

Human Powered Airplane

Advisors: Ken Mease, Bob Liebeck, Jacqueline Thomas, Joe King, Colin Sledge



Background

- No HPA built in U.S. in 2 decades
- Restarted at UCI after 20 year hiatus
- Airplane powered by one person via pedal assembly
- Wings must be large for sufficient lift at low speeds
- Plane must be structurally sound for safety

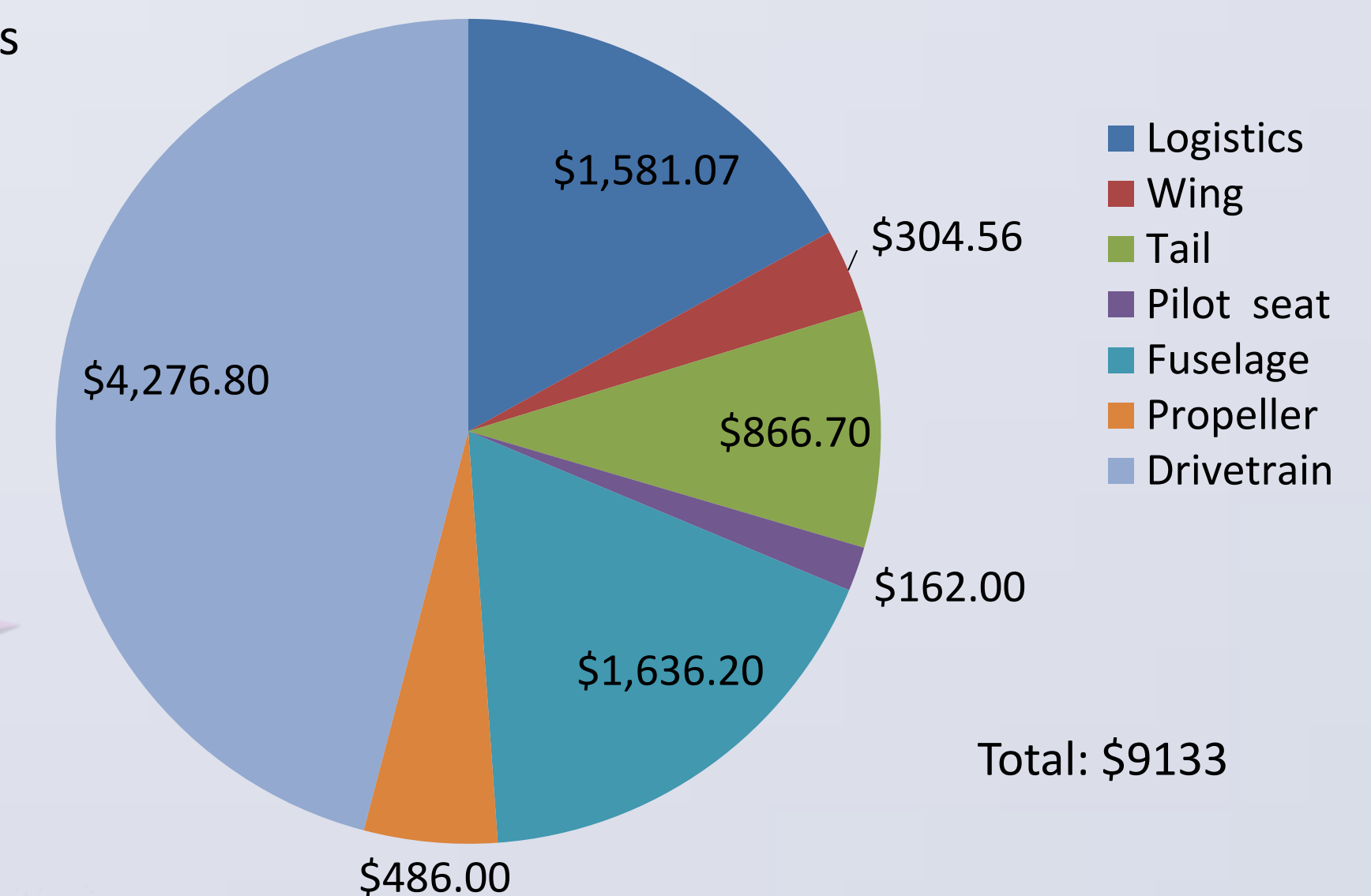
Objective

- Build Human Powered Airplane
- Test fly the aircraft
- Document building processes, benchmark for future HPA's

Significance

- No pollution, environmentally friendly
- Will validate/invalidate wing level fuselage designs

