

BRITISH MICROLIGHT AIRCRAFT ASSOCIATION
MICROLIGHT TYPE ACCEPTANCE DATA SHEET (TADS)

NO: BM048 ISSUE: 2

TYPE: Quicksilver MXL

- (1) MANUFACTURER: Individual aircraft are amateur constructed, BMAA is responsible for continued airworthiness.

Current kit supplier is Quicksilver Aircraft, 27495 Diaz Road, CA 92590 Temecula, USA.
- (2) UK IMPORTER: No current UK importer.
- (3) CERTIFICATION: BCAR SECTION S, Advance issue March 1983 plus amendments dated 11 October 1988.
- (4) DEFINITION OF BASIC STANDARD: As defined by this TADS BMO48 and BMAA MAAN 1187.
- (5) COMPLIANCE WITH THE MICROLIGHT DEFINITION

(a) MTOW	262 kg
(b) No. Seats	1
(c) Maximum Wing Loading	15.67 kg/m ²
(d) V _{so}	nk
(e) Permitted range of pilot weights	55 - 90 kg
(f) Typical Empty Weight	143 kg
(g) ZFW + pilot + full fuel (24.5L)	251 kg

(Weights given are without optional pod).

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(6) POWER PLANTS

Designation	Quicksilver MXL	
Engine Type	Rotax 447 inverted	
Reduction Gear	2.67:1 V-belt	
Exhaust System	Rotax with after muffler	
Intake System	K&N filters	
Propeller Type	Laminated wood, square tip	
Propeller Dia x Pitch	66" x 34"	
Noise Type Cert No.	45M issue 4	
MAAN Approving	1187	

(7) MANDATORY LIMITATIONS:

- | | |
|---------------------------------|--|
| (A) Max Take-Off Weight | 262 kg |
| (B) CG Limits | 63" to 69.5" aft of datum |
| (C) CG datum | Centre of steerable nosewheel axle. |
| (D) Cockpit Loadings | Min 55 kg
Max 90 kg |
| (E) Permanent Ballast | none |
| (F) Typical Empty CG Position | 79" aft of datum |
| (G) Never Exceed Speed | 74 mph / 64 kn |
| (H) Manoeuvring Speed | 62 mph / 54 kn |
| (I) Permitted Manoeuvres | Maximum Bank angle 60°.
Non Aerobatic
Normal acceleration limits, +4 / -2g |
| (J) Fuel Contents (Max Useable) | 24.5 litres |

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(K) Power Plant See Table

Engine	Rotax 447	<i>not used</i>
Max RPM	6,900	
MAX CHT	250°C	
MAX EGT	-	
Fuel Spec	83 MON or 90 RON minimum unleaded to BS(EN)228 or 97+ octane 4-star or MOGAS leaded fuel to BS 4040	
Engine Oil Spec	non-detergent 2-stroke self mix	
Gearbox oil spec	n/a	
Fuel/Oil Mix	50:1	
Coolant Temperature	n/a	
Oil	n/a	

(8) INSTRUMENTS REQUIRED FOR TYPE ACCEPTANCE:

ASI ¹	Altimeter ²	RPM	CHT / EGT	Compass	Turn & Slip	Fuel Pressure
Required To 80mph	Required	Required	Twin CHT	Required	Optional	Optional

(9) CONTROL DEFLECTIONS:

Elevator UP:	5"	Tailplane trim UP:	None fitted
Pitch control DOWN:	7"	Tailplane trim DOWN:	None fitted
Ailerons UP:	4"	Rudder LEFT:	11"
Ailerons Down:	3.5"	Rudder RIGHT:	11"

¹ A Hall windmeter fitted to the tribar upright is acceptable.

² A wrist mounted altimeter is acceptable, so long as the requirement to wear one is placarded.

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(10) PILOT'S NOTES, MAINTENANCE MANUALS REFERENCES:

(10.1) MANUALS.

- (11. Quicksilver owners manual
- (12. Quicksilver build manual
- (13. Rotax 447 engine manual
- (14. Microlight Maintenance schedule MMS-1 (BMAA TIL 020).

(14.1) PLACARDS

The following placards are to be fitted (although they may be combined or split as required):-

Stall Speed	31 mph / 27 kn IAS
Never Exceed Speed	74 mph / 64 kn
Manoeuvring speed	62 mph / 54 kn (appropriate units to be used)
IGNITION - ON / OFF	
FUEL - ON / OFF	
MAXIMUM TOTAL WEIGHT:	262 kg
MAXIMUM COCKPIT LOAD:	90 kg
AEROBATIC MANOEUVRES PROHIBITED	
INTENTIONAL SPINNING PROHIBITED	
BANKED MANOEUVRES NOT TO EXCEED 60° FROM HORIZON	


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

See Annex A for modifications required for UK Type Acceptance.

