

2004 Current Fiscal Year Report: Biological and Physical Research Advisory Committee

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1. Department or Agency

National Aeronautics and Space
Administration

2. Fiscal Year

2004

3. Committee or Subcommittee

Biological and Physical Research
Advisory Committee

3b. GSA

Committee No.

1067

4. Is this New During Fiscal Year?

5. Current Charter

6. Expected Renewal Date

7. Expected Term Date

No 05/01/2003 05/01/2005 11/05/2004

8a. Was Terminated During Fiscal Year?

8b. Specific Termination Authority

8c. Actual Term Date

Yes 11/05/2004

9. Agency Recommendation for Next Fiscal Year

10a. Legislation Req to Terminate?

10b. Legislation Pending?

Terminate No

11. Establishment Authority

Agency Authority

12. Specific Establishment Authority

13. Effective Date

14. Committee Type

14c. Presidential?

Pub.L.No.85-568, As Amended, Section 203(c)(7) 03/07/1994 Ad hoc No

15. Description of Committee

Scientific Technical Program
Advisory Board

16a. Total Number of Reports

3

16b. Report Date

Report Title

10/24/2003 Biological & Physical Research
Advisory Committee Report

02/13/2004 Biological & Physical Research
Advisory Committee Report

05/21/2004 Biological & Physical Research
Advisory Committee Report

Number of Committee Reports Listed: 3

17a. 7 **17b. Closed** 0 **17c. Partially Closed** 0 **Other Activities** 0 **17d. Total** 7
Open

Meetings and Dates

| Purpose | Start | End |
|---|------------|------------|
| Research Partnership Subcommittee Meeting | 10/22/2003 | 10/22/2003 |
| Biological and Physical Research Advisory Committee Meeting | 10/23/2003 | 10/24/2003 |
| Biological and Physical Research Advisory Committee Meeting | 02/12/2004 | 02/13/2004 |
| Research Partnership Subcommittee Meeting | 04/05/2004 | 04/05/2004 |
| Biological and Physical Research Advisory Committee Meeting | 05/20/2004 | 05/21/2004 |
| Space Station Utilization Advisory Subcommittee Meeting | 07/28/2004 | 07/30/2004 |
| Biological and Physical Research Advisory Committee Telecon | 08/13/2004 | 08/13/2004 |

Number of Committee Meetings Listed: 7

| | Current FY | Next FY |
|---------------------------------------|--------------|--------------|
| 18a(1). Personnel | | |
| Pmts to Non-Federal Members | \$0.00 | \$0.00 |
| 18a(2). Personnel | | |
| Pmts to Federal Members | \$0.00 | \$0.00 |
| 18a(3). Personnel | | |
| Pmts to Federal Staff | \$120,666.00 | \$127,906.00 |
| 18a(4). Personnel | | |
| Pmts to Non-Member Consultants | \$0.00 | \$0.00 |
| 18b(1). Travel and Per | | |
| Diem to Non-Federal Members | \$48,129.00 | \$51,017.00 |
| 18b(2). Travel and Per | | |
| Diem to Federal Members | \$0.00 | \$0.00 |
| 18b(3). Travel and Per | | |
| Diem to Federal Staff | \$2,747.00 | \$2,912.00 |

| | | |
|-------------------------------|--------------|--------------|
| 18b(4). Travel and Per | | |
| Diem to Non-member | \$0.00 | \$0.00 |
| Consultants | | |
| 18c. Other(rents,user | | |
| charges, graphics, | \$59,594.00 | \$63,170.00 |
| printing, mail, etc.) | | |
| 18d. Total | \$231,136.00 | \$245,005.00 |
| 19. Federal Staff | | |
| Support Years (FTE) | 1.58 | 1.73 |

20a. How does the Committee accomplish its purpose?

The BPRAC provides NASA with expert technical and programmatic advice on issues and decisions facing the management of the Office of Biological and Physical Research (OBPR), which on August 1, 2004, as part of the NASA agency transformation, joined the new Exploration Systems Mission Directorate. The committee through its findings and recommendations has had a direct influence on biological and physical research policies and priorities, and has brought forward to the NASA Advisory Council issues of major importance to the civil space program, such as the optimal use of the International Space Station, and crew health and safety. As the sole NASA advisory body on physical and biological research, the committee's advice represents the views of the national research community in areas of vital importance to the future of space exploration. The committee has oversight of programs that deal with basic research, applied research, technology development, and commercialization. The issues the committee deals with impact future NASA mission readiness in the areas of life support systems, human adaptation to the space environment, fire safety, availability of automated technologies that increase mission efficiency, and International

Space Station utilization. The committee also assesses OBPR program performance as part of the agency compliance with the Government Performance and Results Act (GPRA).

20b. How does the Committee balance its membership?

The members of Committee and its subcommittees are drawn from a cross-section of the communities in biological and biomedical sciences, the physical sciences, engineering, and research/technology commercialization. Professional recognition and stature is a critical factor in selecting members. Members are also selected to effectively represent a wide range cultural perspectives and backgrounds, in order to clearly capture the breadth of perspectives expected of a national investment.

