Australian Government
Civil Aviation Safety Authority

Type Certificate

Number: VA514

Type Certificate Holder: Avtech Pty Ltd
Airport Drive, Hinkler Airport
Bundaberg, Queensland 4670

Pursuant to regulation 21.13A of the Civil Aviation Safety Regulations 1998 this type certificate is issued in respect of the LSA and Jabiru series of aircraft.

This certificate is valid until it is suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as described in Type Certificate Data Sheet VA514, which forms part of this type certificate.

Date of Application: 6 June 2002
Date of Issuance: 2 December 2004
Date of Revision 1: 11 February 2005

CIVIL AVIATION AUSTRALIA SAFETY AUTHORITY

Eugene Paul Holzapfel
Delegate of the Authority

Australian Government

Civil Aviation Safety Authority

No	VA514
Revision	2
Aircraft	LSA 55/2K LSA 55/2J Jabiru ST LSA55/3J Jabiru ST3 Jabiru UL-C Jabiru UL-D
Date	22 August 2013

TYPE CERTIFICATE DATA SHEET

This data sheet, which is part of Type Certificate No. VA514, lists the conditions and operational limitations under which the aircraft for which the Type Certificate was issued meets the airworthiness requirements of the Civil Aviation Safety Authority.

Certificate Holder

Avtech Pty Ltd
Airport Drive
Hinkler Airport
Bundaberg Qld 4760
Australia

I. LSA 55/2K — Primary Category - RAA operations only - approved 1 October 1991.

Engine	KFM Model 112m.	
Engine Limits	Maximum take-off	3200 rpm (5 minute limited)
	Maximum continuous	3090 rpm
Fuel	100/130 minimum grade aviation gasoline.	
Oil	Aviation or motor grade oil. SAE Grade meeting minimum requirements of MIL-L-46152B.	
Propeller	Avtech Pty Ltd, Part Number 4046092, wooden fixed pitch.	
	Diameter	1372 mm (54 inches)
	Pitch	906 mm (36 inches)
	Full throttle static rpm	2700 – 3000 rpm

Propeller cont.	Full throttle static rpm	2700 – 3000 rpm	
Air Speed Limits (knots IAS))	Never Exceed	120 KIAS	
	Manoeuvring	94 KIAS	
	Max flaps extended	69 KIAS	
Centre of Gravity	Forward Limit 1600 mm aft of datum (20% mac) at 400 kg or less. 1670 mm aft of datum (27% mac) at 450 kg. Variation is linear between 400 kg and 450 kg. Aft Limit 1685 mm aft of datum (28.5% mac) at all weights.		
Datum	1403 mm forward of root leading edge of mainplane.		
MAC	990.6 mm		
Levelling Means	Longitudinal Spirit level placed on trim control decal. Lateral Spirit level placed across lower fuselage, forward of firewall on cowl location rubbers.		
Maximum Weight	Take Off	450 kg.	
	Landing	450 kg.	
Number of Seats	2 fixed.		
Maximum Baggage	Baggage may be stowed behind the seat between the tank and fuselage side. Baggage is not permitted behind the rear face of the fuel tank. The fuel tank is located at 2215 mm aft of datum. The combined weight of baggage and fuel shall not exceed 28 kg.		
Fuel Capacity	Total	41.3 Litres	
	Usable	40 Litres	
Oil Capacity		2.3 litres	
Control Surface Deflections	Aileron	Up	24° ± 1°
		Down	13° ± 1°
	Elevator	Up	18.4° ± 1°
		Down	14.5° ± 1° Elevator movements are measured with trim set at maximum travel in the same direction as the control stick is moved.

Control Surface Deflections cont.	Rudder	Left	19° ± 1°
		Right	22° ± 1°
	Wing flaps	First stage	15.5° ± 1°
		Second stage	40° ± 1°

Serial numbers eligible 610 and upwards (see Note 1).

Operating Basis Aircraft of this model may be registered with RAA and operated under CAO 95.55.

VII. JABIRU UL-D Primary Category - RAA operations only - approved 11 February 2005.

Engine Avtech Pty Ltd 2200B.

Engine Limits Maximum for all operations - 3050 rpm.

Fuel 100LL or 100/130 minimum grade aviation gasoline, or
Leaded or Unleaded Automotive Gasoline above 95 Octane RON.

Oil Aero Oil W Multigrade 15W-50 or equivalent lubricant complying with MIL-L-22851C, or Lycoming Specification 301F, or Teledyne - Continental Specification MHF-24B.

Propeller AVTECH Pty Ltd, Part Number C000242-D60P42, wooden fixed pitch.

Diameter	1524 mm (60 inches)
Pitch	1067 mm (42 inches)
Full throttle static rpm	2700 – 3000 rpm

Air Speed Limits (knots IAS)

Never Exceed	120 KIAS
Manoeuvring	94 KIAS
Max flaps extended	69 KIAS

Centre of Gravity

Forward Limit
1600 mm aft of datum (20% mac) at 393 kg or less.
1670 mm aft of datum (27% mac) at 450 kg.
Variation is linear between 400 kg and 450 kg.

Aft Limit
1685 mm aft of datum (28.5% mac) at all weights.

Datum 1403 mm forward of root leading edge of mainplane.

