CIVIL AVIATION AUTHORITY – SAFETY REGULATION GROUP

MICROLIGHT TYPE APPROVAL DATA SHEET (TADS)

NO: BM - 39 ISSUE: 2

TYPE		HORNET RS-ZA
(1)	MANUFACTURER	Hornet Microlights Ltd, Perseverance Mill, Mill Street, Wibsey, Bradford, West Yorkshire, BD6 3HR (no longer trading) BMAA is responsible for continued airworthiness
(2)	UK IMPORTER	N/A
(3)	CERTIFICATION	BCAR Section S Advance Copy March 1983 BCAR Section S Paper 11 October 1988
(4)	DEFINITION OF BASIC STANDARD	Drawing APL5040

(5) COMPLIANCE WITH THE MICROLIGHT DEFINITION

(a)	MTOW	390 kg
(b)	No. Seats	2
(c)	Maximum Wing Loading	25 kg / m²
(d)	Permitted range of pilot weights	75 – 180 kg
(e)	Typical empty weight	173.5 kg
(f)	ZFW + 172 kg crew + 1hrs fuel	360.5 kg
(g)	ZFW + 86 kg pilot + full fuel (45 litres, 32 kg)	291.5 kg
(h)	Max allowed ZFW at initial permit issue[1]	203 kg

[1] The maximum ZFW is the lower of [(a)-172kg-1hrs fuel], or [(a)-86kg-full fuel].

(6) POWERPLANTS

Designation	Hornet RS-ZA	
Engine Type	Rotax 532 Upright	
Reduction Gear	Rotax Gearbox 2.58:1	
Exhaust System	Rotax under-slung with after muffler	
Intake System	Sponge filters	
Propeller Type	Newton Type 28	
Propeller Dia x Pitch	62” x 45”	
Noise Type Cert. No.	122 Iss 2	
AAN Approving	21977(P)	

(7) MANDATORY LIMITATIONS

(A)	Maximum Take-Off Weight	390 kg		
(B)	Cockpit Loadings	Min	75 kg	(side by side)
		Max	180 kg	
(C)	Never Exceed Speed	103 mph IAS		
(D)	Manoeuvring Speed	103 mph IAS		
(E)	Permitted Manoeuvres	Non-aerobatic		
(F)	Fuel contents (max useable)	45 litres		

(G) Power Plant See Table below

Engine	Rotax 532	
Max RPM	6800	
Max CHT	180 °C	
Max EGT	650°C	
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	self mixing 2-stroke	
Gearbox Oil Spec	see Rotax handbook	
Fuel / Oil Mix	50:1	
Max Coolant Temp	80°C	
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
Required	Required	Optional	Optional	Optional	Optional		Optional	Optional

(9) CONTROL DEFLECTIONS

Conventional weightshift controls.

(10) PILOTS NOTES, MAINTENANCE MANUALS, REFERENCES:

10.1 Manuals approved for operators use with this aircraft

Hornet RS-ZA Owners Flight Manual

10.2 The following placards are to be fitted.

(a) Flight Limitations Placard (to be visible to the pilot)
See Annex D

(b) Engine Limitations Placard
See Annex D

(c) Fuel Limitations Placard
See Annex D

(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:	769 fpm at 50 mph IAS
Stall or minimum flying speed:	40 mph IAS

