## **Minutes**

## National Council of Space Grant Directors Fall Meeting

Green Bay, Wisconsin September 20 – 23, 2011

## Minutes Submitted by Scott Tarry, November 5, 2011

**General Session: Day 1** 

## Welcome - Aileen Yingst, Wisconsin Space Grant

• The Wisconsin SG staff was introduced in dramatic fashion with a Packer theme. Aileen welcomed everyone and reminded about shuttle arrangements and the lost and found.

## Space Grant Introductions - Chris Koehler (CO SGC), National Council Chair

- Called the meeting to order at 1:09 and thanked the Wisconsin Space Grant staff. Thanked DC SG for their efforts in hosting the Spring meeting. Reviewed the conference. Chris gave a little overview of his life since the last meeting...
- Emphasized family and asked us to welcome new members of the family. A number of new Space Grant personnel from around the nation were introduced as were a number of NASA personnel and guests.
- Announced that Mike Drake passed away this morning.

## **Executive Committee Update Presentation – Chris Koehler**

- Introduced the members of the Executive Committee (Ex Comm).
- Described his role as Council Chair, which includes weekly teleconferences with Diane, monthly
  teleconferences with Ex Comm. Described transition meeting in DC and advocacy for SG
  program within and outside NASA. Discussed archive of minutes and effort to collect a full set.
  Presented map indicating representation and participation in the meeting
- Handed out sheet containing 30 great ideas that were generated at the last meeting. He asked that people take a look at the list and rank their top ten ideas. Discussed agenda... networking time, open mic time, etc. Invited presenters to get with him at break to load files ahead of time.
- Explained that door prizes have been provided by Wisconsin SG and reminded everyone that prizes will come from all jurisdictions for the DC meeting next Spring.

## Secretary's Report - Scott Tarry (NE SGC), Secretary

Scott Tarry presented minutes, which had been distributed electronically for comment and correction. No further changes. Mary Sandy moved the minutes be accepted. Peter Sukanek seconded. Unanimous acceptance.

## Treasurer's Report - Peter Sukanek (MS SGC), Treasurer

• Peter Sukanek presented Treasurer's report (see attached). Invited questions. None. John Gregory moved, Aileen Yingst seconded. Unanimous acceptance.

## Nominating Committee Update and Elections - Bill Garrard (MN SGC), Committee Chair

- Bill Garrard presented report. See attached. Asked for volunteers from the committee to help distribute and collect ballots later in meeting. Noted election in Spring - Executive Committee Chair and three open positions. Explained that working groups will have chair elections at meeting in DC in Spring. SG Foundation Board election will take place at this meeting. Bill explained the need for people to either nominate themselves or others so there is good representation on the elected committees.
- Bill G, called for nominations from the floor. Chris asked that Directors who are not on either the Executive Committee or the Foundation Board stand so that others could see and identify potential nominees.
- Scott Miller (KS) nominated himself and was added to the ballot. Aaron Thomas (ID) nominated himself as well. They joined Des Jardins (MT), Sugumaran (IA) and Sukanek (MS) on the ballot.
- Peter Sukanek moved the nominations be closed. Aileen Yingst seconded. Nominations were closed after unanimous voice vote.
- Ballots were distributed. Votes were cast. Ballots were collected.

## NASA Program Updates – Part I

## Office of Education Updates - Diane DeTroye speaking on behalf of Leland Melvin, NASA Associate Administrator for Education, NASA HQ

Diane noted that is was a tremendously busy time at NASA HQ... many changes in Education Office. She extended thanks to WI SG for hosting meeting. Asked NASA personnel to stand and introduce themselves... representatives from NASA HQ, NASA Ames, JSC, KSC, GRC, MSFC, JPL... Introduced NASA SG and EPSCoR staff... Susan Stewart, Katie Pruzan, Frank Six, Sasha Korobov, LaTeicia Durham, Shan de Silva, Jeppie Compton, and Mike Cherry.

Federally required session on constitution... room split down the middle for constitution jeopardy. Rules explained. Games was played. Fun was had. Prizes were awarded.

NASA's New Directions... Diane noted end of shuttle program. Spoke about the commitment of the personnel responsible for the STS program. New direction means a transfer of low-earth orbit business to private American companies, which allows NASA to recommit itself to human spaceflight – ISS will be

centerpiece of NASA's human spaceflight activities. Discussed new technologies, MPCV, new HEO Mission Directorate. Noted CubeSat launches involving SG – Alabama, Montana, and Michigan – and other launch and exploration efforts

New NASA Education Vision... To advance high quality Science, Technology, Engineering, and Mathematics (STEM) education using NASA's unique capabilities. Interested in investments in Higher Ed, Elementary and Secondary Ed, Informal Ed through strategic partnerships. Beginning to migrate away from strict boundaries that separate Higher Ed, E & S Ed, and Informal Ed... a lot of flow back and forth across the three elements... Budget challenges – Leland currently advocating for 2013 budget before OMB. CR through mid-November 2011. Super Committee will cut \$1.4 trillion. If not, automatic across the board will be enacted automatically. Agencies are required to come in with budget requests 5% and possibly 10% less than the 2011 funded level. NASA must cut approx. \$1.7B. 2012 language is not settled. Joint committee resolution will determine funding, but not clear when and what that will be. Senate language as it currently stands would eliminate K-12 program because of funding for Higher Ed and Informal.

Diane then discussed Strategic Goal 5, Outcome 5.1, and Objective 5.1.2 – agency is especially interested in diversity. Discussed Strategic Goal 6, Outcome 6.1: Attract and retain students in STEM disciplines along the full length of the education pipeline.

Chris Brown asked for details on NASA's budget for education, which Leland is presenting to OMB. Diane could not give details because of stage of process.

Mary Sandy asked if SG and the partnerships that we have are recognized among the strategic partnerships that are being stressed.

Pat Hynes asked about Strategic Goals, Outcomes, and Objectives, noting that there are a variety of other issues and areas beyond 5 and 6.

Steve Ruffin asked what the impact would be on SG if automatic cuts happen if Super Committee fails to reach agreement.

Diane referred to the Education Design Team Charter, which is supposed to assist Agency in establishing goals, structures, processes, and evaluative techniques for 'sustainable and innovative' STEM education

EDT made 3 programmatic recommendations...

- 1) Focus to improve impact in areas of greatest need... teacher training for middle school... higher Ed that provides experiential learning...
- 2) Identify and manage partnerships.
- 3) Participate in national and state policy discussions

and three organizational recommendations...

- 1) Establish structure to implement strategically integrated portfolio
- 2) Expand charter to enable deliberate education program design and eval
- 3) Improve communication to inspire learners

NASA Education Office would be reorganized into two sections:

STEM Education and Accountability, which will consist of...

