



# ADVISORY CIRCULAR

## AC 145-05 v1.13

A composite background image featuring a navigation chart with various lines, numbers, and text like 'NAVIGATION', 'WAC SCALE 1:1,000,000', and 'JANOVCE'. Overlaid on the right is a black and white photograph of hands writing on a document with a pen.

# Implementation procedures for the technical arrangement on aviation maintenance between CASA and CAAS

Date

December 2022

File ref

D22/486664

Advisory circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the Regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.

**Advisory circulars should always be read in conjunction with the relevant regulations.**

## Audience

This Advisory Circular (AC) applies to:

- Part 145 maintenance organisations intending to participate under the technical agreement between CASA and CAAS
- any organisation intending to contract work to an organisation participating under the technical agreement between CASA and CAAS.

## Purpose

This AC is issued to provide information and guidance relating to the Technical Arrangement between the Civil Aviation Safety Authority (CASA) and the Civil Aviation Authority of Singapore (CAAS) dated 22 April 2013.

This document provides the following:

- procedures for the acceptance of maintenance organisations under the terms of the TA
- guidelines for Air Operator Certificate (AOC) holders and Approved Maintenance Organisations (AMOs) contracting for or providing maintenance in accordance with the TA
- guidelines for maintenance organisations presently approved or accepted by CASA, on the transition to the new working arrangements.

## For further information

For further information on this AC, contact CASA's Airworthiness and Engineering Branch (telephone 131 757).

Unless specified otherwise, all subregulations, regulations, Divisions, Subparts and Parts referenced in this AC are references to the *Civil Aviation Safety Regulations 1998 (CASR)*.

## Status

This version of the AC is approved by the Branch Manager, Airworthiness and Engineering.

**Note:** Changes made in the current version are not annotated. The document should be read in full.

Version	Date	Details
v1.13	December 2022	Administrative review only.
v1.12	August 2021	The following change has been made to this document: <ul style="list-style-type: none"> <li>• Inclusion of Panasonic Avionics Corporation in Appendix C</li> <li>• Removed Boeing Australia Component Repair Pty Ltd</li> </ul>
v1.11	August 2020	The following change has been made to this document: <ul style="list-style-type: none"> <li>• Inclusion of Avionics 2000 Pty Ltd into Appendix C</li> <li>• Inclusion of Aerobond Pty Ltd into Appendix C</li> <li>• Inclusion of Smart Group Pty Ltd into Appendix C</li> </ul>
v1.10	November 2019	The following change has been made to this document: Name change of CHEP Aerospace Pty Ltd to Unilode Aviation Solutions Australia Pty Ltd.
v1.9	April 2019	The following change has been made to this document: <ul style="list-style-type: none"> <li>• Name change of Aircraft Maintenance Services Australia (AMSA) to Heston MRO Pty Ltd.</li> </ul>
v1.8	January 2018	The following changes have been made to this document: <ul style="list-style-type: none"> <li>• Inclusion of Seats of Australia into Appendix C</li> <li>• Addition of dates column to Appendix C to indicate when organisations were accepted under the Technical arrangement.</li> </ul>
v1.7	November 2017	The following change has been made to the document: <ul style="list-style-type: none"> <li>• Addition of Virgin Tech Pty Ltd Approval No 1-R0235 to the table of organisations accepted under the Technical Arrangement at Appendix C.</li> </ul>
v1.6	June 2017	The following change has been made to the document: <ul style="list-style-type: none"> <li>• Update of contact details under the 'For further information' heading on page 1 of the AC.</li> </ul>
v1.5	December 2016	The following change has been made to the document: <ul style="list-style-type: none"> <li>• Removal of Bower Aero Pty Ltd Approval No: 1-TSP5N from the table of organisations accepted under this Technical Arrangement at Appendix C.</li> </ul>
v1.4	September 2015	This is the fourth amended version of this AC to be issued on this matter. The following change has been made to the document: <ul style="list-style-type: none"> <li>• Additions to the table of organisations accepted under this Technical Arrangement at Appendix C.</li> </ul>
v1.3	March 2015	This is the third amended version of this AC to be issued on this matter. The following changes have been made to the document: <ul style="list-style-type: none"> <li>• Addition to the Acronyms list</li> <li>• RPT clarification to Introduction paragraph</li> <li>• Clarification of CRS requirements under subparagraph 11.4</li> <li>• Additions to the table of organisations accepted under this Technical Arrangement at Appendix C.</li> </ul>
v1.2	August 2014	This is the second amended version of this AC to be issued on this matter.