20c. How frequent and relevant are the Committee Meetings?

The BPRAC generally meets three times in a calendar year. The subcommittees met two times during the fiscal year in conjunction with the BPRAC. These meetings are required if the Biological and Physical Research Advisory Committee and its subcommittees are to give timely and relevant advice concerning the evolving issues and programs connected with the BPRAC.

20d. Why can't the advice or information this committee provides be obtained elsewhere?

No other NASA advisory group contains the spectrum of expertise required to span the breath of BPRAC research programs. Advice from the community served by BPRAC is essential in matters related to defining the relative importance of the various thrusts in competition for funding and this Committee is the sole source of such

advice. No other group of experts has the insight and experience to provide the same level of advice to the Agency concerning life and microgravity sciences and applications especially relative to international partners and development of payloads on the International Space Station.

20e. Why is it necessary to close and/or partially closed committee meetings?

There were no closed or partially closed meetings of this committee.

21. Remarks

Designated Federal Officer

Terri Lomax Executive Secretary, BPRAC

| Committee Members | Start | End | Occupation | Member Designation |
|-------------------|------------|------------|-------------------------------|--|
| Anderson, Timothy | 10/01/2004 | 09/30/2006 | University of Florida | Special Government Employee (SGE) Member |
| Askew, Raymond | 05/02/2003 | 05/02/2005 | Texas A&M University | Special Government Employee (SGE) Member |
| Augenlicht, Len | 10/01/2004 | 09/30/2006 | Albert Einstein Cancer Center | Special Government Employee (SGE) Member |
| Austin, Larry | 10/01/2004 | 09/30/2006 | Starwalker Group | Special Government Employee (SGE) Member |
| Baldwin, Kenneth | 10/01/2004 | 09/30/2006 | University of California | Special Government Employee (SGE) Member |
| Bigelow, Nicholas | 05/02/2003 | 05/02/2005 | University of Rochester | Special Government Employee (SGE) Member |
| Billings, Linda | 10/01/2004 | 09/30/2006 | SETI Institute | Special Government Employee (SGE) Member |

| | | | | |
|-----------------|------------|------------|------------------------------------|--|
| Borer, Jeffrey | 05/02/2003 | 05/02/2005 | Cornell University Medical Center | Special Government Employee (SGE) Member |
| Bula, Raymond | 05/02/2003 | 05/02/2005 | University of Wisconsin, Madison | Special Government Employee (SGE) Member |
| Crouch, Roger | 10/01/2003 | 09/30/2005 | NASA HQs | Special Government Employee (SGE) Member |
| Curbeam, Robert | 10/01/2004 | 09/30/2006 | | Special Government Employee (SGE) Member |
| Daley, Thomas | 05/02/2003 | 05/02/2005 | Philadelphia Naval Business Center | Special Government Employee (SGE) Member |
| Day, Stephen | 10/01/2003 | 09/30/2005 | | Special Government Employee (SGE) Member |
| Doarn, Charles | 10/01/2003 | 09/30/2005 | University of Cincinnati | Special Government Employee (SGE) Member |
| Duke, Michael | 10/01/2004 | 09/30/2006 | Colorado School of Mines | Special Government Employee (SGE) Member |
| Faeth, Gerard | 05/02/2003 | 05/02/2005 | University of Michigan | Special Government Employee (SGE) Member |
| Fuller, Charles | 10/01/2004 | 09/30/2006 | University of California | Special Government Employee (SGE) Member |
| Gross, Leroy | 05/02/2003 | 05/02/2005 | Veterans Health Administration | Special Government Employee (SGE) Member |
| Holstein, Gay | 10/01/2003 | 09/30/2005 | Mount Sinai School of Medicine | Special Government Employee (SGE) Member |
| Jacox, Michael | 10/01/2004 | 09/30/2006 | StarVision Technology, Inc. | Special Government Employee (SGE) Member |
| Kanas, Nick | 10/01/2003 | 09/30/2005 | VA Medical Center | Special Government Employee (SGE) Member |

| | | | | |
|---------------------|------------|------------|--|---|
| Kronenberg, Amy | 10/01/2004 | 09/30/2006 | Lawrence Berkeley Laboratory | Special Government Employee (SGE) Member |
| Lahey, Richard | 10/01/2004 | 09/30/2006 | Rensselaer Polytechnic Institute | Special Government Employee (SGE) Member |
| McDonald, Jay | 10/01/2004 | 09/30/2006 | University of Alabama at Birmingham | Special Government Employee (SGE) Member |
| Merrell, Ronald | 05/02/2003 | 05/02/2005 | Yale University | Special Government Employee (SGE) Member |
| Musgrave, Mary | 05/02/2003 | 05/02/2005 | University of Massachusetts | Special Government Employee (SGE) Member |
| Nygren, Richard | 10/01/2004 | 09/30/2006 | Lyndon B. Johnson Space Center | Special Government Employee (SGE) Member |
| Oman, Charles | 10/01/2003 | 09/30/2005 | Massachusetts Institute of Technology | Special Government Employee (SGE) Member |
| Overfelt, Tony | 10/01/2003 | 09/30/2005 | Auburn University | Special Government Employee (SGE) Member |
| Smylie, Robert | 10/01/2004 | 09/30/2006 | | Special Government Employee (SGE) Member |
| Solomon, Stephen | 10/01/2004 | 09/30/2006 | | Special Government Employee (SGE) Member |
| Spaulding, Glenn | 10/01/2003 | 09/30/2005 | Clear Lake Medical Foundation | Special Government Employee (SGE) Member |
| Tapley, Byron | 10/01/2003 | 09/30/2005 | University of Texas at Austin | Special Government Employee (SGE) Member |
| Wang, Eugenia | 10/01/2004 | 09/30/2006 | University of Louisville School of Medicine | Special Government Employee (SGE) Member |

