



Advisory Circular AC21-1 Appendix 2

Product Certification – Type Certificates and Type Acceptance Certificates – Appendix 2 to AC21-1

Revision 4
01 April 2016

General

Civil Aviation Authority advisory circulars contain information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance (AMC)** with the associated rule.

An AMC is not intended to be the only means of compliance with a rule, and consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate advisory circular.

An advisory circular may also include **guidance material (GM)** to facilitate compliance with the rule requirements. Guidance material must not be regarded as an acceptable means of compliance.

Purpose

This advisory circular provides a list of aircraft, engine and propeller types and models that have been issued with type certificates or type acceptance certificates in Mongolia. This material is intended to assist organisations and persons in determining the current status of an aircraft or product for operation or installation in Mongolia.

Related Rules

This advisory circular relates specifically to Civil Aviation Rule Part 21 Subpart B - *Type Certificates and Type Acceptance Certificates*, and Part 21 Subpart H - *Airworthiness Certificates*.

Change Notice

Subject to “Memorandum for Technical Cooperation” between the CAA of Mongolia and New Zealand on mutual cooperation in implementation of Assembly Resolution A29-3: Global Rule Harmonization, 29th ICAO Assembly, 1992, which urges States to promote global harmonization of national rules, dated 6th of May, 1999, Mongolian Civil Aviation Safety Regulation has been reconciled to the Civil Aviation Regulation of New Zealand.

Amendment 164 of Annex 1 to the Chicago Convention on International Civil Aviation urges flight crew members, ATC personnel and aircraft maintenance engineers to comply with the language proficiency requirements; and

Under Article 14 of the Civil Aviation Law of Mongolia 1999, "Use of foreign language in civil aviation" the AC has been released in English version only, in order to prevent any mistranslation and misuse of the aviation safety related documents.

This AC21-1 Appendix 2 was developed based on NZ AC21-1 Appendix 2 revision 4, dated on 31 July 2013.

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1. Introduction

This advisory circular, which is referred to as Appendix 2 in AC21-1 – *Product Certification-Type Certificates and Type Acceptance Certificates*, provides a list of aircraft, engine and propeller models and variants that have been granted type certificates or type acceptance certificates in Mongolia in accordance with Subpart B of Part 21.

This AC21-1 Appendix 2 will be updated on a regular basis but recent additions to the list of models may not be shown between these updates. Any new aircraft, engine or propeller models which have been type accepted since the publication of this advisory circular will be found in the applicable type acceptance report on the CAA website. AC21-1 Appendix 2 is issued separately from AC21-1 to reduce costs to users and enable more frequent revision.

If you are unsure whether an aircraft, engine or propeller type or serial number is type accepted in Mongolia, please contact the Aviation Safety Regulations Department of the CAA directly. The address of the aircraft certification unit is:

Aviation Safety Regulations Department
Mongolian Civil Aviation Authority
Buyant-Ukhaa, 10th khoroo,
Khan-Uul district
Ulaanbaatar 17120
Mongolia

Email: AWD@mcaa.gov.mn

2. Type Certificates

As a general policy the CAA type accepts an aircraft based on validation of the State-of-Design type certificate. This is to ensure the most direct access to continuing airworthiness information.

The category of type certification or type acceptance is not shown on the list. Refer to the referenced foreign type certificate identification or the MN type acceptance report for further details if there is any question of eligibility for a particular type of operation.

3. Model/Manufacturer Designations

In this advisory circular manufacturers are listed under the “known name” adopted for the CAA database, generally either the latest manufacturer of a model or the most commonly recognised name for the type. (For registration purposes and on official

documents the manufacturer's full legal title at the time of manufacture is used, which is as shown on the type certificate or on the aircraft dataplate.)

A *known* name is used to simplify the aircraft listing and identification, because the name may have changed several times.

