

CIVIL AVIATION AUTHORITY – SAFETY REGULATION GROUP

MICROLIGHT TYPE APPROVAL DATA SHEET (TADS)

NO: BM 74 ISSUE 2

TYPE: SLA-100 Executive and SLA-80 Executive

- (1) MANUFACTURER: Medway Microlights
Burrows Lane
Middle Stoke
Rochester
Kent
ME3 9RN
- (2) UK IMPORTER: N/A
- (3) CERTIFICATION: BCAR Section S Issue 3
- (4) DEFINITION OF BASIC STANDARD: SLA 100/80/ Executive
Drawing GA 9000 SLA series 16/10/2006
- (5) COMPLIANCE WITH THE MICROLIGHT DEFINITION
- | | |
|---|-----------------------|
| (a) MTOW | 450 kg |
| (b) No. Seats | 2 |
| (c) Maximum Wing Loading | 32 kg/m ² |
| (d) V _{so} | 35 mph CAS |
| (e) Permitted range of pilot weights | 55 – 110 kg per seat. |
| (f) Typical Empty Weight (ZFW) | 268 kg |
| (g) ZFW + 172 kg crew + 1 hr fuel
(SLA-100 - 13 litres / 9 kg) | 449 kg |
| (SLA-80 - 11 litres / 8 kg) | 448 kg |
| (h) ZFW + 86 kg pilot + full fuel
(100 litres / 72 kg) | 426 kg |
| (i) Max ZFW at initial permit issue
(SLA-100) | 269 kg |
| (SLA-80) | 270 kg |

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(6) POWER PLANTS

Designation	SLA-100 Executive	SLA-80 Executive		
Engine Type	Rotax 912 ULS	Rotax 912 UL		
Reduction Gear	Rotax 2.43	Rotax 2.271		
Exhaust System	Medway Part No. 9394	Medway Part No. 9394		
Intake System	K&N	K&N		
Propeller Type	Woodcomp Klassic	Airplast Ecoprop		
Propeller Dia x Pitch	62in / 18° at 75% radius	62in / 17° at 75% radius		
Noise Type Cert No.	188M	188M		
AAN approving configuration	29143	29143 Addendum 1		

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(7) MANDATORY LIMITATIONS:

(A) Max Take-Off Weight	450 kg																								
(B) CG Limits	<i>FWD Limit</i> 1068 mm aft of datum <i>Aft limit</i> 1195 mm aft of datum																								
(C) CG datum	Front Wheel Axle (see Annex C).																								
(D) Cockpit Loadings	<table><thead><tr><th></th><th>Port</th><th>Starboard</th><th>Total</th></tr></thead><tbody><tr><td>Min</td><td>55 kg</td><td>0 kg</td><td>55 kg</td></tr><tr><td>Max solo</td><td>110 kg</td><td>0 kg</td><td>110 kg</td></tr><tr><td>Max Dual (1)</td><td>86 kg</td><td>86 kg</td><td>172 kg</td></tr><tr><td>Max Dual (2)</td><td>110 kg</td><td>62 kg</td><td>172 kg</td></tr><tr><td>Max Dual (3)</td><td>62 kg</td><td>110 kg</td><td>172 kg</td></tr></tbody></table>		Port	Starboard	Total	Min	55 kg	0 kg	55 kg	Max solo	110 kg	0 kg	110 kg	Max Dual (1)	86 kg	86 kg	172 kg	Max Dual (2)	110 kg	62 kg	172 kg	Max Dual (3)	62 kg	110 kg	172 kg
	Port	Starboard	Total																						
Min	55 kg	0 kg	55 kg																						
Max solo	110 kg	0 kg	110 kg																						
Max Dual (1)	86 kg	86 kg	172 kg																						
Max Dual (2)	110 kg	62 kg	172 kg																						
Max Dual (3)	62 kg	110 kg	172 kg																						
(E) Never Exceed Speed, V_{NE}	103 kt (119 mph)																								
(F) Manoeuvring Speed, V_A	74 kt (86 mph)																								
(G) Flap Limiting Speed, V_{FE}	60 kt (69 mph)																								
(H) Permitted Manoeuvres	+ /- 60 deg bank Non Aerobatic Normal acceleration limits, +4 / -2g																								
(I) Fuel Contents (Max Useable)	98.6 Litres (* subject to CG & AUW limits)																								

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(J) Power Plant

See Table

Engine	Rotax 912 ULS	Rotax 912 UL
Max RPM	5800 (5 Min limit)	5800 (5 Min limit)
MAX CHT	135 °C	150 °C
MAX EGT	880 °C (take-off) 850 °C	880 °C (take-off) 850 °C
Fuel Spec	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.	
Engine Oil Spec	SAE 20/50 see Engine manual	SAE 20/50 see Engine manual
Gearbox oil spec	N/A	N/A
Fuel/Oil Mix	N/A	N/A
Coolant Temperature	115 °C	115 °C
Oil Pressure	Min 1.5 Bar Normal operation 2-5 Bar Max 7 Bar	Min 1.5 Bar Normal operation 2-5 Bar Max 7 Bar
Oil Temperature	50-130 °C	50-140 °C
Fuel Pressure	0.15 –0.4 bar	0.15 –0.4 bar

