8. AIRWORTHINESS DIRECTIVES/AIRWORTHINESS LIMITATIONS**

This paragraph must address the compliance with Airworthiness Directives and any airworthiness limitations. The applicable CAD regulations on Airworthiness Directives must be complied with.

Airworthiness Directives, Airworthiness Limitations, and other requirements declared mandatory by the State of Registry must be available to maintenance personnel.

The customer must provide a copy of all ADs that must be complied with to the AMO and identify any airworthiness limitations to the AMO. The customer remains responsible for specifying any AD compliance required during maintenance and any airworthiness limitations through the work order.

#### **9. REPAIRS AND MODIFICATIONS**

This paragraph should specify that the customer will obtain or establish the process to obtain necessary CAD approvals prior to the incorporation of major repairs and major modifications. The AMO will ensure that major repairs and major modifications are incorporated only when in receipt of the appropriate approvals.

The CAD criteria must be used to determine whether repairs and modifications are major.

## **10. MAINTENANCE RELEASE OF AIRCRAFT AND COMPONENTS**

Release to service for aircraft under the TA should be carried out in accordance with SAR-145 and a Certificate of Release to Service should be issued.

Release to service of components up to and including complete engines under the TA should be carried out in accordance with SAR-145. The Authorised Release Certificate Form CAAS(AW)95 should be issued.

The following statement should be reflected in Block 13 of the Authorised Release Certificate:

“Released under the provisions of the TA between CAAS and CAD Hong Kong”

When maintenance cannot be performed in accordance with the work order/contract, this fact must be made known to the customer.

## **11. RECORD KEEPING**

This paragraph should describe how the AMO intends to meet the requirements of the TA on the retention of technical records.

## **12. PERSONNEL RESPONSIBLE TO RELEASE TO SERVICE**

Describe the procedures the organisation will use to ensure personnel responsible to release to service a product after maintenance are familiarised with the TA, its Implementation Procedures (IP), this supplement and the customer’s special conditions.

## **13. MANDATORY REPORTING REQUIREMENTS**

Describe the procedures the organisation will use to ensure all mandatory reportable conditions found in aeronautical products are reported to the owner or operator of the aeronautical product and the CAAS.