
Type Acceptance Report

TAR 5/21B/22

Robin R 3000

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Executive Summary

New Zealand Type Acceptance has been granted to the Avions Robin R 3000 Series based on validation of EASA Type Certificate number 172. There are no special requirements for import.

Applicability is currently limited to the Models and serial numbers detailed in Appendix 1, which are now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with CAR §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.) Additional variants or serial numbers approved under the foreign type certificate can become type accepted after supply of the applicable documentation, in accordance with the provisions of CAR §21.43(2).

1. Introduction

This report details the basis on which Type Acceptance Certificate No. 5/21B/22 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.

2. Foreign Type Certificate Details

Manufacturer:	Avions Pierre Robin
Model(s):	R 3000/160
Type Certificate:	N° 172
Issued by:	European Aviation Safety Agency (previously DGAC)
MCTOW	1150 kg (2536 lb.)
Max. No. of Seats:	4
Noise Standard:	None listed in French TCDS (FAR 36 under FAA type certificate)
Engine:	Lycoming O-360-A3A
Type Certificate:	E-286
Issued by:	Federal Aviation Administration

Propeller: Sensenich 76 EM8 S5-0-64
Type Certificate: P4EA
Issued by: Federal Aviation Administration

3. Type Acceptance Certificate

The application for New Zealand type acceptance was from the importer, Izard Pacific Aviation Ltd dated 25 November 2004. The first-of-type example was serial number 163, registered ZK-TZV. The Robin R 3000 Series is a four-seat low-wing fixed undercarriage all-metal touring aircraft fitted with a single piston engine and fixed-pitch propeller.

Type Acceptance Certificate No. 5/21B/21 was granted on 9 September 2005 to the Robin R 3000 Series based on validation of EASA Type Certificate number 172. Specific applicability is limited to the coverage provided by the operating documentation supplied. There are no special requirements for import into New Zealand.

The R 3000 Series was an all new design produced by Robin in the early 1980s, featuring tapered outer wings and distinctive T-tail and upturned wingtips. It still utilised the classic Robin forward-sliding canopy. There have been a number of versions which are basically identical except for the engine size and allowable weight.

4. Type Data

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) Type certificate:

DGAC Fiche de Navigabilite No.172 – Edition No.7 Mars 1998
– Model R 3000/160 approved 17 November 1988

(2) Airworthiness design requirements:

The certification basis of the R 3000 is FAR Part 23 including Amendments 1 to 23. This is an acceptable certification basis in accordance with NZCAR Part 21B Para §21.4, 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.

(3) Certification compliance listing:

Avions Pierre Robin R 3000 FAR 23 amdt 23 Compliance Check List – Dec, 1991

(4) Environmental Certification:

FAA AFM Section 5: noise level at max. cont. power @ 2536 lb is 75.2 dB(A)

(5) Flight manual: DGAC-Approved Flight Manual R 3000/160 – Edition 2 April 1990
(British version of French manual) – CAA Accepted as AIR 2909

(6) Illustrated Parts Catalogue:

R 3000 Serie Illustrated Spare Parts Catalog – Edition II

(7) Maintenance manual and service data for aircraft:

Service Manual R 3000 – Edition 2 – Julliet 1994

(8) Agreement from manufacturer to supply updates of data in (4), (5) and (6):

CAA 2171 – G Pellissier, Head Design Office, Apex Aircraft dated 27 July 2005

(9) Other information:

FAA TCDS No. A66EU at Revision 3 dated August 14, 2002

5. Additional New Zealand Requirements

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 is a prerequisite for the grant of a type acceptance 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	FAR §23.785 (Shoulder harness not required)
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) – Std.Eqpt * N/A – No Mach limitations FAR §23.1303(b) – Std.Eqpt. * FAR §23.1303(c) – Std.Eqpt. * FAR §23.1305(a) – Std.Eqpt. * FAR §23.1305(d) – Std.Eqpt. * FAR §23.1305(b) – Std.Eqpt. *
91.511 Night	(1) Turn and Slip (2) Position Lights	Fitted as Standard * FAR §23.1385 – Std. Eqpt.*
	* See Instrument Panel Diagram in Section 1 – Description in the Flight Manual	
91.513	VFR Communication Equipment	<i>Operational requirement – To be determined as applicable</i>
91.517	IFR Instruments and Equipment	Not Applicable – Only approved for Day and Night VFR
91.519	IFR Communication and Navigation Equipment	Not Applicable – Only approved for Day and Night VFR
91.523 Emrgcy Eqpmt.	(a) More Than 10 pax - First Aid Kits per Table 7 - Fire Extinguishers per Table 8 (b) More than 20 pax - Axe readily acceptable 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 C91a after 1/4/97 (or replacement)	<i>To be determined on an individual aircraft basis</i>
91.531	Oxygen Indicators - Volume/Pressure/Delivery	Not fitted as Standard

91.533	Oxygen for Non-Pressurized Aircraft	<i>Operational requirement – To be determined as applicable</i>
91.541	SSR Transponder and Altitude Reporting Equipment	<i>Operational requirement – To be determined as applicable</i>
91.543	Altitude Alerting Device - Turbojet or Turbofan	Not Applicable – Not turbojet or turbofan powered
91.545	Assigned Altitude Indicator	Not Applicable – Only approved for Day and Night VFR
A.15	ELT Installation Requirements	<i>To be determined on an individual aircraft basis</i>

Civil Aviation Rules Part 135

Subpart F - Instrument and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
135.355	Seating and Restraints – Shoulder harness flight-crew seats	Diagonal shoulder belt fitted as standard front and rear – see Compliance Checklist statement against §23.785
135.357	Additional Instruments (Powerplant and Propeller)	FAR 23 is an Appendix C airworthiness standard
135.359	Night Flight	<i>Operational requirement – To be determined as applicable</i>
135.361	IFR Operations	Speed, Alt, spare bulbs/fuses
135.363	Emergency Equipment (Part 91.523 (a) and (b))	<i>Operational requirement – To be determined 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

Attachments

The following documents form attachments to this report:

- Photographs first-of-type example R 3000/160 s/n 163 ZK-TZV
- Three-view drawing Avions Pierre Robin Model R 3000/160
- Copy of DGAC Type Certificate Data Sheet Number 172

Sign off

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 David Gill
 Team Leader Airworthiness

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 Checked – AWE3
 Date: 9 September 2005

Appendix 1

List of Type Accepted Variants:

<i>Model:</i>	<i>Applicant:</i>	<i>CAA Work Request:</i>	<i>Date Granted:</i>
R 3000/160	Izard Pacific Aviation Ltd	5/21B/22	9 September 2005