
Type Acceptance Report

TAR 8/21B/8 – Revision 1

CESSNA 404

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Executive Summary

New Zealand Type Acceptance has been granted to the Cessna Model 404 based on validation of FAA Type Certificate number A25CE. There are no special requirements for import.

All serial numbers listed under the FAA type certificate have been type accepted in New Zealand, except for the Model 406, which was only produced in France by Reims Aviation. The Model 404 is now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with NZCAR §21.177, subject to any outstanding New Zealand operational requirements being met. (See Section 5 of this report for a review of compliance of the basic type design with the operating Rules.)

NOTE: The information in this report was correct as at the date of issue. The report is generally only updated when an application is received to revise the Type Acceptance Certificate. For details on the current type certificate holder and any specific technical data, refer to the latest revision of the State-of-Design Type Certificate Data Sheet referenced herein.

1. Introduction

This report details the basis on which Type Acceptance Certificate No.8/21B/8 was granted in the Standard Category in accordance with NZCAR Part 21 Subpart B.

Specifically, the report aims to:

- (a) Specify the foreign type certificate and associated airworthiness design standard used for type acceptance of the model(s) in New Zealand; and
- (b) Identify any special conditions for import applicable to any model(s) covered by the Type Acceptance Certificate; and
- (c) Identify any additional requirements which must be complied with prior to the issue of a NZ Airworthiness Certificate or for any subsequent operations.

The report covers all models included on the State-of-Design type certificate which have been granted type acceptance in New Zealand. Appendix 1 details which models have been type accepted in accordance with the provisions of CAR Part 21B and which were certificated prior to that under NZCAR Section B.9 and are now type accepted under the transitional arrangements of Part 21 Appendix A(c).

2. Aircraft Certification Details

(a) State-of-Design Type and Production Certificates:

Manufacturer: Cessna Aircraft Company

Type Certificate Holder: Textron Aviation Inc. (since July 29, 2015)
Type Certificate: A25CE
Issued by: Federal Aviation Administration

Production Approval: Delegation Option Manufacturer No. CE-3
FAA Production Certificate 312

(b) Models Covered by the Part 21B Type Acceptance Certificate:

(i) **Model:** 404

MCTOW: 8400 lb. [3810 kg]

Max. No. of Seats: 11

Noise Standard: FAR Part 36

Engine: Continental GTSIO-520-M
Type Certificate: E7CE
Issued by: Federal Aviation Administration

Propeller: McCauley 3FF32C501/90UMB-0
Type Certificate: P45GL
Issued by: Federal Aviation Administration

3. Application Details and Background Information

The application for New Zealand type acceptance of the 1980 Model 404 was from Dennis Thompson International Ltd, dated 14 August 2007. The first-of-type example was serial number 404-0693, registered ZK-NDY. The Cessna 404 is an unpressurised low-wing light twin-engine piston aircraft with accommodation for two crew and nine passengers.

Type Acceptance Certificate Number 8/21B/8 was granted on 24 September 2007 to the 1980 Model 404 based on validation of FAA Type Certificate A25CE. Specific applicability is limited to the coverage provided by the operating documentation supplied. There are no special requirements for import into New Zealand.

Revision 1 to this report added all the other model years of the 404 not previously included. This was at the request of the type certificate holder, who has provided access to all technical publications.

The Model 404 was conceived as a growth version of the Model 402B, with a larger wing and 35-inch fuselage stretch similar to the 441 and incorporating large fowler flaps, new trailing link main landing gear and a new bonded metal “wet wing”. The basic hydraulic system is taken from the 421C.

There have been four previous examples of the 404 on the New Zealand Register including a 1980 model serial number 404-0603 ZK-TNT, but this was de-registered in 1984 and was not current in 1995. The type is therefore not covered by the Transitional Arrangements provisions of Part 21 Appendix A(c). The first example was serial number 404-0067 registered ZK-TAS in April 1977.

4. NZCAR §21.43 Data Requirements

The type data requirements of NZCAR Part 21B Para §21.43 have been satisfied by supply of the following documents, or were already held by the CAA:

(1) State-of-Design Type certificate:

FAA Type Certificate Number A25CE

FAA Type Certificate Data Sheet A25CE at Revision 13 dated October 29, 2015
– Model 404 approved July 21, 1976

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

The certification basis of the Model 404 is FAR Part 23 effective February 1, 1965, including Amendments 23-1 through 23-13, except Subpart B at Amendment 23-14; FAR Part 23 paragraph §23.1385(c) at Amendment 23-21 and FAR §23.1327 at Amendment 23-23.

