

SPACE CITY 2020

SPACE STRATEGY WORKSHOP

Rice University BioScience Research Collaborative • Friday, Sept. 9, 2011

Policy and Advocacy

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RICE **NASA**versary

Objectives for Discussion

The Policy and Advocacy working group was tasked with the following objectives:

- Define the “why” for human space flight partnerships
- Discuss the goals and criteria for successful partnerships among the following entities:
 - Academia
 - Industry
 - Government
- Identify the short-term next steps to convert ideas to action

The ultimate goal is to cultivate “space enterprise zones” to formalize these partnerships.

Human Space Flight Partnerships: Why Now?

The time is right to move forward with partnerships in human space flight:

- Human space flight is in a time of transition and the future of it is yet to be determined. There is an opportunity to drive that future through partnerships among academia, industry, and government. JSC must take a leadership role and place itself at the forefront of these changes
- Human space flight will ultimately be measured by its economic and societal returns which can only be maximized through collaboration
- The wealth of intellectual capital in Houston about living and working in space and integrating large international projects must be harnessed
- Partnerships are mandated by the agency strategy
- Academia, industry, and government have different but convergent agendas. Strategic partnerships can bring the best of all to common challenges
- The future of funding is uncertain, making the case for partnership and collaboration that much stronger
- There is focus and enthusiasm in the local community, city, and state for this effort
- Emerging commercial space flight has reached a level of maturity to benefit by partnerships

Benefits

Benefits to NASA JSC

- Access to more resources: people, facilities, and funding
- Increased relevance
- Building and motivating the next generation
- Plentiful and cost-effective labor from universities
- Diverse portfolio of advocates
- Synergies between partners
- Preserve and grow capability
- Strengthen advocacy and support
- Access to current education and a larger pool of ideas
- Prestige

Benefits to Non-NASA Partners

- Access to more resources: people, facilities, and funding
- Prestige (both in the US and internationally)
- Access to NASA expertise and technology
- Larger collaboration pool
- Educational outreach (inspirational to students and attracts more students to math and science)

Possible Action Steps

NASA JSC

- Articulate the commitment to partnerships and openness and the role of the JSC
- Create “one door” partnership intermediary that serves as a concierge
- Align support staff (procurement, legal, etc.)
- Engage university to build capability and integrate into curriculum
- Revive and expand the “Inspection Day” concept to include private companies and universities
- Streamline process – “work at the speed of business”
- Actively engage the community and business leaders by providing access and resources
- Clarify that NASA and the JSC are embracing space commercialization (take actions to bring in space commercial community)
- Focus on core competencies, instead of vehicles:
 - Integrate internationally on large efforts
 - Live and work in space
- Endorse the technology incubator
- Conduct regular meetings with center director and staff, Greater Houston Partnership, emerging commercial space flight companies, and universities
- Pursue joint JSC/university research facilities “outside the fence” (example: JSC Innovation Park)

Possible Action Steps

Other Entities

- **Universities:** Align student expectations and university schedules with co-op programs
- **Congressional delegation:** Explore support for a formal, long-term partnership between Rice, UH, and Texas universities and JSC
- **State government:** Identify possible studies for the next legislative session
- **State government:** Formal support for and enable space-related research partnerships with NASA JSC at Texas universities
- **Mayor's office:** Formal declaration in support of partnerships followed by actions supporting the formation of those partnerships
- Create community and university points of contact for partnerships for JSC exclusively

Potential Partnerships with JSC

- Commercial space companies
- Wind turbine and energy industry
- Universities (national and international)
 - Technology research (all disciplines)
- HISD and other school districts
- Community colleges (for workforce, training, etc.)
- NSBRI/Texas Medical Center
- Port of Houston
- International communities (via consulates)
- The State of Texas
- Other Federal agencies

Next Steps

In order to convert these discussions to action, the following next step is identified.

- Go do it!
- Conduct working/planning sessions
- Review progress in 30 days
- Create formal report in 6 months

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Appendix

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Primary Questions

1. How can a **non-NASA enterprise** benefit from partnering with NASA/JSC?
2. How can **NASA/JSC** benefit from partnering with a non-NASA enterprise?
3. What must NASA/JSC do to be sought after and seen as an effective partner?
4. Is it today?