

**TECHNICAL ARRANGEMENT ON
AVIATION MAINTENANCE
BETWEEN THE
CIVIL AVIATION AUTHORITY OF SINGAPORE
AND THE
CIVIL AVIATION SAFETY AUTHORITY**

This Technical Arrangement dated 22 April 2013 is entered into between the CIVIL AVIATION AUTHORITY OF SINGAPORE (hereinafter referred to as "CAAS") and the CIVIL AVIATION SAFETY AUTHORITY of Australia (hereinafter referred to as "CASA") (hereinafter referred to singularly as 'Party', and collectively as "Parties").

Whereas

(A) The Parties have entered into a Memorandum of Understanding which entered into force on 11 March 2013 and provides, inter alia, for technical arrangements to be developed to facilitate the issuance of approvals and certificates by either party for the other Party's products and organisations, starting with airworthiness certification and maintenance.

(B) The Parties agree that their respective laws, regulations, standards, practices, procedures and systems for the approval and monitoring of aviation maintenance in general, and approved maintenance organisations in particular, are sufficiently comparable to permit the acceptance of each other's maintenance certification systems, subject to the procedures described in this Technical Arrangement.

(C) The Parties now wish to work in accordance with this Technical Arrangement on Aviation Maintenance from the date upon which the requirements of clause 10.1 are satisfied, until such time as it is replaced by some other arrangement, revised by mutual consent, or terminated by either of the Parties.

(D) Therefore, and without prejudice to the obligations of each Party under its own laws, regulations, standards, practices, procedures and systems, the purpose of this Technical Arrangement is to avoid duplication of inspections and evaluations by:

- (i) Enabling each Party to recognize the other Party's inspection and evaluation findings for the approval of maintenance organisations in their respective Areas; and
- (ii) Enabling each Party to recognize the other Party's system for the release of civil aeronautical products or aircraft to service after maintenance as its own release system.

IT IS HEREBY AGREED as follows:–

1 Definitions and interpretation

1.1 In this Technical Arrangement, unless the context otherwise requires, the following words have the following meanings:

Area in relation to Australia means the national territory of Australia and, in relation to Singapore, means the national territory of Singapore;

Aeronautical product means any civil aircraft, and any aircraft engine, propeller, sub assembly, appliance, material, part or component to be installed thereon;

Convention means the Convention on International Civil Aviation signed in Chicago on 7 December 1944;

Maintenance means the performance of:

- (a) Inspection, overhaul, repair, preservation or modification of an aeronautical product; or
- (b) The replacement of parts, components, materials, appliances of an aeronautical product with similar parts, components, materials and appliances;

Overseeing authority means the party having jurisdiction in its Area over a maintenance organisation that performs maintenance pursuant to this Technical Arrangement in that Area;

Part 145 approved maintenance organisation means an organisation certified by CASA in accordance with Part 145 of the *Civil Aviation Safety Regulations 1998 (CASR)*;

Regular Public Transport means the purpose of transporting persons generally, or transporting cargo for persons generally, for hire or reward in accordance with fixed schedules to and from fixed terminals over specific routes with or without intermediate stopping places between terminals;

Responsible authority means the Party having responsibility pursuant to the Convention for the safety oversight of the airworthiness of an aircraft registered in that Party's State:

- (a) that is maintained by a maintenance organisation approved by the other Party when in the other Party's Area; or
- (b) Upon which parts are to be installed while undergoing maintenance by a maintenance organisation approved by the other Party when in the other Party's Area;

Singapore approved maintenance organisation means a maintenance organisation certified by the Chief Executive of the CAAS under paragraph 8A of the Singapore Air Navigation Order and in accordance with the Singapore Airworthiness Requirements (SAR) 145;

Technical records means any document that an owner or operator of an aeronautical product is required to keep in accordance with the aviation legislation which applies to the maintenance of that aeronautical product and which identifies in a legible and permanent manner the name, signature or personal identifier of the person who performed maintenance on the aeronautical product on the date as specified therein and the particulars of maintenance and includes but is not limited to a journey, airframe, engine, propeller or component log, weight and balance report, technical drawing, x-ray film, Non-Destructive Testing report, laboratory report and flight test record.

