MINUTES OF THE SPACE GRANT DIRECTORS' PLANNING SESSION HONOLULU, HAWAII, OCTOBER 1999

Introduction

The following includes edited view-graphs of my summary of answers to the Directors' Questionnaire of summer 1999, followed by a transcript of the spoken comments of the directors during the 3-hour session (transcription thanks to Janice, Richard H, Jackie and SusanB.). This summary of your questionnaire answers is NOT exhaustive nor complete and some of your data is not included. The purpose was to give the overall, corporate picture and not to compare individual states. Please accept my apologies if some of your own input was dropped.

You will recall that this exercise was a lead-in to specific proposals for action presented, on behalf of your ExCom, by Janice DeCosmo and Bill Hiscock at later sessions. It also represents a kind of pre-planning exercise, which we will now build upon at our Denver meeting in January, 2000.

Questions from the DIRECTOR'S QUESTIONNAIRE SUMMER 1999:

- 1. What is the one (or maybe two) element(s) of your program where Space Grant is making the most impact, and which you would expand or deepen if you had more funds?
- 2. What new element or program would you like to add if you had more funds?
- 3. Do you have a model program in your state which should be implemented nationally, and for which you are willing to supply leadership? (Briefly describe.)
- 4. In 5 years what would you like your Consortium to be doing and roughly what resources would it take for you to get to that point?
- 5. Your thoughts on how Space Grant should converge on this Vision and Resources Plan are needed now.

SUMMARY OF THE ANSWERS

What are the common threads?

Questions 1 and 2.

Almost everyone covers all of the SG program areas (we are required to). These include:

- Scholarships and fellowships
- Research infrastructure: seed grants, post-docs
- Research experiences for undergraduates
- Joint programs with industry
- K-12 activities (from science fairs to state-wide systemic change)
- · Public outreach
- Teacher training in science and technology
- Special projects: rocket flights, satellites, KC-135, precision farming, protein crystal growth experiments, etc.
- MANY states (probably applies to ALL) said:
 - Add more affiliates
 - Add more scholarships (IN, KS, MA)
 - \bullet More K-12 (SC, NY, MT, NH) [impossible to significantly affect systemic change with \$50K/yr and more than half the state SG's dont even have that]
- Several (non-EPSCoR) states want a seed program for space-related research development (RI, DE, IA, IL, ME, MI, OR)
- MANY states want to add the following programs, but need more funds to do it:
 - Undergrad research experience (AL, GA, HI, ID, MA, MS, PA, PR, WI, WY)
 - Pre-service teacher training (MD, LA, MN, OR)
 - Remote sensing/cooperative extension (Many states ... AZ, HI, MI, MT, NM, SC, VA)
 - Internet curriculum development (CA, MN, TX, TN)
 - Industry partnerships/technology transfer (NC, LA, SD, VT, WI)
 - Public Outreach/Increase general awareness of NASA (NE, NV)
 - Work force development (WV, CA)

Many directors are particularly proud of some special program which they have built and which is successful in their state. Some, like the Texas KC-135 microgravity program, have been placed on a national basis, with extra funding having been found (from NASA) to serve all 52 Space Grants.

Question 3: Model programs and willingness to help other programs.

Many excellent examples:

- Research experiences for undergrads: AZ, WA
- Collaborative partnerships with industry: CA, A:
- Student rocket and satellite programs: CO, NM, AK, VA, AZ
- Inner-city programs: DC
- Summer outreach academy: DE
- Sci-Ed space camp; grades 2-6: HI, LA; high school: IL

- Undergrads teach in K-12 classrooms: MT (Mars program), AL
- College student retention: NM
- SMILE middle and high school program: OR
- State math initiative: VT
- Connection with state K-12 science: WY, WA
- Science journalism: TNMedia education: NYPrograms for women: PA
- Teacher training center: PR, MA
- Small aircraft transportation system: NE
- Advanced Design Program across several universities: TX (and, of course, the KC-135 program)
- Remote Sensing Pilot (AL)
- How to get state and industry funds, KS, ME?
- Large-scale ecology projects: NH, MD, SD
- Space studies curriculum: MN, ND?

!!!!! GREAT NEED HERE FOR DISSEMINATION PROCESS!!!!!!!!

Question 4: Where do you want to be in 5 years and how much \$\$\$?

- 44 states gave estimates
- Clear that directors know well ,and in detail, the costs of extending their programs.

