



TYPE: Thruster T600N (450Kg)

- (1) MANUFACTURER: Thruster Aircraft (UK)
Continued Support: Thruster Aircraft LLP
North Hanger
Wickenby Airfield
Langworth, Lincs
LN3 5AX
- (2) UK IMPORTER: N/A
- (3) CERTIFICATION: BCAR Section S Issue 2
- (4) DEFINITION OF BASIC STANDARD: Mod TAS001 Issue 1 dated 18 April 1995. Master Drawing List form F10 Issue 1 dated 2 January 1997, Mod TAS 020, TAS 023 (Part) and TAS 025
- (5) COMPLIANCE WITH THE MICROLIGHT DEFINITION
- | | | |
|--|-------|-------------------|
| (a) MTOW | 450 | kg |
| (b) No. Seats | 2 | |
| (c) Maximum Wing Loading | 28.68 | kg/m ² |
| (d) V _{so} | 30.5 | kn CAS |
| (e) Permitted range of seat loading* | 55-90 | kg per seat |
| (f) Typical Empty Weight (ZFW) | 245 | kg |
| <i>Sprint</i> | 261 | kg |
| (g) Max ZFW + 172 kg crew + 1 hr fuel
(21litres /15 kg) | 450 | kg |
| <i>Sprint</i> | 450 | kg |
| (h) Max ZFW + 86 kg pilot + full fuel
(21litres /15 kg) | 385 | kg |
| <i>Sprint</i> | 385 | kg |
| (i) Max ZFW at initial permit issue | 263 | kg |

**Note: It is the Pilot's responsibility that the aircraft is not flown outside the permitted MTOW*

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Engine	<i>Rotax 582 2V DCDI Oil Premix</i>			
Max RPM	6500			
MAX CHT	-NA-			
MAX EGT	650C(1200F)			
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	Super Two Stroke To TSCT (min)			
Gearbox oil spec	API-GL5 or GL6 or SAR 140 EP or 85W 140 EP			
Fuel/Oil Mix	50:1			
Coolant Temperature	80C (175F) Max			
Oil Pressure	-NA-			
Oil Temperature	-NA-			
Fuel Pressure	-NA-			

(8) INSTRUMENTS REQUIRED:

ASI	Altimeter	RPM	CHT / EGT	Compass	Coolant temp	Fuel Pressure	VSI	Slip ball
0 to 100 KIAS	0 - 20,000	0 - 8000	-NA- /Required 0-1700°F 0-900°C	Optional	0-240°F 0-120°C	Optional	Optional	Optional

(9) CONTROL DEFLECTIONS:

Elevator UP:	30° ± 2°	Tailplane trim UP:	-NA-
Elevator DOWN:	30° ± 2°	Tailplane trim DOWN:	-NA-
Ailerons* UP:	40° ± 2°	Rudder LEFT:	25° ± 2°
Ailerons* Down:	30° ± 2°	Rudder RIGHT:	25° ± 2°

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

10.1 Manuals approved for use with this aircraft.

- (a) **POH 210-072, Rotax Engine Operator Manual**

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 the filler cap)
See Annex D
- (d) Switches
See Annex D

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

See Annex A for required modifications.

Annual Bettsometer test is to be carried out to **1320** grammes with wing sails fitted and tensioned to flight. Test must be to both upper and lower surfaces.

NB: A definitive list of Mandatory actions is to be obtained by reference to CAA published Mandatory Permit Directories. The list on this TADS is not necessarily up-to-date. Also see Thruster website @ www.thruster.co.uk for latest information

(12) MINIMUM PERFORMANCE AT MAX TAKE-OFF WEIGHT

Rate of Climb: 448 fpm at 50 KIAS.

Stall or Minimum Flying Speed: 35 KIAS at 450kg MTOW / idle.

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Issue History

<u>Issue No.</u>	<u>Reason and signatory</u>
1	13/05/03 Initial Issue - 450 kg T600N Rotax aircraft originally recorded in TAD BM-52 Issue 4 on the 7 September 1999. These are now being transferred to BM-63 Issue 1 that also incorporates a fully enclosed rear fuselage, details of which are denoted as applicable to the “Sprint” variant as distinct from the basic T600N Rotax 582 A J MAXWELL
2	Not Formally Issued
3	20/11/07 Editorial Corrections A J MAXWELL
4	05/05/12 Editorial Corrections, Corrections to Cockpit Loading, Control Deflections, AAIB Safety action addition of “Area Of Special Attention” ANNEX E



A LOVE

Illustration of Aircraft Type: Open Back



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MICROLIGHT TYPE APPROVAL DATA SHEET (TADS)

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Illustration of Aircraft Type: Sprint



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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.