- Formal and Informal Ed
- MUREP
- Innovation
- Evaluation, Performance Monitoring, and Accountability

and Aerospace Research and Career Development, which will consist of...

- National Space Grant
- EPSCoR

Diane then presented a chart breaking down NASA Ed Funding by Source for FY10 – SG/EPSCoR accounted for 30% (\$68.9 million). 58% of Agency Education Portfolio accounted for by STEM Higher Ed. She then presented chart contrasting the PBR for FY11 and the Enacted FY11. Share of funding devoted to SG and EPSCoR grew in proportion to other programs, which caused stress in Office of Ed.

Philip Geubelle (Illinois) asked if chart for FY10 would look much different from chart for FY11. Diane didn't know.

Steve Ruffin (Georgia) noted that SG was 25% of NASA Ed pie in 2010.

Chris Brown (North Carolina) asked about total agency investment in education going up or down from 2010 to 2011? Diane wasn't sure because data aren't complete.

Tehseen Lazzouni asked about 12% Higher Ed slice and what that was made up of as opposed to SG and EPSCoR.

Diane reported that the NASA education community met and held agency wide teleconference with Leland yesterday... She reported the following results from that teleconference. The emphasis was on Investment Strategies for Infrastructure...

- Education networks to connect communities of practice
- Access to and utilization of NASA's unique assets and platforms (lunarbotics, moon buggies, student launch initiatives, RockOn, etc.)
- Web infrastructure and distribution networks (on-line communities and resources very distributed and not very cohesive)

and Lines of Business...

- Educator professional development
- NASA scholarships, internships, and fellowships
- Competitive opportunities and partnerships
- Innovative pilot opportunities

Diane emphasized that all of this is brand new – literally a week old. She did report that there are six themes that Leland feels strongly about and they are Essential Portfolio Elements that will help drive funding decisions...

- Scalability (can be huge, but can be small as well)
- Global Design Challenges (focus students on NASA themed challenges)

- Teacher Preparation
- Infrastructure (gain efficiencies)
- Innovation (continue to push the envelope)
- Evaluation and Accountability

Diane noted that these themes are brand new as well – only 14 days old – and emphasized that all these changes create a very challenging environment for NASA education personnel...

Sharon Brandt (Wisconsin) raised the concern about defunding successful programs that were innovative pilot programs, but are now mature? Diane likened the situation to the decision to cancel shuttle, which was a successful mature program. There was a need for innovation and new solutions, which necessitated the end of the current program.

John Gregory (Alabama) asked about Leland's six themes. He noted that Space Grant is doing all of these, yet we don't see or hear Leland using Space Grant as an example of accomplishing or addressing these themes such as the global design challenges... Diane said the challenges Leland mentions reflect his interest in partnerships with visible partners.

There were additional questions about experiential learning... Diane explained that EDT said SG should focus on undergrads and other elements of NASA Education should focus on grads and other groups.

Wally Fowler (Texas) asked if our focus should change and Diane said we should make no changes right now... data show that 83% of our Higher Ed students are undergrads... which is good.

#### 2010 Data Review

Diane noted that each Space Grant will get consolidated report of results from Mike Cherry and will need to respond.

She offered some points of clarification regarding collaboration between College of Education and Science and/or Engineering Departments. She emphasized the question: Are you engaged with your College of Education in the area of pre-service and post-service educators?

Diane presented some Notes on the Network... One important highlight is that we now have 1009 affiliates. Diane noted that his is great, but reiterated the need to make sure these are people with whom we are genuinely working. She reminded us about the importance of Diversity at three levels: Institutions, Individuals, Management

Diane reported that 6868 were being tracked longitudinally. Mary Sandy (Virginia) asked if this represented everyone who was supported and the answer was yes.

Diane presented the NASA Educational Annual Performance Goals. She noted that PART is no longer used; we're evaluated on the basis of the Annual Performance Goals (APG)

According to Diane's slides, Space Grant made significant contributions to Annual Performance Goals 1 through 5.

• APG 1 – SG accounted for 57%

- APG 2 SG accounted for 79%
- APG 3 SG accounted for 20%
- APG 4 SG accounted for 64%
- APG 5 SG accounted for 21%

Denise Thorsen (Alaska) asked who set the goals and Diane explained that it was a collaborative effort between NASA and OMB...

Diane then discussed whether we are meeting our goals....

Regarding support for underrepresented students, Diane showed chart that showed some SG are doing very well in this category, while others are falling woefully short.

Susan Brew (Arizona) asked if the targets are established by NCES data or something else? Diane said NCES data are used.

Diane noted that a comparison of K-12 activities from FY09 and FY10 revealed an increase in the numbers of precollege students, precollege teachers (in-service) and informal educators, which shows responsiveness to emphasis on middle schools.

Diane discussed the Space Grant Congressionally-Directed Augmentation, which we should expect next week, which will be followed by another "Competitive Solicitation" for \$5 million. The details on this solicitation are not yet available.

Diane then provided an OEPM update. She noted that IDMax process has been designed to establish access to OEPM and Sasha will provide additional information. Established SOLAR identities will already have access to OEPM.

Diane invited SG to send Consortium Activity Highlights, which will be forwarded to the administrator who reads these and discusses with Leland. Send information about SG and EPSCoR major milestones and events. Please make entries no longer than a short paragraph.

Greg Guzik (Louisiana) asked if we could get access to the updates that were sent in. Sharon Brandt (Wisconsin) noted that it would be helpful to see what others are reporting so that everyone is aware of what is of interest.

Bill Garrard (Minnesota) asked about augmentation. Diane confirmed that we would hear about this next week. Asked how the \$5 million competitive part might be competed and Diane invited everyone to send ideas.

Yervant Terzian (New York) asked about expiration of funds that have not been awarded. Diane said that there is a two-year window. If there is concern about executing the programs, no one is required to submit a proposal. Activities need to be scoped appropriately – quality and feasible. Reiterated if opportunity does not suit our consortium, then we do not need to submit a proposal.

Chris Fritsen (Nevada) said everyone would be able to execute programs, but there is concern about being able to report. Diane said it should not be a problem. Her office will

help get the data reported. There is recognition that numbers could be lower because of the timing on the funding.

Aileen Yingst (Wisconsin) asked about communication given the workload experienced by Diane's staff. How do we best get information and answers from Diane? Are there some things we could do to help expedite the flow of information? Diane said put URGENT in subject line and copy others on the team – where appropriate copy LaTeicia on budget/finance issues... include the grant number in the subject line and/or message. She asked that we don't send rambling e-mails.

