
Type Acceptance Report

TAR 99/21B/31 – Revision 2

Piper PA-28 Cherokee Series

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Executive Summary

New Zealand Type Acceptance has been granted to the Piper PA-28 Cherokee Series based on validation of FAA Type Certificate number 2A13. There are no special requirements for import.

Applicability is currently limited to all Models and serial numbers listed on the TCDS at Revision 59, except for the PA-28S-160/180 seaplane variants, which are now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with NZCAR §21.191, 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.) Additional variants or serial numbers approved under the State-of-Design type certificate after that date can become type accepted after supply of the applicable documentation, in accordance with the provisions of NZCAR §21.43(c).

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.99/21B/31 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 models 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: Piper Aircraft, Inc. (since August 7, 2006)
The New Piper Aircraft, Inc. (since July 14, 1995)
Piper Aircraft Corporation

Type Certificate: 2A13
Issued by: Federal Aviation Administration

Production Approval: FAA PC

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

- (i) **Models:** PA-28-140, PA-28-150, PA-28-151
- MCTOW: 1950 lb. [884 kg] – PA-28-140 up to s/n 28-20939
2150 lb. [975 kg] – PA-28-140 s/n 28-20940 up, PA-28-150
2325 lb. [1055 kg] – PA-28-151
- Max. No. of Seats: 4 (Applies to all PA-28 variants)
- Noise Standard: Not Applicable
- Engine:** Lycoming O-320-A2B [PA-28-150]
Lycoming O-320-E2A [PA-28-140, PA-28-150]
Lycoming O-320-E3D [PA-28-140, PA-28-151]
FAA Type Certificate: E-274
- Propeller:** Sensenich M74DM or 74DM Series
FAA Type Certificate: P-886
- (ii) **Models:** PA-28-160, PA-28-161
- MCTOW: 2200 lb. [998 kg] – PA-28-160
2325 lb. [1055 kg] – PA-28-161 Cherokee Cadet
2440 lb. [1106 kg] – PA-28-161
- Noise Standard: Not Applicable – PA-28-160
FAR 36 – PA-28-161
- Engine:** Lycoming O-320-B2B or -D2A [PA-28-160]
Lycoming O-320-D3G or -D2A [PA-28-161]
FAA Type Certificate: E-274
- Propeller:** Sensenich M74DM or 74DM Series
FAA Type Certificate: P-886

- (iii) **Models:** PA-28-180, PA-28-181
- MCTOW:** 2400 lb. [1088 kg] – PA-28-180
2450 lb. [1111 kg] – PA-28-180 s/n 28-7305001 and up
2550 lb. [1157 kg] – PA-28-181
- Noise Standard:** Not Applicable – PA-28-180
FAR 36 – PA-28-181
- Engine:** Lycoming O-360-A3A, -A4A [PA-28-180]
Lycoming O-360-A4M [PA-28-180, PA-28-181]
FAA Type Certificate: E-286
- Lycoming IO-360-B4A [PA-28-181 s/n 2890206 and up]
FAA Type Certificate: 1E10
- Propeller:** Sensenich M76EM or 76EM Series
FAA Type Certificate: P4EA
- (iv) **Models:** PA-28-235, PA-28-236
- MCTOW:** 2900 lb. [1315 kg]
3000 lb. [1361 kg] – PA-28-235 s/n 7310001 up, PA-28-236
- Noise Standard:** Not Applicable – PA-28-235
FAR 36 – PA-28-236
- Engine:** Lycoming O-540-B1B5, -B2B5 or -B4B5 [PA-28-235]
Lycoming O-540-J3A5D [PA-28-236]
FAA Type Certificate: E-295
- Propeller:** McCauley 1P235PFA80 [PA-28-235]
FAA Type Certificate: P12EA
- Hartzell HC-C2YK-1/8468A-4 [PA-28-235]
Hartzell HC-C2YK-1()F/F8468A-4 [PA-28-235]
Hartzell HC-F2YR-1()F/F8468A-4R [PA-28-236]
FAA Type Certificate: P-920
- Sensenich M80BMM or 80BM8 – with -B4B5 engine only
FAA Type Certificate: P17EA
- (v) **Model:** PA-28R-180, PA-28R-200, PA-28R-201, PA-28RT-201
- MCTOW:** 2500 lb. [1134 kg] – PA-28R-180
2600 lb. [1179 kg] – PA-28R-200
2650 lb. [1202 kg] – PA-28R-200 s/n 28R-7235001 and up
2750 lb. [1247 kg] – PA-28R-201, PA-28RT-201

