MICROLIGHT TYPE ACCEPTANCE DATA SHEET (TADS)

NO: BMO-41 ISSUE: 1

TYPE: 130SX/CYCLONE 70 AND 130SX/FIREFLY

(1) MANUFACTURER: WING: AERIAL ARTS
TRIKE: CYCLONE HOVERCRAFT

(2) UK IMPORTER: N/A

(3) CERTIFICATION BASIS: Reduced BCAR Section 5 as per
CAA letter dated 17/01/86,
Ref: 9/3D/UL18

(4) DEFINITION OF BASIC STANDARDS:
As described in this TADS and MAAN 1161

(5) DIMENSIONS/WEIGHT OF COMPLIANCE WITH MICROLIGHT DEFINITION

(a) Wing Area: 11.9m$^2$
(b) Span: 8.84m
(c) Standard Mean Chord: 1.34m
(d) Dry Empty Weight: 65.5 to 80kg
(e) Maximum Take-Off Weight: 170kg
(f) Wing Loading: (empty) 5.59 to 6.64kg/m$^2$
(g) Wing Loading:
(max take-off weight) 13.79 to 14.21kg/m$^2$
(h) Fuel Capacity: 9 to 25 litres

DOCUMENT ISSUE STATUS

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<td>MAAN 1161</td>
<td>13/05/94</td>
<td>BMAA W G BROOKS</td>
<td>ALL NEW</td>
<td>1 to 7</td>
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(6) POWER PLANTS

<table>
<thead>
<tr>
<th>Designation</th>
<th>130sx Cyclone 70 and 130sx Firefly</th>
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<tbody>
<tr>
<td>Engine Type</td>
<td>Rotax 277 inverted</td>
</tr>
<tr>
<td>Reduction Gear</td>
<td>2.58:1</td>
</tr>
<tr>
<td>Exhaust System</td>
<td>Rotax</td>
</tr>
<tr>
<td>Intake System</td>
<td>K&amp;N Filter</td>
</tr>
<tr>
<td>Propeller Type</td>
<td>Reed or Cyclone</td>
</tr>
<tr>
<td>Propeller Dia x Pitch</td>
<td>58&quot;x32&quot;</td>
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<tr>
<td>Noise Type Cert No.</td>
<td>15M issue1</td>
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</table>

(7) MANDATORY LIMITATIONS:

(A) Max Take-off Weight 170kg
(B) C G Limits (3-Axis Aircraft): N/A
(C) C G Datum not required - weightshift
(D) Cockpit Loadings: Pilot and Baggage or Ballast (Min) 55kg, Pilot and Baggage 90kg
(E) Permanent Ballast, Weight and Position: none.
(F) Empty C of G (3-Axis Aircraft): N/A
(G) Never Exceed Speed: 56kt 65mph
(H) Manoeuvring Speed: 49kt 56mph
(I) Permitted Manoeuvres: non-aerobatic (pitch <±30 degrees, bank < 60 degrees)
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(J) Fuel Contents (Max Useable): 9 litres to 25 litres

(K) Power Plant: See Table

<table>
<thead>
<tr>
<th>Engine</th>
<th>Rotax 277</th>
</tr>
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<tbody>
<tr>
<td>Max RPM</td>
<td>6800</td>
</tr>
<tr>
<td>MAX CHT</td>
<td>480F</td>
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<tr>
<td>Fuel Spec</td>
<td>MON 83</td>
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<tr>
<td></td>
<td>RON 90</td>
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<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td></td>
<td>Octane</td>
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<tr>
<td>Oil Spec</td>
<td>Self Mix</td>
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<tr>
<td></td>
<td>2 Stroke</td>
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<td>Fuel/Oil Mix</td>
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<tr>
<td>Max EGT</td>
<td>-</td>
</tr>
<tr>
<td>Oil Press</td>
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</tr>
<tr>
<td>Oil Temp</td>
<td>N/A</td>
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</tbody>
</table>

(8) INSTRUMENTS REQUIRED FOR TYPE ACCEPTANCE:
An Airspeed Indicator, 0-70mph minimum.
An Altimeter, (which may be worn on the pilots wrist).

(9) CONTROL DEFLECTIONS (3-Axis Systems): N/A

Pitch Control  Up:-  Down:-
Tailplane Trim  Up:-  Down:-
Ailerons        Up:-  Down:-
Rudder          Left:- Right:-
Steering        Left:- Right:-
Spoilers

(10) PILOT’S NOTES, MAINTENANCE MANUALS REFERENCES:
Aerial Arts 130SX and Cyclone 70 Owners Manuals.

(11) MANDATORY MODIFICATIONS/SERVICE BULLETINS/AIRWORTHINESS DIRECTIVES ETC:
None.
(12) MINIMUM PERFORMANCE AT MAX TAKE-OFF WEIGHT

Rate of Climb: 600fpm at 28kt 32mph
Stalling Speed: 25kt 28mph

(13) PLACARDS
The following information must be clearly placarded in view of the pilot:

Empty Weight
Max and Min Cockpit Load
Maximum Take-Off Weight = 170kg
VNE Speed = 65mph
Manoeuvre limitations = Pitch, ±30 degrees. Roll, ±60 degrees.
WARNING - NO LOOSE ITEMS IN COCKPIT

Close to the fuel tank:
Fuel type, quantity and mix ratio

At the ignition switch
Ignition on/off

At the fuel tap:
Fuel on/off.

BMAA APPROVAL: [Signature] issue: 1 Date: 13/5/94

ADDITIONAL POINTS TO NOTE FOR INSPECTORS:

1) See defect reports A2.01 to A2.08 (Aerial Arts Wings hang bracket cracks.)
   If any cracking or distortion is found, the hang bracket must be replaced with one where the hang plates wrap around the bearing tube. The wing may be modified to incorporate a Cyclone Airsports Chaser S hang bracket. Contact W. Sherlock at Cyclone Airsports for further information.

2) Ensure compliance with the general recommendations of BMAA documents WG and TG.

3) Photographs showing the principal features of the aircraft shall be attached to these data sheets.