IMPLEMENTATION PROCEDURES FOR THE TECHNICAL ARRANGEMENT ON  
AVIATION MAINTENANCE BETWEEN CASA AND CAAS

Version	Date	Details
		<p>The following changes have been made to the document:</p> <ul style="list-style-type: none"> <li>• Addition of an Acronyms list</li> <li>• Addition of a Definitions section</li> <li>• Substitute each occurrence of the term 'aircraft component' with 'aeronautical product'</li> <li>• Addition of a table of organisations accepted under this Technical Arrangement at Appendix 3.</li> </ul>
v1.1	March 2014	<p>This is the first amended version of this AC to be issued on this matter. The following changes have been made to the document:</p> <ul style="list-style-type: none"> <li>• Addition of an Acronyms list</li> <li>• Addition of a Definitions section</li> <li>• Substitute each occurrence of the term 'aircraft component' with 'aeronautical product'</li> <li>• Addition of a table of organisations accepted under this Technical Arrangement at Appendix 3.</li> </ul>
(0)	July 2013	<p>This is the first AC to be issued on this matter.</p>

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# 1 Reference material

## 1.1 Acronyms

The acronyms and abbreviations used in this AC are listed in the table below.

Acronym	Description
AC	Advisory Circular
AMO	approved maintenance organisation
AOC	air operator's certificate
CAAS	Civil Aviation Authority of Singapore
CASA	Civil Aviation Safety Authority
CASR	<i>Civil Aviation Safety Regulation 1998</i>
CRS	certificate of release to service
MOE	maintenance organisation exposition
TA	technical arrangement

## 1.2 Definitions

Terms that have specific meaning within this AC are defined in the table below.

Term	Definition
CASR Part 145 AMO approval	an approval issued to a maintenance organisation under regulation 145.030 of the <i>Civil Aviation Safety Regulations 1998 (CASR)</i> that is in force.
SAR-145 approval	an approval issued to a maintenance organisation in accordance with the Singapore Airworthiness Requirements (SAR) 145.

## 1.3 References

### Legislation

Legislation is available on the Federal Register of Legislation website <https://www.legislation.gov.au/>

Document	Title
Part 145	Continuing airworthiness - Part 145 approved maintenance organisations
<a href="#">SAR-145</a>	Maintenance organisation approval

## **2 Introduction**

### **2.1 Background**

- 2.1.1 On 22 April 2013, CASA entered into a Technical Arrangement on Aviation Maintenance with CAAS (the TA). The TA is currently limited to maintenance on regular public transport aircraft, engine and aeronautical products.
- 2.1.2 The TA allows maintenance organisations, recognised under the provisions of the TA, to perform maintenance on Australian or Singaporean aircraft and aeronautical products in accordance with the maintenance regulations of the territory where the organisation performing the work is located.

### **2.2 Transition for organisations currently holding CASA or CAAS approvals**

- 2.2.1 Part 145 maintenance organisations located in Australia should notify CASA of their intention to seek recognition under the terms of the TA.
- 2.2.2 SAR-145 maintenance organisations located in Singapore should notify CAAS of their intention to seek recognition under the terms of the TA.

### **2.3 List of participating organisations under the technical arrangement**

- 2.3.1 CASA has published a list of organisations accepted under the TA in Appendix C - Organisations accepted under this technical arrangement of this AC.

### **2.4 Feedback**

- 2.4.1 Any feedback or questions about the TA and its implementation should be directed to the Branch Manager, Airworthiness and Engineering.

## 3 Procedures for the acceptance of CASA Part 145 approved maintenance organisations

### 3.1 Purpose of this section

3.1.1 This section provides guidelines:

- for the acceptance, under the provisions of the TA, of maintenance organisations currently under the jurisdiction of the CASA
- to Singaporean air operators and approved maintenance organisations contracting or intending to contract maintenance work with the aforementioned organisations.

### 3.2 Singaporean regulatory requirements

3.2.1 SAR-145 requires Singaporean aircraft and aeronautical products to be maintained by a maintenance organisation appropriately approved in accordance with the SAR-145.