Noise Standard: Not Applicable – PA-28R-180, PA-28R-200
FAR 36 – PA-28R-201, PA-28RT-201

Engine: Lycoming IO-360-B1E [PA-28R-180]
Lycoming IO-360-C1C [PA-28R-200]
Lycoming IO-360-C1C6 [PA-28R-200, PA-28-201]
FAA Type Certificate: 1E10

Propeller: Hartzell HC-C2YK-()/7666A-0 or -2
Hartzell HC-C2YK-1()F/F7666A
FAA Type Certificate: P-920

McCauley B2D34C213/90DHA-16 [with -C1C6 engine only]
McCauley 2D34C215/90DJA-14E [PA-28RT-201]
FAA Type Certificate: P7EA

(vi) **Model:** PA-28R-201T, PA-28RT-201T, PA-28-201T

MCTOW: 2900 lb. [1315 kg]

Noise Standard: FAR Part 36

Engine: Continental TSIO-360-F or -FB
FAA Type Certificate: E16EA

Propeller: Hartzell BHC-C2YF-1()F/F8459A-8R
FAA Type Certificate: P-920

Hartzell PHC-C3YF-1()F/F7663-2R [PA-28RT-201T]
FAA Type Certificate: P25EA

Notes: 1. Refer to FAA TCDS 2A13 for specific applicability of engine and propeller combinations to individual aircraft models.

2. Refer to Advisory Circular 21-1 Appendix 2 for the New Zealand type acceptance status of any engines and propellers listed above.

3. Application Details and Background Information

There have been many examples of the Piper PA-28 Cherokee in New Zealand prior to 1995 when Part 21 was introduced, and those particular model years or serial number ranges were therefore deemed to have a type acceptance certificate under the transitional arrangements of Part 21 Appendix A(c). The first application for New Zealand type acceptance under Part 21B was for the Model PA-28-181 Archer III from the NZ agent and importer, Airwork (NZ) Ltd, dated 24 February 1999. A new production aircraft serial number 2843213 had been ordered as a demonstrator, registered as ZK-NEW. The PA-28 Cherokee Series is a four-seat low-wing all-metal unpressurised light aircraft. There have been subsequent imports of later production aircraft equipped with the Avidyne FlightMax Entegra EFIS system under an STC, for which New Piper supplied a certification package. Type acceptance was not required because the same manuals are used with Supplements.

Type Acceptance Certificate No. 99/21B/31 was granted on 30 March 1999 to the Piper Model PA-28-181 Archer III based on validation of FAA Type Certificate 2A13. Specific applicability is limited to the coverage provided by the operating documentation supplied. There are no special requirements for import into New Zealand.

The application for type acceptance of the Model PA-28R-201T was from the owner dated 26 November 2001. The first-of-type example was serial number 28R-7803237, registered ZK-REC. (Although there have been three examples of the Arrow III on the NZ register, the first being ZK-EIF in 1978, and four examples of the later Turbo Arrow IV, there have been no Turbo Arrow III.) Type acceptance was granted on 20 December 2001.

The application for New Zealand type acceptance of the most recent production Model PA-28-161 Warrior III was from the aircraft manufacturer dated 14 August 2002. The first-of-type example was serial number 2842165, which was registered as ZK-EBW for the Canterbury Aero Club. Type acceptance was granted on 3 September 2002.

This report was raised to Revision 1 to include the 1969/71 Model PA-28R-200 Arrow. The opportunity was also taken to consolidate all the previous (separate) PA-28 Reports and update to the latest format. The applicant was Flight Care Ltd and the first-of-type was serial no.28-35725, registered ZK-RTE. Type acceptance was granted on 20 October 2008.

