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# **Type Acceptance Report**

**TAR 20/21B/8**

**PIPER J3L Series**



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## Executive Summary

New Zealand Type Acceptance has been granted to the Piper Model J3L Series based on validation of FAA Type Certificate number A-698. There are no special requirements for import.

Applicability is to all aircraft covered by the type certificate, 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.)

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. 20/21B/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 in accordance with the provisions of CAR Part 21B.

## 2. Aircraft Certification Details

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

Manufacturer: Piper Aircraft Corporation  
Type Certificate: A-698  
Issued by: Federal Aviation Administration  
Production Approval: Not applicable

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

(i) **Models:** J3L, J3L-65 (Army L-4C)

MCTOW: 1100 lb. [499 kg]  
1170 lb. [530 kg] – J3L-65 per Note 4 on TCDS

Max. No. of Seats: 2

Noise Standard: Not Applicable

**Engine:** Lycoming O-145-A1, A2 or A3 [J3L]  
Lycoming O-145-B1, B2 or B3 [J3L-65]  
Type Certificate: 210  
Issued by: Federal Aviation Administration

**Propeller:** Sensenich M74CX-2  
Type Certificate: 1P2  
Issued by: Federal Aviation Administration  
  
Hartzell HA-12U/7414 to 6814 or 7214M to 6814M  
Type Certificate: P-824  
Issued by: Federal Aviation Administration  
  
Any fixed or adjustable pitch type certificated  
wooden propeller

Note: 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

The application for New Zealand type acceptance of the Piper J3L Series was from the importer Mr David Johnson, dated 3 December 2019. The first-of-type example was serial number 6615, registered ZK-AND. The J3L is a single-engine tandem two-seat high-wing light aircraft with fixed undercarriage and conventional steel-tube and fabric construction.

Type Acceptance Certificate No. 20/21B/8 was granted on 23 December 2019 to the Piper Model J3L Series based on validation of FAA Type Certificate A-698. There are no special requirements for import into New Zealand.

The J3L is the Lycoming-powered version of the J3C Cub, the first examples of which were registered in New Zealand in 1939 (ZK-AHC). Many examples of the J3L have had the Lycoming engine changed to a Continental, although there is no Service Bulletin available to cover this or to formally re-designate the aircraft model.

#### 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 A-698

FAA Aircraft Specification number A-698 at Revision 14 dated August 7, 2006  
– Model J3L approved September 17, 1938  
– Model J3L-65 approved May 27, 1940

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

The certification basis of the J3L Series is CAR 4a. This is an acceptable certification basis in accordance with NZCAR Part 21B paragraph §21.41, as CAR 4a is the predecessor to CAR 3 and FAR 23, which is the basic standard for Normal Category Airplanes specified under NZCAR Part 21 Appendix C and Advisory Circular 21-1. 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:*

Nil

(iv) *Airworthiness Limitations:*

Nil

(3) Aircraft Noise and Engine Emission Standards:

(i) *Environmental Standard:*

Not Applicable.

(4) Certification Compliance Listing:

"Cub" Model J3: Basic Drawing List Under Type Certificate

Stress Summary: J3 Series Airplanes

(5) Flight Manual:

Piper advises no Flight Manual was required under CAR 4a. The Regulations did require an "Operations Limitations Certificate", which could be obtained from the local FAA Regional Office. The Operations Limitations for N35846 dated July 14, 1944 was adopted as the Flight Manual in New Zealand as AIR 3958



(6) Operating Data for Aircraft:

(i) *Maintenance Manual:*

(There is no published Maintenance Manual. Piper recommends FAA AC 43.13-1 for standard repair procedures.) Inspection intervals are found in Report 230 3000.

(ii) *Current service Information:*

Service Bulletins and Service Letters

(iii) *Illustrated Parts Catalogue:*

Not Published for J-3

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

Piper provides CAANZ access to all publications through the Piper Fileshare Server

## 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.

### Civil Aviation Rules 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:

### Civil Aviation Rules Part 91

#### Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
91.505	Seating and Restraints – Safety belt/Shoulder Harness	<i>To be determined on an individual aircraft basis</i>
91.507	Pax Information Signs – Smoking, safety belts fastened	N/A – 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	CAR §4.655(a)(1) CAR §4.655(a)(2) CAR §4.655(a)(3) CAR §4.655(b)(1)(i) CAR §4.655(b)(1)(iv) CAR §4.655(b)(1)(ii) CAR §4.655(b)(1)(v)
91.511	Night VFR Instruments and Equipment	<i>Operating Rule – Compliance to be determined by operator</i>
91.513	VFR Communication Equipment	<i>Operating Rule – Compliance to be determined by operator</i>
91.517	IFR Instruments and Equipment	<i>Operating Rule – Compliance to be determined by operator</i>
91.519	IFR Communication and Navigation Equipment	<i>Operating Rule – Compliance to be determined by operator</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	Not Applicable – Less than 10 passenger seats Not Applicable – Less than 10 passenger seats 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>Operating Rule – Compliance to be determined by operator</i>
91.531	Oxygen Indicators – Volume/Pressure/Delivery	<i>Operating Rule – Compliance to be determined by operator</i>
91.533	Oxygen for non-Pressurised Aircraft	Not Fitted as Standard
91.541	SSR Transponder and Altitude Reporting Equipment	<i>Operating Rule – Compliance to be determined by operator</i>
91.543	Altitude Alerting Device – Turbojet or Turbofan	Not Applicable – Not turbo jet or turbofan powered
91.545	Assigned Altitude Indicator	<i>Operating Rule – Compliance to be determined by operator</i>
A.15	ELT Installation Requirements	<i>To be determined on an individual aircraft basis</i>

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.

**Attachments**

The following documents form attachments to this report:

- Three-view drawing Piper Model J3L
- Copy of FAA Aircraft Specification Number A-698

**Sign off**

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David Gill  
Team Leader Airworthiness  
Certification

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Checked – Greg Baum  
Acting Team Leader Product