Mark II

Magnus Force Lift equation

$L = \rho \cdot G \cdot V$ Lbs/ft

w/ 100 mm radius + 25000 rpm motor.

$L =$ 1.3938 Lbs/ft = 630 grams

Derate 10% = 567g

Weight

- Wheel x4 @ 48g = 192 g

⇨ parts accounted for 357.6 g

→ unaccounted for
- Wing skins
- plastic mounts

→ carbon fiber Rod - 1.8g

→ Aluminum rod 7.6g

→ 9v, 45g

→ motor, 17.2g

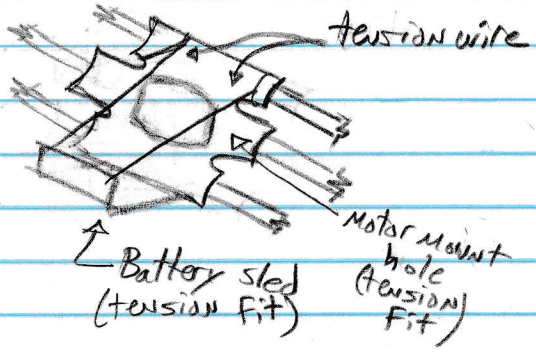
→ 9v connector 1.6g

→ Bearing, 0.5g

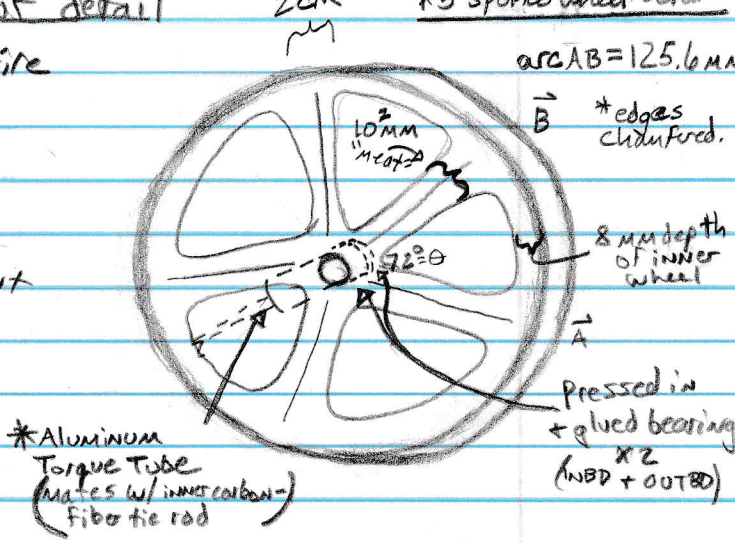
→ Wing Gear 2.0g

, Kenneth Mikolaichik 3/11/2022 – 3/12/2022

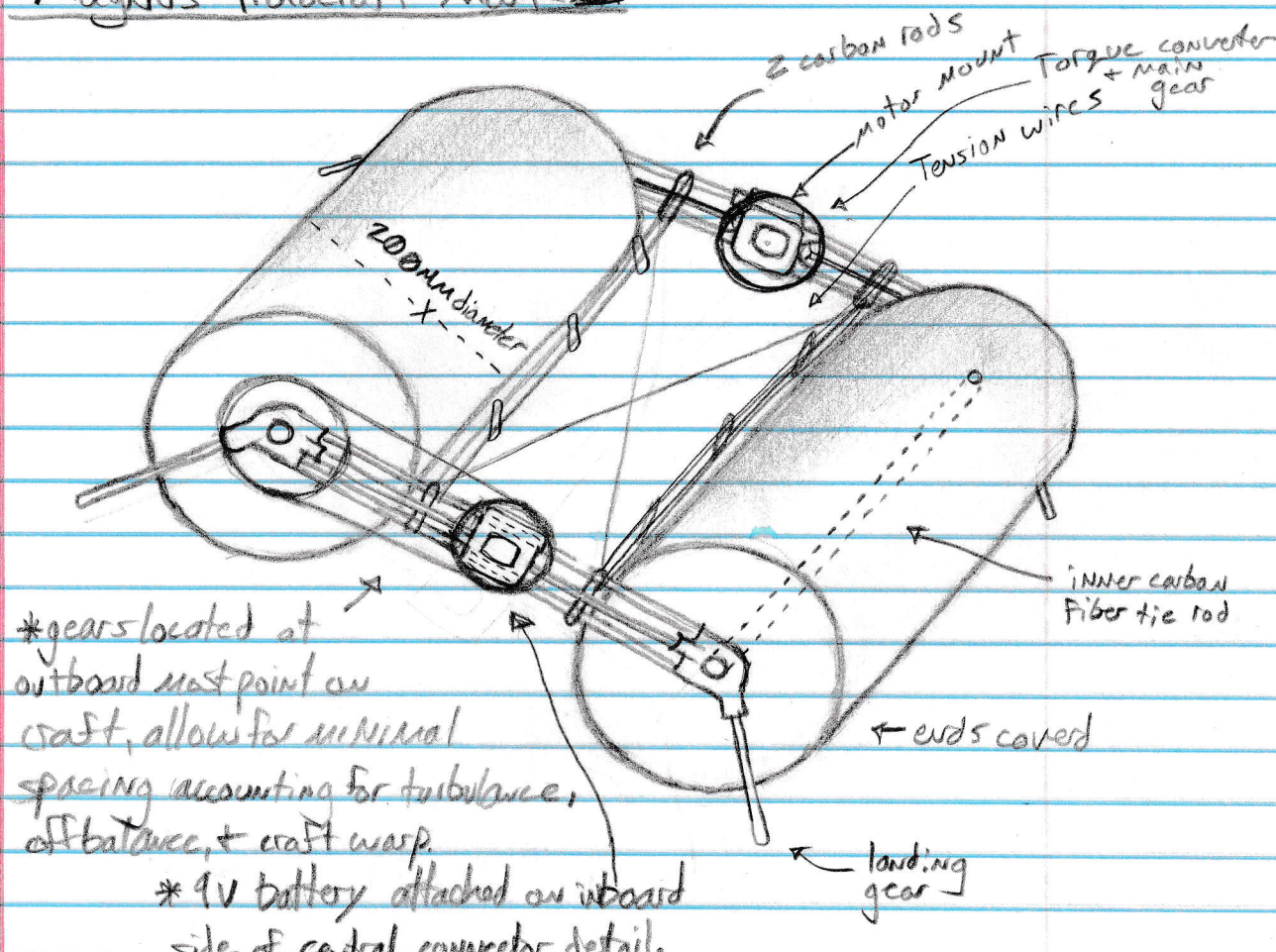
*central structural connector detail



*5 spoked wheel detail



Magnus-Protocraft Mark II



*gears located at outboard most point on craft, allows for minimal spacing accounting for turbulence, offbalance, + craft warp.

*9V battery attached on inboard side of central connector detail.