Revision 2 was raised to add the two latest PA-28-181 production versions, the “Archer DX” with the G1000 and the later “Archer TX” with the G1000NXi EFIS displays. The first-of-type examples were serial numbers 2843918 and 2843919 registered ZK-LJT and ZK-LJX respectively. The opportunity was also taken to add all the other PA-28 variants on the current type certificate which were not previously covered. This was on the basis that the type certificate holder had provided CAA with access to all technical publications.

The very first Model PA-28-160 Cherokee introduced in 1960 was an all-new entry-level training and touring aircraft from Piper. It has since been developed into a large family of variants with a range of powerplant options, including the Arrow Series with retractable undercarriage and constant-speed propeller. All variants have four seats with a single entry door on the right hand side, while an extra fuselage window was added in the late 1960s. The first Cherokees had a constant-chord rectangular planform wing, but starting in 1974 Piper introduced a new wing with tapered outer section and an extra two feet of span. This was progressively fitted to the new PA-28-151/161/181/201 variants.

The Archer III is a derivative of the PA-28-181 Archer II which was first type accepted in NZ in 1978 with ZK-EIP. The Archer III is a new sub-model on the Type Certificate, and the modifications include: 28 volt electrical system; a restyled flat single-piece metal instrument panel with post lights; new style control wheel; an overhead switch panel with internally lit rocker switches; a redesigned engine cowling with NACA scoop air induction system and axisymmetric engine cooling inlets; and a modified muffler exhaust exit pipe. The taxi and landing lights are now mounted in the wing tips and there is an electric engine primer system. A propeller with an extended hub was also incorporated.

The first example of the original 180 hp Arrow in New Zealand was ZK-CUI, which was imported in 1969. The PA-28R-200 was the first development, with an uprated engine, and the first-of-type example was ZK-RTE. The PA-28R-200 Arrow II introduced for the 1972 model year had a five inch fuselage extension, to allow more rear seat room, a larger horizontal tail, and small wingspan and gross weight increases. The first example here was registered ZK-DIU in 1973. The Arrow III was a major re-development incorporating the new increased-span semi-tapered wing first introduced on the PA-28-151 Warrior. This uses the same wing section, but it permits an increase in MCTOW. The first example of the Model PA-28R-201 Arrow III in New Zealand was ZK-EIF, which was registered in 1978.

The Warrior III is an updated version of the PA-28-161 Warrior II, which was a 160 hp development of the PA-28-151 Warrior. A simplified version with reduced trim standard was sold as the Cadet. There have been fifteen examples of the Warrior in NZ, the first being ZK-DIX and ZK-DOU registered in January 1974, and twenty six examples of the Warrior II, starting with ZK-EID in October 1977. For the Warrior III the electrical system was uprated from 14 to 28 volts, and a new two-piece panel fitted with modernised engine instrumentation, lighted rocker switches and post lights. The only aerodynamic change is the deletion of wheel pants and the use of the small-chord strut fairings from the Cadet.

The Commercial Model Names for the various Cherokee models are as follows:

- PA-28-150, PA-28-160 Cherokee, Cherokee B/C
- PA-28-140 Cherokee Cruiser
- PA-28-151 Cherokee Warrior
- PA-28-161 Warrior II/III
- PA-28-180 Cherokee / Archer
- PA-28-181 Archer II/III
- PA-28-235 Cherokee Pathfinder
- PA-28-236 Dakota
- PA-28R-180 Arrow
- PA-28R-200 Arrow II
- PA-28R-201 Arrow III
- PA-28R-201T Turbo Arrow III
- PA-28RT-201 Arrow IV
- PA-28RT-201T Turbo Arrow IV
- PA-28-201T Turbo Dakota