Chris Brown (North Carolina) asked about EDT recommendations. What is the focus or the message that we need to be sure we understand? Diane responded that the EDT recommendations are still in development and are not at the level where it articulates what we should be doing and if there are things we should be doing differently.

Diane emphasized that things are going to be different and possibly very different, but she does not know what that will look like specifically.

Space Grant Highlights – Part I Enhancing Space Education: An iPad App – *John Boucha*, Sponsored by Santhosh Seelan (ND SGC)

John the goals of his project and the process he went through to develop an iPad app focusing on space education. He provided some detail about the programming and editing as well as the layout of the app, especially the way a user can access images and videos. He used Titanium Developer to demonstrate the functionality of the app.

Chris K. adjourned the meeting at 4:52 PM

## **General Session: Day 2**

## **Announcements and Updates**

Aileen shared some Wisconsin lingo. Chris thanked Wisconsin SG for reception and tour. Scott Tarry reminded people about seeing Majid to pay for the EPSCoR lunch.

#### **National Space Grant Foundation**

National Space Grant Foundation Update - Wally Fowler (TX SGC), Chair and Mark Fisher, Executive Director

Wally gave quick presentation of contracts currently managed by the Foundation then yielded back the remainder of his time to let us get back on track

MN Space Grant Middle School High-Altitude Ballooning Initiative – *James Flaten*, Sponsored by Bill Garrard (MN SGC)

Described the various high-altitude ballooning projects in MN and how they led to the middle school initiative. Developed "snap together" sensors and heaters which let more students work on payloads.

Emphasized the use of a "command center" to replicate mission control and data collection. Used college students to work with middle school students on White Earth Reservation. Also conducted a 4-day teacher only workshop, which gave teachers experience with all elements of a launch. Described how schools approached their launches differently in terms of student involvement and curricular structure. Shared video clip of payload landing in tree near farmhouse. Shared feedback from students and teachers. Positive experience even for those students who weren't actually involved in the launch. Noted the potential for "for hire" ballooning consultants to help schools.

## Reduced Gravity Program - Doug Goforth, Johnson Space Center

Overview of the Reduced Gravity Education Flight Program... student and teacher access to unique NASA asset for reduced gravity research opportunity.

Start to stop engineering/science research opportunity proposed to NASA, evaluated, and reviewed. Largest year – flew over 500 participants. Higher Ed and K-12 opportunities including Microgravity University, Systems Engineering, and four pilot programs, Grant Us Space, MIS & Community Colleges, Teaching from Space, and a Department of Energy opportunity.

Photos taken from reduced gravity flights are often used widely by institutions, which in turn, promotes NASA opportunities.

Grant Us Space was open to graduate students, which was a unique opportunity and well received. Outreach is a required element for each proposal. Now require a 3-5 video presentation for those schools interested in participating in the future.

50% of participants in recent flights sought and received support from their SGs and most said that without SG support they would not have been able to participate.

Question... timing is important. Grant Us Space was not well timed in terms of semester schedules. Chris K asked if Grant Us Space was going to be offered again. Doug said it wasn't at this time, but he suggested that SG or anyone else could pool resources to buy a flight week. Show of hands suggested strong interest in Grant Us Space.

## Star Lab Launch Vehicle: New Suborbital Opportunities From Florida – Panayot Slavov, sponsored by Jaydeep Mukherjee (FL SGC)

Described a reusable air-launched sounding vehicle that has been designed and developed collaboratively by university and industry. ERAU - Daytona Beach, UCF, and U of Tampa students involved in project. Starfighters provides platform (F-104). Expecting to be fully operational with 8 flights per year by mid 2012. Desire to provide frequent and economical flight opportunities for education and research. Seeking supporters and students from outside Florida to participate in the project.

Questions... what is the cost? Reviewed payload costs (e.g. \$12K for 2kg) noted there are opportunities for discounts if two or more flights are purchased right now. Do payloads have access to space? Yes, payloads will have space access individually.

## ISS National Lab Education – Debbie Biggs, Johnson Space Center

Update on NLE project. Reviewed vision of the ISS NLE, which emphasizes a broad range of activities for students of all ages. Shared information and urls for variety of ISS NLE experiences including ARISS (10 minutes), EarthKAM (4 hour process for requesting and getting an image), and In-flight Education Downlinks (20 minutes). Two proposal windows open each year for ARISS and IED. 3-4 annual opportunities for EarthKAM. Described some partnerships (Zero Robotics with MIT), (Commercial Generic Bio-processing Apparatus with BioServe), and (Lego Bricks with Lego). In process of getting some new payloads certified, which is a lengthy process. Noted Saturday Morning Science and ISSLive! which will deliver real-time ISS data through the Internet. ISSLive will go live on the internet (http://spacestationlive.jsc.nasa.gov) with activities written at the AP science level – so they are good for AP high school and undergraduate students. Offered invitation to the NASA Education Stakeholder's Summit II in Chantilly, VA at the Westfields Marriott Conference Center.

## NASA Space Technology Research Fellows Program: Opportunity for Grad Students and Their Faculty Advisor - Liz Ward, representative from NASA Langley Chief Technologist Office

Described a new program from the OCT. Encouraged SG to have someone from OCT come to DC meeting since things are changing. Shared distribution of current fellows by university and state. The FY12 announcement has not been released, but will appear on NSPIRES.

Question... could the awards be shared with SG directors so we can make contact with the fellows and the faculty mentors. Liz said a list will be sent. David Kankam recommended two individuals to serve as speakers from the OCT. Andy Eckel from GRC would be great speaker for DC meeting regarding OCT fellows program and Claudia Meyer from GRC, but at HO would be good as well.

## Space Grant Highlights – Part II

## National Space Grant Student Satellite Program Update - Luke Flynn (HI SGC) and Angela Des Jardins (MT SGC)

Angela described the informal committee that has been formed to promote student satellite program within SG. Explained opportunity for NASA's CSLI. Noted the desire to launch CubeSats without relying on the Russians. Good news about CSLI is that CubeSats will launch on ELaNa mission, which means you won't be charged a launch fee (assuming you deliver on proposal, otherwise you pay up to \$50K). Noted HASP and RockOn/RockSat opportunities which are part of the pipeline in the crawl, walk, run, fly progression envisioned by the student satellite program leadership. Asked for help with survey of student satellite activities, which will be conducted by NASA Education in conjunction with NSGSSP.

