

BGA glider data sheet - Dart 15, 17 & 17R (T.51, T.51/17 & T.51/17R)

Data source Pilots Notes

Date of issue: April 1975

Manufacturer: Slingsby

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Weighing Data:

	Kg	Pounds
Dart 15 Max weight (dry)	354	780
Dart 15 BGA concession non-aerobatic max weight (dry) [+3%]	365	803
Dart 17 Max weight (dry)	372	820
Dart 17 BGA concession non-aerobatic max weight (dry) [+3%]	383	844
	mm	Inches
Forward C of G limit (aft of datum)	229	9.0
Aft C of G limit (aft of datum)	345	13.6
Pilot position (forward of datum)	584	23

Control deflections in mm

	Up	Down	Measuring point	Max free play
Ailerons	105 ±5	55 ±5	TE inboard end	6mm total at top of stick
Elevator	60 ±5	77 ±5	Inboard end	3mm between halves 6mm total at top of stick
Trim	26 +4 -2	32 +4 -2	Inboard end (TP at -5°)	
Airbrakes	142 min		Top paddle	
Rudder	Left & right 185 small rudder (15M) 218 large rudder (17 M)		Measure at extreme TE	

Elevators to be within ¼° of each other. Elevator load at centre of stick hand grip with spring connected to be 2lb greater than with spring disconnected. Load to move trimmer 10lb±1lb at TE of tab. The air brakes are to be ¾ mm below the wing surfaces when locked. When a metal tailplane (Mod 60) is fitted add 3mm to all elevator and trim deflections.

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage top 1000:30 tail down

Maximum speeds

	Knots	Kph
VNE	119	220
Rough air	82	152

	Knots	Kph
Aerotow	82	152
Winch / auto tow	71	132

Max winch weak link: 1000 lb (450 Kg) (BGA 600 Kg, Tost Blue)

Tyre pressure: 25 PSI (1.76 Kg/cm²)

Semi aerobatic - Cloud flying permitted

The original Dart 15s had wooden spars. The later 15s and all 17s have lighter aluminium spar booms redux bonded to the wooden structure. The 15R and 17R have a retractable undercarriage. The 15W and 17W had a Wortman wing section of higher performance but which gave less stall/spin warning.

This sheet compiled by: Tim Macfadyen Last update 30.4.2008 (Dart 17 AUW increased as per SAS)