The combination of model, serial number and type certificate identification is the ruling criterion for type acceptance. The aircraft certification unit of the CAA should be contacted if:

- the model is not listed or the model is similar to but not identical to a model listed
- the serial number of the aircraft is outside the serial number range listed as eligible
- the aircraft dataplate lists a different type certificate to that shown in this AC

The CAA does its best effort to ensure the accuracy and completeness of the lists in this advisory circular. However should you discover missing data or for any other question, please contact the Aviation Safety Regulations Department at the contact details shown under paragraph 1.

4. Type Acceptance Reports

Part 21 introduced the concept of type acceptance to replace the previous first-of-type airworthiness certification process. Type acceptance is a self-contained process which involves a review of supplied design data and operating documentation and can be carried out as an independent exercise without any aircraft of the type being imported.

All new aircraft, engine and propeller types and variants imported will have been required to obtain a type acceptance certificate. (Prior to 16 April 2010 the engine and propeller was included with an aircraft type acceptance. Since that date it can be carried out separately.) The determination as to whether type acceptance is required for similar variants or serial numbers, for example Boeing 737s, is usually whether a different flight manual is used. If so, type acceptance is the only means to introduce a new flight manual into the system and supply CAA with a copy.

Type acceptance is important to provide the CAA with the assurance that the aircraft meets Mongolian design requirements and to supply the required operating and maintenance data needed to support the operation of a particular aircraft, engine or propeller type in Mongolia. It is also vital to ensure that the CAA has access to and can promulgate the applicable continuing airworthiness requirements (Airworthiness Directives) for the type in Mongolia.

The last column in this advisory circular indicates whether a type acceptance report is available for the type. A cross in the column means a report has been produced. Copies of all type acceptance reports are available on the CAA website.

Since September 2003 the European Aviation Safety Agency (EASA) has assumed responsibility for all type certification activities in those European countries which are members. This includes responsibility for all existing type certificates. EASA is in the process of re-issuing all the individual European countries type certificates with EASA type certificates. The CAA will be noting these in this advisory circular as they are issued. The applicable type acceptance report is not being updated unless the report is revised by another type acceptance application.

EASA type certificate data sheets are available at :

<http://www.easa.eu.int/certification/product-certification.php>

FAA type certificate data sheets are available at :

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/MainFrame?OpenFrameSet

5. Validity of Type Acceptance

CAR paragraph §21.25(b) states that a type acceptance certificate remains in force unless the type certificate or other equivalent document required under rule §21.43(a)(1)(i) for the issue of the type acceptance certificate is no longer valid.

Many countries, including Mongolia and most European countries under EASA, require a type certificate to be supported by a design organisation or equivalent to provide continuing airworthiness support and technical data as required. This can be quite an expensive and onerous task and as a result many organisations which had taken up that task when the original aircraft manufacturer had ceased to exist are relinquishing that function. In other cases the support is only available to owners who subscribe to the service with an annual fee.

Consequently further revision of the list of type accepted models will may have seen a considerable cull of old types, because there is no longer any active technical support available and the type is no longer eligible for the issue of an airworthiness certificate in their State of Design. In Mongolia the first step towards implementation of this will be the deletion of affected models from this advisory circular. Eventually the CAA will formally advise owners that the type design approval has been cancelled and that in effect their airworthiness certificate is no longer valid. The aircraft will be permitted to transition to the Special Limited category. In some cases the actual status of these aircraft is unclear, because it depends on the availability of technical support which may be individual to an aircraft owner. Therefore the CAA will only accept applications for an airworthiness certificate in the standard category when it is accompanied by evidence of technical support for the aircraft. In the case of de Havilland types this would be by having a formal agreement with the holder of a type responsibility agreement (TRA).

In addition EASA has an interim process for unsupported aircraft whereby they are issued with a specific airworthiness specification (SAS), which summarises all the

airworthiness data needed for the operation of the aircraft. Aircraft with an SAS are only eligible for a restricted category airworthiness certificate. In this advisory circular this is indicated by an asterisk in the final column.