This is an acceptable certification basis in accordance with NZCAR Part 21B Para §21.41 and Advisory Circular 21-1A, as FAR 23 is the basic standard for Normal Category Airplanes called up under Part 21 Appendix C. There are no non-compliances and no additional special conditions have been prescribed by the Director under §21.23.

(ii) *Special Conditions:*

Nil

(iii) *Equivalent Level of Safety Findings:*

FAR §23.1189(a) – Engine compartment shutoff means were not required provided hydraulic lines were fireproof hoses with steel fittings which met demonstrated fire resistance criteria.

FAR §23.1545 and 23.1583(a) – IAS permitted instead of CAS provided both values are given in the POH/AFM and all placards to meet certification requirements are consistent with instrument markings. ASI calibration data must cover the full operating range and be predicated on flight tests.

(iv) *Airworthiness Limitations:*

See the aircraft Maintenance Manual.

(3) Environmental Certification:

(i) *Environmental Standard:*

The 1980 Model 404 and on has been certificated for noise under FAR Part 36, including Amendments 36-1 through 36-4.

(ii) *Compliance Listing:*

Flyover noise, established in compliance with FAR 36 at maximum continuous power is 78.9 dB(A) – See Flight Manual Section 4.

(4) Certification Compliance Listing:

DM Report 404-0 Type Inspection Report – Basic Aircraft Configuration

Cessna Report S-404-110 – Cessna 404 – Structures Data Summary

(5) Flight Manual:

CAA AIR Cessna**Number: Publication: Title:**

AIR 2025	D1540-13	Model 404 Titan (1977) Pilot's Operating Handbook
AIR 3450	D1563-13	Model 404 Titan (1978) Pilot's Operating Handbook
AIR 2027	D1572-13PH	Model 404 Titan (1979) Pilot's Operating Handbook
AIR 3011	D1583-13PH	Model 404 Titan (1980) Pilot's Operating Handbook
AIR 2505	D1593-13PH	Model 404 Titan (1981) Pilot's Operating Handbook

(6) Operating Data for Aircraft:

(i) *Maintenance Manual:*

Cessna 404 (1977-1981) Maintenance Manual – Publication D2517-13

Cessna 400 Series Continued Airworthiness Program – Publication D5305-13

(ii) *Current service Information:*

Service Bulletins

(iii) *Illustrated Parts Catalogue:*

Cessna 404 Titan (1977-1981) Parts Catalog – Publication P559-12

(7) Agreement from manufacturer to supply updates of data in (5), and (6):

Cessna publications are now available through the Textron IView website at <https://ww2.txtav.com> or for older manuals at <http://techpubs.cessna.com/>

(8) Other information:

Cessna Model 404 Titan Ambassador Equipment List – 14 July 1976

Cessna Model 404 Titan Freighter Equipment List – 15 August 1977

Cessna Model 404 Titan Courier Equipment List – 15 August 1978

Cessna Model 404 Titan Ambassador Equipment List – 6 July 1979

Cessna Model 404 Titan Freighter Equipment List – 7 August 1980

5. New Zealand Operational Rule Compliance

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 has been assessed as they are a prerequisite for the grant of an airworthiness certificate.

CAR Part 26 – Subpart B – Additional Airworthiness Requirements

Appendix B – All Aircraft

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
B.1	Marking of Doors and Emergency Exits	<i>To be determined on an individual aircraft basis</i>
B.2	Crew Protection Requirements – CAM 8 Appdx. B # .35	Not Applicable – Agricultural Aircraft only

Compliance with the following additional NZ operating requirements has been reviewed and were found to be covered by either the original certification requirements or the basic build standard of the aircraft, except as noted:

