

A composite image of space. The top half shows a dark starry sky with a large, bright crescent moon in the upper center and a smaller, reddish-orange crescent planet (Mars) to its right. A thin white line representing a satellite orbit or trajectory starts from the left edge and extends towards the center. The bottom half of the image shows a blue sky with white clouds.

*Perspectives from Washington*

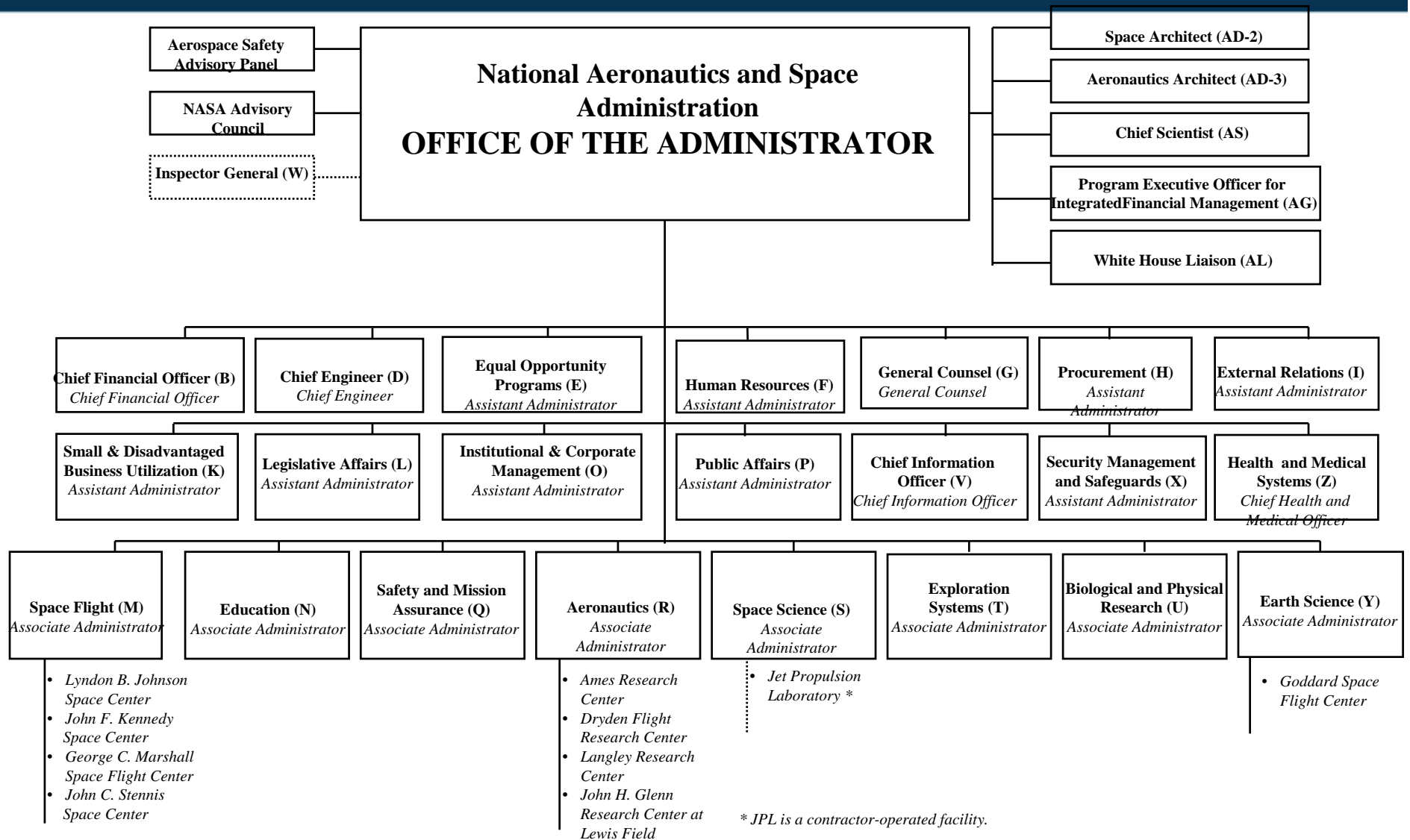
A horizontal band containing silhouettes of various aircraft, including a biplane on the left, a jet fighter in the center, and a large transport plane on the right.