NUMBER OF STATES AND BUDGET-INCREASE FACTOR ESTIMATED BY 2005

2X budget	2.5X	3X	4X	5X	10-20X
21 states	2	10	5	5	1

Mean required SC Budget in 2005 = \$60M*

*Notes:

- REAL dollars; not co-funding or leveraging
- 1999 dollars; not corrected for inflation
- Source of funds is not defined not necessarily Code FE, or even NASA

In the final 2 hours of this session, the directors were invited to share their views about the direction that needs to be taken to realize the potential of Space Grant. If appropriate they were asked to state what they were prepared to do as their part. Each had only 2 minutes to talk, and to everyone's credit that rule was adhered to!

Julius: **SG in the future**:

- Want consortia to improve relations with state government in the new 5-year cycle.
- Want greater diversity in the directors' council, steering committee, etc. Get people with experience in equal opportunity issues on steering committees to help with diversity.
- Affiliates need to be made bigger part of the overall program.

Alabama (Gregory)

- Learned a lot about Congressional relations (to the good) but we have spent (wasted) too much of the valuable SG Council time on it (1 whole meeting per yr, out of only 2). We should be spending that time on improving programs.
- We should act cohesively to focus on what we can do to address national needs in science and math education.
- Acting nationally doesn't mean we quit on our own states' special and particular needs.

Alaska (Hawkins)

• Very little buy-in from agency and we should try to convince NASA that we can build our own budget and would do same for them. Focus on lobbying efforts that go hand-in-hand with NASA so create a win-win situation.

Arizona (Brew)

SG terrific program with pittance of funding.

Not convinced proposals put forth are best way to maintain relationships all around.

Focus on fact we're education program.

Try to find buy-ins within NASA codes.

Arkansas

- Agree with internal problems. Problems with NASA should be addressed first, then Congress. Feels
 like SG is the enemy from UAOs on up. Need to convince NASA we will work with them to increase
 budget.
- SG network capable of great things.
- We've managed to get Congressional support.
- Failed to get agency buy-in.

California (Wiskerchen)

- Big cultural change and shift going on within NASA -- R&D emphasis not operations. Education and outreach shift -- demanding 2% of budget. Space Grant is best vehicle to get results.
- Well-trained workforce is major issue concerning aerospace and high technology industry in CA. Large resources for education & outreach is being planned statewide -- large industry contribution. State is focusing on capturing commercial space world marketplace (In 1999 \$56B commercial 55% of total and in 2005 \$160B commercial 75% of total.
- State of CA needs SG and new Governor has been shown the importance of Space Grant in terms of workforce development, education and outreach.

Colorado (Hanson)

- Passion and pride in program and NASA getting wonderful deal.
- Future based on success of present, but also <u>new</u> programs involving coperation of many states for major impact.

Connecticut

- New person and donates time to anyone who wants it.
- Applaud efforts of SG.

Delaware (Ness)

- What is our product? If it were in demand we'd have clients and customers.
- Apparently NASA is not interested in our product; perhaps not important to NASA or they'd be supporting us.
- NASA Ed. is anarchy within NASA.
- Resonate with NY. Problem is with NASA; why don't they do something about it? Falls on us to do it.

Florida

- SG is the largest organization with university participation program related to space.
- Need structure to address our common interest.
- Need to address more than funding with Congress. We put space as priority.
- Need address issues with other agencies federal and state.
- Need to engage participation with NASA centers.
- Collectively we can work better.

GA (Armanios)

- Need to convince NASA.
- Congress lobbying problem because of time but not wasteful to inform representatives a duty. Need to know exactly when to remind them.
- Concur that NASA should look at UAO officers carefully...
- We need to have unified approach with NASA and Congress.

Hawaii (Taylor)

- Yes, it's wasteful.
- First need to educate NASA about SG. Tremendous amount of resources and \$\$ within NASA devoted to education; we need to tap into that. Part of group who realize zero sum game. Don't want to take resources from other programs.
- Maintain flexibility with a few programs nationally.

Idaho (?):

- Second Alaska.
- Need to cooperate more with NASA in efforts to establish and maintain funding level for SG; feels as if we're at odds with agency.

IL (Solomon)

- Agree with MN
- No, not wasteful; something else to do (the Was. way).
- We know own states best and can provide the best programs there and use our resources most wisely. National networking is somewhat less important as harder to do and payoff not as great (not as important/fruitful to work on national agenda).

Indiana (?)

• Do not see buy in/support from NASA. Need to build on our national visibility.

Iowa (Byrd)

- SG is a great program. If NASA really understood they have someone in every state ready to champion their cause, we wouldn't have budget problems....
- Would rather be on Hill championing NASA cause and other agencies rather than own cause.
- Feel like we are at football game where every so often team goes over and beats up cheer squad.

