

**NASA ADVISORY COUNCIL**

**EXPLORATION  
COMMITTEE  
DELIBERATION**

**12 October 2006**

# **EXPLORATION COMMITTEE OF THE NAC**

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- **Lt.Gen. James A. Abrahamson U.S. Air Force (ret.)**
- **Dr. Wanda Austin, Sr. VP, Aerospace Corporation**
- **Capt. Rick Hauck U.S. Navy (ret.), Astronaut**
- **Dr. Stephen Katz, Director NIH**
- **Dr. John Logsdon, Director SPI, GW University**
- **[Dr. David Longnecker—now Space Operations Committee.]**
- **NASA Adv. Team: Dr. Louis Ostrach and Ms. Jane Parham**

# FACT FINDING PROCESS

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- **Exceptional set of Briefings and Fact Finding Discussions on the Exploration Strategy Fact Finding Process:**
  - **Interactions at This Meeting: Doug Cooke, Deputy AA Exploration Systems; Skip Hartfield, Orion CEV Project Manager; Tony Lavoie, Science Program Manager; Mike O'Brien, AA External Relations; Frank Schowengerdt, former Director SPD and IPP; Jeff Volosin, Lead Strategy; and Panel Discussion; Valin Thorn, COTS; Gib Kirkham, Director, OER**
  - **Tour of Goddard SFC Projects,**

## **FACT FINDING Continued**

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- **Earlier Meeting Discussions (reported separately)**
- **Separate Fact Finding Meetings:**
  - **Several Members attended Global Workshop**
  - **ITAR fact finding.**
  - **NIH Meeting on Exploration Human Medicine**
- **Individual Fact Finding and Research on Perspectives**

# **SOME CONCLUSIONS**

## **(Not in any Priority Order)**

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- **NASA has incorporated an unprecedented, constructive, and extraordinary effort to gather ideas and involve stakeholders in the shaping of the Vision and Exploration Project. Goes well beyond the process in major previous projects.**
  - **Domestic and International groups, individuals, etc.**
  - **Traditional Aerospace Industry and Innovative Entrepreneurial Industry.**
  - **Broad Science Community Involvement**
  - **Many other dimensions**

# INVOLVEMENT PROCESS

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- **Involves all levels within the Agency interfacing into diverse groups of stakeholders:**
  - Hundreds of meetings, conferences, international visits, potential partner discussions, technology assessments, open lines of communication.
  - Result is an Architecture Development that flows from hierarchical considerations of the following:
    - Themes and Objectives
    - Evolving Reference Architecture & Design Reference Mission.
    - Detailed Design Tradeoffs: include ConOps, Technology Needs and availability assessments, Element Requirements
- **Well Documented and Traceable, Interactive Process**

# **HIGHLY DISCIPLINED PROCESS PROVIDES SOLID STRATEGY FOUNDATION**

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- **Traceable Management of Stepping Stones**
- **Well Structured Scientific Goals**
- **Sustained Human Presence as well as Scalable Robotic contributions that will enhance total success.**
- **Expansion of the Earth's Economic Sphere**
- **Global Partnerships**
- **Engage, Inspire, and Serve the people of the United States and the Entire Globe.**
- **Holds Every Promise of Cost Effective and Systematic Progress toward Practical but Vital Goals Outlined in President Bush's Vision Mandate.**

# **NAC EXPLORATION NEXT STEPS**

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- **Selective Value and Execution Measurements**
- **Scaled into Different Levels of the Strategy and Project Structure.**
- 1. **Creation of a dynamic, independent support evaluation – leading to actionable advice from the NAC to the NASA Administrator.**
  - **Select our own evaluation process, appropriate for an Advisory Committee.**
    - **Start with an evaluation of the breadth of the “stakeholder community” to identify any additional “evaluation level” participants for “added advice. i.e. emphasize outside beneficiaries and functionaries (not directly involved as Project Participants but whose opinions must also be listened to and who will be long term beneficiaries): other agencies in government, other industries, other citizen and institution fora, etc.**
    - **Potential Conference that parallels NAC and Science next evaluation milestones,**
    - **Searching for broader societal evaluation levels as opposed to direct contributors and participants.**

**AUGMENTS HIGHLY EFFECTIVE STRATEGY  
PROCESS WITH A DIMENSION OF FUTURE  
“WHY GO” EVALUATORS WHOSE OPINION  
WILL BE IMPORTANT FOR THE MULTI-  
DECADAL TIME FRAME OF THE PROJECT!**

- **Continue more detailed, specific problem oriented evaluations:**
  - ITAR Process Issues
  - Selective Cross Committee Issues (i.e. with Operations Committee)
  - And the Important “Long Term Human SpaceFlight Medical Project” Evaluation: Medical Research for the Vision and its Benefits to Broader Human Needs”