**Brad R. Weiner**  
**Director, Division of Higher Education**

*Space Grant Director's Meeting*  
22 October 2004



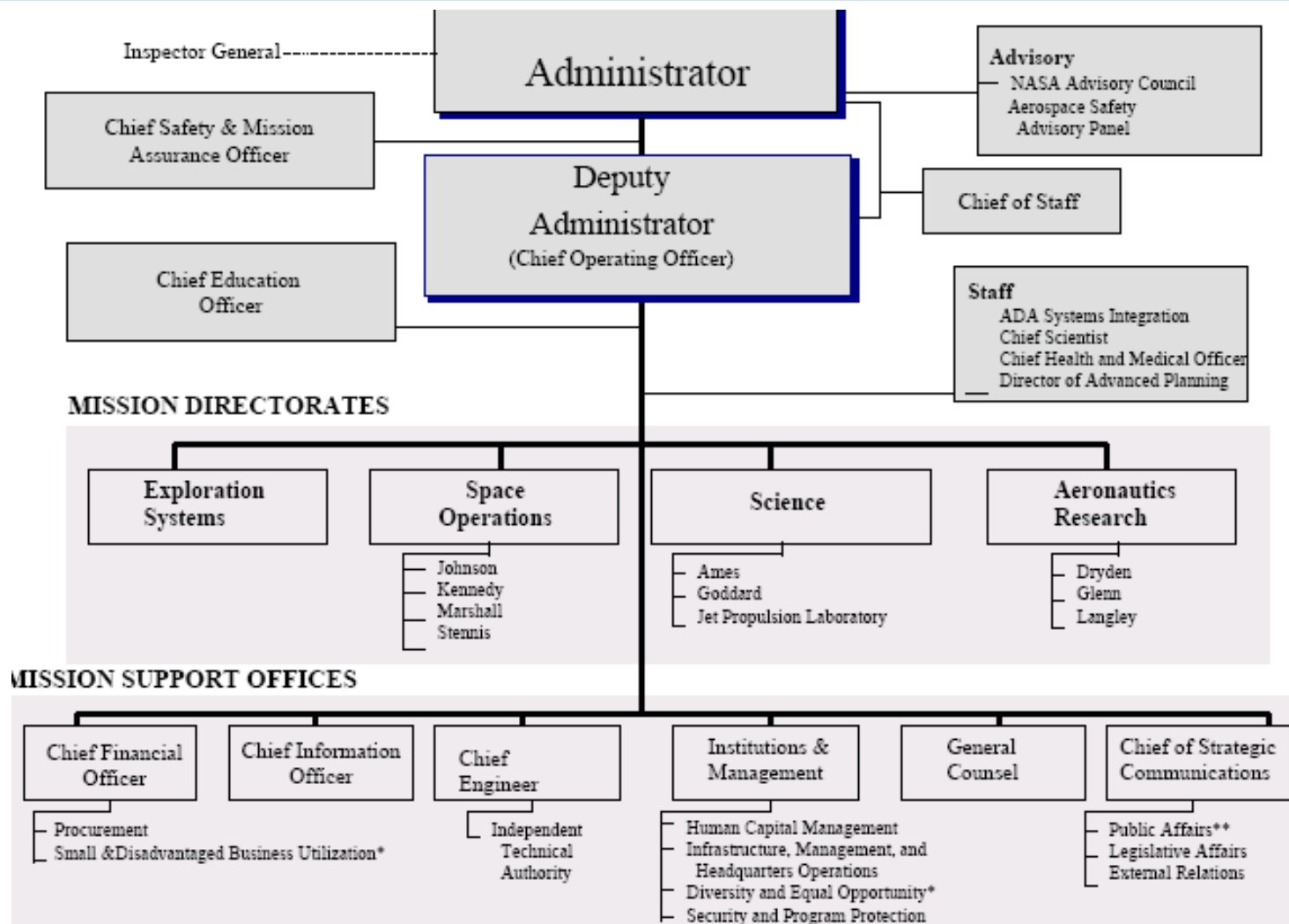
# Office of Education



# Office of Education



## Transformed Structure



\* In accordance with law, the Offices of Diversity and Equal Opportunity and Small and Disadvantaged Business Utilization maintain reporting relationships to the Deputy and the Administrator.

\*\* Including a new emphasis on internal communications.



