

Advisory Circular

GUIDANCE ON APPLICATION OF A CAAS LETTER OF ACCEPTANCE OF TYPE CERTIFICATE

GENERAL
PURPOSE 1
APPLICABILITY 1
RELATED REGULATIONS1
CANCELLATION1
EFFECTIVE DATE 1
REFERENCES1
1 INTRODUCTION
2 SUBMISSION OF TECHNICAL DATA FOR A LETTER OF ACCEPTANCE OF
TYPE CERTIFICATE (LOATC) 2

GENERAL

Advisory Circulars (ACs) are issued by the Director-General of Civil Aviation (DGCA) from time to time to provide practical guidance or certainty in respect of the statutory requirements for aviation safety. ACs contain information about standards, practices and procedures acceptable to CAAS. An AC may be used, in accordance with section 11 of the Air Navigation Act 1966 (ANA), to demonstrate compliance with a statutory requirement. The revision number of the AC is indicated in parenthesis in the suffix of the AC number.

PURPOSE

This AC provides additional guidance regarding an application of a CAAS Letter of Acceptance of Type Certificate (LOATC) in accordance with SAR-21.110.

APPLICABILITY

This AC applies to an applicant for a CAAS LOATC.

RELATED REGULATIONS

This AC relates specifically to SAR-21.110.

CANCELLATION

This is the first Advisory Circular issued on this subject.

EFFECTIVE DATE

This AC is effective from 19 May 2023.

REFERENCES

AMC 21.110 in SAR-21

1 INTRODUCTION

1.1 Before an aircraft may be registered in Singapore, or an engine or propeller can be used on a Singapore-registered aircraft, CAAS will assess and issue a Letter of Acceptance of Type Certificate (LOATC) to the organisation holding the Type Certificate (also known as the "TC holder") that has been issued by the State of Design of that aircraft, engine or propeller. Where there is an application for a supplemental type certificate, the aircraft type involved must have been issued with a LOATC.

1.2 Subpart A of SAR-21 specifies the requirements for an application for a LOATC. An applicant for a LOATC should refer to the guidance in this advisory circular in addition to the information in AMC 21.110 (e.g. related fees) before submitting a completed application form for a LOATC online¹.

2 SUBMISSION OF TECHNICAL DATA FOR A LETTER OF ACCEPTANCE OF TYPE CERTIFICATE (LOATC)

2.1 The application process for a LOATC can be summarised by the following phases:

Phases	Purpose
1. Pre- application	This phase usually includes a meeting between CAAS and the applicant. The meeting is intended for CAAS to advise on the applicable requirements, the application process and associated fees. It is also for the applicant to seek clarification on the requirements that are to be complied with for the purpose of the issuance of a LOATC.
2. Formal application	In this phase, the applicant must submit a completed online application, accompanied with the information as listed in paragraph 2.2. Fees are to be paid in accordance with Twelfth Schedule of the Air Navigation Order (ANO) and in the manner described in paragraph 3 of AMC 21.110 of SAR-21.
3. Technical reviews	This phase will include meetings with the applicant and the State of Design to establish the technical specifications, certification basis and production controls associated with the foreign Type Certificate. The applicant is expected to provide clarifications, wherever necessary, to facilitate the assessment of the application by CAAS.

2.2 The following information should be submitted to CAAS at the formal application phase. CAAS may request for other supporting documents to facilitate the review process.

Application data

(1) Evidence to demonstrate necessity for obtaining a LOATC (e.g. letter of intent from Singapore air operator);

¹ CAAS(AW)204 – SAR-21 Type Certificate – Letter of Acceptance of Type Certificate can be found online on the CAAS website (www.caas.gov.sg).

- (2) Detailed schedule of proposed plans (e.g. dates for submission of document, technical meetings, facility visit);
- (3) A proposed schedule of familiarisation training or type training for CAAS officers with respect to the aircraft, engine or propeller;

State of Design (SoD) and State of Manufacture (SoM) data

- (4) Certificates (such as organisation approvals, type design / manufacture approvals) granted by SoD / SoM to TC holder / manufacturer;
- (5) Information on the safety oversight programmes by the SoD and SoM on the TC holder / manufacturer, such as the scope of safety surveillance activities on the design, production and quality systems;
- (6) Where the SoD and SoM are different States, information describing the coordination between the design organisation (TC holder) and the production organisation (manufacturer);

Certification basis

- (7) A copy of the type certificate and the type certificate data sheets for the aircraft, engine or propeller;
- (8) Certification project summary consisting of design description and certification basis, including details of any new or novel technologies or processes used during design and manufacturing;
- (9) Information on aircraft systems in all relevant disciplines such as electrical, avionics, structure, mechanical system, cabin interior, powerplant, performance, etc.;
- (10) The applicable airworthiness design standards and the effective date of the standards;
- (11) List of differences between the airworthiness standards of the SoD and CAAS' accepted standards;
- (12) Airworthiness standards compliance checklist or matrix document (to show compliance to the applicable airworthiness standards);
- (13) Any airworthiness standards that are not complied with, such as issue papers or certification review items (CRI) raised by SoD (e.g. special conditions, equivalent level of safety, exemption, exception, etc.);
- (14) Any airworthiness limitations;
- (15) System safety assessments, functional hazard analyses and failure mode evaluation analyses of any critical systems identified by CAAS;
- (16) Evidence of environmental certifications, e.g. compliance with respect to noise, engine emissions and CO2 emissions in accordance with the relevant volumes in ICAO Annex 16 – Environmental Protection;

Operator's option items

- (17) List of options for aircraft configuration offered by TC holder to the Singapore air operator;
- (18) List of supplemental type certificates (STCs) related to the aircraft configuration to be delivered;

<u>Manuals</u>

- (19) Aircraft operation manuals such as the Aircraft Flight Manual, Flight Crew Operating Manual and Master Minimum Equipment List (MMEL);
- (20) Instructions for Continued Airworthiness such as Illustrated Parts Catalogue, Aircraft Maintenance Manual, Wiring Diagram Manual, Engine/Propeller Manual, Electrical Loads Analysis and Weight & Balance Manual;
- (21) Maintenance manuals such as Maintenance Planning Data and Maintenance Schedule;
- (22) Maintenance review board report;

In-service data

- (23) All current service information issued by the manufacturer of the aircraft, engine or propeller;
- (24) List of applicable airworthiness directives (ADs) and alternative means of compliance (AMOCs);
- (25) List of aircraft / engine incidents or accidents including any associated ADs issued as a result of the accident or incident;

Other data

- (26) Information that may be used by CAAS for the purposes of the issuance of the following: (Data may also be provided after the validation of certain TC activities)
 - (a) operational approvals (RVSM, RNP, ETOPS, RNAV, etc.);
 - (b) certificate of registration;
 - (c) certificate of airworthiness;
 - (d) maintenance and aircrew licenses;
 - (e) simulator approvals.
- 2.3 The applicant should update the information or documentation provided in support of the application when there is a change to the technical and certification basis, such as those affecting the compliance to airworthiness standards. For such design changes, the applicant should demonstrate that the technical and certification basis of the product would remain in compliance and valid with the foreign Type Certificate at the expected time of issue of the LOATC.