Missouri S&T
Advanced Aero Vehicle Group

SAE Aero Design Competition
What Is AAVG?

The Advanced Aero Vehicle Group is a competitive and voluntary student design team in which students can use their knowledge from the classroom and apply it to real-world aerospace/systems engineering projects.
What Projects Are We Involved With?

- SAE Aero Design
  - Advanced Class
  - Micro Class
- USLI
- R&D
AAVG’s History

- Formed in 1999
- One of 10 official student design teams at Missouri S&T
- Competes in SAE Aero Design Advanced and Micro Class
- Started launching rockets in 2006
2001 2nd Place
2002 3rd Place
2003 1st Place Overall
2004 2nd Place
2005 3rd Place
2006 2nd Place Design
2008 2nd Place Design
2009 3rd Place Overall
2010 5th Place Overall

Advanced Aero Vehicle Group
SAE Aero Design

Advanced Class

Micro Class

Advanced Aero Vehicle Group
Micro Class

- Empty weight to payload ratio
- Special task
  - Fit in a brief case
- Scoring:
  - Payload fraction
  - Oral presentation
  - Written Report
Advanced Class

- Gross Weight limit 55lbs
- No span limit
- .65 in$^3$ max engine displacement
- Data Acquisition System
  - Record take-off distance

Advanced Aero Vehicle Group
Looking To The Future