

CIVIL AVIATION AUTHORITY – SAFETY REGULATION GROUP

MICROLIGHT TYPE APPROVAL DATA SHEET (TADS)

**NO: BM - 36 ISSUE: 4**

TYPE	KESTREL	
(1) MANUFACTURER	Powerchute Systems International Ltd (no longer trading)  BMAA is responsible for continued airworthiness  Replacement canopies may be obtained from Aerochute Industries PTY Ltd, 12 Acheson Place, North Coburg, Victoria 3058, Australia	
(2) UK IMPORTER	N/A	
(3) CERTIFICATION	BCAR Section S: Advance issue March 1983 plus CAA Draft Paper S848	
(4) DEFINITION OF BASIC STANDARD	Drawing GA of Kestrel No 1100 Issue 2	
(5) COMPLIANCE WITH THE MICROLIGHT DEFINITION		
(a)	MTOW	280 kg
(b)	No. Seats	2
(c)	Maximum Wing Loading	8.61 kg / m <sup>2</sup>
(d)	Permitted range of pilot weights	20 – 172 kg
(e)	Typical empty weight	94 kg
(f)	ZFW + 172 kg crew + full fuel	275 kg
(g)	ZFW + 86 kg pilot + full fuel (13 litres, 9 kg)	189 kg
(h)	Max allowed ZFW <sup>1</sup>	99 kg

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<sup>1</sup> Note that for this type, since capacity is less than 1 hrs fuel, maximum fuel capacity is therefore used for ZFW determination rather than 1 hrs fuel at MCP as normally required by the certification basis.

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(6) POWERPLANTS

Designation	Rotax	
Engine Type	503	
Reduction Gear	2.58:1	
Exhaust System	Rotax	
Intake System	Rotax	
Propeller Type	Powerchute No. 1301	
Propeller Dia x Pitch	54" x 44"	
Noise Type Cert. No.	122M	
AAN Approving	21797P	

(7) MANDATORY LIMITATIONS

- (A) Maximum Take-Off Weight 280 kg
- (B) Cockpit Loadings Min 20 kg (side by side)  
Max 172 kg (Total)
- (C) Never Exceed Speed 45 mph IAS
- (D) Manoeuvring Speed 35 mph IAS
- (E) Permitted Manoeuvres Non-aerobatic
- (F) Fuel contents (max useable) 13 litres

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(G) Power Plant

See Table below

Engine	Rotax 503	
Max RPM	6400	
Max CHT	250°C	
Max EGT	N/A	
Fuel Spec	83 MON or 90 RON minimum unleaded to BS(EN)228, or 97+ octane MOGAS leaded fuel to BS 4040, or AVGAS 100LL	
Engine Oil Spec	2 stroke oil	
Gearbox Oil Spec	Hypoid 90	
Fuel / Oil Mix	50:1	
Max Coolant Temp	N/A	
Max Oil Pressure	N/A	
Min Oil Pressure	N/A	
Oil Temperature	N/A	

(8) INSTRUMENTS REQUIRED

ASI	Altimeter	RPM	EGT	Compass	Coolant Temp	CHT	Fuel Pressure	VSI
Not Required	Required	Optional	Optional	Not Required	Not Required		Not Required	Optional

(9) CONTROL DEFLECTIONS

Conventional powered parachute control lines.

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(10) PILOTS NOTES, MAINTENANCE MANUALS, REFERENCES:

10.1 Manuals approved for operators use with this aircraft

Operators Manual Reference 25289 Issue 3 dated 18 January 1990

10.2 The following placards are to be fitted.

a) Flight Limitations Placard (s) (to be visible to pilot)

Max take-off weight not to exceed 280 kg

Cockpit loadings must be between 20 and 172 kg

V<sub>NE</sub> 45 mph

V<sub>A</sub> 35 mph

Non-aerobatic

b) Engine Limitations Placard (to be located near to engine instruments)

A placard showing the limitations for all the indicated engine parameters is to be mounted close to the engine instruments. This requirement need not be complied with for limitations shown as coloured markers (red for danger, amber for caution) on the instrument displays.

c) Fuel Limitations Placard (to be located near to filler cap)

A placard is to be fitted showing fuel capacity, fuel type(s), fuel : oil ratio (if relevant) and if MTOW can be exceeded with full fuel and 172kg cockpit weight, the fuel loads at MTOW for cockpit weights of 172kg / 170kg / 160kg etc. at no more than 10kg intervals down to the maximum fuel load.

