

Team Roster

Chief Engineer

Erin Westbrook

CAD Lead

Chris Maples

Aerodynamics

Eric Ruhlmann (Lead)

Jay Anderson

Zach Etier (Car Lead)

Jarrett King

Propulsion

Jared Allison (Lead)

Bradey Baird

Jacob Kuhlman

Gloria Moseley

Chris Petrin

Structures

Bobby Pollock (Lead)

Sudarshan Dhakal

JJ Estrada

Arron Martin

Zac Matson

Harley Richardson

David Strawn

Wes Turpin



For Contest Information and updates, please visit speedfest.okstate.edu

To see past Speedfest and DBF projects, as well as other Oklahoma State research projects, please visit aerodesign.okstate.edu

Special Thanks

Andy Arena, professor

Dan Bierly, pilot

Speedfest V

April 25, 2015



The Reckoning

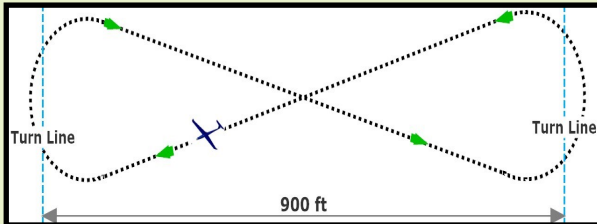


Black Team

Mission Requirements

Air Mission

The Timer begins. The Aircraft must be carrying a Payload. The Payload consists of an RC car and a GoPro Hero3 camera. The Aircraft takes off and must fly 15 flags, from pylon to pylon, on the following course. The Aircraft drops the Payload.

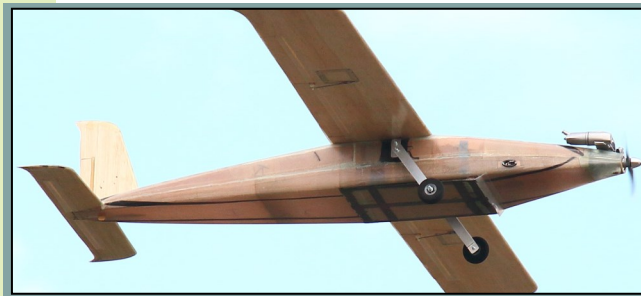


Ground Mission

The Payload begins the Ground Mission. The Ground Mission consists of a course on runway and grass. The Payload must navigate the course, view a sign, and come to the finish line to greet victory and glory. The Timer stops.

Victory

The shortest time wins. If an autonomous Payload is used, time is decreased by 20%. If the Payload does not finish, the mission time is increased by 75%. The Payload must prove it saw the sign and otherwise risk disqualification.



Car Specifications

E-Revo VXL 1/16th Scale Car
Engine: Castle Creations 1/10th motor
Autopilot System: 3DRobotics/Arduover



Aircraft Specifications

Wing Area: 6ft ²	Horizontal Area: 140in ²
Wing Span: 6.5ft	Horizontal Span: 28in
Wing Chord: 11in	Vertical Area: 60in ²
Taper Ratio: .9	Vertical Span: 10.5in
Aspect Ratio: 7	GTOW: 12.5lb
Length: 66in	