CAR Part 91 – Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
91.505	Seating and Restraints – Safety belt/Shoulder Harness	FAR §23.785
91.507	Pax Information Signs – Smoking, safety belts fastened	Not Applicable – Less than 10 passenger seats
91.509 Min. VFR	(1) ASI (2) Machmeter (3) Altimeter (4) Magnetic Compass (5) Fuel Contents (6) Engine RPM (7) Oil Pressure	FAR §23.1303(a) N/A – No mach limitations FAR §23.1303(b) FAR §23.1303(c) FAR §23.1305(a) FAR §23.1305(e) FAR §23.1305(b)
91.511 Night	(1) Turn and Slip (2) Position Lights	Fitted as std – See AFM/POH FAR §23.1385
91.511	Night VFR Instruments and Equipment	<i>Operational requirement – Compliance as applicable</i>
91.513	VFR Communication Equipment	<i>Operational requirement – Compliance as applicable</i>
91.517	IFR Instruments and Equipment	<i>Operational requirement – Compliance as applicable</i>
91.519	IFR Communication and Navigation Equipment	<i>Operational requirement – Compliance as applicable</i>
91.523	Emergency Equipment: (a) More Than 9 pax – First Aid Kits per Table 7 – Fire Extinguishers per Table 8 (b) More than 20 pax – Axe readily accessible to crew (c) More than 61 pax – Portable Megaphones per Table 9	<i>Operational Requirement – Compliance as applicable</i> <i>Operational Requirement – Compliance as applicable</i> Not Applicable – Less than 20 passenger seats Not Applicable – Less than 61 passenger seats
91.529	ELT – TSO C126 406 MHz after 22/11/2007	<i>Operational requirement – Compliance as applicable</i>
91.531	Oxygen Indicators – Volume/Pressure/Delivery	<i>Operational requirement – Compliance as applicable</i>
91.533	Oxygen for Non-Pressurised Aircraft >30 min above FL100 – Supplemental for crew, 10% Pax – Therapeutic for 3% of Pax Above FL100 – Supplemental for all Crew, Pax – Therapeutic for 1% of Pax – 120l PBE for each crew member	Maximum Operating Altitude Limit in Flight Manual (with oxygen equipment) is 30,000 ft The standard oxygen system is either a 22 cu.ft. bottle or a 114.9 cu.ft. bottle in the nose compartment, with plumbed outlets for each occupant. The oxygen control, pressure gauge, bottle, regulator and plumbing are optional.
91.533	Oxygen for non-Pressurised Aircraft	Not fitted as standard
91.541	SSR Transponder and Altitude Reporting Equipment	<i>Operational requirement – Compliance as applicable</i>
91.543	Altitude Alerting Device – Turbojet or Turbofan	Not Applicable – Not turbo jet or turbofan powered
91.545	Assigned Altitude Indicator	<i>Operational requirement – Compliance as applicable</i>
A.15	ELT Installation Requirements	<i>To be determined on an individual aircraft basis</i>

CAR Part 135 – Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
135.355	Seating / Restraints – Shoulder harness flight-crew seats	FAR §23.785
135.357	Additional Instruments (Powerplant and Propeller)	FAR §23.1305
135.359	Night Flight	Landing light, Pax compartment
135.361	IFR Operations	Speed, Alt, spare bulbs/fuses
135.363	Emergency Equipment (Part 91.523 (a) and (b))	<i>Operational requirement – Compliance as applicable</i>
135.367	Cockpit Voice Recorder	N/A – Only for 2-crew helicopters with more than 10 pax
135.369	Flight Data Recorder	Not Applicable – Less than 10 passenger seats
135.371	Additional Attitude Indicator	Not Applicable – Not turbo jet or turbofan powered

- NOTES: 1. A Design Rule reference in the Means of Compliance column indicates the Design Rule was directly equivalent to the CAR requirement, and compliance is achieved for the basic aircraft type design by certification against the original Design Rule.
2. The CAR Compliance Tables above were correct at the time of issue of the Type Acceptance Report. The Rules may have changed since then and compliance should be checked individually.
3. Some means of compliance above are specific to a particular model/configuration. Compliance with Part 91/119 operating requirements should be checked in each case, particularly oxygen system capacity and emergency equipment.

Attachments

The following documents form attachments to this report:

- Photographs first-of-type example 1980 Cessna 404 ZK-NDY
- Three-view drawing Cessna Model 404 Titan
- Copy of FAA Type Certificate Data Sheet Number A25CE

Sign off

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 David Gill
 Team Leader Airworthiness

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 Checked – Gaetano Settineri
 Airworthiness Engineer

Appendix 1

List of Type Accepted Variants:

<i>Model:</i>	<i>Applicant:</i>	<i>CAA Work Request:</i>	<i>Date Granted:</i>
404 (1981)	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
404 (1980)	Dennis Thompson International Ltd	8/21B/8	24 September 2007
404 (1977-79)	Textron Aviation Inc.	18/21B/17	22 May 2018