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

### 3.3 Acceptance of Part 145 AMO

3.3.1 Part 145 AMO located in Australia intending to perform maintenance on Singaporean aircraft and aeronautical products should follow the procedures detailed below:

- All applications for recognition under the TA should be sent to CASA's Airworthiness and Engineering Branch, at [airworthiness.standards@casa.gov.au](mailto:airworthiness.standards@casa.gov.au), which will ensure that all documentation relating to the application is acceptable under the provisions of the TA.
- Applicants must satisfy CASA that there is a need to participate in the TA, either with a letter of intent from a Singaporean air operator, SAR 145 AMO located in Singapore, or another local Part 145 of CASR AMO that is participating in the TA.
- Applicants should include in their application a copy of the supplement to their Part 145 AMO Maintenance Organisation Exposition (MOE), which should clearly demonstrate how the organisation intends to meet any special provisions of the TA. Appendix 2 of this AC provides guidance on how to compile such a supplement.
- CASA will acknowledge receipt of the application and commence a review of the documentation required in accordance with the TA. CASA may also conduct an on-site audit if necessary. Once the TA criteria are met and have been found to be acceptable, CASA will accept the organisation by approving the MOE supplement for recognition under the TA and the scope of the work that can be performed.
- CASA will inform the CAAS designated office mentioned in Paragraph 16 of the TA of the acceptance of the maintenance organisation under the TA.



### **3.4 Work performed on Singaporean aircraft and aeronautical products by Australian AMO under the TA**

- 3.4.1 Organisations approved under the TA to perform work on Singaporean aircraft and aeronautical products, shall do so in accordance with the following provisions:
- Maintenance shall be released in accordance with TA requirements. The TA subparagraph 3.3(b) allows a CASR Part 145 AMO to issue a CRS for an aircraft equivalent to SAR 145.50 when complying with the requirements of Annex 3 of the TA. A CRS statement under SAR 145.50 shall be used for complete aircraft and a CASA Form 1 shall be used for aeronautical products. In the case of issuing a CRS for the maintenance of Singaporean registered aircraft conditions as set out in Annex 3 of Appendix 1 must be met. The release certificates shall clearly state that the maintenance performed is released in accordance with the TA.
  - All maintenance of Singaporean aeronautical products shall be performed in accordance with the conditions specified by the owner or operator of the aeronautical products maintained.
  - CAAS regulations on Airworthiness Directives, related to the work undertaken, must be complied with.
  - The design of major repairs and major modifications shall be in accordance with the CAAS approved data.
  - CAAS criteria shall be used to determine whether a repair or modification is major or minor.
  - Technical records shall be completed in accordance with CAAS requirements.
  - Any aeronautical product installed pursuant to the TA shall be manufactured and maintained by organisations that are approved by or acceptable to CAAS.
  - Only responsible maintenance personnel who are familiar with the TA, its implementation procedures, this AC and customer's special conditions are allowed to perform inspections and issuance of the certificate of release for aircraft and aeronautical products under the TA.

### **3.5 Contracted and subcontracted work**

- 3.5.1 CASA AMO recognised by CAAS to maintain aeronautical products under the TA may contract work to other participating organisations located within Australia.
- 3.5.2 Where work is contracted to organisations outside of Australia, the organisation shall be approved by CAAS or be otherwise acceptable to CAAS under the terms of an existing TA or a bilateral maintenance agreement.
- 3.5.3 The AMO may subcontract work to any other organisation provided it extends its quality system to that organisation and that the work is within the scope of the ratings and limitations of the approved maintenance organisation.
- 3.5.4 It is the organisation's responsibility to ensure that the customer is informed when the subcontracting of work is required.

### **3.6 Revocation of CAAS recognition**

- 3.6.1 Notwithstanding any of the foregoing, CASA or CAAS may revoke recognition of an organisation pursuant to the TA, where CASA or CAAS finds that an organisation is not maintaining the applicable standards or is otherwise not achieving the intent of the TA.

### **3.7 Oversight**

- 3.7.1 Oversight of maintenance organisations located in Australia recognised under the TA shall be conducted by CASA.
- 3.7.2 CAAS may, subject to reasonable prior notification, inspect the AMO, to investigate safety issues. CAAS may also participate in CASA audits and inspections of approved maintenance organisations.

## **4 Acceptance of CAAS SAR-145 approved maintenance organisations**

### **4.1 Australian regulatory requirements**

- 4.1.1 Part 42 of CASR requires Australian aircraft and aeronautical products to be maintained by a maintenance organisation appropriately approved in accordance with Part 145. Part 42 also contains a provision to allow the acceptance of a maintenance organisation approved under Singaporean law.
- 4.1.2 By signing the TA, CASA acknowledges that maintenance organisations, approved in accordance with SAR-145 and qualifying under the terms of the TA are considered equivalent to an Australian AMO approved under the Part 145.

### **4.2 Acceptance of CAAS SAR 145 approved maintenance organisations**

- 4.2.1 SAR 145 maintenance organisations located in Singapore and intending to participate in the TA should refer to CAAS Advisory Circular AC 145-10 *Implementation Procedures for the Technical Arrangement on Aviation Maintenance between CAAS and CASA*.