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 2A13

FAA Type Certificate Data Sheet no. 2A13 at Revision 59 dated 27 August, 2018

- Model PA-28-160 approved October 31, 1960
- Model PA-28-150 approved June 2, 1961
- Model PA-28-180 approved August 3, 1962
- Model PA-28-235 approved July 15, 1963
- Model PA-28-140 approved February 14, 1964
- Model PA-28R-180 approved June 8, 1967
- Model PA-28R-200 approved January 16, 1969
- Model PA-28-151 approved August 9, 1973
- Model PA-28-181 approved July 8, 1975
- Model PA-28-161 approved November 2, 1976
- Model PA-28R-201 approved November 2, 1976
- Model PA-28R-201T approved November 2, 1976
- Model PA-28-236 approved June 1, 1978
- Model PA-28RT-201 approved November 13, 1978
- Model PA-28RT-201T approved November 13, 1978
- Model PA-28-201T approved December 14, 1978

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

The original certification basis of the first Cherokee Model PA-28-160 was CAR 3 effective May 15, 1956, including Amendments 3-1, 3-2 and 3-4. For subsequent variants of the PA-28 this was upgraded to include paragraphs of Amendment 3-7, plus specific paragraphs of FAR Part 23, as noted individually on the TCDS. This is an acceptable certification basis in accordance with NZCAR Part 21B paragraph §21.41 and Advisory Circular 21-1A, because CAR 3 is the predecessor of FAR 23, which 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:*

Special Condition (Docket #CE207) for HIRF was applied to later production versions of the PA-28 Series when fitted with electronic flight instrument systems.

(iii) *Equivalent Level of Safety Findings:*

Piper Models PA-28-161, PA-28R-201, PA-28R-201T, PA-28-236, PA-28RT-201, PA-28RT-201T, and PA-28-201T – CAR 3.757(a) Airspeed Indicator – Piper advised this addressed “calibrated airspeed shall be used”, while these later Models used an ASI which displayed indicated airspeed.

- (iv) *Airworthiness Limitations:*
See Maintenance Manual.

(3) Aircraft Noise and Engine Emission Standards:

- (i) *Environmental Standard:*
The PA-28-161 and later versions have been certificated under FAR Part 36, including Amendments 36-1 through 36-4, and later as applicable.
- (ii) *Compliance Listing:*
Report VB-1610 – PA-28-161 Warrior III noise level is 72.9 dB(A).
Report VB-1611 – PA-28-181 Archer III FAR 36G noise level is 73.1 dB(A) with standard exhaust, and 71.9 dB(A) with optional exhaust system.
Report VB-1612 – PA-28R-201 Arrow III noise level is 75.5 dB(A).
Report VB-800 – PA-28R-201T noise level is 68.8 dB(A).
Report VB-910 – PA-28-236 noise level is 72.9 dB(A).
Report VB-930 – PA-28RT-201 noise level is 75.5 dB(A).
Report VB-940 – PA-28RT-201T noise level is 69.4 dB(A).
Report VB-920 – PA-28-201T noise level is 69.6 dB(A).

(4) Certification Compliance Listing:

Piper Report VB-2 Model PA-28 Section 2 Basic Data
Piper Report VB-15 PA-28 Land Plane Equipment List

Piper Report FT-183 – Model PA-28-181 Archer III Certification dated 19 Aug 94
Piper Report VB-712 Sect. II – PA-28-181 III 28V Electrical System Substantiation

Piper Report FT107 – Flight Test Certification PA-28R-201T
Piper Report FT108 – Flight Test Report PA-28R-201/T
Piper Report VB-751 – Structural Substantiation PA-28R-201/T

Piper Report FT-184 – PA-28-161 Warrior III Type Inspection Report – Rev C
Piper Report VB-814 – Appendix 7 – 28 Volt Electrical System – PA-28-161 III
Project 28-079-34 – Compliance Checklist PA28-161 – Optional 28V Elec. System
Project 28-118-18 – Compliance Checklist PA28-161 – 2000 Yearly Model Change
Project 28-069-03 – Compliance Checklist PA28-161 – Model Year 2001 Warrior

Report VB-1892 – PSCP – Avidyne Entegra Integrated Flight Deck Option PA-28
Report VB-1898 – Electrical Substantiation Report – Avidyne Entegra Integrated
Flight Deck System (PFD and MFD) Installation in PA28R-201; PA-28-181 and
PA-28-161 (FAA project TD7644AT-A).

