



# Type Certificate

Number: **VA521**

Original issue: 1

Type Certificate Holder: **Aerochute Industries Pty Ltd**  
**12 Acheson Place**  
**North Coburg**  
**VIC 3058**

Pursuant to Regulation 21.013A of the Civil Aviation Safety Regulations 1998, this type certificate is issued to Aerochute Industries Pty Ltd, in respect of the Aerochute Dual and the Aerochute HummerChute model powered parachutes.

This certificate is valid until suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as prescribed in Type Certificate Data Sheet Number VA521 issued by this Authority.

Date of Application (Hummerchute)  
Date of Issuance

27 November 2014  
19 October 2015



**Peter Nikolic**  
Delegate of the Authority

*safe skies for all*

Number: VA521  
Revision: 2  
Aircraft: Aerochute Dual  
Aerochute Hummerchute

Date: 28 July 2017

## TYPE CERTIFICATE DATA SHEET

This data sheet, which is part of Type Certificate No VA521, lists the conditions and limitations under which the aircraft for which the Type Certificate was issued meet the airworthiness requirements of the Civil Aviation Safety Authority.

**Type Certificate Holder** Aerochute Industries Pty Ltd  
12 Acheson Place  
North Coburg  
Vic 3058

**Model: Aerochute Dual** Primary Category, RA-AUS and HGFA operations only. See Note 1.

Engine	ROTAX 503 DCDI (two stroke)
	Exhaust System ROTAX 180 Bend
	Intake System K&N Intake filter or Rotax Intake Silencer
	Reduction Gear 2.58: 1
	Gearbox Oil Spec 85W-140
	Reduction Gear Oil Capacity 0.410 litre
Engine Limits	Max RPM 6800
	Max CH Temp 250 °C
	Max EG Temp 650 °C
Fuel	83 MON or 90 RON minimum unleaded to BS(EN)228, or 97+ octane 4 star / MOGAS leaded fuel to BS 4040, or AVGAS 100LL.
Oil: Fuel Mix Ratio	1:50. Oil specification as detailed in Aerochute Operator's Manual, Document No. AC-OM, Issue 4, Rev 1, dated August 2015, or later CASA approved revision.
Total Fuel Capacity	30 litre tank
	Usable 29 litres
	Unusable 1 litre

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Propeller	IVO 3 Blade	
	Diameter	58”
	Pitch	8-12 degrees
	- Details on optimal pitch setting are available from Aerochute Industries Pty Ltd.	
	Bolly 3 Blade	
	Diameter	58”
	Pitch	7 degrees
CG Limits – applies to trike base only		
	Aft limit	Rear seat bar.
	Fwd limit	140 mm forward of rear seat bar.
	CG datum	¼ chord point of the top plate, i.e. 47.5mm aft of the centre line of the front attachment lug. Centre of Gravity is determined in accordance with the Operator’s Manual.
Typical Empty Weight	107 kg (235lb)	
Max Take-Off Weight	32.5 m² Canopy (350 ft²)	280 kg (616 lb)
	34 m² Canopy (367 ft²)	300 kg (660 lb)
	- see Aerochute Operator’s Manual for loading information.	
Air Speed Limits	Never Exceed Speed (V <sub>NE</sub> )	72 kph (45 mph)
	Manoeuvring Speed (V <sub>A</sub> )	60 kph (37 mph)
Wind speed Limitations		
	Max surface wind	24 kph (15 mph)
	Max cross wind, take-off	0 kph (0 mph)
	Max cross wind, landing	8 kph (5 mph)
Control Deflections	Max trailing edge deflection	750mm
Permitted Manoeuvres	Non-aerobatic only	
Minimum Crew	1 Pilot	
Permitter Operations	Day VFR only	
Number of Seats	2	
Equipment	1. Altimeter	
Serial Numbers Eligible		
	Aerochute Dual Trike Base	
	1 through 392, 394, 395, 397, 398, 399, 400, 401, 406, 407, 410, 411,413, 415, 419, 421, 422, 425, 426, 439 & Up.	