Kansas (?)

- Issues differ in states. Reason SG is doing well is overall program performance; keep individual strengths.
- Not good at doing lobbying work. Believes a strength is that has SG flexibility to work within state. Shouldn't try to make us all look alike. If look at SG as a whole great. Not everyone has to do every thing.

Kentucky (Hackney)

- NASA not a single entity; NASA a bunch of cells internally oriented, not reaching out.
- Big. Ed. Program problem internally competitive with FE.
- NASA needs to ask what SG does for me. NASA is not working with the public.
- We need professional help to interface with NASA and with Congress.

Louisiana (Wefel)

- Agrees with Virginia.
- We've been successful in Congress and it hasn't been wasteful. Now Congress knows us and is watching us more closely.
- NASA should not want to be questioned about SG budget..
- Now know what we're doing and want to know what we're accomplishing. Collectively we can be more effective.
- SG is small potatoes compared to research grants universities will not go to bat for this small program.

Maine

- Is there an intermediate plan?
- Maybe something in between vs. doing it ourselves and having full-time lobbyist.
- Need to ask NASA what we can do for you.

Massachusetts

- Wants to work within NASA
- Lobbying part of job, best done by directors. Help needed with information gathering to aid lobbying.

Maryland (Henry)

- Agrees with Yervant [Terzian].
- Do not consider activities in DC wasteful.
- Problem we have is with NASA. We won-over Ladwig and showed him how effective we could quickly be and then he met his demise.
- Difficulty not with SG management; but problem perceived that others are our competitors.

SG Directors meet with AA's.

Agree with people who don't want all programs the same.

We could pull together and act cohesively on some things to our benefit.

Michigan (Johnson)

• Ditto Yervant. Useful to Learn how to network in Washington; gained unity.

- Is our focus really, solely NASA? We have services we can offer elsewhere with opportunities that will come up in next 5 years. Work force development, private development of space and should think in this bigger scope.
- Problem is with perception of SG in NASA.

Minnesota (Gerrard)

Need to work together.

Need to sell ourselves to other parts of NASA.

Start of a network – brings scientists to places they wouldn't reach.

Mississippi (Sukanek)

- Echo frustration of little support in general in NASA.
- Useful experience to visit delegation, but frustrating because they are interested in state-specific particulars so state gets something.

Montana (Hiscock)

- Unique network. Incredible potential for doing good within NASA and beyond. Need to work within NASA and keep working with Congress to keep us where we are and to help us grow our budget.
 Problem is with NASA. NASA budget not "zero sum" actually going down. Budget from OMB explicit on what to cut.
- We cannot hope to address whether growing SG would hurt other programs. Should look for jobs that NASA needs to have done in education and fulfill these.

Missouri (Christensen)

• Don't want all consortia to be the same. On other hand, there are some things that would benefit with cooperative action.

Nebraska (Bowen)

• Small state perspective. Congressional delegation much more aware of them now (after lobbying). We are competing with organizations for same resources. If we don't pursue alliance building now, we will loose out quickly. We will see a reversion to earlier funding levels if we don't (use ASA as a model). We need NASA to let us serve as educational arm of NASA. SG could be all educational programs for NASA with our vast network.

Nevada (Taranik)

- Prepared as a state to go to delegation for program support; supportive of SG.
- Major concern more related for NASA. If plan is to take the program and hold it at 19.1M, needs to grow it.
- Support EPSCoR coalition using lobbyist in DC.

New Hampshire (Bartlett)

- Sea Grant went through similar process about 30 years ago and have found that this was the only way to preserve their program. Have not jeopardized other programs funding if it is done well with sensitivity to need of NASA and individual universities etc. Don't oversell ourselves.
- Need to be aware of stress that would really result if got much more funding to do programs *not of our own creation*. (If we became the outreach arm of NASA). Don't become agents solely for NASA education programs.

New Jersey (Chaim ?)

- Against hiring a lobbying firm. Grass roots efforts will lead us to greater results, more respectability
 and increase our visibility.
- Better to have flexibility in running our programs rather than focusing on doing things at national level keep focus at state level.

New Mexico (Hynes)

- This is war but does not have to be adversarial but is war. "Art of warfare"
- —need to gather intelligence at the NASA level.
 - Learn what is going on over there that is good for us or impacting us negatively.
 - who has been successful learn from them
 - Need to create alliances professional and non-professional. This is not simple.
 - Have to be proactive/diversity of approach (go beyond NASA) lots of \$\$ out there.

