Aircraft Characteristics

- Wingspan: 50.20 in
- Length: 29.75 in
- Empty weight: 0.800 lbs
- Max payload fraction: 73.33%
- Motor: E-flite park flyer 370, 1360 kV brushless
- Aspect ratio: 8.98
- Planform area: 292.38 in²
- Dihedral angle: 10°

Goat Works

James Blair
Ethan Connors
Paul Crosby
David Irwin
Keegan Mehrtens
Carlos Sarria

Advisors:
Professor David Olinger
Professor Simon Evans

Worcester Polytechnic Institute
100 Institute Road
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Innovations

- Collapsible boom tail
- Simplified four piece assembly
- Detachable wings
- Shear webbing in wings

Manufacturing

- Parts were toleranced to ensure accurate fabrication
- Team developed jigs for precise construction
- Manufacturing turnaround time of less than 8 hours
- Cost per plane: $333.64
  - $71.41 without electronics

Predicted Performance

- Predicted raw flight score: 105.6
- Test flight operational availability: 87.5%