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- (11) MANDATORY MODIFICATIONS / SERVICE BULLETINS /  
AIRWORTHINESS DIRECTIVES ETC:

See Annex A for required modifications.

- (12) MINIMUM PERFORMANCE AT MAX TAKE-OFF WEIGHT

Rate of Climb: 600 fpm at S/L ISA conditions

Stall or minimum flying speed: 25 mph

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Issue History

<b><u>Issue No.</u></b>	<b><u>Reason and signatory</u></b>
1	20/01/90 Initial issue R J HARDY
2	07/10/93 K D RUSSELL
3	16/05/97 To revise maximum take-off weight to originally approved figure of 280 kg in accordance with BCAR S at BMAA request. R J HARDY
4	18/03/03 Document revised to new format and addition of MPD 2003-002 - redesigned anchor plate assembly (MAAN 1633)

J BARRATT

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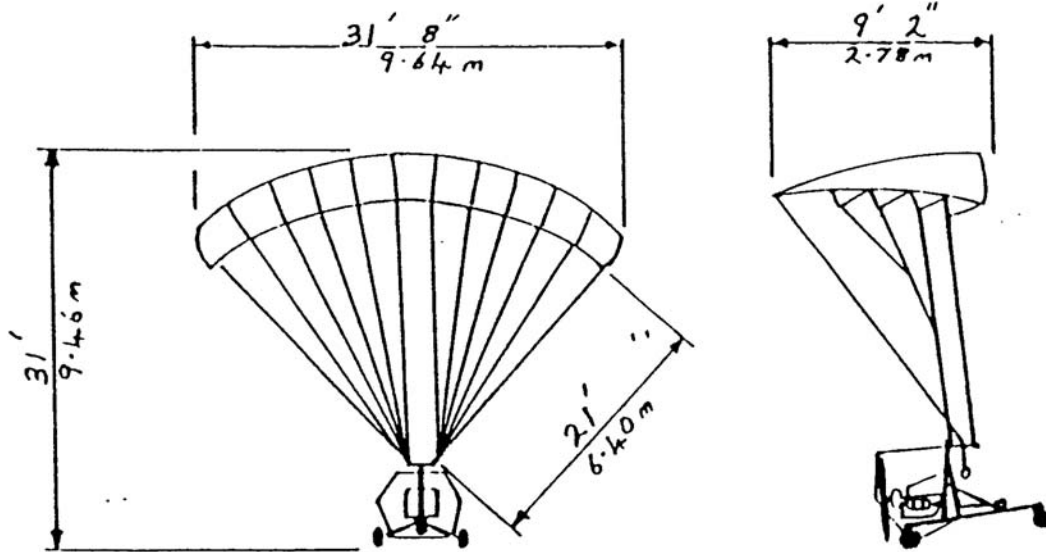
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Illustration of Aircraft



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ANNEX A – MANDATORY MODIFICATIONS

1. MPD 2003-002 Redesigned anchor plate assemble, as described in BMAA MAAN 1633 issue 1 dated 26 November 2002.

ANNEX B - APPROVED OPTIONAL MODIFICATIONS

The installation of all optional modifications is to be inspected by a BMAA inspector and an entry made in the appropriate logbook(s). Note that other approved modifications may exist which are not listed here.

None.

ANNEX C – WEIGHING INFORMATION

- |                       |  |
|-----------------------|--|
| 1. Weighing Attitude: | Unimportant. Trike and parachute wing may be weighed separately if required. |
| 2. Crew Weights:      | Minimum 20 kg. Maximum 172 kg total.   |
| 3. Fuel load:         | 13 litres  |
| 4. MTOW               | 280 kg   |

ANNEX D - POINTS FOR SPECIAL ATTENTION

In service, the following points have been found to be commonly recurring problems, and Inspectors must give special attention to the following both during initial approval, and during later inspections.

None.