New York (Terzian):

- In the last few years we've proven the problem is not with congress but with NASA. Why doesn't NASA think well of us?
- Is it because we are not doing a good job? Not peer reviewed? The problem is within NASA. We have to see how we can change that- how?
- · Hope that management can champion that work for us.

North Carolina

NASA scientists happy to get free help, and very helpful with projects and support. Not selling ourselves well to NASA itself.

North Dakota (Wood)

- Education is our great strength and need to do it the way our state does it best.
- Got to find a way to interact personally with people at NASA to have them buy into our programs from the bottom up.
- NASA only interested at level of branches; we need to interact at that level.

Ohio (DeWitt)

- Agrees with Mary Sandy, Virginia.
- Frustrated that we are going in circle.

Oklahoma (Snowden)

- Need to rethink way we do business.
- How to change relationships and perceptions within NASA.
- Need to focus on what can we do within NASA to improve relations better use of energy.

Oregon (Klein)

- Positive that we've learned a lot and bonded together as the result of having to lobby and work together for our funding through Congregessional work. We've learned about process and developed relationships.
- One of our strengths is collaboration and non-competitive

Pennsylvania

Relationship with NASA needs to be focus. Rather that than hire lobbyist.

Puerto Rico (Wiener)

- Need to work with NASA.
- SG 600 lb sleeping gorilla could be lead for NASA advocacy in country.

Rhode Island (Schultz)

- Our lobbying efforts not a waste of time. Worry about competing against ourselves with other programs in the state.
- Need to maintain our individuality and want to stay creative and individual.

• Need rewards for individual creativity.

South Carolina (Colgan):

- Frustration that NASA didn't fight for us and feel that SG was not recognized. We are still viewed as in battle for resources. SG viewed as competitors rather than partners by NASA.
- If we could become allies and work together and not have to fight and work together it would be much better. (Best war is one which isn't fought need to be allies).
- Loss of great man like Frank Six has affected SG program and hurt us all.

South Dakota (Derkim)

- Lobbyist save us some "cards" when asking for support from our congress people.
- Lobbyist saves time and opportunities for other issues.
- NASA center activities in stale s/b coordination through HQ and SG (e.g. with tribes).

Tennessee (Strauss)

We fared much better within NASA when we had excellent education officers at centers.
 Unfortunately, these are now replaced by invisible entities who have no visibility. We should push to get real <u>university affairs</u> offices (not that handle K-12 etc. etc) and our visibility would increase considerably.

Texas (Fowler)

NASA perception critical. They need to know what we do. Students effective; use as interns in DC rather than lobbyist.

Utah:

Value in coordinated efforts in DC.

Need professionals who can help; also to teach us how to do our education job better.

Virginia (Sandy)

- Need to change way do business, more organized approach in dealing with Congress. Formal mechanism needed to do this. Willing to pay share or costs/share work. Cannot continue business as usual, need presence in Wash. D.C.
- Will do part in working with own legislators. Wasteful of resources having to recoup and maintain budget. Presence in Washington that can help us important.

Vermont

- We are a national network given freedom to develop programs locally important to meet our needs. We have best of both worlds in this sense.
- Frustrating but valuable to lobby to see how things work in DC. Lobbying gives us a realistic view of how things are done. If we believe in SG program we must be prepared to do what we need to do to get the resources. We must come to grips with how we are going to come forward or we'll put the program at risk.

Washington (DeCosmo)

- Would have rather gone to Congress to ask for 23M increase rather than going to Congress to work hard to get level funding. Rather be growing.
- 25% increase resulted in big change for the program; it established a new level of credibility with consortium affiliates & member institutions essential to maintain. Matching funds went up much greater than 25% as a result. Level of visibility went up dramatically and if our budget goes back down it will be the beginning of end.

• We share a national charter and have the freedom address it in unique ways in each of our states. We need to join together to advocate for the charter – i.e. the overall program goals - so we can continue to develop thriving state-based programs.

West Virginia (Jaraiedi)

- Endorse proposed change in way of doing business.
- Diluted effort as every state goes to own representatives instead of having a united focus to focus on key
 people in Congress. Focus approach on <u>key</u> people, so each spends his/her time special opportunities on
 SG.

Wisconsin (Brandt)

- Agree with HI.
- Told by Congressmen they should support \$19.1M base problem between NASA & SG. Their congress people support the higher funding level. But has been pointed out it is an internal program within NASA. Need to convince NASA SG worth \$\$.

Wyoming (Johnson)

• If we believe in program we need to passionately and aggressively lobby as effectively and passionately as we can.