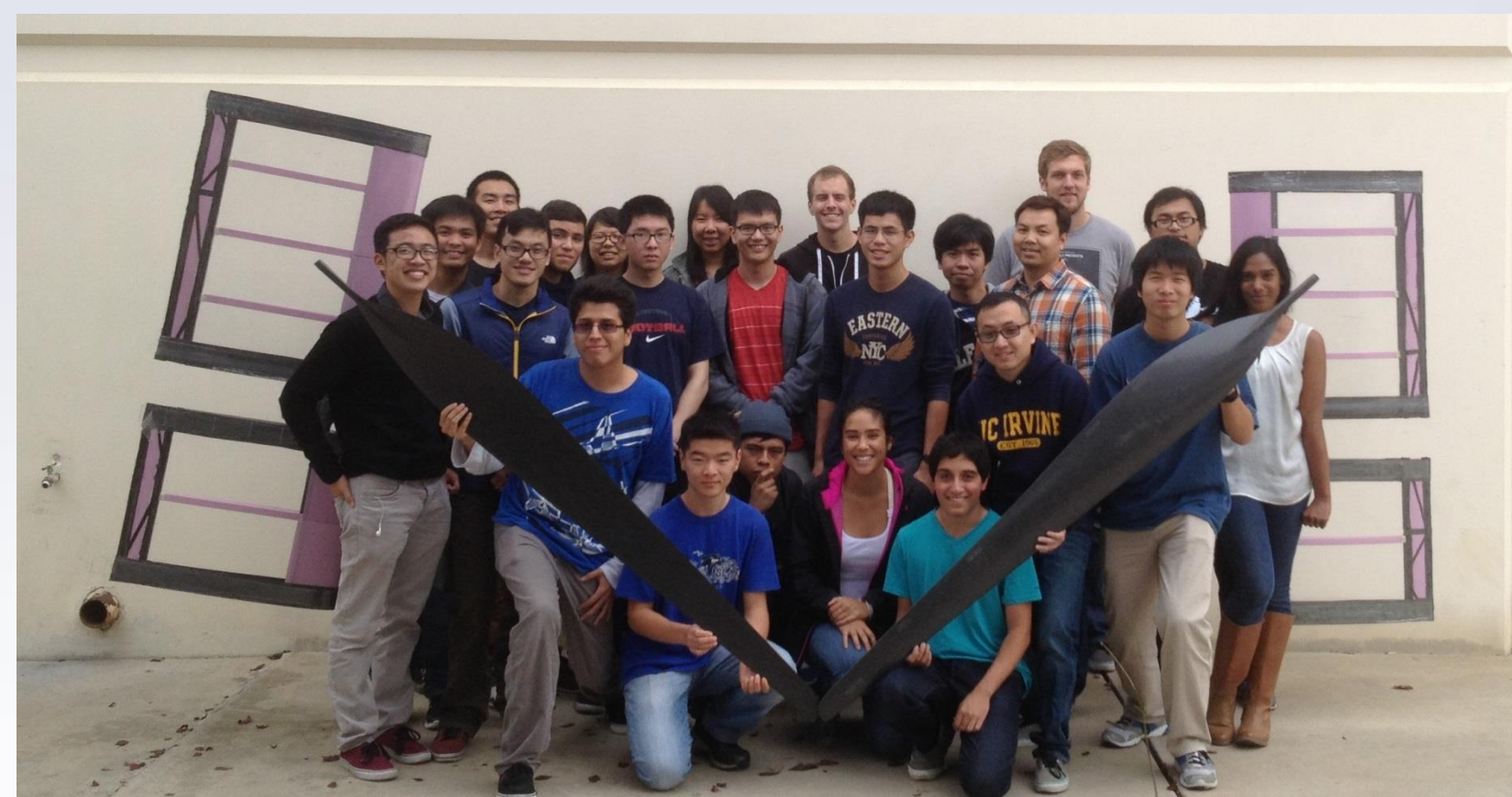
Budget 2014-2015 High Wing



Specifications:

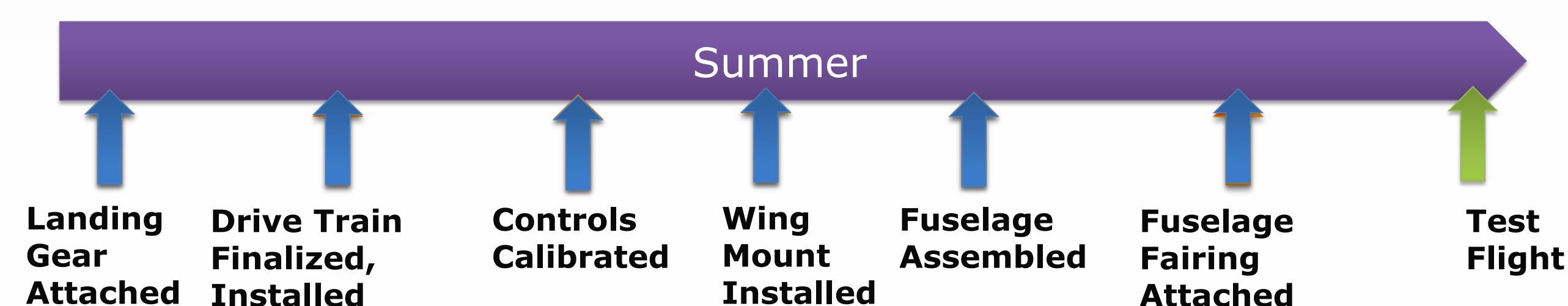
- Wing Span: 108 ft.
- Aspect Ratio: 29.75
- Taper Ratio: 0.6 (outward 21 ft.)
- Wing Chord: 4 ft.
- Horizontal Span: 10 ft.
- Horizontal Chord: 3 ft.
- Vertical Span: 5 ft.
- Vertical Chord: 2 ft.
- Propeller Diameter: 12 ft.
- Propeller Speed: 200 rpm
- Projected Total Flight Weight: 300 lbs.
- Projected Flight Speed: 17 mph

Team Members



Dat Huynh (Project Manager), Chieh Lo Hsieh (Chief Engineer), Israel Cruz, Franco Staub, Cameron Haygood, Samuel Reyes, Michael Morey, Edmund Situ, Sokvuthy Chan, Onalli Gunasekara, Anthony Pham, Chu Yi Liu, Kelsey Safar, Samuel Pan, Junjie Huang, Khoi Ngo, Medhi Razouane, Linh Ly, Wyzza Nagui

Timeline



Contact Information

Dat Huynh: dvhuyh@uci.edu
 Chieh Lo Hsieh: chiehloh@uci.edu
 Website: ucihpa.com

