## **Material for:**

Structure: Carbon Fiber Tube [1]

Suspension wire for the wing: Carbon Fiber [2]

Wing: Kevlar [3]

## **Characteristics:**

2 Electric Ducted Fan [4]

- 150 Hp
- 30 000 Rpm
- 2 Air Compressor [5]
  - 600 2 100 CFM
  - 3 600 rpm
  - 6psi

## Battery [6]

- 1,000 watt-hours per kilogram
- Power consumption for 2 Electric Ducted Fan: 300 W
- Power consumption for 2 Air Compressor: 150 W

Solar Panel [7]

• 15.4 V 1.8A 28W

## **References:**

- [1] http://www.clipcarbono.com/
- [2] http://zoltek.com/carbonfiber/how-is-it-made/
- [3] <u>http://www.dupont.com/products-and-services/fabrics-fibers-nonwovens/fibers/articles/kevlar-properties.html</u>
- [4] http://www.jethangar.com/Ducted%20Fans/df.html#10s
- [5] http://www.ventilacion.us/productos-turbocentrifugos-soplador-lc.html
- [6] http://www.graphenano.com/es/aplicaciones/baterias
- [7] http://www.celdassolaresflexibles.com/PowerFilm-Solar-Rollable-Solar-Panels.php