Report VB-1901 – PA-28 Series Powerplant Substantiation – Optional Avidyne
Report VB-1901 – PA-28 Series Mechanical Systems Substantiation – Optional AE

Piper Report VB-59 – Structural Substantiation PA-28R-180/200
Piper Report FT67 – Model PA-28R-200 Flight Test Report
Piper Report VB-176: Equipment List, Model PA-28R-200

(5) Flight Manual:

CAA AIR Number:	Report Number:	Piper Model and Serial Number Range:
AIR 3858	VB-160	PA-28-140 S/N 28-20001 through 28-26946, and 28-7125001 through 28-7125641
AIR 3859	VB-339	PA-28-140 S/N 28-7225001 through 28-7325674
AIR 225	VB-557	PA-28-140 S/N 28-7425001 through 28-7625275
AIR 2400	VB-770	PA-28-140 S/N 28-7725001 through 28-7725290
AIR 3860	VB-166	PA-28-150 S/N 28-1 through 28-4377
AIR 2048	VB-573	PA-28-151 S/N 28-7415001 through 28-7615435
AIR 2022	VB-780	PA-28-151 S/N 28-7715001 through 28-7715314
AIR 2770	VB-168	PA-28-160 S/N 28-1 through 28-4377, and 28-1760A
AIR 2024	VB-880	PA-28-161 S/N 28-7716001 through 28-8216300
AIR 2387	VB-1180	PA-28-161 S/N 28-8316001 through 28-8616057, and 2816001 through 2816119
AIR 3861	VB-1360	PA-28-161 S/N 2841001 through 2841365
AIR 3862	VB-1565	PA-28-161 S/N 2816110 through 2816119
AIR 2793	VB-1610	PA-28-161 Warrior III Serial Number 2842001 and Up
AIR 2103	VB-163	PA-28-180 S/N 28-671 through 28-5600
AIR 2773	VB-210	PA-28-180 S/N 28-5601 through 28-5859, and 28-7105001 through 28-7205091
AIR 2863	VB-355	PA-28-180 S/N 28-7205092 through 28-7205318
AIR 203	VB-437	PA-28-180 S/N 28-7305001 through 28-7305601
AIR 2850	VB-558	PA-28-180 S/N 28-7405001 through 28-7505260
AIR 2009	VB-760	PA-28-181 S/N 28-7690001 through 28-7690467
AIR 2438	VB-790	PA-28-181 S/N 28-7790001 through 28-7990589
AIR 2128	VB-1120	PA-28-181 S/N 28-8090001 through 28-8690056, 28-8690061, 28-8690062, and 2890001 through 2890205
AIR 2650	VB-1611	PA-28-181 Archer III Serial Number 2843001 and Up
AIR 3863	VB-1563	PA-28-181 Archer III S/N 2890206 through 2890231
AIR 3845	VB-2266	PA-28-181 Archer III S/N 2843701, 03 and up G1000
AIR 3916	VB-2596	PA-28-181 Archer III S/N 2843852, 54 and up G1000NXi
AIR 3864	VB-2749	PA-28-181 S/N 2843823, 2881001 and up G1000NXi-GFC
AIR 2313	VB-173	PA-28R-180 S/N 28R-30001 through 28R-31270, and 28R-7130001 through 28R-7130013
AIR 3055	VB-175	PA-28R-200 S/N 28R-35001 through 28R-35820, and 28R-7135001 through 28R-7135229
AIR 3054	VB-343	PA-28R-200 S/N 28R-7235001 through 28R-7335446
AIR 2905	VB-560	PA-28R-200 S/N 28R-7435001 through 28R-7635545
AIR 2042	VB-870	PA-28R-201 S/N 28R-7737001 through 28R-7837317
AIR 3865	VB-1365	PA-28R-201 S/N 2837001 through 2837061
AIR 3866	VB-1612	PA-28R-201 S/N 2844001 and up

