

Electronic Components
 Airtek RDTRX-stand-alone receiver and RDT Transmitter --
 Attn: Ken Bauer
<https://airteke.wordpress.com>
 HobbyKing Ultra Micro Servo HK3D-1.7R
 Linear motion @ 80 gm rated force
 Speed: 0.12sec, Voltage: 3.7V-4.2V
 Dimensions: 20.8 x 15 x 11mm, Weight: 1.7 g
 NOTE! Some other linear servos (notably Spektrum) are not compatible with the Airtek receiver.
 A 70 mah 1S LiPo Battery is rated by AirTek to be capable of 500 servo cycles on a full charge
 Winged Shadow "How High" recording altimeter is not in current production, but a large number were produced. Used units might still be available at swap shops.

Prototype's Gross Flying Weight
 56.9 Fuselage and Fin Assembly
 26.2 "Front End" (Nose Block, Montreal Stop, and Propeller)
 19.0 Wing Centre Panel
 16.0 Pair of Wing Tips
 13.8 Stabilizer
 2.8 Bobbin, wing and stab. bolts, wing tip joiner tapes and nose block retainer rubber bands
 48.3 Rubber Motor
 5.3 RDT, RDT Servo, and How High Altimeter incl. wiring
 5.5 (2) 70 mah 1S LiPo batteries For RDT and Altimeter
 0.0 Nose Ballast
 193.8 grams (6.84 oz. avo) Gross Flying Weight (Ready to Fly)

Wing Area
 2 tip panels x 46.3 sq. in. x cos 30° = 80.19 sq. in. projected area
 + Centre Panel = 121.20 sq. in.
 Total Projected Wing Area = 201.39 sq. in. (1.40 sq. ft)
Wing Loading
 (neglecting the Lifting Stab's contribution)
 = 6.84 oz. / 1.40 sq. ft. = 4.89 oz./sq. ft.
Projected Wingspan
 10.25 in. span x cos 30° x 2 tip panels + 22.44 in. span Centre Panel = 40.19 in. total projected wingspan
Aspect Ratio
 Aspect Ratio = Projected Span ² / Projected Area
 = (40.19²) / 201.39 = 8.02