APPENDIX 2 to Advisory Circular AC21-1

Table 1 – List of Aircraft Models for which Type Certificates and Type Acceptance Certificates have been issued

Notes: 1. A cross in the RHS column means a type acceptance report has been produced. Copies of type acceptance reports are available at <http://www.mcaa.gov.mn>
2. An asterisk in the RHS column means the aircraft is only eligible for the issue of an airworthiness certificate in the restricted category.

Manufacturer	Aircraft Model	Serial Numbers	Type Certificate	
Aircraft Class: Airship				

Manufacturer	Aircraft Model	Serial Numbers	Type Certificate	
Aircraft Class: Aeroplane				
Airbus	A310-304 /A300B4-622R	all	FAA A35EU	x
Airbus	A318/319/320/321	See type acceptance report for applicability	EASA A.064	x
Airtractor	AT-602	AT-602	FAA A19SW	x
Boeing	B737	Next generation family of aircraft	FAA A16WE	x
Boeing	B767	all	FAA A1NM	x
Brithish Aerospace	AVRO-146 RJ	AVRO-146 RJ	EASA A.182	x
Cessna	Cessna-208B	Cessna-208B	FAA A37CE	
De Havilland Canada	DHC-8	DHC-8 100/20/300/400 all series	DOT A-142	x
Evektor- Aerotechnik Czech republic	Eurostar EV-97	EV-97	EASA A.029	x
Evektor- Aerotechnik Czech republic	Sport star	all	EASA A.592	x
Fokker	Fokker F27 Mk050	Mk050	FAA A-817 CAA-NL T-050-87	x
Fokker	F28 Mk0100	F28 Mk0100	FAA A20EU CAA-NL/RLD T-100-87	

Jabiru	Jabiru UL	Jabiru UL series	Australian CASA VA514	
LET, n.p. 686 04 Kunovice 1177 CZECH REPUBLIC	L-410 UVP	L-410 UVP	State department of aviation transport (UKRAVIATRANS) TL-0014	
Lilienthal Aviation, Kharkiv	Bekas X-32-912	Bekas X-32-912	State administration of Ukraine for Aviation safety oversight ТЛ0034	
Maule Aircraft Corporation	M-7-235C	M-7-235C	FAA 3A23	x
Pilatus	PC-6	B2-H4	FAA 7A15	
SAAB aircraft AB	SAAB-340B	SAAB-340B	FAA A52EU, Swedish CAA A1/84	x

Manufacturer	Aircraft Model	Serial Numbers	Type Certificate	
Aircraft Class:	Free Balloon			

Manufacturer	Aircraft Model	Serial Numbers	Type Certificate	
Aircraft Class:	Glider			

Manufacturer	Aircraft Model	Serial Numbers	Type Certificate	
Aircraft Class:	Helicopter			
Eurocopter Deutschland GmbH	MBB-BK 117C-2 (EC-145)	MBB-BK 117C-2	EASA R.010	x
Swednick K/Lublina-Polska	Ми-2	Ми-2	Polish People's republic civil aircraft inspection board BC-	x
Ulan-Ude Aviation plant under approval of "ОАО Московский вертолетный завод им М.Л.Миля"	Ми-8АМТ	Ми-8АМТ	Helicopter airworthiness Certificate /26.11.1993/; Supplement to helicopter airworthiness certificate 25.08.1995/	x

Ulan-Ude Aviation plant under approval of "ОАО Московский вертолетный завод им М.Л.Миля"	Ми-171	Ми-171	Inetrstate Aviation Committee (IAC) 90-171	x
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Manufacturer	Aircraft Model	Serial Numbers	Type Certificate	
Aircraft Class: Powered Glider				

Table 2 – List of Engine Models for which Type Acceptance Certificates have been issued