2 Purpose

2.1 The purpose of this Technical Arrangement is to establish a working arrangement between the parties to allow:

- (a) The acceptance by one Party of the maintenance performed on an Aeronautical product (including a civil aircraft) under the maintenance system of the other Party and in the Area of the other Party, when that maintenance is performed by a Part 145 approved maintenance organisation or a Singapore approved maintenance organisation, providing maintenance services for RPT aircraft and/or aeronautical products;
- (b) The exchange of information regarding maintenance standards and maintenance certification systems; and
- (c) Co-operation and assistance with respect to the maintenance certification of aeronautical products.

3 Maintenance and Certification

- 3.1 Each maintenance organisation that is approved by the applicable Overseeing authority to provide maintenance services under this Technical Arrangement and which complies with **Annex 1** of this Technical Arrangement will be recognized by the applicable Responsible authority as being able to perform or certify maintenance functions in respect of Aeronautical products (including a civil aircraft) maintained within the Overseeing authority's jurisdiction.
- 3.2 A maintenance organisation which has been approved by the applicable Overseeing authority to provide maintenance services in accordance with this Technical Arrangement, must perform and certify that maintenance in accordance with, and otherwise comply with any conditions specified in, **Annex 1** of this Technical Arrangement.
- 3.3 Subject to paragraph 3.4, the certification of aeronautical product maintenance covered by this Technical Arrangement will be accepted by the Parties as follows:
- (a) Australia will recognize a Singapore Airworthiness Requirement (SAR-145) 145.50 Certificate of Release to Service issued by a Singapore approved maintenance organisation in respect of an Australian registered aircraft maintained in Singapore as equivalent to an Australian Certificate of Release to Service, if the organisation issuing that certificate complies with the requirements of **Annex 2** in performing and certifying the maintenance to which the certificate relates.
 - (b) Singapore will recognize an Australian Certificate of Release to Service for an aircraft issued by a Part 145 approved maintenance organisation in respect of a Singapore registered aircraft maintained in Australia as equivalent to a SAR 145.50 Certificate of Release to Service, if the organisation issuing that certificate complies with the requirements of **Annex 3** in performing and certifying the maintenance to which the certificate relates.
 - (c) Under this Technical Arrangement, an Australian Certificate of Release to Service for an aeronautical product (excluding an aircraft) refers to a *Certificate of Release to Service* issued by a Part 145 approved maintenance organisation in a document titled "CASA Form 1".
 - (d) Under this Technical Arrangement, a SAR 145.50 Certificate of Release to Service for an aeronautical product (excluding an aircraft) refers to Certificate of Release to Service issued by a Singapore approved maintenance organisation in a document titled "CAAS (AW) 95 Form".

- (e) A CAAS Form (AW) 95 Authorised Release Certificate issued under the Singapore Airworthiness Requirements in respect of an aeronautical product installed on an Australian registered aircraft in accordance with this Technical Arrangement will be accepted by CASA as equivalent to a CASA Form 1 Authorised Release Certificate.
- (f) A CASA Form 1 Authorised Release Certificate issued under the CASR in respect of an aeronautical product installed on a Singaporean registered aircraft in accordance with this Technical Arrangement will be accepted by CAAS as equivalent to a CAAS Form (AW) 95 Authorised Release Certificate.

3.4 In relation to an aircraft registered in a Party's State that is maintained by a maintenance organisation approved by the other Party when in the other Party's Area:

- (a) The design of any repairs and modifications to Aeronautical products which are not from the original equipment manufacturer will be approved in accordance with the requirements of the Responsible authority.
- (b) Where the maintenance involves the installation of an Aeronautical product, the aeronautical product being installed must originate from an organisation approved under the provision of an existing Technical Arrangement entered into by the Responsible authority, or approved by or otherwise acceptable to the Responsible authority.

4 Mutual Co-operation and Technical Assistance

- 4.1 Each Party will provide to the other Party information regarding the provisions of this Technical Arrangement, and will develop appropriate advisory publications and circulate these publications through established methods in their respective Areas to inform the public of the provisions of the Technical Arrangement and outline the special requirements necessary for persons to perform and certify work under the provisions of this Technical Arrangement.
- 4.2 Each Party agrees to provide the other Party with technical evaluation assistance upon request, to further the purposes and objectives of this Technical Arrangement. Such assistance may include, but is not limited to reporting on a maintenance organisation's continued compliance with the requirements of this Technical Arrangement.
- 4.3 The Parties will provide each other with any regulations, standards, guidance material, policies, practices and interpretations relevant to this Technical

Arrangement. The Parties shall ensure that such documents are updated in a timely manner and any amendments provided to each other.