## NASA Vision and Mission

### **The NASA Vision**

**To improve life here,  
To extend life to there,  
To find life beyond.**

### **The NASA Mission**

**To understand and protect our home planet,  
To explore the universe and search for life,  
To inspire the next generation of explorers  
...as only NASA can.**

A composite image featuring the Sun in the bottom left, Earth in the center, and the Moon in the top left. A satellite with solar panels is in the upper right. The background is a starry field. Three curved bands in orange, red, and black sweep across the bottom right. The text 'NASA' is in large white letters on the left. Below it, 'SCIENCE MISSION DIRECTORATE' is in smaller white letters. To the right of a vertical line, three lines of white text describe the mission. At the bottom, three labels 'SUN - EARTH SYSTEM', 'SOLAR SYSTEM', and 'UNIVERSE' are positioned under the curved bands.

# NASA

SCIENCE  
MISSION  
DIRECTORATE

To understand and protect our home planet  
To explore the universe and search for life  
To inspire the next generation of explorers

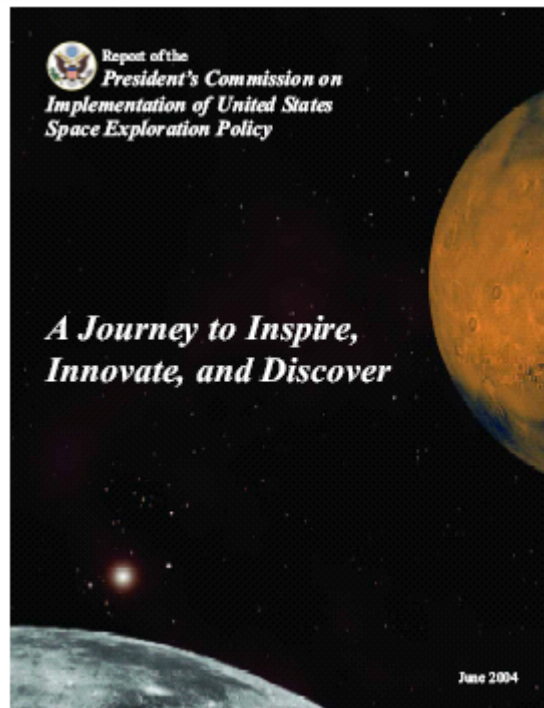
SUN - EARTH SYSTEM

SOLAR SYSTEM

UNIVERSE



## Aldridge Commission



### Section V

## Inspiring Current and Future Generations



### Finding 8

*The Commission finds that the space exploration vision offers an extraordinary opportunity to stimulate mathematics, science, and engineering excellence for America's students and teachers – and to engage the public in a journey that will shape the course of human destiny.*

Space exploration captures the imaginations of America's children and adults. The challenge before us is to leverage the journey to the space frontier to engage learners of all ages and interests. In addition, we must focus on training the workforce needed for the success of the long-term exploration program. The education community, working with NASA, must aggressively educate and train a new generation of explorers – there is perhaps no greater imperative for ensuring successful and sustainable space exploration by this nation.<sup>1</sup>



## Recommendation 8-1

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*The Commission recommends the Space Exploration Steering Council work with America's education community and state and local political leaders to produce an action plan that leverages the exploration vision in support of the nation's commitment to improve math, science, and engineering education. The action plan should:*

- increase the priority on teacher training;*
- provide for better integration of existing math, science, and engineering education initiatives across governments, industries, and professional organizations; and*
- explore options to create a university-based "virtual space academy" for training the next generation technical work force.*

**In explaining points 2 & 3, the Aldridge Commission made a strong plea for much greater "hands-on training".**



**Dr. Katie Blanding**  
*Designated Federal Official for  
 Education Advisory Committee*

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*Chief Education Officer*  
**Dr. Bernice Alston**  
*Deputy Chief Education Officer*

**Ms. Carolyn Knowles**  
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**Ms. Diane Bray (Acting)**  
*AAA for  
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 Public Affairs  
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## Summer Faculty Research Opportunities