Can people who are not directors be included on committee? Yes How many states are putting in proposals by Nov. 14 deadline? 4

## Reaching for the Stars: Inspiring with High Altitude Science - Luther Richardson, sponsored by **Steve Ruffin (GA SGC)**

Steve introduced Luther and explained the background of his Columbus (High School) Space Program. Described range of activities... FIRST Robotics, Zero Robotics, InvenTeams, Pete Conrad Spirit of Innovation, and DREAMS (Doing Research at Extreme Altitudes by Motivated Students). Systems engineering driven process of student-led projects. Described evolution of program and effort to collaborate with community groups, especially in Atlanta where the program can reach diverse audiences. Student Centered Approach. Have taken kids to Ames Astro-biology camps in Mojave. Edge of Space Camp. Has worked with NASA Ames and Marshall and GTRI. Critical to set up both students and teachers for short and long term success. Important to involve community groups.

Questions: John Gregory noted that Luther was a student at Auburn while a full-time teacher. Asked about cost of DREAMS program – \$15K per year for workshop, launch, etc.

How does all of this fit within standards, curriculum, etc.? Luther breaks elements of project into his AP courses and also has after school activities.

Tahseen asked what made him decide to be a high school teacher and where does he get his energy and enthusiasm. Was at a football game at Auburn and met his wife who wanted him to move to Columbus.

## RockSats - Chris Koehler, Director Colorado Space Grant Consortium

Described the follow-on program that has been developed to complement RockOn. Emphasizes lowcost access to space. Payload development is guided through a mentoring program. Costs are reinvested into the Rock... programs. RockSat-X is next generation of the program and provides full access to space to do whatever you want. Over 500 participants have participated in the progression of opportunities through Rock...

Majid Jaridi (West Virginia) asked question after being bribed to do so. Not really a question, said that the experience was the most fun someone could have legally. Gerardo Morrell (Puerto Rico) spoke briefly about PR's extensive participation and the impact of the program on students in PR. Described how program has benefited students from a number of disciplines including medical sciences.

Chris attempted to connect to his class back in CO, but they didn't answer...

## Kentucky Wing Design Competition: Building NASA's NextGen Aeronautics Workforce - Deborah Hinton and Dylan Skaggs, Sponsored by Suzanne Weaver Smith (KY SGC)

Showed video that described the program with interviews of SG director, instructors, and students. Dylan described how getting involved in an aviation program at his high school changed his life. He improved his grades, met new people, and discovered new opportunities. Deborah described how she moved from teaching physics to developing an aviation program. Discussed how the state was developed a program that now has 16 high schools involved offering aviation related curriculum and competitions such as the wing design competition.

Question: Are there opportunities for other states? Answer: This is a model that could be adopted by any state.

What's the investment? \$1K for each school for materials and a GA hired to run competition and serve as mentor. Community partners have been important in supporting the student opportunity.

## **Future Meetings and Ideas**

Spring 2012 National Meeting – Richard Berendzen, Director, DC Space Grant

Meeting scheduled for March  $1 - 3^{rd}$  in DC. Chris K. noted there will be a talent show.

Fall 2012 National Meeting – Robert Winglee, Director, Washington Space Grant

October 25-27, 2012 at the Red Lion 5<sup>th</sup> and Pike. Reception at the Museum of Flight in the new space wing. Tours on October 24 – Boeing plant in Everett (777) and Microsoft (home of the future) and possibly, weather permitting, a Mt. Rainier excursion.

### **Great Idea Activity**

Chris K described the benefit of two-way communication and the Great Idea activity at the last national meeting. Susan Brew (Arizona) explained how they accomplished their goal of recognizing SG students with a graduation sash. Had to complete a survey that provided information from students. Students loved the recognition. Barrett Caldwell (Indiana) shared outreach example and someone shared how the Great Midwest Region has developed a regional rocket competition.

Chris K explained the ground rules. If you don't want to participate, you don't have to. Important to have full participation. Chris K described how he wanted everyone to cast their votes for the top ten by placing their sticky notes on the sheets against the wall. Votes were cast and tallied.

Luke Flynn began reading ideas that garnered the most votes

- 38 Add low income and first generation to underrepresented group
- 39 Top 5 reports share good reporting examples
- 34 national space grant commercial
- 23 national success stories website
- 3 national space grant alumni academy
- 8 national space grant direction conference
- 5 space grant director mentoring program
- 22 provide CubeSat launches
- 28 Space Grant student conference
- 16 posters

Chris showed a motivational video after having volunteers lead each group. Invited groups to form and began working on their ideas as we move to lunch. Groups ranging from 4 to a dozen or so people formed and began discussing ideas.

### Lunch

Tehseen Lazzouni (California) explained that Mike Wiskerchen was retiring as CA SG Director after over 20 years of service. She shared a memory from Irene Xavier about Mike's frugality. Several years ago Mike decided to stay at a less expensive hotel near the Pentagon, took a wrong turn and ended up in a prohibited area. Frank Six said Mike called once about a rocket team and started a series of internships of California students at Marshall. Susan B (Arizona) spoke about Tom Jones taking a Native American earth bundle to space to protect him. Susan took the artifacts to a framing shop and met a woman who claimed to have been married to the head of NASA – Mike's ex-wife. Diane applauded Mikes' effort to manage CA SG and the relationships with 3 distinct NASA centers. Chris K. told story about his first SG meeting. Related the story of meeting Mike for the first time. Tahseen presented Mike with a photo of Atlantis landing signed by members of the SG family.

## Chris K. reconvened the great ideas exercise.

Number 23, the top choice, received 71 votes (top) and number 16, the tenth most popular idea, received 32 votes. Leaders gave 1-minute overviews of their group discussions and offered their declarations about when they would accomplish the effort that has been proposed.

Idea – Projected Time

- 3 2013
- 5 March 2012
- 8 next year
- 16 2013 DC meeting
- 22 Fall 2012 meeting
- 23 Spring 2012
- 28 2013 DC meeting
- 34 March 2012 for initial states, September for the rest, March 2013 for national ad
- 38 August 2012 to have data from states
- 39 March 2012

Reports from Idea Chairs as follows:

## Great Ideas Report on #3, National Space Grant Alumni Academy

Reported by Sharon Brandt, Wisconsin Space Grant Consortium

Initially each state sends a student representative (ambassador) from their Space Grant students that are picked for (in no particular order):

- Outgoing personality
- Communication skills
- Organizational skills
- Leadership
- Enthusiasm about Space Grant

These students would get together for one week at a NASA Center next summer (Langley was volunteered) where they would get a chance to network and to put together their own alumni organization that would be run by the students for the students (this would include their own website, facebook, etc.). If a state doesn't send some one the first year, they may miss the planning session but are encouraged to participate in the alumni association. Students would also discuss how to best recruit Space Grant students in their state to participate in this alumni association. One or more students from the NASA Academy Alumni Association will be brought in to help these students form the SG Alumni Association. This could happen as soon as 2012, but it will probably be 2013 and depends on state SG funding or a special grant from NASA.