Manufacturer	Engine Model	Limitations	Type Certificate	
Engines				
Bombardier Rotax	912 series	912 A, S, UL, ULS	EASA E.121, FAA E00051EN	x
CFM international	CFM56-7B		FAA E000055EN; EASA E.004	x
CFM international	CFM56-5A series	CFM56-5A1, -5A3, -5A4, -5A5 or CFM56-5A1/F	FAA E28NE	x
CFM international	CFM56-5B series	CFM56-5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5B9	FAA E28NE	
General Electric	CF6-80 series	CF6-80A, CF6-80A2, CF6-80C2, CF6-80C2A2, CF6-80C2-B2, -B4, -B6 or CF6-80C2-B2F, -B4F, -B6F, B7F	FAA E-13NE	x
General Electric	CT7-9B		FAA E8NE	x
Four Textron Lycoming	LF507-1F		FAA E6NE	x
Lycoming	O-540 series	O-540 - J1A5D, -J3A5, -B4B5	FAA E295	x
Lycoming	IO-540 series	IO-540 - W1A5	FAA 1E4	x
Italian American Motor Engineering	KFM model 112m		CASA VA514	

Pratt & Whitney	PT6A-27		FAA E4EA	
Pratt & Whitney	PT6A-45 A/R/B, -60 AG, -65 AR/B/R/AG		DOT E12	
Pratt & Whitney	PT6A-114 and PT6A-114A		FAA A37CE	
Pratt & Whitney	PW120 series	PW120, PW120A, PW121, PW123 B/C/D/E,	EASA E.041	x
Pratt & Whitney	PW-125B		FAA E20NE	x
Pratt & Whitney	PW-150A		EASA E.049	x
Pratt & Whitney	PW4000 series	PW4052, PW4056, PW4060, PW4060A, PW4060C, PW4062, PW4158	FAA E24NE	x
Pratt & Whitney	PW6000 series	PW6122A, 6124A	FAA E24NE	x
Pratt & Whitney	JT9D-7 series	JT9D-7R4D, JT9D-7R4E, JT9D-7R4E4	FAA E20EA	x
Rolls-Royce	TAY 620-15 or TAY 650-15		FAA A20EU	
Rolls-Royce	RB211-524H-36 or RB211-524H-T-36		FAA E30NE	x
Klimov, Russia	ГТД-350		Polish People's republic civil aircraft inspection board	x
Turbomeca	Arriel 1E2		EASA E.073	x
ПАО «Мотор Сич», г. Запорожье, Украина	TB3-117BM		Interstate Aviation Committee (IAC) 90-171, STC 90-	x

Table 3 – List of Propeller Models for which Type Acceptance Certificates have been issued

Manufacturer	Engine Model	Limitations	Type Certificate	
Propellers				
Avtech Pty Ltd	Part number 4046092		Australian CASA VA514	
Dowty RotoI propellers	R352/6-123 series	R352/6-123-F/1; F/2	FAA P16NE	x
Dowty RotoI propellers	R354/4-123 series	R354/4-123-F/13; F/20	FAA P16NE	x
Dowty RotoI propellers	R375/4-123-F/21;		FAA P16NE	x
Dowty RotoI propellers	R389/4-123 Series	R389/4-123-F/25; F/26	FAA P16NE	x
Dowty RotoI propellers	R408/6-123F/17		EASA P.002	x
Hamilton standard	14RF-19		FAA P11NE	x
Hamilton standard	14SF series	14SF -7, -15, -23	FAA P7NE	x
Hartzell propellers	HC-B3MN3/M10083		FAA A37CE	
Hartzell propellers	HC-B3TN-3C or HT-B3TN-3D		FAA P15EA	
Hartzell propellers	HC-B5MP-3C		FAA P44GL	x
McCauley	3GFR34C703/106GA-0		FAA A37CE	
WOODCOMP	Klassic 170/3			x

Table 4: Type Certificate NAA reference codes

Code	Authority	Country
CAA-NL	Civil Aviation Authority	Netherland
CASA	Civil Aviation Safety Authority	Australia
DOT	Department of Transport	Canada
EASA	European Aviation Safety Agency	Europe
FAA	Federal Aviation Administration	USA

Note: From time to time a country may change the title of their National Aviation Authority (NAA). This is reflected in type certification documentation and later issues of a particular type certificate may appear different. For simplicity a single code has been assigned to the authority of each country. e.g. all certificates issued by the United States authority are listed with the FAA prefix and this may be regarded as synonymous with the earlier CAA title.