Number of Committee Members Listed: 34

Narrative Description

The BPRAC provides NASA with expert technical and programmatic advice on issues and decisions facing the management of the Office of Biological and Physical Research (OBPR). The committee through its findings and recommendations has had a direct influence on the policies and priorities of the OBPR, and has brought forward to the NASA Advisory Council issues of major importance to the civil space program, such as the optimal use of the International Space Station, and crew health and safety. As the sole NASA advisory body on physical and biological research, the committee's advice represents the views of the national research community in areas of vital importance to the future of space exploration. The committee has oversight of programs that deal with basic research, applied research, technology development, and commercialization. The issues the committee deals with impact future NASA mission readiness in the areas of life support systems, human adaptation to the space environment, fire safety, availability of automated technologies that increase mission efficiency, and International Space Station utilization. The committee also assesses OBPR program performance as part of the agency compliance with the Government Performance and Results Act (GPRA).

What are the most significant program outcomes associated with this committee?

Checked if
Applies

| | |
|---|-------------------------------------|
| Improvements to health or safety | <input type="checkbox"/> |
| Trust in government | <input type="checkbox"/> |
| Major policy changes | <input type="checkbox"/> |
| Advance in scientific research | <input checked="" type="checkbox"/> |
| Effective grant making | <input checked="" type="checkbox"/> |
| Improved service delivery | <input type="checkbox"/> |
| Increased customer satisfaction | <input checked="" type="checkbox"/> |
| Implementation of laws or regulatory requirements | <input type="checkbox"/> |
| Other | <input type="checkbox"/> |

Outcome Comments

NA

What are the cost savings associated with this committee?

Checked if Applies

- | | |
|----------------------------|-------------------------------------|
| None | <input type="checkbox"/> |
| Unable to Determine | <input checked="" type="checkbox"/> |
| Under \$100,000 | <input type="checkbox"/> |
| \$100,000 - \$500,000 | <input type="checkbox"/> |
| \$500,001 - \$1,000,000 | <input type="checkbox"/> |
| \$1,000,001 - \$5,000,000 | <input type="checkbox"/> |
| \$5,000,001 - \$10,000,000 | <input type="checkbox"/> |
| Over \$10,000,000 | <input type="checkbox"/> |
| Cost Savings Other | <input type="checkbox"/> |

Cost Savings Comments

NA

What is the approximate Number of recommendations produced by this committee for the life of the committee?

10

Number of Recommendations Comments

NA

What is the approximate Percentage of these recommendations that have been or will be Fully implemented by the agency?

90%

% of Recommendations Fully Implemented Comments

NA

What is the approximate Percentage of these recommendations that have been or will be Partially implemented by the agency?

5%

% of Recommendations Partially Implemented Comments

NA

Does the agency provide the committee with feedback regarding actions taken to

implement recommendations or advice offered?

Yes ☒ No ☐ Not Applicable ☐

Agency Feedback Comments

Reports on Agency actions at next meeting.

What other actions has the agency taken as a result of the committee's advice or recommendation?

Checked if Applies

| | |
|-----------------------------------|-------------------------------------|
| Reorganized Priorities | <input type="checkbox"/> |
| Reallocated resources | <input type="checkbox"/> |
| Issued new regulation | <input type="checkbox"/> |
| Proposed legislation | <input type="checkbox"/> |
| Approved grants or other payments | <input type="checkbox"/> |
| Other | <input checked="" type="checkbox"/> |

Action Comments

Utilize expert scientific advice to strengthen approaches to meet mission objectives.

Is the Committee engaged in the review of applications for grants?

No

Grant Review Comments

NA

How is access provided to the information for the Committee's documentation?

Checked if Applies

| | |
|---------------------------|-------------------------------------|
| Contact DFO | <input type="checkbox"/> |
| Online Agency Web Site | <input type="checkbox"/> |
| Online Committee Web Site | <input type="checkbox"/> |
| Online GSA FACA Web Site | <input checked="" type="checkbox"/> |
| Publications | <input type="checkbox"/> |
| Other | <input checked="" type="checkbox"/> |

Access Comments

Contact Advisory Committee Specialist or Executive Secretary at Agency. Directorate web site has link for advisory committee information.