- 4.4 Where urgent or unusual situations develop that are within the scope of this Technical Arrangement but are not specifically addressed herein, the Parties will consult each other, and by mutual consent, take appropriate action, including amending this Technical Arrangement where required.
- 4.5 The Parties agree that by mutual consent and with reasonable prior notice, each party will allow the other party to participate in inspections and audits (conducted by either party) of any maintenance organisations approved to provide maintenance services under this Technical Arrangement.
- 4.6 Either Party may request the disclosure or review of any data concerning any approval granted under the Technical Arrangement by the other Party from time to time. Disclosure of information by the other Party is subject to applicable statutory or other requirements relating to privacy or confidentiality.
- 4.7 In relation to provisions concerning information exchange in this Technical Arrangement, neither Party will be limited in the manner in which it may use information or documents provided by to it by the other, but such use is subject to applicable statutory requirements.
- 4.8 Where it is not otherwise inappropriate to do so, the Parties agree that by mutual consent and with reasonable prior notice, they will jointly investigate any serious maintenance issues, including major defects and maintenance related incidents and accidents arising out of maintenance services provided under this Technical Arrangement.
- 4.9 Notwithstanding any of the foregoing, the approval granted to a maintenance organisation to participate in this Technical Arrangement may be revoked by the Overseeing authority at the request of the Responsible authority, if the Responsible authority determines, on reasonable grounds, that the maintenance organisation is not maintaining the safety standards required under its airworthiness regulations.

5 Notification

- 5.1 Each Party will notify the other Party of any circumstance that affects its ability to comply with the provisions of this Technical Arrangement.

- 5.2 The Overseeing authority will promptly advise the other Party of any investigations or enforcement action, including revocation or suspension taken against a maintenance organisation that it has approved to participate in this Technical Arrangement.

6 Intellectual property

- 6.1 The Parties agree that ownership of Intellectual Property which exists prior to the commencement of this Technical Arrangement will not be altered or transferred merely by virtue of its use for the purposes of this Technical Arrangement.

7 Costs and Expenses

- 7.1 The Parties shall each bear their own costs and expenses incurred in connection with the preparation and implementation of this Technical Arrangement.

8 Administration and implementation

- 8.1 The CAAS Director, Airworthiness / Flight Operations and the CASA Executive Manager, Standards Division will be the responsible persons for the administration and implementation of this Technical Arrangement.
- 8.2 Each Party will also advise the other Party of any significant changes to their organisations that affect the administration and implementation of the provisions of this Technical Arrangement, including the holders of the positions mentioned in paragraph 8.1.
- 8.3 Each Party will inform any maintenance organisations approved by that Party to provide maintenance services under this Technical Arrangement of any updates or amendments to their laws, regulations, standards, practices, procedures and systems that may impact upon this Technical Arrangement.

9 Legal and financial liabilities

- 9.1 This Technical Arrangement does not establish any legal liabilities between the parties. Nor does anything in this Technical Arrangement operate to preclude or supersede liabilities otherwise arising as a matter of law.

9.2 Where it is not otherwise inappropriate to do so, the Parties agree to liaise with one another with a view to addressing any legal issues that may arise as a consequence of actions taken under this Technical Arrangement.

9.3 The Parties agree that under this Technical Arrangement there will be no fees charged for the provision to each other of the material referred to in this Technical Arrangement.

10 Entry into force

10.1 This Technical Arrangement will come into operation

(a) Upon signature by the persons holding the positions mentioned in paragraph 8.1, and

(b) when the *Australian Civil Aviation Legislation Amendment (Miscellaneous) Regulation 2013 (CALAR 2013)* comes into force.

10.2 CASA will notify CAAS in writing when the CALAR 2013 comes into force.

11 Duration

11.1 This Technical Arrangement will commence on the date specified in clause 10 and operate until terminated in accordance with clause 15 of this Technical Arrangement.

11.2 The termination of the Memorandum of Understanding on aviation safety between CASA and CAAS which is currently in force will not affect the survival of this Technical Arrangement.

