NASA
West Virginia Space Grant Consortium

Organizational & Personal Transformation:
A West Virginia Story
A Little History

- Modest Beginning in 1991 (seven total members)
- Expanded in 1996 to 10 academic affiliates
- Expanded again in 2003 to eleven academic affiliates
- Include both of the HBCU’s in WV
New Partnerships

- WV High Tech Consortium Foundation
- NASA IV & V Facility in Fairmont, WV
- Governor’s Workforce Investment Division
- True Partnerships with High Tech Companies
Matrix of Programs

Fellowships/Scholarships:

• Undergraduate Research Fellowship (at least $1,000 each)

• Graduate Research Fellowships (at least $12,000 each)
Matrix of Programs

Summer Internships:

• USRP
• NASA Academies
• SIP at Goddard Space Flight Center
• Fellowships at the IV & V Facility
• Internships at High Tech Companies in West Virginia
Matrix of Programs

Research Infrastructure:

• Joint University-Industry Research Opportunity ($20,000 each)
• Faculty Research Seed Grants ($20,000)
• Inter-disciplinary Collaborative Research Grants ($30,000 each)
• Summer Faculty Fellowship Programs at NASA Field Centers ($15,000 each)
• Research Development Grants (approx. $500 each)
Matrix of Programs

Education:

• Pre-college Course Development ($5,000 each)
• College Course Development ($10,000 each)
• K-12 Outreach (Approx. $3,000 each)

Public Service and Outreach:

• ($30,000 total)
Matrix of Programs

NASA ESPCoR Programs:

- Travel Grants ($1,000 each)
- College University Collaboration ($20,000 each)
- Seed Grants ($5,000 each)
- Two (relatively) large research projects at West Virginia University and Marshall University ($350,000 total)
Summer Internships

- High Tech Companies in West Virginia: 16

- NASA Related Facilities: 15
Student Satellite Program

Goals

• Adopt program as a required part of the WVU Aerospace Engineering undergraduate curriculum
• Train faculty in member institutions to conduct a balloon satellites project.
• Offer an additional elective course at the senior or beginning graduate level
• Participate in NASA plans for student-designed payloads.
Student Satellite Program

Student teams design, build, launch, track, and recover small electronics payloads, using helium-filled weather balloons to send their payloads into and beyond the stratosphere!

http://www2.cemr.wvu.edu/~satellite.balloon/
Student Satellite Program

Final steps of preparation.

The Launch

Tracking

Curvature of earth as it tops the clouds