MAC 990.6 mm

Levelling Means	Longitudinal Spirit level placed on trim control decal. Lateral Spirit level placed across lower fuselage, forward of firewall on cowl location rubbers.		
Maximum Weight	Take Off Landing	450 kg 450 kg	
Number of Seats	2 fixed		
Maximum Baggage	Baggage may be stowed behind the seat between the tank and fuselage side. Baggage is not permitted behind the rear face of the fuel tank. The fuel tank is located at 2215 mm aft of datum. The combined weight of baggage and fuel shall not exceed 28 kg.		
Fuel Capacity	Total Usable	41.3 litres 40 litres	
Oil Capacity		2.3 litres	
Control Surface Deflections	Aileron	Up Down	24° ± 1° 13° ± 1°
	Elevator	Up Down	18.4° ± 1° 14.5° ± 1° Elevator movements are measured with trim set at maximum travel in the same direction as the control stick is moved.
	Rudder	Left Right	19° ± 1° 22° ± 1°
	Wing flaps	First stage Second stage	15.5° ± 1° 40° ± 1°
Serial numbers eligible	610 and upwards (see Note 1).		
Operating Basis	Aircraft of this model may be registered with RAA and operated under CAO 95.55.		

DATA PERTINENT TO ALL MODELS

Certification Basis

Aircraft models LSA 55/2K, LSA 55/2J and LSA 55/3J.

CAO 101.55 Issue 1 dated 7 January 1988 up to and including Amendment 99 dated 15 December 1993 and BCAR Section S (advance copy dated March 1983).
These aircraft models are limited to RAA operations under CAO 95.55.

Aircraft models Jabiru ST and Jabiru ST3.

CAO 101.55 Issue 1 dated 7 January 1988 up to and including Amendment 99 dated 15 December 1993 and BCAR Section S (advance copy dated March 1983).

These aircraft models are eligible for a Special Certificate of Airworthiness in Primary Category.

Aircraft model Jabiru UL-C

CAO 101.55 Issue 1 dated 7 January 1988 up to and including Amendment 103, dated 1 October 1998, with an exemption against Chapter 9 – Noise Certification, and BCAR Section S, Issue 2, dated 31st August 1999, with an exemption against Subpart A, S2 – Applicability paragraph (a)(3).

The exemption from BCAR S, Subpart A, S2, Para (3)(a) is granted subject to the aircraft complying with the operational limitations of CAO 95.55.

Aircraft of this model are limited to RAA operations under CAO 95.55.

Aircraft model Jabiru UL-D

BCAR Section S, Issue 2, dated 31st August 1999.

Aircraft of this model are limited to RAA operations under CAO 95.55.

Production Basis

All models

For aircraft produced prior to 25 November 2003
- Certificate of Approval No. 3501.

For aircraft produced on or after 25 November 2003
- Production Certificate No. 444128.

Approved Aircraft Flight Manuals

LSA 55/2K

- Jabiru LSA 55/2K Flight Manual and Operator's Handbook.

LSA 55/2J

- Jabiru LSA 55/2J Flight Manual and Operator's Handbook.

Jabiru ST

- Jabiru ST Flight Manual and Operator's Handbook.

LSA 55/3J

- Jabiru LSA 55/3J Flight Manual and Operator's Handbook.

Jabiru ST3

- Publication JP-FM05 Jabiru ST3 Flight Manual.

Jabiru UL-C

- Document JP-FM-UL-C Jabiru UL-C Flight Manual.

Jabiru UL-D

- Document JP-FM-UL-D Jabiru UL-D Flight Manual.

Crosswind Component	All models - maximum for take-off and landing - 14 knots.
Equipment and Placards	Equipment and placards required by the applicable flight manual must be installed.
Operating Altitude	All models – maximum 10,000 feet density altitude.
Colour Limitations	All models – The exterior colour of composite surfaces is limited to white, to minimise the effects of heat on the composite structure. Small areas of colour or trim may be applied to non-critical parts of the vertical or under surfaces.
Noise Certification	See Note 2.

NOTES

Note 1 Avtech Pty Ltd aircraft serial numbers are sequential and include both production and kit built aircraft. Only aircraft serial numbers manufactured under Certificate of Approval No. 3501 or Production Certificate No. 444128 are eligible for certification under this type certificate. Kit built aircraft are ineligible for certification under Type Certificate VA514.

Note 2	All models – data submitted demonstrates compliance with *Chapter 9 – Noise Certification*, CAO 101.55 Issue 1 dated 7 January 1988. This data can be used as the basis for issuing Permits To Operate Without A Noise Certificate for individual aircraft.
Note 3	Type Certificate VA514 replaces Certificate of Type Approval 160-1, Issue 5 and was issued to incorporate the Jabiru model UL-C and on. Earlier models have also been included, and details relating to Jabiru models LSA 55/2K, LSA 55/2J, LSA 55/3J, ST and ST3 have been transcribed from CTA160-1 with minor editing and reformatting. Replacement of CTA 160-1 with a TC was required to satisfy the Civil Aviation Safety Regulations (1998). Aircraft certificated under CTA 160-1 are taken to be certificated under TC VA514.
Note 4	RAA (Recreational Aviation Australia) was formerly the Australian Ultralight Federation.
Note 5	Revision 1 is issued to add the UL-D model.
Note 6	Revision 2 is issued to correct page numbering errors.

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