## **Appendix A**

### **Copy of the technical arrangement on aviation maintenance between CAAS and CASA**

## **Appendix B**

### **Supplement to the AMO exposition**

## B.1 Purpose

This Appendix provides guidance for a Part 145 AMO based in Australia on the development of a supplement to the Part 145 AMO exposition, required under the TA between CAAS and CASA. Where the material required by this supplement is already incorporated into the manual/exposition, the supplement need only contain a reference to the location of that information in the manual/exposition.

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### COVER PAGE

#### SUPPLEMENT TO MAINTENANCE ORGANISATION EXPOSITION

REF \_\_\_\_\_

#### Company Name and Facility Address

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CASA Part 145 AMO APPROVAL NO. \_\_\_\_\_

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

This Supplement, together with the CASA Part 145 AMO exposition, forms the basis of acceptance by CAAS for maintenance carried out by this organisation on aircraft and/or engine and/or aeronautical products under the regulatory control of CAAS.

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

## B.2 Introduction

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

“The Civil Aviation Authority of Singapore and the Civil Aviation Safety Authority signed a Technical Arrangement (TA) on 22 April 2013 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.”

## B.3 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.

An acceptable statement might be as follows:

“This Supplement defines in conjunction with the CASA Approved Maintenance Organisation Exposition Ref ..... the organisation and procedures upon which CAAS 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 CAAS 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 CAAS and notified to this organisation from time to time.

It is further understood that the CAAS 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, sign the statement so as not to invalidate the acceptance. All significant changes will be managed in accordance with the organisations exposition procedures.

## B.4 Acceptance basis and limitation

CAAS acceptance is based upon full compliance with Part 145 of the CASR 1998, related MOS and the Exposition.

This acceptance of maintenance is limited to the scope of work permitted under the current approval granted by CASA to the AMO in accordance with Part 145 and to the Australian locations specified therein.

## **B.5 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.

## **B.6 Assess by CAAS and CASA**

This paragraph should identify the fact that CAAS and CASA 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 CAAS enforcement action in order to maintain status with CAAS.

## **B.7 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 CAAS and shall have been certified in accordance with SAR-145.

## **B.8 Contracting and subcontracting**

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

## **B.9 Airworthiness directives/airworthiness limitations**

This paragraph must address the compliance with Airworthiness Directives and any airworthiness limitations. The applicable CAAS 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.



## **B.10 Repairs and modifications**

This paragraph should specify that the customer will obtain or establish the process to obtain necessary CAAS 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 CAAS criteria must be used to determine whether repairs and modifications are major.

## **B.11 Maintenance release of aircraft and aeronautical products**

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. This paragraph should address the procedures for the conditions to be met as specified in the provisions in Annex 3 of the TA.

Release to service of aeronautical products up to and including complete engines under the TA should be carried out in accordance with SAR-145. The Authorised Release Certificate CASA Form 1 should be issued.

The following statement should be reflected in Block 12 of the Authorised Release Certificate:

Released under the provisions of the TA between CAAS and CASA

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

## **B.12 Record keeping**

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

## **B.13 Personnel responsible to release to service**

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

## **B.14 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 CASA.

## **Appendix C**

### **Organisations accepted under this technical arrangement**

IMPLEMENTATION PROCEDURES FOR THE TECHNICAL ARRANGEMENT  
ON AVIATION MAINTENANCE BETWEEN CASA AND CAAS

Accepted organisations	CASR Part 145 certificate approval No:	Date Accepted under the Technical Arrangement
Kidde Aerospace and Defence Pty Ltd	1-WHSQD	21 February 2014
Thomas Electronics of Australia Pty Ltd	1-TSPBB	20 June 2014
Qantas Airways Limited	1-R3K15	7 July 2014
Aerotech Aviation Pty Ltd	1-11HDHI	11 July 2014
Australian Fuel Cells Pty Ltd	1-WLT59	15 October 2014
Heston MRO Pty Ltd	1-T4GEM	16 December 2014
Unilode Aviation Solutions Australia Pty Ltd	1-QXEAO	15 October 2019
GE Aviation Systems Australia Pty Ltd	1-TESOB	13 April 2015
Aircraft Plastics Australia Pty Ltd	1-S46S3	7 August 2015
Seats of Australia Pty Ltd	1-QAW7Q	12 August 2016
Virgin Tech Pty Ltd	1-R0235	28 September 2017
Avionics 2000 Pty Ltd	1-VZD2F	22 July 2020
Aerobond Pty Ltd	1-TDR9X	11 August 2020
Smart Group Pty Ltd	1-XQ75X	12 August 2020
Panasonic Avionics Corporation	1-W7OPL	6 November 2020