12 Notices

12.1 In relation to any notice, request or other communication to be given or served pursuant to this Technical Arrangement, CASA will direct notices or other correspondence to the CAAS Director for Airworthiness / Flight Operations. CAAS will direct its notices and correspondence to the attention of the Executive Manager, Standards Division for CASA.

13 Dispute resolution

13.1 The Parties agree to attempt to resolve any disputes that may arise under this Technical Arrangement at the workplace level by consultations between the

CAAS Director for Airworthiness / Flight Operations and the Executive Manager, Standards Division for CASA

14 Variation and review

- 14.1 It is important that this Technical Arrangement and its Annexes remain consistent, relevant and current. To that end, the Parties will review this Technical Arrangement on an annual basis or more frequently if the Parties agree to do so.
- 14.2 Should either Party seek to vary this Technical Arrangement including any of its Annexes the Parties will negotiate in good faith.
- 14.3 This Technical Arrangement and/or its Annexes may be varied at any time by agreement in writing signed by the CAAS Director for Airworthiness / Flight Operations and the Executive Manager, Standards Division for CASA.

15 Termination

- 15.1 Either Party may terminate this Technical Arrangement at any time by giving written notice of its decision to the other Party.
- 15.2 This Technical Arrangement will terminate 90 days following the date of the other Party's receipt of such notice, unless such notice is withdrawn by mutual consent before the expiry of the 90-day period.

16 General

- 16.1 The designated offices for the implementation of this Technical Arrangement are:

For CAAS:

Airworthiness & Flight Operations Division
Civil Aviation Authority of Singapore
Room 047-029, 4th Storey Terminal 2
Singapore Changi Airport
Singapore 819643

For CASA:

Standards Division
Civil Aviation Safety Authority
GPO Box 2005
Canberra ACT 2601
Australia

Correspondence Address:

Airworthiness & Flight Operations Division
Civil Aviation Authority of Singapore

Standards Division
Civil Aviation Safety Authority

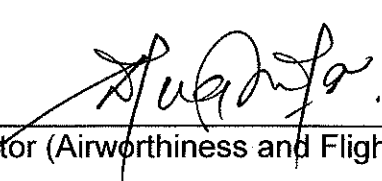
P.O. Box 1
Singapore 918141

GPO Box 2005
Canberra ACT 2601
Australia

- 16.2 Any existing understanding, arrangements or approvals relating to the acceptance of aviation maintenance between CASA and CAAS, will be superseded by this Technical Arrangement. For the avoidance of doubt, this Technical Arrangement does not affect the Memorandum of Understanding entered into between the Parties on 11 March 2013.
- 16.3 CASA and CAAS acknowledge that nothing in this Technical Arrangement can legally restrict or enlarge either Party's statutory functions, powers or duties.

Signed on 22 April 2013 in Singapore

On behalf of Civil Aviation Authority of Singapore



Director (Airworthiness and Flight Operations)

And on behalf of Civil Aviation Safety Authority



Executive Manager
Standards Division

ANNEX 1

Recognition of Maintenance Organisations

- 1 A maintenance organisation that is approved to provide maintenance services under this Technical Arrangement must comply with the requirements of this Annex I.
 - 1.1 The maintenance organisation may only be approved for the purposes of this Technical Arrangement by the Overseeing authority in the Area where that maintenance organisation is located.
 - 1.2 The maintenance organisation ("Contracting Organisation" for the purposes of this clause 1.2) may only contract or subcontract maintenance services to be performed in accordance with this Technical Arrangement to:
 - (i) Organisations located within the Area of the Overseeing authority and approved by the Overseeing authority under the provisions of this Technical Arrangement; or
 - (ii) Organisations located outside the Area of the Overseeing authority, only where
 - (a) the organisation concerned is approved to provide maintenance services pursuant to other Technical Arrangements entered into by the Responsible authority, or
 - (b) the organisation concerned is recognized by the Responsible authority, or
 - (c) Any organisation not specified in (a) or (b), provided that the Contracting Organisation extends its quality system to cover performance of maintenance by that organisation.
- 2 The maintenance organisation will include in its Exposition, by means of a suitable supplement:
 - (i) A statement signed by the current CEO or accountable executive/Manager directing personnel of the organisation to comply with the policies and procedures contained therein relating to the provision of maintenance services under this Technical Arrangement.
 - (ii) Confirmation that failure to comply with the policies and procedures described in the company's Exposition or company internal procedures

related to company's exposition, may be grounds for suspending or cancelling the approval to participate in this Technical Arrangement.