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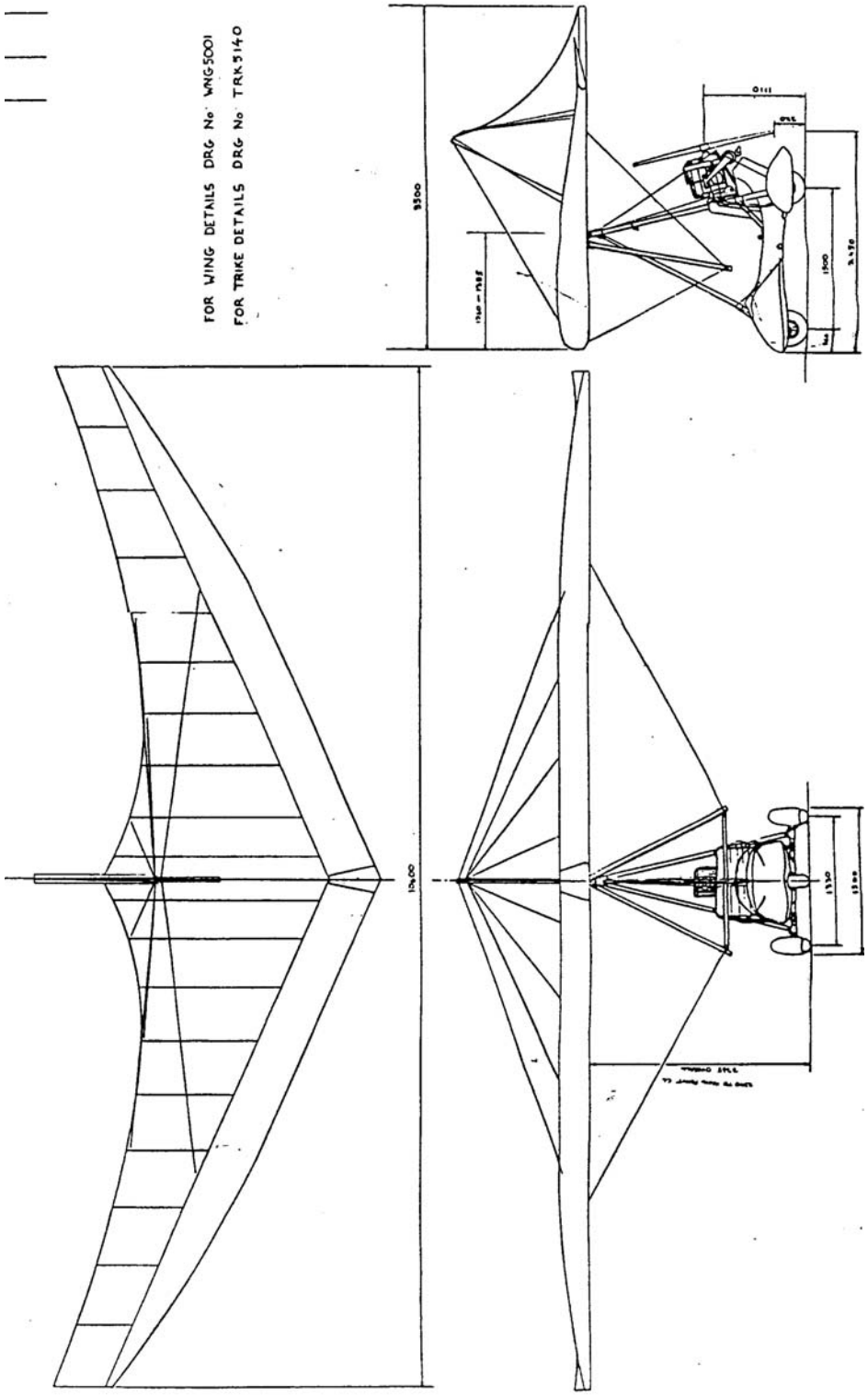
Issue History

	Issue No.	Reason and signatory
1	13/03/90	Initial Issue W A Bevan
2	08/07/03	Document revised to new format J Barratt

Illustration of Aircraft



ANNEX A – MANDATORY MODIFICATIONS

None

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.

ANNEX C – WEIGHING INFORMATION

1.	Weighing Attitude:	Unimportant. Trike and wing may be weighed separately if required.
2.	Crew Weights:	Minimum 75 kg. Maximum 90 kg per seat. (Maximum reducible, not below 86kg, if required)
3.	Fuel load:	45 litres
4.	MTOW	390 kg

ANNEX D - PLACARDS

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

Max take-off weight not to exceed 390 kg
Cockpit loadings must be between 75 and 180 kg
V_{NE} 103 mph
V_A 103 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 180kg cockpit weight, the fuel loads at MTOW for cockpit weights of 180kg / 170kg etc. at no more than 10kg intervals down to the maximum fuel load.

ANNEX E - 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.

1. (blank)

2. (blank)

3. (blank)

4. (blank)

5. (blank)

6. (blank)

7. (blank)

8. (blank)

9. (blank)

10. (blank)