NASA FACULTY FELLOWSHIP PROGRAM  
2003 ANNUAL REPORT

Aerospacetechnology



Human Exploration  
& Development of Space



Biological &  
Physical Research



Earth Science



Education



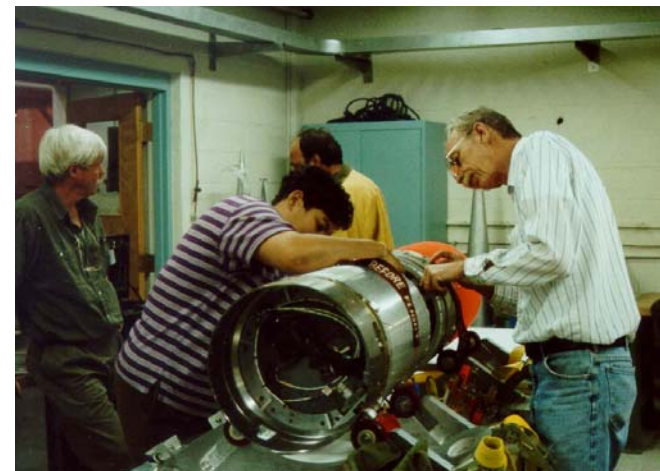
Space Science



"As Only NASA Can"



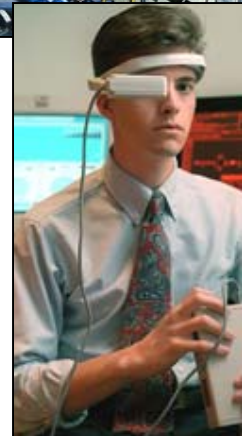
*NFFP as a program ended in 2004, but NASA will continue offering summer faculty research opportunities through other programs*



<http://www.asee.org/resources/fellowships/nffp/general.cfm>

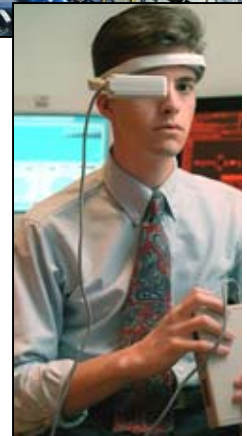
## Science and Technology Scholarship Program – Primary Features

- ❖ Eligibility limited to U.S. Citizens and Permanent Residents
- ❖ Scholarship eligibility for up to 4 academic years
- ❖ Scholarship recipients will receive up to \$20,000 tuition support per year (tuition, fees, and other expenses)
- ❖ Scholarship recipients will receive up to \$10,000 stipend support for annual research internship (mandatory) at a NASA Center/Installation and NASA-related research activities at home academic institution
- ❖ Scholarship recipient's academic programs approved and progress reviewed/approved annually by NASA
- ❖ Scholarship recipients must maintain an overall academic standing as required by the college/university, including a cumulative 3.0 GPA in all major coursework, to remain in the scholarship program.
- ❖ Financial need, as determined by the academic institution, may be considered



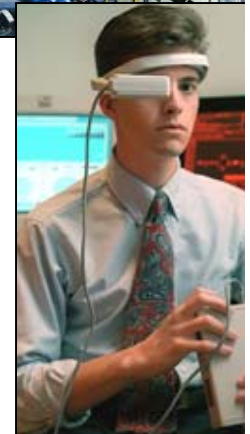
## Science and Technology Scholarship Program – Service Component

- ❖ Scholarship recipients incur two years of obligated NASA service for each full academic year of scholarship enrollment; four year statutory maximum obligation
- ❖ Service obligation to begin within 60 days of graduation
- ❖ Deferral option for graduate studies (with NASA approval)
- ❖ Obligation will be served as a term appointment
- ❖ Penalties for breach of contract:
  - Enrollment year(s): repayment of scholarship tuition costs if academic year not completed (repay scholarship-related expense costs only, not stipend)
- ❖ Upon graduation: repayment of scholarship tuition costs if service obligation not met (repay 3 times total scholarship expenses)



## Science and Technology Scholarship Program – Workforce Linkages

- ❖ Anticipate “steady-state” pipeline of ~200 students; will adjust intake according to NASA Competency Management System’s projected gaps
- ❖ First year estimated intake: ~25 rising freshmen; ~75 rising sophomores; ~75 rising juniors; ~25 rising seniors
- ❖ NASA to establish annual targeted academic disciplines/goals (% in engineering, natural/life sciences, mathematics, computer science, etc.); adjust intake annually to align with graduations, withdrawals, and projected NASA workforce requirements
- ❖ NASA Missions/Centers will have an active role in discipline allocation, participant selection and placement
- ❖ NASA will competitively select a Program Partner to administer and coordinate program activities





## **Final Remarks**

- ❖ **Very fluid time in NASA**
- ❖ **Office of Education is stable**
- ❖ **The role for Space Grant within the Office of Education continues to grow**
- ❖ **Excellent opportunities for Space Grant to align to the Vision for Space Exploration**