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

Black Team

The Reckoning

Speedfest V
April 25, 2015

Collegiate UAV Design Competition
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/Ardurover

Aircraft Specifications

Wing Area: 6ft²  Horizontal Area: 140in²
Wing Span: 6.5ft  Horizontal Span: 28in
Wing Chord: 11in  Vertical Area: 60in²
Taper Ratio: .9  Vertical Span: 10.5in
Aspect Ratio: 7  GTOW: 12.5lb
Length: 66in