Canopy Serial Numbers Eligible - 32.5 m<sup>2</sup> (350 ft<sup>2</sup>) & 34 m<sup>2</sup> (367 ft<sup>2</sup>)

249, 251, 252, 258 through 260, 267 through 270, 275 through 280, 284 through 290, 293 through 301, 315, 389, 434, 437 through 445, 447, 484, 493, 495 through 508, 515 through 519, 529, 530, 540, 547, 576, 579, 580, 590, 592, 607, 619 through 630, 638 through 640, 653, 669, 670, 672, 686 through 698, 710, 739, 740, 743 through 747, 750 through 754, 793, 801 through 826, 841 through 846, 854, 855, 862 through 865, 870, 874, 881, 882 through 889, 896, 900, 901, 903, 904, 907 through 911, 913, 919 through 921, 938 through 942, 956, 962, 964 through 972, 975 through 979, 993 through 995, 1006 through 1014, 1020, 1024, 1046 through 1052, 1061 through 1071, 1092 through 1113, 1122, 1129, 1130, 1140, 1141, 1144 through 1147, 1155 through 1161, 1184 through 1201, 1203 through 1210, 1212 through 1214, 1216 through 1218, 1237 through 1240, 1257 through 1265, 1267 through 1270, 1275 through 1286, 1295, 1296, 1301, 1303 through 1306, 1311, 1315, 1319 through 1332, 1334 through 1342, 1365, 1367, 1368, 1381 through 1384, 1386 through 1388, 1390, 1392, 1410, 1423 through 1430, 1445 through 1447, 1468 through 1478, 1485, 1486, 1489 through 1501, 1512, 1519 through 1522, 1555, 1557 through 1559 & Up

Certification Basis      1. BCAR S, Advance Copy, March 1983, and  
2. UK CAA Draft Paper No. S848.

Operational Basis      Eligible for registration with RA-AUS and HGFA only, for operation under CAO 95.32.

Type Design Data

Aerochute Dual Trike Base

1. Master Drawing List MRI 001 Issue 2, dated 31 August 1993 or subsequent CASA approved revision, and
2. Aerochute Operator's Manual, Document No. AC-OM, Issue 4, Rev 1, dated August 2015, or later CASA approved revision.

Aerochute 32.5m<sup>2</sup> Canopy

1. Master Drawing List MRI 011 Issue C, dated 12 August 1997 or later CASA approved revision, and
2. Aerochute 350 Ram-Air Parachute Owner's Manual, 1997.

Aerochute 34m<sup>2</sup> Canopy

1. Master Drawing List MRI 015 Issue B, dated 23 January 2009 or later CASA approved revision, and
2. Aerochute 34m<sup>2</sup> (367ft<sup>2</sup>) Ram-Air Parachute Owner's Manual, 2001.

**Model: Aerochute HummerChute**

Primary Category, RA-AUS and HGFA  
operations only, approved 16 October 2015.

Engine	ROTAX 582 DCDI	(two stroke)
	Exhaust System	ROTAX 90 Bend
	Intake System	K&N Intake filter or Rotax Intake Silencer
	Reduction Gear	2.58: 1
	Gearbox Oil Spec	85W-140
	Reduction Gear Oil Capacity 0.410 litre	
Engine Limits	Max RPM	6800
	Max CH Temp	250 °C
	Max EG Temp	650 °C
Fuel	Fuel specification as detailed in HummerChute Operator's Manual, Document No. HC-OM, Issue 2, Rev 0, dated June 2015, or later CASA approved revision.	
Oil: Fuel Mix Ratio	1:50. Oil specification as detailed in HummerChute Operator's Manual, Document No. HC-OM, Issue 2, Rev 0, dated June 2015, or later CASA approved revision.	
Total Fuel Capacity	46 litre tank	
	Serial numbers 376, 414, 429, 431, 432, 446, 451, 452, 453, 454, 458, 462, 464 and up.	
	Usable	44 litres
	Unusable	2 litres
	30 litre tank	
	Serial numbers 393, 396, 397, 402, 403, 404, 405, 408, 409, 412, 416, 417, 418, 420, 423, 424, 427, 428, 430, 433 through 445, 447 to 450, 455, 463	
	Usable	29 litres
	Unusable	1 litre
Propeller	Bolly	3 Blade
	Diameter	63"
	Pitch	9 degrees

**CG Limits – applies to trike base only**

Aft limit	80 mm behind rear seat bar.
Fwd limit	70 mm forward of rear seat bar.
CG datum	¼ chord point of the top plate, i.e. 68mm aft of the centre line of the front attachment lug. Centre of Gravity is determined in accordance with the Operator's Manual.