AIR 2765 VB-800 PA-28R-201T S/N 28R-7703001 through 28R-7803373
AIR 3867 VB-1370 PA-28R-201T S/N 2803001 through 2803012
AIR 3868 VB-930 PA-28RT-201 S/N 28R-7918001 through 28R-7918267
AIR 3869 VB-1130 PA-28RT-201 S/N 28R-8018001 through 28R-8218026
AIR 2195 VB-940 PA-28RT-201T S/N 28R-7931001 through 28R-8631005,
and 2831001 through 2831013
AIR 3870 VB-920 PA-28-201T S/N 28-7921001 through 28-7921095
AIR 2040 VB-170 PA-28-235 S/N 28-10001 through 28-11378, and
28-7110001 through 28-7210023
AIR 204 VB-442 PA-28-235 S/N 28-7310001 through 28-7310176
AIR 2469 VB-559 PA-28-235 S/N 28-7410001 through 28-7610202
AIR 3871 VB-810 PA-28-235 S/N 28-7710001 through 28-7710089
AIR 2123 VB-910 PA-28-236 S/N 28-7911001 through 28-8611008, and
2811001 through 2811050
AIR 3872 VB-1613 PA-28-236 S/N 2845001 and up

(6) Operating Data for Aircraft:

(i) *Maintenance Manual:*

P/N 761-539 – PA-28-151 & PA-28-161 Warrior I, Warrior II, & Warrior III (III ending Serial Number 2816119)
P/N 761-882 – PA-28-161 Warrior III (Serial Number 2842001 & up)
P/N 761-829 – PA-28-161 Cadet
P/N 753-586 – PA-28-140, PA-28-150, PA-28-160, PA-28-180, & PA-28-235 Cherokee, PA-28R-180, & PA-28R-200 Cherokee Arrow & Arrow II
P/N 761-679 – PA-28-181 Archer II and Archer III
P/N 761-883 – PA-28-181 Archer III (Serial Number 2843001 & up)
P/N 761-702 – PA-28-201T Turbo Dakota
P/N 761-681 – PA-28-236 Dakota
P/N 761-639 – PA-28R-201 Arrow III & PA-28R-201T Turbo Arrow III (Serial numbers 28R-7737001 thru 28R-7837317 and 2837001 thru 2837061)
P/N 761-895 – PA-28R-201 Arrow (Serial No.s 2844001 & up, 2881001 & up)
P/N 761-694 – PA-28RT-201 & PA-28R-201T Arrow IV & Turbo Arrow IV

(ii) *Current service Information:*

Service Bulletins and Service Letters – P/N 1762-331

(iii) *Illustrated Parts Catalogue:*

P/N 761-538 – PA-28-151 & PA-28-161 Warrior I, Warrior II, & Warrior III
P/N 761-897 – PA-28-161 Warrior III (Serial Number 2842001 & up)
P/N 761-828 – PA-28-161 Cadet
P/N 753-582 – PA-28-140, PA-28-150, PA-28-160, PA-28-180 & PA-28-235 Cherokee, PA-28R-180 & PA-28R-200 Cherokee Arrow & Arrow II
P/N 761-678 – PA-28-181 Archer, Archer II, Archer III (III ending S/N 2890231)
P/N 761-898 – PA-28-181 Archer III (Serial Number 2843001 & up)
P/N 761-701 – PA-28-201T Turbo Dakota
P/N 761-680 – PA-28-236 Dakota

P/N 761-638 – PA-28R-201 & PA-28R-201T Arrow III & Turbo Arrow III

P/N 761-894 – PA-28R-201 Arrow III (Serial Number 2844001 & up)

P/N 761-693 – PA-28RT-201 & -201T Arrow IV & Turbo Arrow IV

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

Letter from New Piper Inc. FAA/DOA Coordinator dated 10 December 1998

CAA 2171 – New Piper Director of Aircraft Certification Services dated 14-8-02

Piper now provides CAA access to publications through the NAA portal

(8) Other information:

PA-28-181 Archer III Equipment List – S/N 2843112 and Up.