- (iii) Confirmation that the maintenance organisation shall make provision for the Responsible authority to have access to the organisation to perform audits and inspections.
- (iv) Suitable procedures to ensure that relevant personnel in the maintenance organisation are informed of any updates of the laws, regulations, standards, practices, procedures and systems relevant to this Technical Arrangement.
- (v) Suitable procedures to ensure that the regulations relating to Airworthiness Directives and Airworthiness Limitations of the Responsible authority are complied with.
- (vi) Suitable procedures to ensure that:
 - (a) Maintenance is performed in accordance with the regulations of the Overseeing authority.
 - (b) Aeronautical products are released in accordance with this Technical Arrangement as applicable.
 - (c) The design of any repairs and modifications to Aeronautical products which are not from the original equipment manufacturer or which would otherwise require approval of the Responsible authority will be approved in accordance with the requirements of the Responsible authority.
 - (d) Any parts installed have been manufactured or maintained by organisations that are recognized by the Responsible Authority.
 - (e) Only responsible maintenance personnel who are familiar with this Technical Arrangement, any advisory material issued by the Overseeing authority in relation to this Technical Arrangement, and any applicable customer's special conditions in relation to the performance of maintenance are allowed to perform maintenance on Aeronautical products or issue release documentation for Aeronautical products under this Technical Arrangement.
 - (f) Any mandatory reportable conditions found in civil aeronautical products under the jurisdiction of the Overseeing authority are reported to the Overseeing authority and the customer. The customer will then be responsible for reporting the mandatory

reportable conditions to the Responsible authority in accordance with the applicable Responsible authority requirements.

ANNEX 2

Conditions to be met by a Singapore approved maintenance organisation, to which this Technical Arrangement applies, for the issue of a Certificate of Release to Service for the maintenance of an Australian registered aircraft

- 1 A certificate of release to service (CRS) must be issued when all of the maintenance required to be carried out on an aircraft at a particular time has been completed and certified.
- 2 The CRS must be issued in the flight technical log for the aircraft and include the following:
 - (a) information identifying the certification as the CRS;
 - (b) the signature of the person issuing the CRS;
 - (c) either the licence number or any other unique number that identifies the person and relates to his or her entitlement to issue the CRS;
 - (d) the date and time of the issue of the CRS.
- 3 Before a person issues the CRS, he or she must ensure:
 - (a) certification of completion of maintenance has been issued by an individual who is permitted under Singaporean legislation to certify for the maintenance
 - (b) that any defect in the aircraft that the person is aware of has been rectified; or
 - (c) that the rectification of defect has been deferred in accordance with clauses 4 and 5; or
 - (d) if the defect could not be rectified or deferred — that the details of the defect have been entered in the flight technical log for the aircraft.
- 4 The rectification of a defect may only be deferred if:
 - (a) the defect does not adversely affect the airworthiness of the aircraft; or
 - (b) the operation of the aircraft for a flight with the defect is permitted by any of the following:
 - (i) the instructions for continuing airworthiness for the aircraft;
 - (ii) the minimum equipment list for the aircraft;
 - (iii) the configuration deviation list for the aircraft;
 - (iv) an airworthiness directive; or
 - (c) the defect consists of, or is caused by, damage to the aircraft that is approved as a permissible unserviceability under regulation 21.007 of the CASR; or
 - (d) the defect is in an item of operational or emergency equipment that:
 - (i) is fitted to the aircraft; and
 - (ii) is not required by the certification basis for the aircraft; and