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(8) INSTRUMENTS REQUIRED:

ASI	Altimeter	RPM	CHT / EGT	Compass	Coolant temp	Fuel Pressure
Required	Required	Required	Required	advisable	Required	optional
VSI	Slip ball					
optional	Required					

(9) CONTROL DEFLECTIONS:

Elevator UP:	$31^{\circ} \pm 2^{\circ}$	Tailplane trim UP:	$24^{\circ} \pm 2^{\circ}$
Elevator DOWN:	$22^{\circ} \pm 2^{\circ}$	Tailplane trim DOWN:	$40^{\circ} \pm 2^{\circ}$
Ailerons UP:	$17^{\circ} \pm 2^{\circ}$	Rudder LEFT:	$20.5^{\circ} \pm 2^{\circ}$
Ailerons DOWN:	$17^{\circ} \pm 2^{\circ}$	Rudder RIGHT:	$20.5^{\circ} \pm 2^{\circ}$
Flaps UP:	$0^{\circ} \pm 2^{\circ}$		
Flaps DOWN:	$23^{\circ} \pm 2^{\circ}$		

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

10.1 Manuals approved for use with this aircraft.

- (a) SLA-100 and SLA-80 Executive Operators Manual Issue 2 or later approved revision

10.2 The following placards are to be fitted:-

- a) Flight Limitations Placard (to be visible to pilot)
See Annex D.
- b) Engine Limitations Placard (to be located near to engine instruments)
See Annex D.
- c) Fuel Limitations Placard (to be located near to filler cap)

A placard is to be fitted showing fuel capacity (litres), fuel type(s), fuel:oil ratio (if relevant) and if MTOW can be exceeded with full fuel and maximum cockpit weight, the fuel loads at MTOW for cockpit weights of 180 kg / 170 kg / 160 kg etc. at 10 kg intervals down to the maximum fuel

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load. An example is shown at Annex D.

d) Switches

See Annex D.

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

None.

(12) MINIMUM PERFORMANCE AT MAX TAKE-OFF WEIGHT

Rate of Climb: SLA100 - 860 fpm at 68 mph (59 kt) IAS

SLA-80 - 690 fpm at 68 mph (59 kt) IAS

Stall or Minimum Flying Speed: 38 mph (33 kt) IAS at MTOW / idle / full
flap.

Issue History

<u>Issue No.</u>	<u>Date</u>	<u>Reason and signatory</u>
1	03/01/2007	Initial Issue JC Barratt
2	11/04/2007	Correction of stall speed units and control deflections

JC Barratt

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Illustration of Aircraft - Photograph



ANNEX A – MANDATORY MODIFICATIONS

1. 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.

1. None

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ANNEX C

WEIGHING INFORMATION

- | | |
|---------------------------|---|
| 1. CG Datum: | Front Wheel Axle |
| 2. Weighing attitude: | Floor level |
| 3. Main wheel moment arm: | 1395 mm aft |
| 4. Nose wheel moment arm: | 0 mm as cg datum point |
| 5. Fuel moment arm: | 1705 mm aft of datum |
| 6. Crew moment arm: | 1275 mm aft of datum |
| 7. Crew weights: | Minimum 55 kg / maximum 172 kg
Maximum per seat 110 kg |
| 8. Fwd CG Limit: | 1068 mm aft of datum |
| 9. Aft CG Limit: | 1195 mm aft of datum |

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ANNEX D

EXAMPLE PLACARDS

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

	<u>[Type] [Engine] [Registration]</u>
Never Exceed Speed:	103 kt / 119 mph IAS
Manoeuvring Speed :	74 kt / 86 mph IAS
Stall Speed:	33 kt / 38 mph IAS
Best climb speed:	59 kt / 68 mph IAS
Best glide speed:	52 kt / 60 mph IAS
Bank angle limits:	+/- 60°
Maximum Stall entry rate:	1 kt/s
Normal Acceleration Limits:	+4 / -2g
Empty Weight:	268 kg *
Max Take-Off Weight:	450 kg
Minimum Cockpit Weight:	55 kg
Maximum Cockpit Weight:	172 kg (max 110 kg in each seat.)*
<u>Aerobatics and spinning prohibited.</u>	

* This must match the most recent W&CG report for the aircraft.

(b) Engine Limitations Placard (to be located near to engine instruments)

A placard showing the limitations for all 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.

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(c) Fuel Limitations Placard (to be located near to filler cap)

FUEL	
Capacity 100 Litres 4 Stroke add NO oil	
Cockpit Weight (kg)	Max. Fuel Load (litres)
172	13
110 Or below	Full fuel
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	

(d) Switches

All switches are to be marked with function and sense (up=on, down=off).

(e) Miscellaneous placards

- ICOM A3E radio to be placarded 'LA class 3 approval - may only be used outside controlled airspace'
- Baggage compartment to be placarded '5 kg maximum'
- 'Any loss of instrument – land as soon as practicable' to be placarded next to electronic instrument display (i.e. Adsim Flightbox, Skydat GX1 or Skydat GX2)