

Exploration Systems Mission Directorate

1st Space Exploration
Conference
Opening Remarks



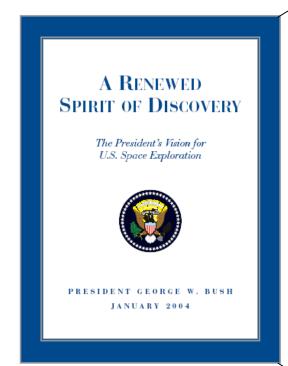
Rear Admiral Craig E. Steidle (Ret.) Associate Administrator January 31, 2005



The Vision for Space Exploration



THE FUNDAMENTAL GOAL OF THIS VISION IS TO ADVANCE U.S. SCIENTIFIC, SECURITY, AND ECONOMIC INTEREST THROUGH A ROBUST SPACE EXPLORATION PROGRAM



Implement a <u>sustained</u> and <u>affordable</u> human and robotic program to explore the solar system and beyond

Extend human presence across the solar system, starting with a human return to the Moon by the year 2020, in preparation for human exploration of Mars and other destinations;

<u>Develop the innovative technologies</u>, <u>knowledge</u>, and <u>infrastructures</u> both to explore and to support decisions about the destinations for human exploration; and

Promote <u>international and commercial</u> <u>participation</u> in exploration to further U.S. scientific, security, and economic interests.





Foster and sustain the exploration culture across generations

- Open new frontiers
- Continuing and inspiring
- A constant impetus to educate and train

Identify, develop, and apply advanced technologies to...

- Enable exploration and discovery
- Allow the public to actively participate in the journey
- Translate the benefits of these technologies to improve life on Earth

Harness the brain power

- Engage the nation's science and engineering assets
- Motivate successive generations of students to pursue science, math, engineering and technology
- Create the tools to facilitate broad national technical participation

International Cooperation

- Promote common objectives and cooperative/complementary efforts for space exploration
- Utilize international capabilities to help close capability gaps and develop breakthrough technologies



Conference Objectives



- Presentation of NASA's strategy to execute the Nation's Vision to a broad audience for awareness and comment;
- Provide industry (big and small), academia and international space agencies an open forum to help us formulate and implement the Vision;
- Fulfill our commitment to maintain a world-wide dialogue and open communications to share:
 - Agency programs, status, and plans;
 - Conferences, workshops, events; and
 - Business and research opportunities, etc
- Provide an opportunity to identify potential areas of collaboration:
 - e.g. shared resources, new development strategies, mutual exploration objectives, joint technology development...



Conference Discussion Panels



Discussion Panels (7)

Space Exploration 1st Year Report

- NASA's leadership team will focus on how the Vision has transformed the Agency and its processes
- NASA panelists will also highlight accomplishments of the first year

Exploration Systems of Systems Spiral Development

- Panel to provide an overview of NASA's Exploration strategy, concepts, and plans for spiral development of the Constellation program's "system of systems" as currently being developed by the Exploration Systems Mission Directorate
- Presentations will present the various aspects of this "system of systems" / spiral development concept with particular emphasis on the need for and integration of near-, mid-, and long-term technologies into the spiral development process

Exploration and Science

- Panel will discuss how the Vision will aid the exploration and science communities in their study of the origins and evolution of the Earth, sun, solar systems, universe and galaxies
- Presentations will focus on how and why science is a critical aspect of exploration and establish concrete ways in which the objectives of science and exploration work in tandem and can help to advance the accomplishments of the other.



Conference Discussion Panels (Cont.)



Project Constellation and CEV

- Panel will discuss the status of the CEV/Constellation program, Level 1 requirements and upcoming plans
- 11 CE&R contractors will be present to provide firsthand industry knowledge

Strategic Planning

 Key NASA representatives will discuss strategic planning processes underway at the Agency

International Participation

- Panel will discuss opportunities for international participation in the implementation of the Vision and report out on the International Workshop held in Nov '04
- The panel will address innovative technologies, shared knowledge and infrastructures for partnership and collaboration

Washington, Budget and Public Support

- Panelists will discuss difficulties and methods for sustaining support for the Vision through over 30 budget cycles, 8 presidential elections, and many Congresses
- The panel will address this year's legislative and budgetary schedules and their possible impacts upon the program as well as detail importance of establishing and maintaining an effective and efficient strategy for relating to policymakers and their representatives.



Conference Technical Sessions



- Technical Papers (65)
 - Technical sessions will cover a range of technologies and infrastructures from robotics and nuclear powered propulsion to innovative vehicles for human exploration of space to expeditions (both manned and unmanned) to the moon, Mars, and beyond.
 - Technical sessions will focus on the following areas:
 - Space Exploration Requirements
 - Space Exploration Technology
 - Space Transportation
 - Program Affordability
 - Human Missions
 - Crew Health and Human Factors
 - Extending Human Presence
 - Automation and Robotics Exploration
 - International Participation
 - Outreach and Program Sustainment



Space Exploration Conference



Registration

- Average for first year conference is 300 participants
- 1st Space Exploration Conference sold out at 1,000 participants
 - Sold out before early registration closed
- Participants include large and small industry, academia, international partners, and other government agencies.

Web Cast

- Plenary sessions and discussion panels will be broadcast via the web world-wide to provide remote access for those unable to attend.
- Web cast will be archived for future reference material

Call for Papers

- Average number of abstracts for first year conference is 150 -200
- 1st Space Exploration Conference generated 685 abstracts
- Initially down-selected to 50 papers
- Increased facilities to accommodate a total of 65 papers

Exhibits

- Original exhibit hall sold out
- Increased exhibit hall capacity to accommodate double the amount of exhibits
 - Additional space sold out immediately



04 - A Great Year for Space Exploration



We Are:

- Reorganizing for Success
- Transforming Our Processes
- Establishing Trust
- Building Credibility
- Executing to Plan
- Generating Excitement
- Inspiring the Next Generation

Even Better in 05



Exploration Systems Mission Directorate