- (iii) is not required by or under the *Civil Aviation Regulations 1988* or the CASR for the operation of the aircraft for a flight.
- 5 If the rectification of a defect is deferred, it must be deferred by a person who is permitted under Singaporean legislation to certify for completion of whatever maintenance would be required for the rectification of the defect.
- 6 If the rectification of a defect is deferred, a record of the deferral must be made in the flight technical log for the aircraft by the person who defers the rectification of the defect and the record must include the following information:
- (a) a description of the defect;
 - (b) the justification for the person's decision to defer the rectification of the defect taking into account the requirements and conditions of clauses 4 and 5;
 - (c) any limitations or conditions specified in a document mentioned in clause 4 in relation to the deferral of the rectification of the defect and the operation of the aircraft;
 - (d) the signature of the person;
 - (e) the licence number, or any other unique number, that identifies the person and relates to his or her privilege to certify for the completion of whatever maintenance would be required for rectification of the defect in accordance with paragraph 4 (a) or (b).
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Conditions relating to critical control system maintenance

If any critical control system maintenance has been carried out on an aircraft, the Singapore approved maintenance organisation must ensure that a **qualified individual** has verified for the proper assembly, configuration and function of the affected aircraft control system in accordance with Division 42.D.5 of the CASR. A record of such verification must be made in accordance with the Division 42.D.5. The verification must be carried out and recorded before the issue of a CRS for the aircraft.

An individual will be considered qualified if he or she is allowed to carry out such verification under the Singaporean legislation.

Critical control system maintenance and **aircraft control system** have the meaning given in regulation 42.015 of the CASR.

Conditions in relation to maintenance records

A Singapore approved maintenance organisation performing maintenance on an Australian registered aircraft under this Technical Arrangement, must ensure details

of any maintenance carried out on an aircraft are recorded in writing in accordance with the requirements of regulation 42.395 of the CASR.

Conditions relating to the fitting of non-standard parts

If a part is fitted to the aircraft that is not a standard part, the Singapore approved maintenance organisation must ensure that the requirements of regulation 42.420 of the CASR are met in relation to the part.

The supply of the non-standard part must be covered by an Authorised Release Certificate issued under the law of one of the following foreign countries:

- Brazil,
- Canada
- European Aviation Safety Agency (EASA) member states
- New Zealand
- Singapore
- United States of America

The Part 42 Manual of Standards (MOS) Chapter 12 issued by CASA includes a list of the specific documents from these countries which are recognised as Authorised Release Certificates.

ANNEX 3

Conditions to be met by a Part 145 approved maintenance organisation, to which this Technical Arrangement applies, before the issue of a Certificate of Release to Service for the maintenance of a Singapore registered aircraft

- 1 A certificate of release to service (CRS) must be issued when all of the maintenance required to be carried out on an aircraft at a particular time has been completed and certified.
- 2 The CRS must contain basic details of the maintenance carried out, the date such maintenance was completed and the identity including approval reference of the Part 145 approved maintenance organisation and certifying staff issuing such a certificate. The CRS must have a statement "Released under the terms of the CAAS-CASA TA-AM."
- 3 When a Part 145 approved maintenance organisation maintaining the aircraft is unable to complete all maintenance required by the customer, being the aircraft operator, within the aircraft operator's limitations, then such fact must be entered in the aircraft certificate of release to service before issue of such certificate.
- 4 A certificate of release to service must not be issued in the case of any non-compliance known to the Part 145 approved maintenance organisation which could hazard flight safety.
- 5 The systems for controlling deferred and carried forward defects must be done in accordance in with Singapore Air Operator Certificate Requirements Chapter 8.9 Deferred and Carried Forward Defects.

Conditions in relation to Duplicate Inspection of Control Systems

If any duplication inspection is required to be carried out on a Singapore registered aircraft, the Part 145 approved maintenance organisation must ensure that the inspection is done in accordance with the Singapore Airworthiness Requirements Chapter 4.8 Required Inspections and Tests.

Conditions in relation to maintenance records

A Part 145 approved maintenance organisation performing maintenance on a Singapore registered aircraft under this Technical Arrangement must ensure that details of any maintenance carried out on an aircraft are recorded in accordance with

the Singapore Airworthiness Requirements Part 145 SAR-145.55 Maintenance Records.

Conditions relating to the fitting of non-standard parts

If a new part is fitted to the aircraft that is not a standard part, the Part 145 approved maintenance organisation must ensure that the requirements of SAR Part-145 Sub-Part D Appendix 1 Certification Requirements for New Aircraft Parts are met in relation to the part.

The acceptability of maintained parts for installation on a Singapore registered aircraft should be done in accordance with CASA Advisory Circular AC145-3 Acceptability of Maintained Parts.