BRITISH MICROLIGHT AIRCRAFT ASSOCIATION

MICROLIGHT TYPE ACCEPTANCE DATA SHEET (TADS)

NO: BM062  ISSUE: 2

TYPE
Whittaker MW4

(1) MANUFACTURER:  - Mr Michael Whittaker, Apple Tree Cottage, Churchfield Road, Clayton, Doncaster, DN5 7BZ (also the designer).

(2) UK IMPORTER:  N/A

(3) CERTIFICATION:  BCAR SECTION S, (in the modification state at the date of manufacture or modification of any example)

(4) DEFINITION OF BASIC STANDARD:  Drawing MW4-1-1, General Assembly

(5) DIMENSIONS/WEIGHT FOR COMPLIANCE WITH MICROLIGHT DEFINITION

(a) Wing area (inc canard area, excluding winglets): 10.13 m²
(b) Span: 7.9 m²
(c) Standard Mean Chord: 1.28 m
(d) Dry Empty Weight (standard aircraft): 102 kg
(e) Max Take-Off Weight: 215 kg
(f) Wing Loading (Weight Empty/Wing Area): 9.9 kg/m²
(g) Wing Loading (Max Take-Off Weight/Wing Area): 21.22 kg/m²
(h) Fuel Capacity (minimum usable): 22 litres

(6) POWER PLANTS

<table>
<thead>
<tr>
<th>Designation</th>
<th>MW4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Type</td>
<td>Fuji Robin EC34PM air cooled</td>
</tr>
<tr>
<td>Reduction Gear</td>
<td>2.67:1 V-belt</td>
</tr>
<tr>
<td>Exhaust System</td>
<td>Nicklow</td>
</tr>
<tr>
<td>Intake System</td>
<td>Air filter only</td>
</tr>
<tr>
<td>Propeller Type</td>
<td>Newton 2 blade wood fixed</td>
</tr>
<tr>
<td>Propeller Dia x Pitch</td>
<td>54” x 36”</td>
</tr>
<tr>
<td>Noise Type Cert No.</td>
<td>47M issue 1</td>
</tr>
<tr>
<td>Approving MAAN</td>
<td>1345 issue 1</td>
</tr>
</tbody>
</table>
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(7) MANDATORY LIMITATIONS: * To be placarded

(A) Max Take-off Weight: 215 kg *

(B) CG Limits: 12” to 15” aft of datum

(C) CG datum: Wing leading edge

(D) Cockpit Loadings: Front Rear Total

| Pilot and Baggage or Ballast (Min) | 55kg | - | 55kg * |
| Pilot and Baggage (Max) | 95 kg | - | 95 kg * |

(E) Permanent Ballast, Weight and Position: none

(F) Empty CG: Approx 86.24” AOD

(G) Never Exceed Speed: 72 mph *

(H) Manoeuvring Speed: 72 mph *

(I) Permitted Manoeuvres: Non Aerobatic. *
Bank angle not exceeding 60° *
Pitche attitude not exceeding ± 45°*

(J) Fuel Contents (Max Useable): 22 litres*
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<table>
<thead>
<tr>
<th>(K)</th>
<th>Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>Fuji Robin EC34 PM</td>
</tr>
<tr>
<td>Max RPM</td>
<td>7000</td>
</tr>
<tr>
<td>MAX CHT</td>
<td>250°C</td>
</tr>
<tr>
<td>MAX EGT</td>
<td></td>
</tr>
<tr>
<td>Fuel Spec</td>
<td>Petroleum Spirit, minimum 90 RON or 83 MON</td>
</tr>
<tr>
<td>Engine Oil Spec</td>
<td>2 Stroke Oil</td>
</tr>
<tr>
<td>Gearbox oil spec</td>
<td>n/a - belt drive</td>
</tr>
<tr>
<td>Fuel/Oil Mix</td>
<td>40:1</td>
</tr>
</tbody>
</table>

(L) Maximum crosswind limit, 12 knots component perpendicular to runway.

(8) **INSTRUMENTS REQUIRED FOR TYPE ACCEPTANCE:**

<table>
<thead>
<tr>
<th>ASI</th>
<th>Altimeter</th>
<th>RPM</th>
<th>CHT</th>
<th>EGT</th>
<th>Compass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>Required</td>
<td>optional (recommended)</td>
<td>optional (recommended)</td>
<td>optional</td>
<td>optional</td>
</tr>
</tbody>
</table>

(9) **CONTROL DEFLECTIONS:**

| Elevator UP | 18° | Elevator Trim | n/a |
| Elevator DOWN | 18° | | |
| Ailerons UP | 20° | Rudder LEFT | 20° |
| Ailerons DOWN | 20° | Rudder RIGHT | 20° |

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

Maintain to BMAA Schedule MMS1 & Fuji engine manual

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No pilots notes exist; MW5 manual may be used for handling and inspection advice.

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

None apply.

(12) MINIMUM PERFORMANCE AT MAX TAKE-OFF WEIGHT

Rate of Climb: 400 fpm
Best Climb Speed: 50 mph IAS
Stall or Minimum Flying Speed: 38 mph IAS
Distance, in still air, to 15m height: 175 m (factor for conditions using CAA GA Safety Leaflet 7B)

<table>
<thead>
<tr>
<th>BMAA Approval:</th>
<th>G B Gratton Chief Technical Officer</th>
<th>10 August 2000</th>
</tr>
</thead>
</table>

Issue History

Issue 1  Issued for type acceptance. Signatory G B Gratton, CTO, 7 Feb 2000.

Issue 2  Issued including full W&CG data. Signatory G B Gratton, CTO, 10 Aug 2000.

Issue 3
BRITISH MICROLIGHT AIRCRAFT ASSOCIATION
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Illustration of Aircraft

Annex A

Mandatory Modifications required for Type Acceptance
None apply.

Annex B

Approved Optional Modifications from the plans standard
None apply.

Annex C

Weighing Information

1. CG Datum: Wing leading edge
2. Weighing attitude: All 3 wheels on a level surface.
3. Mainwheel moment arm: 17.5” aft of datum
4. Nosewheel moment arm: 24” fwd of datum
5. Fuel moment arm: 18” aft of datum
6. Pilot moment arm: 14” aft of datum
7. Crew weights: Minimum 55 kg / maximum 95 kg
   (maximum reducible, not below 86 kg, if required).
8. Aft CG Limit: 15” aft of datum
9. Fwd CG Limit: 12” aft of datum

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Annex D
Mandatory Placards

<table>
<thead>
<tr>
<th>Max CHT 250°C</th>
<th>Vs 30 mph IAS</th>
<th>Ignition ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max RPM 7500</td>
<td>Va 60 mph IAS</td>
<td>OFF</td>
</tr>
<tr>
<td>Max cont. RPM 6,500</td>
<td>Vc 52 mph IAS</td>
<td></td>
</tr>
<tr>
<td>Cruise RPM 6200</td>
<td>Vne 72 mph IAS</td>
<td></td>
</tr>
</tbody>
</table>

OCCUPANT WARNING
This aircraft is not certified to an international standard

Max TO WT: 215 kg
Empty Wt: 102 kg
Cockpit loading: Min 55kg Max 95kg
Max Bank angle: 60 deg
Max pitch angle: 45 deg
Fuel contents: 22 litres
Fuel: oil ratio: 40:1

Passengers travel at their own risk