Engineering Order 101311 – Installation Nav & Comm Antenna PA-28-181

Report VB-712 Section II – PA-28-181 III 28V Electrical System Substantiation

5. New Zealand Operational Rule Compliance

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 is a prerequisite for the grant of a type acceptance 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	Shoulder Harness if Aerobatic; >10 pax; Flight Training	CAR §3.715
91.507	Pax Information Signs - Smoking, safety belts fastened	Not Applicable – Less than ten passenger seats
91.509	Minimum Instruments and Equipment	
	(1) ASI (2) Machmeter (3) Altimeter (4) Magnetic Compass (5) Fuel Contents (6) Engine RPM (7) Oil Pressure	CAR §3.655(a)(1) N/A – No mach no. limitations CAR §3.655(a)(2) CAR §3.655(a)(3) CAR §3.655(b)(1)(i) CAR §3.655(b)(1)(iv) CAR §3.655(b)(1)(ii)
		(8) Coolant Temp (9) Oil Temperature (10) Manifold Pressure (11) Cylinder Head Temp. (12) Flap Position (13) U/C Position (14) Ammeter/Voltmeter
		<i>N/A – Air cooled engine</i> CAR §3.655(b)(1)(iii) CAR §3.655(b)(2)(v) CAR §3.655(b)(2)(iii) Spring-loaded lever position CAR §3.359 CAR §3.681
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	Not Applicable – Less than 10 passenger seats
91.529	ELT – TSO C126 after 1 July 2008	<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	<i>Operational requirement – Compliance as applicable</i>
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>Compliance of factory installation to be determined</i>

CAR Part 135 – Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
135.355	Seating and Restraints – Shoulder harness flight-crew seats	<i>Operational requirement – Compliance as applicable</i>
135.357	Additional Instruments (Powerplant and Propeller)	<i>Operational requirement – Compliance as applicable</i>
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 that date and should be checked individually.

3. Some means of compliance above are specific to a particular model/configuration. Compliance with Part 91/135 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 serial number 28-43213 ZK-NEW
 Three-view drawing Piper Model PA-28-181 Archer III
 Photographs first-of-type example serial number 28R-7803237 ZK-REC
 Three-view drawing Piper Model PA-28R-201T Turbo Arrow III
 Photographs first-of-type example serial number 2842165 ZK-EBW
 Three-view drawing The New Piper Model PA-28-161 Warrior III
 Photographs first-of-type example serial number 28R-35725 ZK-RTE
 Piper Drawing 76101B – General Arrangement PA28R-200 (Arrow II)
 Copy of FAA Type Certificate/Type Certificate Data Sheet No. 2A13

Sign off

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 David Gill
 Team Leader Airworthiness

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 Checked – Kavita Vanmari
 Airworthiness Engineer

Appendix 1

List of Type Accepted Variants:

<i>Model:</i>	<i>Applicant:</i>	<i>CAA Work Request:</i>	<i>Date Granted:</i>
PA-28-140, PA-28-160	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28-151, PA-28-180	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28-161 (1976-93)	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28-181 (1975-93)	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28R-180	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28R-200 (1972-76)	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28R-201 (1977-78)	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28RT-201T	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28-235 (1963-76)	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28-236 (1978-93)	AC 21-1.2/NZCAR Part 21 Appendix A(c)		
PA-28-181 (1995 on)	Airwork Holdings Limited	99/21B/31	30 March 1999
PA-28R-201T (1977-78)	M J Newcombe	2/21B/6	20 December 2001
PA-28-161 (1995 on)	The New Piper Aircraft Inc.	3/21B/3	3 September 2002
PA-28R-200 (1969-71)	Flight Care Limited	9/21B/5	20 October 2008
PA-28-181 (G1000NXi)	Piper Aircraft, Inc.	18/21B/40	30 May 2018
PA-28 all other variants except PA-28S versions	Piper Aircraft, Inc.	18/21B/40	8 July 2019