### **Great Idea 34; National SG Commercial**

Present:

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### Discussion

## (1) The How

- requires student involvements; with a possible prize supplied by the foundation;
- Commercial should have 2 components a national component and a state component each component limited to more that 2 min.
- Should be fun add a celebrity or have 'Space Grant Gone Wild'

## (2) Where

- College Games, YouTube, National Competitions Lego, FIRST Robotics
- Movie theaters, pop ups at websites
- Congressional visits
- Update every few yrs

### (3) When

- Prototype to be develop for March 2012 Mtg
- Provide story book for states to produce their own commercial for Sept 2012
- Exec comm.(or sub committee) develops national commercial from the state commercials March 2013 ready for congressional visits.

## **Summary Report Idea #22: Provide CubeSat Launches**

Members in attendance:

William Garrard (convener) – Minnesota SG, Luke Flynn (Elected Lead) – Hawaii SG, Doran Baker – Rocky Mountain SG, Jun Yu – Vermont SG, Debbie Biggs – ISS National Lab, NASA, Gregory Guzik – Louisiana SG, Michael Wiskerchen – California SG, Luther Richardson – Columbus Space Program, Georgia SG, Chris Carter (taking notes) – Virginia SG, Denise Thorsen – Alaska SG

Purpose: Fly Space Grant CubeSats

Time Line: Unrestricted, but identify a mechanism for the routine space access for Space Grant CubeSats within 2 years.

Target Goal: October 2013.

Notes from the Group:

- 1) Since Universities in Space Grant consortia will continue to build CubeSats for the foreseeable future, there really is not a definitive end point for this task. However, the group can work to provide a mechanism for routine access to space for Space Grant CubeSats.
- The NASA CubeSat Launch Initiative is the best program current available that will provide regularly scheduled launches for Space Grant CubeSats.
- The HASP Program could also provide a pre-orbital platform on which Space Grants can test their CubeSats. Dr. Guzik (HASP Director) was part of our group and thought that this was a good idea. Dr. Guzik offered to talk to the NASA HASP office. Further, it was suggested that a CubeSat Workshop could be developed in conjunction with a HASP flight. Next HASP launch is September, 2012.
- 4) The group recognized that meetings such as the CubeSat Developers Workshop at CalPoly SLO would be helpful for Space Grants developing CubeSat programs.
- Some of the group recognized that it would be beneficial to have a CubeSat Builders Workshop. This would be a hands-on activity to "teach the teachers" on how to build and test a 1-u CubeSat. Even a simple CubeSat would require 2-3 weeks to build and text for a small group. Kentucky and Hawaii offered to host the CubeSat Builders Workshop, but both recognized that they would not have the necessary staff to hold a large workshop. Kentucky currently runs a CubeSat Workshop within the State. Multiple teams of CubeSat Builders would require more skilled personnel from other Space Grants. The goal of the Workshop would not be to replicate RockOn or RockSat. The Workshop would not be offered every year. The goal of this Workshop would be to teach the Space Grant staff members who would then provide mentorship for students in their

- respective States, so the actual goal is to transfer CubeSat building capability to more Space Grants.
- 6) The CubeSat Builders' Workshop could leverage online Space Grant course materials with respect to building small satellites. The Workshop could also add to this body of knowledge by expanding it with a "How-To" guide.
- 7) Mike Wiskerchen mentioned that he has a DoD project that will potentially offer Space Grants alternative access to space for their CubeSats. Mike is retiring from Space Grant to further this effort. He predicts that first flight involving Space Grant CubeSats could happen as early as next Fall (2012). DoD would pay for the launch either out of Kennedy or Vandenberg.
- 8) SpaceX may be offering payload space for Space Grant CubeSats in the future. Collective thoughts:
- 1) All attending agreed to join the NSGSSP. The CubeSat Launch idea could become part of the executable mission of the NSGSSP since the two are closely related.
- 2) The NASA CubeSat Launch Initiative offers the best way to get Space Grant payloads to Space. Other DoD or SpaceX opportunities should be explored.
- 3) HASP, next flight fall 2012, could offer payload space for Space Grant CubeSat tests.
- 4) A CubeSat Builders' Workshop might be a good idea. It would be a multi-consortium effort in terms of staffing the event, but Kentucky and Hawaii have the necessary Integration and Test Facilities (clean rooms, TVAC, Vibe Table) to possibly host the event.

## Next Steps:

- 1) Get everyone on this Idea list to sign up for NSGSSP membership.
- 2) Organize a monthly NSGSSP telecom to start in late October or November 2011.
- Talk with NASA CubeSat Launch Initiative, DoD (Mike Wiskerchen), SpaceX, and others to identify and then increase opportunities to fly Space Grant CubeSats.

# Write-up for Recommendation No. 5 at the National Space Grant Directors Meeting, Green Bay, Wisconsin, Sept. 21-23, 2011

The subcommittee included the following people:

Cater Arico, Connecticut

Haim Baruh, New Jersey

Janet Lumpp, Kentucky

Mary Sandy, Virginia

Sugu Sugumaran, Iowa

Denise Thorsen, Alaska

Goal: The goal is to provide mentors to newly appointed Space Grant directors from among existing directors. We would like to build on the practice that HQ has of appointing a NASA mentor to a new director and provide the new director also with mentors from among Space Grant directors.

## How:

- 1) The Executive Committee will maintain a list of SG directors who are experienced and are willing to serve as mentors.
- 2) Once HQ identifies the new director and assigns a staff mentor from the Space Grant Office, the name of the new director will be made available to Ex-Com.
- 3) Ex-Com will then appoint one or more SG directors to serve as mentors for the new director. If necessary, mentors will also be provided to new program coordinators.
- 4) Input will be sought from the Space Grant Office when matching mentors with new directors.
- 5) Efforts will be made to select mentors whose positions are compatible with the new director, such as similar funding levels (designated or program state), whether the state is an EPSCoR state or not, and whether there is a new lead institution or not.

An added benefit of the proposed program is that questions asked by the new directors will be compiled and formed into a FAQ or best practices booklet that will be made available to any Space Grant director, new or not.

When: The program can be implemented immediately. Once we have HQ approval, Ex-Com will appoint a committee which will implement the program, by first compiling a list of mentors and then contacting the new directors. Alternatively, Ex-Com can implement the program directly, without appointing a subcommittee.

## **Space Grant Strategic Planning Workshop 2012 (Proposed)**

Submitted by John Gregory and Yervant Terzian, for the topic committee.

