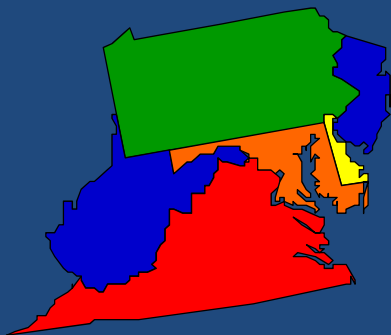




Maryland Space Grant Consortium

Focus Project
Minority Serving
Institutions Partnership
Development Program



Mid-Atlantic Regional Meeting

Charleston, West Virginia

2009 October 6

Minority Serving Institutions Partnership Development Opportunity

How might MDSGC respond?

Our environment (Maryland) and our membership determined a lot of our thinking

Members of MDSGC

Hagerstown Community College

Johns Hopkins University

Johns Hopkins University Applied Physics Lab

Morgan State University

Space Telescope Science Institute

Towson University

United States Naval Academy

University of Maryland College Park

University of Maryland Eastern Shore

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University of Maryland Eastern Shore

A solid, long term partnership already existed, so what do we “develop”?

Closer interaction among the students attending our affiliate institutions

Greater understanding of the research and technical capabilities at each campus

Greater appreciation of the opportunities across Maryland institutions

Collaborative efforts among faculty

The Exchange of Hostages Scenario

- UMCP, Morgan State, UMES – all of which have major aerospace science and engineering research activity
- Three students from each university would spend the summer working on a research project at one of the other universities
- They would be housed near the host institution

- A PI was chosen at each university to shepherd the process, along with the MDSGC Assistant Director
- Students selected a research project from the descriptions provided by the mentors
- Mostly engineering related projects, but some science as well
- Students presented their work at a final research seminar at NASA GSFC

- Evaluation made by the mentors, students and the MDSGC Assistant Director (ongoing)
- All of the mentors, Pis, and students have expressed satisfaction with the project
- Funds were included for the students to present their work at conferences after the summer

Research Projects

Experimental Prototype of a Remote Controlled Platform to Monitor Water Quality Data

Using Matlab Simulink to Simulate the Performance of a Direct Receiver

Development of Systems Engineering at Morgan State University for NASA Workforce Pipeline Education

Using a Low-Fidelity Simulator to Gauge Eye Reactions in Differing Weather Conditions

Applications, Issues and Challenges of Kite Aerial Photography

A Quantitative Analysis of Fuel Consumption due to Commercial Flight Delays and Rerouting Processes

Modifying the Space Sciences Lab Rover



The Future

We are looking for ways to secure funding to continue the project in the future

The project is simple in concept, and easily replicable

The project could be expanded to include a region, rather than just a state