<u>Thruster Mod</u>	<u>Date</u>	<u>Title</u>
TAL 03-3	12/02/1992	Rotax Exhaust After Muffler
TAL 03-9	12/02/1992	GRP Wheel Spats
TAS 010	10/07/1997	Ultralam Wing Skins
TAS 013	02/12/1997	Ivo Prop Installation
TAS 018	29/09/1997	Disabled Person Mod “Crip Kit”
TAS 026	01/03/2004	Lever for existing Bungee Trim System
TAS 030	01/03/2004	Carburettor Inlet Heater
TAS 031	01/03/2004	Wing Strobe Lights
TAS 033	01/03/2004	Roll Trim Bias
TAS 034	01/03/2004	Battery Isolator Switch
TAS 035	01/03/2004	Extended Control Colum Stick (Training Aid)
TAS 037	01/03/2004	Wider Nose Wheel

ANNEX C
WEIGHING INFORMATION

1. CG Datum: Front of Leading Edge Spar Tube
2. Weighing attitude: Wings Level Fuse Tube Horizontal
3. Mainwheel moment arm: 767.5mm Aft of datum
4. Tailwheel moment arm: 750mm Fwd of datum
5. Fuel moment arm: 1030mm Aft of datum
6. Crew moment arm:
 - a) 423 mm Aft of datum (Forward Seat Position)
 - b) 448 mm Aft of datum (Mid Seat Position)
 - c) 473 mm Aft of datum (Rear Seat Position)
7. Crew weights: Minimum 55 kg / maximum 90 kg
8. Aft CG Limit: 501 mm Aft of datum
9. Fwd CG Limit: 415 mm Aft of datum

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ANNEX D

EXAMPLE PLACARDS

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

1. On cockpit fascia

<p>OPERATIONAL LIMITATIONS THE AIRCRAFT MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARD MARKINGS AND MANUALS. NO AEROBATIC MANOUVRES INCLUDING SPINS ARE PERMITTED</p>

2. Adjacent to fuel cock

<p>FUEL -φ- OFF</p>

3. Adjacent to ignition switch on Instrument panel

<p>RUN ↑ ↓ STOP</p>

4. On cockpit fascia adjacent to A.S.I.

<p>V_A 60Kt / V_{NE} 80Kt</p>
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Version (a) and (b)

<p>V_A 71Kt / V_{NE} 1020Kt</p>
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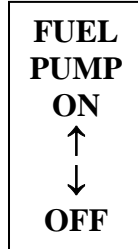
Version (c) Sprint

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5. Adjacent to Fuel pump switch on Instrument panel



6. On Keeltube at rear of Engine [Port and Starboard]

DANGER PROPELLER ARC

7. On roof Panel adjacent to Trim Cord

**ELEVATOR TRIM
PULL ←←—————NOSE UP**

8. On cockpit fascia adjacent to RPM gauge

**MAX RPM
6500**

9. On cockpit fascia

C of G LIMITS
0.389m TO 0.501m AOD
COCKPIT LOADING
MAX 172KG
MTOW 450KG

10. On cockpit fascia

WARNING
IT IS THE RESPONSIBILITY OF THE PILOT IN
COMMAND TO ENSURE THAT THE C OF G AND
MTOW ARE WITHIN OPERATIONAL LIMITS

11. On cockpit fascia

COCKPIT LOAD (kg)	ALLOWABLE FUEL (LITRES)

[Note: This Placard is completed by Thruster Air Services for each individual Aircraft prior to its release.]

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12. On cockpit fascia

**NO SMOKING
FASTEN SEATBELTS**

13. Adjacent to EGT gauge on Instrument panel

**MAX EGT
650C**

**MAX EGT
1200F**

14. Adjacent to EGT gauge on Instrument panel

**MAX WATER TEMP
80C**

**MAX WATER TEMP
175F**

Adjacent to Water Temp. gauge on Instrument panel

** The Placard displayed will be either Metric or Imperial units dependant on the scaling of the Gauge fitted.*

15. On cockpit fascia.

**CLASSIFICATION
MICROLIGHT**

16. One of the following , Fuel Tank adjacent to filler cap

**FUEL GRADE: RON 90
MIN
FUEL OIL MIX 50:1
CAPACITY 50 LITRES
USEABLE**

17. On seat rail adjacent to Throttle lever both Port and Starboard.

**POWER ON
↑
↓
POWER OFF**

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18. On cockpit fascia.

AIRCRAFT TYPE.....T600N (450Kg).....
REGISTRATION.....
Ser No.
EMPTY WEIGHT:
.....Kg Weighing Date

19. On cockpit fascia adjacent to Push Start Switch

PUSH START

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

ANNEX E

Areas for Special Attention During Inspections

1. Carburettor Heating System to minimise risk of Carburettor Icing. An accident caused by Carburettor Icing has been reported which was due in part to the Electric Carburettor Heating system being fitted on the inlet of the Carburettor rather than the outlet in the vicinity of the butterfly valve. Check that the installation is correct and operational.