A proposal emanating from the 'fresh ideas' session at the National Space Grant meeting, Green Bay, WI, September 2011.

Space Grant has held 2 general or 'strategic' planning sessions in its 21 year history, the first was held at Woods Hole, MA in 1990 and the second in Denver, CO, about 10 years later. We propose that a new strategic planning session be organised now and held in 2012.

Purpose:

To examine the direction, role, objectives and plans of the Space Grant Program for the next 10 years in the sustenance and development of US STEM workforce and aerospace science and engineering excellence.

In doing this, the workshop participants will examine:

- 1) Congressional mandate, as expressed in the Authorization bills of 1989 and subsequent years.
- 2) The accomplishments of Space Grant in the past 21 years.
- 3) Where should Space Grant go now? What improvements and redirections are needed?; what current programs have proven their effectiveness and need extension to more participants?, etc, etc.

As we examine item 3, we must (in the parlance of strategic planning):

- define the objectives and goals of the program (as defined by all its participants).
- evaluate the strengths and weaknesses of the current program;
- examine the values of the individuals and organisations critical to the execution of the program;
- examine external or environmental constraints (for example, amongst others: Congressional direction; national fiscal limits; requirements, needs and emphases of NASA education leadership and their program objectives; requirements, needs and emphases of the 1000 affiliates and partners in the 52 jurisdictions of SG, in terms of their interest in being partners with NASA Space Grant).
- develop a plan for acquiring the resources to implement that which needs to be done.

## Attendance:

Open to all 52 Space Grants, NASA leadership, NASA education at HQ, the Centers and Mission Directorates. Other participants from industry and state organisations are included. There are no exclusions.

Responsibility for management and execution:

National Council of Space Grant Directors, and its designees.

Time:

Summer 2012, or Fall 2012, perhaps replacing the regional meetings. TBD

Who's on-point?

A preliminary workshop organising committee has been established including SG directors, NASA personnel and others. This is open to other participation.

Co-chairs are:

Yervant Terzian (NY), <terzian@astro.cornell.edu> and John Gregory (AL), <gregoryj@uah.edu> Resources needed:

Travel costs, meeting costs, facilitator contract, reporting cost. (all TBD). Source of funds: TBD

Great Idea #38: Change the definition of underrepresented groups to include low income economic groups and first generation college students.

Our group recommends that all Space Grants begin collecting data from participating students on their status as low income or first generation college students. Becky Highfill, Program Coordinator for Idaho Space Grant, will share the definitions and language used by other national programs that serve low income families and first generation college students. We declare to add this part of our data collection to Space Grant applications and longitudinal tracking by August 2012, including the Space Grant Foundation data collection. Beginning in 2013 we will share data at national meetings to highlight Space Grant work serving these two underrepresented groups. We also recommend that Space Grant programs target students served by the federal TRIO programs in their state including Upward Bound and McNair Scholars.

## #39 Top 5 Reports

Redefinition: Share excellent (highly-rated) annual Space Grant reports with all consortia so they can help other Space Grants in preparing their reports

- Step 1 would be to approach Diane to discover what she can and cannot tell us. We're aware she will never release any state's name or identifying information, but for the sake of completeness, it is important to know whether she can release \*any\* information (anonymous review comments, portions of proposals, etc.). We assume this will yield nothing, but we had an interesting idea come out, in which we would see if we could ask Diane to provide annual report "mentors", much as states were given mentors after 5-year reviews where needed. We'll try that, too, and see where that might go.
- Step 2: We'll ask the directors who are willing and received excellent comments on their annual proposals, to make those available to the other consortia. One director (or the Foundation) will be tasked with organizing these and making them available through some type of software (GoogleDocs, or again, the Foundation) that will allow us to regulate access. It needs to be understood that complete proposals can rarely be stripped of identifying information (e.g., text that says "We in the state of XXX" will not be redacted), but we will not purposely identify these proposals.
- We intend for this to go online by March of 2012.

## Report on Suggestion 28: National Space Grant Student Conference/Presentation

Our plan is to have a student presentation day one day before the Washington DC meeting of Space Grant. Each state can send one student/student team. Due to the possible 52 teams, the plan is to split these into 26 powerpoint presentations and 26 posters presentations. States would do a presentation/poster in alternate years.

There will be a printed schedule of presentations/posters. Congressmen and senators, as well as NASA Headquarters personnel would be invited to attend. – Obviously state SG representatives would be there also.

There would be no student fee to attend and present. Each state SG would pick up student expenses.

Posters would have a special afternoon/evening(?) poster session/reception for people to view and ask questions.

No judging or awards.

A nice certificate signed by the NASA Administrator would be awarded to each student.

We DECLARE this we should initiate this at the 2013 Washington DC Meeting.

Our group consisted of myself—and representatives from Oregon, North Dakota, Idaho, and Nebraska. (Sorry—I forget some of the names!) After out meeting I met informally with Stephen Haug of Missouri who chaired the suggestion for a poster exhibition at NASA Headquarters. We both agreed we should merge these two areas—the posters at our Space Grant meeting could then be displayed at Headquarters the next year. (Rotating posters every two weeks.) we will try to work on this further before the March 2012 meeting.

Gary Slater, Ohio Space Grant

Space Grant Success Stories Website

Notes

-Leader - Eric Day

-Suggestions/notes for website:

Clickable map

Online data collection form

Highlights section

Weekly Feature

**RSS** Feed

Site must be easy to implement

Can include current students and alumni

Council Website will host

Can be sortable by keywords

SEO for entry

Many SG's already have stories collected

Need student/alumni permission to post on website

Entries should include photos and upload ability

Crystal Bassett offered assistance

Timeline: BETA ready for DC Spring Meeting

Those who attended (from memory, a formal attendance was not conducted):

Mark Fischer

Becky George

Melissa Wragge

Heather Nelson

Crystal Bassett

Laura Peckyno

Becky Highfill

Chris K. noted that the Colonists didn't ask for permission from the British, so it's OK to venture into new territory or do things that aren't necessarily pre-approved.

Bill Garrard informed the group that Angela DesJardins and Peter Sukanek have been elected to the Foundation Board

### **Presentations**

## Space Grant Internship Workgroup Update – Barrett Caldwell, Chair and Director Indiana Space Grant

Barrett provided an update on the "internship doo-dah thing"... SOLAR is operational, but questions and concerns remain. Survey was sent out in August regarding SOLAR access and use. 30 states responded to survey. ~40 students logged in SOLAR were placed by other processes due to delays in gaining access to SOLAR.

Why worry about Co-ops?

- Not a SG task per se
- Most SG are not linked to primary co-op provider (different office or different campus)
- Students were being asked to register for Co-ops through SOLAR
- Centers reduce campus visits perhaps as a result of using SOLAR

An important next step is to link to NASA, track students through application process, share information with co-op offices, get ready for 2012.

