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# **Type Acceptance Report**

**TAR 5/21B/22 – Revision 1**

**ROBIN R 3000 Series**

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## Executive Summary

New Zealand Type Acceptance has been granted to the Robin R 3000 Series based on validation of Type Certificate number EASA.A.372. There are no special requirements for import.

Applicability is currently limited to the Models and/or serial numbers detailed in Section 2, 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 foreign type certificate 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. 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.

The report notes the status of all models included under the State-of-Design type certificate which have been granted type acceptance in New Zealand, which are listed in Section 2. The history of the Robin R 3000 Series type acceptance in New Zealand under type certificate EASA.A.372 is listed in Appendix 1.

## 2. Aircraft Certification Details

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

Type Certificate Holder: C.E.A.P.R. (Centre Est Aeronautique Pierre Robin)  
– since 10 May 2013

Type Certificate: EASA.A.372  
Issued by: European Aviation Safety Agency

Manufacturer: Société Avions Pierre Robin

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

(i) **Model:** R 3000/160

MCTOW: 1150 kg (2536 lb.)

Max. No. of Seats: 4

Noise Standard: ICAO Annex 16

**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

Notes: 1. Refer to TCDS EASA.A.372 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

The application for New Zealand type acceptance was from the importer, Iazard 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 tricycle 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 3000/160 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.

This report was raised to Revision 1 to update the format and note the change of State-of-Design type certificate to EASA.

#### 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:

EASA Type Certificate Number EASA.A.372

Type Certificate Data Sheet number EASA.A.372 at Issue 1 dated 10 May 2013  
– Model R3000/160 approved 17 November 1988

Supersedes:

DGAC Fiche de Navigabilite No.172 – Edition No.7 Mars 1998

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

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 Paragraph §21.43, 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:*

Nil

(iv) *Airworthiness Limitations:*

Nil

(3) Aircraft Noise and Engine Emission Standards:

(i) *Environmental Standard:*

The Model R 3000 Series has been certificated for noise under ICAO Annex 16, Volume 1, Chapter 6.

(ii) *Compliance Listing:*

TCDS for Noise EASA.A.372 at Issue 1 dated 24 October 2013

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

(4) Certification Compliance Listing:

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

(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) Operating Data for Aircraft:

(i) *Maintenance Manual:*

Service Manual R 3000 – Edition 2 – Julliet 1994

(ii) *Current service Information:*

Service Bulletins

(iii) *Illustrated Parts Catalogue:*

R 3000 Serie Illustrated Spare Parts Catalog – Edition II

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

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

## 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	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	<b>Operational requirement – Compliance as applicable</b>
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	<b>Operational requirement – Compliance as applicable</b>
91.541	SSR Transponder and Altitude Reporting Equipment	<b>Operational requirement – Compliance as applicable</b>
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	Landing light, Pax compartment
135.361	IFR Operations	Speed, Alt, spare bulbs/fuses
135.363	Emergency Equipment (Part 91.523 (a) and (b))	<b>Operational requirement – Compliance as applicable</b>
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 91/119 operating requirements should be checked in each case, particularly oxygen system capacity and emergency equipment.

## Attachments

The following documents form attachments to this report:

Copy of Type Certificate Data Sheet Number EASA.A.372

## Sign off



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David Gill  
Team Leader Aircraft Inspection



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Checked – Lino Miguel  
Certification Engineer

## 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

## Appendix 2

### 3-view Drawing Robin Model R 3000/160