**Typical Empty Weight** 118 kg (260lb)

**Max Take-Off Weight** 34 m² Canopy(367 ft²) 360 kg (792 lb)  
see Aerochute Operator's Manual for loading information.

**Air Speed Limits**  
Never Exceed Speed ( $V_{NE}$ ) 74 kph (46 mph)  
Manoeuvring Speed ( $V_A$ ) 50 kph (31 mph)

**Wind speed Limitations**

Max surface wind	24 kph (15 mph)
Max cross wind, take-off	0 kph (0 mph)
Max cross wind, landing	8 kph (5 mph)

**Control Deflections** Max trailing edge deflection 838mm

**Permitted Manoeuvres** Non-aerobatic only

**Minimum Crew** 1 Pilot

**Permitter Operations** Day VFR only

**Number of Seats** 2

**Equipment**  
1. Altimeter  
2. Coolant temperature gauge.

**Serial Numbers Eligible**

**Aerochute Hummer Trike Base**

376, 393, 396, 397, 402, 403, 404, 405, 408, 409, 412, 414, 416, 417, 418, 420, 423, 424, 427 through 438, 440 through 450, 452 through 455, 460, 461, 462, 463 & up.

Serial numbers 393, 396, 397, 402, 403, 404, 405, 408, 409, 412, 416, 417, 418, 420, 423, 424, 427, 428, 430, 433 through 445, 447 to 450, 455 and 463 are required to accomplish Aerochute International Service Bulletin SB-15-30L Issue 1, dated October 2015 in order to meet the standard specified in this TCDS.

Serial numbers 376, 414, 429, 431, 432, 446, 451, 452, 453, 454, 458 and 462 are required to accomplish Aerochute International

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Service Bulletin SB-15-46L Issue 1, dated September 2015 in order to meet the standard specified in this TCDS.

**Canopy Serial Numbers Eligible - 34 m<sup>2</sup> (367 ft<sup>2</sup>) Issue C**

1386, 1426, 1428, 1445, 1451, 1468, 1473, 1474, 1476, 1489, 1492, 1495, 1501, 1509 through 1510, 1512, 1521, 1555, 1558, 1560, 1594, 11041901, 1104902, 11041903, 11041905, 11041906, 11041908, 11101909, 11101911, 12041914 through 12041923, 14041901, 14041902, 14041905, 14041909, 150415, 150419, 150421 & up.

**Certification Basis**

1. BCAR S, Issue 6, and
2. UK CAA Draft Paper No. S848.

**Operational Basis**

Eligible for registration with RA-AUS and HGFA only, for operation under CAO 95.32.

**Type Design Data**

**Aerochute Hummer Chute Trike Base**

1. Master Record Index MRI 001 Issue 2, dated July 2015, or later CASA approved revision, and
2. HummerChute Operator's Manual, Document No. HC-OM, Issue 2, Rev 0, dated June 2015, or later CASA approved revision.

**Aerochute 34m<sup>2</sup> Canopy**

1. Master Record Index MRI 015 Issue C, dated September 2010 or later CASA approved revision, and
2. Aerochute 34m<sup>2</sup> (367ft<sup>2</sup>) Ram-Air Parachute Owner's Manual, July 2015.

**Placards**

1. As detailed in HummerChute Operator's Manual, Document No. HC-OM, Issue 2, Rev 0, dated June 2015, or later CASA approved revision.

**Notes**

1. Aerochute Dual was originally approved by Certificate of Type Approval C510780 on 28 May 1992, with the 32.5m<sup>2</sup> canopy only. Approval for the 34 m<sup>2</sup> canopy was added on 10 June 2005. This approval is re-issued as TC VA521, Issue 1, and adds the Hummerchute approval.

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