Question: When will we live the reality of one stop shopping?

Answer: (Frank) Phase 2 of linking center specific projects is underway, but not accomplished.

Dave Rosage asked if Space Grants have access to SOLAR. Diane noted that IDMax was a hurdle, but SGs should all have access now.

Gary Slater (Ohio) noted that case of center wanting to fund a student from Ohio, but student's residency created confusion. Another issue concerned looking at student files taking considerable time and asked if there was a way to parse the data or create spreadsheets that could be ordered to call out students who would not be candidates for awards. Diane noted that she would talk to developers about adding this functionality to the software. Differences in state size and student applicant pools were incorporated in software design, but there may be a need for more training on this issue.

### Internship Opportunities at JSC - Frank Prochaska, Johnson Space Center

Frank thanked Barrett for his resounding support for SOLAR! Described benefits of internships at NASA. Described process for reviewing applications and interviewing intern candidates at JSC. Frank shared a student-produced video about their internship experiences. Provided an overview of the internship process. JSC has a person on staff to be a point-of-contact for SGs who are working with students seeking internships through the SOLAR process.

Takeaway message... Emperor Palpatine (Star Wars) doesn't endorse internships because his intern threw him into the main reactor of the death star, so internships must be good (since he is evil)...

## Industrial Internship Program - Patricia Cosentino, Sponsored by Tom Filburn and Mary "Cater" Arico (CT SGC)

Patty provided an overview of United Technologies and the internship opportunities provided by UTC's subsidiaries including Sikorsky, Otis, Pratt & Whitney, Hamilton Sundstrand, Carrier, UTC Fire and Security, and UTC Power. Discussed UTC's efforts to provide a positive internship experience through mentoring, coaching, performance reviews, and presentations. No copy/coffee jobs – all meaningful opportunities. Invited SGs to consider supporting interns in CT with UTC.

## NASA Aeronautics Student Programs - Liz Ward, NASA Langley Research Center

Talked about how aeronautics/aviation is a small, but important part of NASA because of the impact of NASA research on the safe and efficient operation of the air transport system. Aeronautic Scholarship Program - 20 students per year for undergraduates funded at \$15K per year for two years - 5 grad students \$35K for up to two years. Real World Design Challenge – High School Program – 7,000 schools participated last year. Supported by many industry and government groups... great opportunity for cost share from free software. Kick of is in October in DC. Noted engineering design competitions especially the green aviation competitions. Liz recognized students from Aeronautics Academy. SG sponsored 8 of 10 students. Showed video interview of student who was sponsored by the Montana SGC

## Formation of a National Organization for High Altitude Ballooning - Matthew Nelson, Sponsored by Ramanathan Sugumaran (IA SGC)

Discussed 3<sup>rd</sup> Annual Academic High Altitude Conference, which will be held in Nashville, TN at the Travecca Nazarene University next summer. Described National Near Space Alliance – 9 universities and 2 industry partners on the committee

### Presented goals:

- Education and outreach and distribution of information.
- Interested in further collaboration with Space Grant, AIAA, and others.
- Developing best practices and standards to improve safety and compliance

## Idaho Space Grant's Robotic Lunar Exploration Program - David Gardner, Sponsored by Aaron Thomas (ID SGC)

Aaron introduced David, who was taking advantage of the free registration IDSG won at the last DC meeting. RLEP fellow at NASA Ames - two-year stint - mentor a senior design team for a year. Interdisciplinary teams developed at University of Idaho for yearlong project. Discussed concept of "tensegrity" and the benefits of tensegrity robots... compliant, lightweight, high strength-to-weight ratio, deployable (can remove tension for efficient storage), and impervious to gravity.

Discussed senior design team project choices and challenges to design a one bar system to test concept, servos, pivots, etc. Demonstrated some of the testing with a video. Explained how they developed a control simulator that aided in the further refinement of the robot.

## A Trip to the Moon – Dr. Harrison Schmitt, Apollo 17 Astronaut with Q/A, Council sponsored talk

Aileen Yingst introduced Dr. Harrison Schmitt who walked on the moon and is a former US Senator.

## General Session: Day 3 (Ballroom 2-4)

### **Mission Directorates**

### Announcements

Prizes were given out. Terry Shehata offered to move his presentation to the spring. Chris K explained changes to the agenda.

## **Mission Directorate Working Group Chair reports**

Aeronautics – Steve Ruffin – 12 members – Mary Sandy has been working on aeronautics seminars and web presentations. She is working with John Sullivan at ARMD. Discussion about improving the visibility of aeronautics at SG meetings. Considering inviting the AA for aeronautics to a future SG meeting. Will provide some input on future SG agendas to include aeronautics speakers. Haim is working with people at ARMD to improve communication and coordination between SG and the MD.

Space Operations - Wally Fowler - ESMD/SG collaboration - provided quantitative summary of impact on students and NASA. Jaydeep will coordinate ISS education issues and CubeSat. NASA

Education Summit in November... do we need any SG representation? Interested in tapping the private space companies. Projects within SOMD and ESMD are being merged.

Science – Terry Teays – Mitch Colgan has stepped down. Chris Fritsen has agreed to stand in as cochair. Had an intern attached to SMD (non-center) that was paid for exclusively by SG. Explored post-doc opportunity. MDSG paid half post-doc for first year to get arrangements started. Interested in an inventory of the support SG provides to SMD. Will invite Ed Wiley (?) SMD to come to a SG meeting. Also discussed having Stephanie visit with us in DC 2012.

OCT – Luke Flynn – 12 members - developing some synergies for the student small satellite group. Desire to get OCT representation at the DC meeting to better understand how SG and OCT might work together. SG CubeSat could be a good way to test some new technologies OCT interested in flying. Interest in teaching others how to build CubeSats. Kentucky offered to host as did Hawaii. Something similar to RockSat. Possibly a SG proposal to OCT to fly some of the new techs on either a balloon or ELaNa.

Chris K. reiterated that Chris Fritsen will be holding monthly teleconferences with WG chairs and providing the Executive Committee with quarterly reports. Encouraged everyone to think about how to bring MD into national meeting agendas. Chris discussed the idea of having a booth that could be used to promote SG at trade and professional shows. Called on volunteers to form committee that will formulate message. Barrett suggested using NSTA meeting in April as a venue to prototype a booth. Chris said there was an earlier need.

### **Open Mic Presentations**

Iain Prober presented idea for SG presence at the National Space Symposium. New Generation Initiative for 35 and younger space professionals – proposal is to have 15 SG students participate in NGI program along with a variety of other benefits. Discussion about how this arrangement might benefit SG and the students we support.