(12) MINIMUM PERFORMANCE AT MAX TAKE-OFF WEIGHT

Rate of Climb: 670 fpm

Stall or Minimum Flying Speed: 31 mph / 27 kn IAS

BMAA Approval:		G B Gratton Chief Technical Officer	28 August 2001
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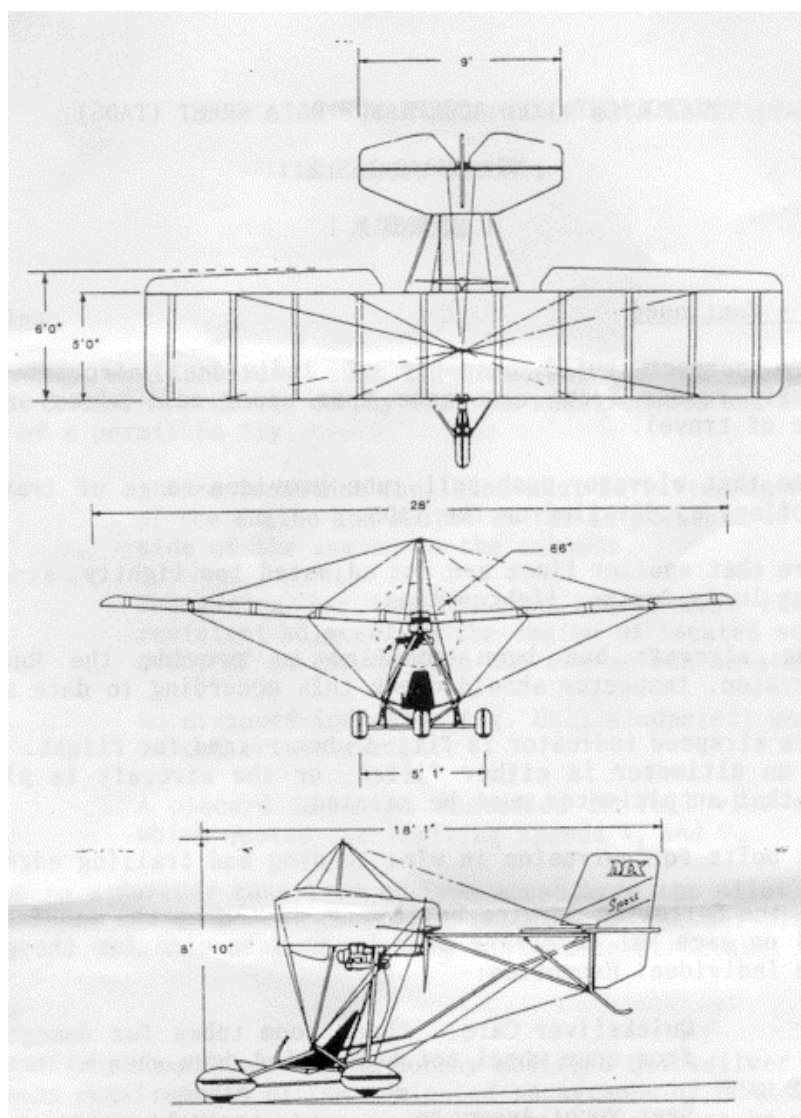
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Issue History

- Issue 1 Based upon MAAN 1187 issue 1, 20 Jul 94, Signatory W G Brooks, CTO
- Issue 2 Re-issued following procurement of more detailed type information, and relocation of CG datum to reflect fitment of steerable nosewheel. Signatory G B Gratton, CTO.

Illustration of Aircraft



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ANNEX A
MODIFICATIONS REQUIRED FOR UK TYPE ACCEPTANCE

- 1 Fitment of steerable nosewheel

ANNEX B
WEIGHT AND BALANCE INFORMATION

- | | | |
|----|-----------------------|---|
| 1 | MTOW: | 262 kg |
| 2 | CG datum: | Nosewheel axle centreline |
| 3 | Weighing attitude: | Nosewheel just above ground. Weigh at mainwheels and skid |
| 4 | Mainwheel Moment Arm: | 72.4 inches aft of datum |
| 5 | Skid moment arm. | 176" |
| 6 | Fuel capacity: | 24.5 litres |
| 7 | Fuel moment arm: | 56.7" aft of datum |
| 8 | Maximum seat load: | 90kg, reducible, not below 86kg, if required. |
| 9 | Minimum seat load: | 55kg |
| 10 | Seat moment arm: | 46" AoD |
| 11 | Fwd CG limit: | 63" aft of datum |
| 12 | Aft CG limit: | 69.5" aft of datum |

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ANNEX C
SPECIAL INSPECTION REQUIREMENTS

The following faults have been found common, and special attention should be paid to them both in service, and particularly during the annual permit renewal inspection.

- 1 Ensure that all tubing is anodised, or if not some other equivalent level of corrosion protection has been provided.
- 2 Corrosion at terminations of plastic coated cables.
- 3 Exhaust system is clear of structure and fabric
- 4 Ensure fuel lines are routed clear of the exhaust.
- 5 Ensure spoiler lines are not over-tightened (they will further tighten in flight, and this must be allowed for).
- 6 Corrosion in wing leading and trailing edge bolts.