BRITISH MICROLIGHT AIRCRAFT ASSOCIATION

TYPE ACCEPTANCE DATA SHEET (TADS)

NO: BMO60 ISSUE: 3

TYPE MW5a

(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: AI Master General Assembly (G1000 / Issue 1)

(5) COMPLIANCE WITH THE MICROLIGHT DEFINITION

(a) MTOW 250 kg
(b) No. Seats 1
(c) Wing area 11.2 m²
(d) Maximum wing loading 22.3 kg/m²
(e) Permitted range of pilot weights 55 - 100 kg
(f) Typical Empty Weight (ZFW) 127 kg
(g) Span 8.5m
(h) Constant Chord 1.32m

(6) POWER PLANTS

<table>
<thead>
<tr>
<th>Designation</th>
<th>MW5a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Type</td>
<td>Fuji Robin EC34PM upright</td>
</tr>
<tr>
<td>Reduction Gear</td>
<td>Aerotech toothed belt, 2.5:1</td>
</tr>
<tr>
<td>Exhaust System</td>
<td>Aerotech E3-1300-L01</td>
</tr>
<tr>
<td>Intake System</td>
<td>Conical Sponge silencer</td>
</tr>
<tr>
<td>Propeller Type</td>
<td>Newton laminated wood, fixed pitch</td>
</tr>
<tr>
<td>Propeller Dia x Pitch</td>
<td>52” x 25”</td>
</tr>
<tr>
<td>Noise Type Cert No.</td>
<td>37M issue 2</td>
</tr>
<tr>
<td>MAAN Approving</td>
<td>1415 issue 1</td>
</tr>
</tbody>
</table>
BRITISH MICROLIGHT AIRCRAFT ASSOCIATION

TYPE ACCEPTANCE DATA SHEET (TADS)

NO: BMO60  ISSUE: 3

(7) MANDATORY LIMITATIONS:

(A) Max Take-Off Weight  250 kg
(B) CG Limits  
   Aft limit  16” aod
   FWD Limit  12” aod
(C) CG datum  Wing leading edge

Note: For fuller weight and balance information, see Annex A.

(D) Cockpit Loadings  Total
   Min  55 kg
   Max  100 kg

(E) Never Exceed Speed  70 kn IAS
(F) Manoeuvring Speed  57 kn IAS
(G) Permitted Manoeuvres  Non Aerobatic

(H) Fuel Contents (Max Useable)  20 litres

(I) Power Plant  See Table

<table>
<thead>
<tr>
<th>Engine</th>
<th>Fuji Robin EC34 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max RPM</td>
<td>7500</td>
</tr>
<tr>
<td>Max cont. RPM</td>
<td>6500</td>
</tr>
<tr>
<td>MAX EGT</td>
<td>1200 °F</td>
</tr>
<tr>
<td>Fuel Spec</td>
<td>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.</td>
</tr>
<tr>
<td>Engine Oil Spec</td>
<td>non-detergent 2-stroke self mix</td>
</tr>
<tr>
<td>Fuel/Oil Mix</td>
<td>40:1</td>
</tr>
</tbody>
</table>

(8) INSTRUMENTS REQUIRED FOR TYPE ACCEPTANCE:

<table>
<thead>
<tr>
<th>ASI</th>
<th>Altimeter</th>
<th>RPM</th>
<th>EGT</th>
<th>Compass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Optional</td>
<td>Required</td>
</tr>
</tbody>
</table>

TADS BMO60 issue 3  Page 2 of 6
BRITISH MICROLIGHT AIRCRAFT ASSOCIATION

TYPE ACCEPTANCE DATA SHEET (TADS)

NO: BMO60  ISSUE: 3

(9) CONTROL DEFLECTIONS:

For rigging instructions see maintenance manual.
Note: MW5 control deflections are at the stabilator leading edge relative to the fuse-tube centreline.

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

10.1 Manuals approved for use with this aircraft.

(a) Flight Manual FLTM/0008/MJM 23.9.86
(b) Maintenance Manual MANU/0007/MJM Issue 1

10.2 The following limitations and values are to be placarded.
Empty Weight
Occupant weight limits.
Maximum Take-off weight
Fuel Capacity
Va, Vne.

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

None apply

(12) MINIMUM PERFORMANCE AT MAX TAKE-OFF WEIGHT

Rate of Climb: 400 fpm at 45 kn IAS.

Stall or Minimum Flying Speed: 32 kn IAS

Landing distance from 15m: 130m

Take-off distance to 15m: 182m (factored i.a.w. Section S issue 2)

<table>
<thead>
<tr>
<th>BMAA Approval:</th>
<th>G B Gratton</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chief Technical Officer</td>
</tr>
<tr>
<td></td>
<td>28 July 2004</td>
</tr>
</tbody>
</table>

TADS BMO60 issue 3  Page 3 of 6
BRITISH MICROLIGHT AIRCRAFT ASSOCIATION

TYPE ACCEPTANCE DATA SHEET (TADS)

NO: BMO60 ISSUE: 3

Issue History

Issue 1
Initial Issue, signatory G B Gratton, 7 February 2000

Issue 2
Re-issue to correct some data found inaccurate in service.
Signatory G B Gratton, 10 August 2000.

Issue 3
Re-issue to correct propeller diameter and pitch information. Addition of note in Section 10.

ANNEX A

WEIGHING INFORMATION

1. CG Datum: Wing leading edge
2. Weighing attitude: All three wheels on a level surface
3. Mainwheel moment arm: 17.25” aod¹
4. Nosewheel moment arm: 29.5” fod
5. Fuel moment arm: 17.25” aod
6. crew moment arm: 11.75” aod
7. Minimum crew weight: 55 kg
8. Maximum crew weight: 100 kg (reducible, not below 86kg, if required)
9. Aft CG Limit: 16” aod
10. Fwd CG Limit: 12” aod
11. Maximum useable fuel: 20 litres (14.4kg)

(Illustrations on pages 5 and 6 are omitted from the electronic version of this TADS)

¹ Inspectors are advised to check moment arms.