Presentation about the IRIS competition from Randy (MT). He handed out cards and encouraged participation from SGs.

Greg Guzik discussed HASP program and gave a report on the 2010 and 2011 HASP flight. Planning to fly HASP for another three years. Provided website and proposal information.

James Flaten offered a reminder about the Faces of Space Grant project. Invited people to send a photo.

### **Consortium Coordination**

## Consortium Coordination Session – NASA HQ, Directors, and Coordinators by Diane DeTroye and Katie Pruzan

OEPM – Testing Activities – committee met in DC to get behind NASA firewall. Susan Brew described how they tested the system and how the previous system shaped how we conceptualized, implemented, and reported programs in ways that weren't necessarily the best ways. She believes the new system provides an opportunity to reinvent ourselves. Mark Fischer noted that when the system is out and fully functional, the system should more accurately reflect what we do in our programs and ease the reporting burden.

Plan for Rollout – Diane did not provide dates, but we're getting closer...

List of Data Elements

WebEx Sessions

Phase 1: System Overview and National Network

Phase 2: Management

Phase 3: Fellowship/Scholarship and Student Profile

Phase 4: Projects – Core Data and Subprojects

Wally Fischer asked about the student data and whether OEPM will take over the tracking of students. Diane: SGs will still have to make sure students are providing information to OEPM. Susan Brew noted that this is a concern and that she plans to keep her tracking system in place until it is clear that OEPM will handle this well. Denise asked a question about who will be able to input student data. Diane said that she was not sure and Katie added that system has not been developed to that point yet. Student profile system is on of the agency wide elements of the program. Sharon (WI) asked if there was a way to get list of data that would be required to ultimately report. Diane explained that the List of Data Elements will be sent out.

Diane asked: How do you get to be a top five report?

## Program Goals

• refer directly to SMART goals and objectives described in your FY 2010 budget and objectives

Program/Project Benefit to Outcome (1,2, & 3)

- *meaningful* highlights (anecdotes not a litany of everything you've done)
- highlighting student and/or project accomplishments

## **Program Accomplishments**

- connect back to consortium annual performance goals and objectives
- Describe your success in terms of metrics utilized to demonstrate the accomplishment of or progress toward meeting those goals.

NASA 2010 Education Priorities: Make sure these were included.

## PROGRAM CONTRIBUTIONS TO NASA EDUCATION PART MEASURES

• Matching Funds: Ratio of funds leveraged by NASA funding support

Discussion about the nature of reporting "progress" as well as "expected results including expected match"

### IMPROVEMENTS MADE IN THE LAST YEAR

• Succinctly describe improvements and/or adjustments

## PROGRAM PARTNERS AND ROLE OF PARTNERS IN PROJECT EXECUTION

Diane emphasized some general concerns:

- Failure to follow template
- Length "sparse information cloaked in lengthy narratives"
- Some SMART Objectives need to be tightened up (e.g. If the objective is a %, must cite and provide increase over base)

 Some consortia used last year's report and changed numbers – problem since report changed

Katie Pruzan discussed data tables – student data tables are examined first because the demographic data are most important to OMB – she reviewed the review of annual data report checklist to explain how they review data tables... compare expenditure tables and performance data to make sure it makes sense... Word documents will be sent to SGs next week. These documents should be corrected in BOLD RED TEXT... reiterated the need for diversity in three areas (institution, students, and management)...

Questions: Wally asked about reporting SoI numbers... SG trained teachers... should SG report this? YES.

Diane shared SOLAR data... highlights... 153 SG selections across NASA... total of 42 states had students selected. Lowest 1 and highest 11 (FL). One of SOLAR questions refers to prior NASA engagement -  $\sim 50\%$  had prior engagement with the agency. Majority were seniors followed by juniors. Will provide race and ethnicity diversity numbers later... 104 males and 45 females.

## **QUESTIONS?**

Tehseen Lazzouni (California) question about access to SOLAR. Questions about access should be directed to Sasha (NASA)

Suezette Bieri (North Dakota) asked how much time do we have to get cleaned up report back. Katie said about 2 weeks.

Angela Des Jardins (Montana) mandatory security training for access doesn't work – Diane said they are aware of this and it is a glitch in the program... security training is waived for us except for SG personnel who have badges to get on centers, then security training is required.

Bill Garrard (Minnesota) in closing out the previous five-year grant there was a question on technical reports... Diane is checking on this.

Tehseen Lazzounia (California) about review of survey monkey... Katie said there will be a list of questions that SG is asked to look at.

Question about technical report requirement, which is not relevant according to Diane because we are a training grant.

#### **Presentations**

## Space Grant Facebook 101 – Janice Riley

Suggested creating a fan page that people can "like" so they become fans and then receive updates. Shared goals for using FB to promote SG and offered Top Ten Tips:

- 10) Intern Exploitation find student who can do this for academic credit
- 9) Logistical Nightmares how to manage pages
- 8) Content Conundrums Info page, discussion threads, and posting questions

- 7) Status Sticklers update daily and make note of worthy items
- 6) Cross-pollination promote friends and related pages
- 5)Treasure Hunt: Fans variety of mechanisms to promote awareness of FB presence
- 4) Media Mayhem posting photos and videos
- 3) Bragging Rights Info page is important leave no doubt what SG does
- 2) Social Butterflies communicate regularly respond to fan posts promptly and personally...
- 1) Don't stop believing... FB changes... keep learning and exploring...

Question from Wally... How do we do this with limited staff? Business interns can provide the technical skills, but don't have the content. Content takes time, so this is a challenge. But these interns need to be able to do this in their career development.

How do you get the word out once you have one? Add to e-mails, other literature, listserv notices... etc.

Sharon Brandt (Wisconsin) asked if SGs with FB seen any positive impact in numbers of student apps, etc. Eric Day said DC has one and it seems to help get the word out.

### Open Mic

Frank Six (JSC) and David Kankam (GRC) noted that Academies are not going to be part of SOLAR yet, and that the centers pay for the Academies with the support of SG to fund student travel and other expenses. David confirmed that Aeronautics Academies will be held in 2012 at Ames, GRC, and LaRC.

Sharon Brandt (Wisconsin) thanked everyone for coming to Wisconsin for the meeting.

Chris K recognized the Wisconsin SG staff – Sharon, Sue, Aileen, and Brittany – and thanked them for their hospitality.

Gerardo Morrell (PR) and Catherine Hughes (??) won the final door prizes and the student registrations for the next national meeting.

Chris K. Invited people to send pictures to him so he can share at the next meeting.

Meeting was adjourned.