

MEMORANDUM TO: Members of the National Science Board

SUBJECT: Preliminary Report of the March 26, 27, 28, 1997 Meeting

The major actions of the Board at its 342nd meeting on March 26, 27, 28, 1997 are summarized for the advance information of those members absent and as a reminder to those present.

1. Executive Committee

In the absence of a quorum, the Executive Committee reconvened in Closed Session to approve the following items:

- a. Closed session agenda items for the May 1997 NSB meeting;
- b. Open and Closed Session Minutes for the February 1997 meeting;
- c. Alan T. Waterman and Vannevar Bush Award Recipients

Dr. H. Guyford Stever, former NSF Director, is the recipient of the Vannevar Bush Award. The Alan T. Waterman Award recipient will be announced after the recipient is notified. Both will be presented at the May Awards dinner at the State Department on May 7.

d. Proposed Award Review Exemptions

1. U.S. Coast Guard Logistics Support for the U. S. Antarctic Program, NSB-97-53, Board Book, Tab B1.

- A five-year waiver from NSB review requirements for CY 1997-2001 for icebreaker logistics support in Antarctica. This support is performed by the U.S. Coast Guard under an interagency memorandum of agreement between the National Science Foundation and the Department of Transportation. The Director will notify the Board of any significant changes in the relationship between NSF and the U.S. Coast Guard.

2. Department of Defense Logistics Support for the U.S. Antarctic Program, NSB-97-54, Board Book, Tab B2.

- A five-year waiver from NSB review requirements for CY 1997-2001 for DOD logistics support in Antarctica. This support is performed by the Department of Defense under an interagency Memorandum of Agreement between the National Science Foundation and the Department of Defense. The Director will notify the Board of any significant proposed changes in the relationship between NSF and the Department of Defense.

e. Award actions:

Amount
Not to
Exceed

Computer and Information Science and Engineering
Division of Advanced Scientific Computing

Partnerships for Advanced Computational Infrastructure,
NSB-97-50, Board Book, Tab A1.

The Executive Committee authorized the Director at his discretion to make an award to the University of Illinois at Urbana-Champaign for the National Computational Science Alliance for an amount not to exceed \$170,000,000 for a period of 60 months of which the first year budget will not exceed \$29,000,000.

\$170,000,000

The Executive Committee authorized the Director at his discretion to make an award to the University of California at San Diego for the National Partnership for Advanced Computational Infrastructure for an amount not to exceed \$170,000,000 for a period of 60 months of which the first year budget will not exceed \$29,000,000.

\$170,000,000

Mathematical and Physical Sciences
Division of Physics

Studies of Nuclear Structure and Nuclear Processes at Intermediate Energies at Indiana University, NSB-97-52, Board Book, Tab B3.

The Executive Committee authorized the Director at his discretion to make an award for Studies of Nuclear Structure and Nuclear Processes at Intermediate Energies at Indiana University for an amount not to exceed \$33,000,000 for 60 months.

\$33,000,000

The Executive Committee reconvened during the Open Session of the Board and approved the following items in Open Session:

- a. The Executive Committee approved the Integrative Graduate Education and Research Training ((IGERT) Program, Tab F in the Board Book.
- b. Recommendations of the Merit Review Task Force, NSB/MR-97-5, Board Book, Tab H. and a resolution on New General Criteria for Merit Review of proposals, NSB-97-72.
- c. Recommendations of the report of the Ad Hoc Committee on Board Operations, NSB-OPS-97-6, Board Book, Tab G.

The Committee recommended that the current calendar year be used to transition to the new NSB meeting schedule. The transition year would be as follows:

NSB Meetings:

May 7, 8, 9, 1997
August 20, 21, 22, 1997
October 8, 9, 10, 1997 (off-site)
November 12, 13, 14, 1997
Late February 1998 [TBA]
(including NSB retreat)

Executive Committee Meetings

June 19, 1997
January 1998 [TBA]

2. NSF Distinguished Public Service Award

The Chairman announced that a posthumous NSF Distinguished Public Service Award to Carl Sagan. His widow, Ms. Ann Druyan, will accept the award. Members were encouraged to write a personal note to their congressional representatives encouraging them to attend the dinner.

3. Mechanisms for Setting Priorities in S&E

The Board discussed a draft resolution on Analyses to Assist in Preparation and Enactment of Federal Budgets for Science and Engineering Research and Education, NSB-97-71. The Chairman asked members to review the White Paper developed by Dr. Ian Ross. The White Paper and the resolution will be discussed again at the May meeting. Board members are asked to fax their comments on the White Paper to Dr. Ross.

4. Committee Meeting Summaries

The summaries of committee reports are provided by the executive secretaries of the respective committees.

a. Executive Committee (EC)

The Executive Committee discussed the organization of the March NSB meeting. It also discussed NSF plans for commemorating the 50th anniversary of the establishment of the Foundation and the Board and the NSB awards dinner in May. The Committee concurred with the Director's recommendation for this year's recipient of the Alan T. Waterman Award. The Director reported on personnel issues and on recent and planned congressional hearings.

b. Audit and Oversight (A&O)

The Committee received two task force reports and an update.

Mr. Paul Herer reported for the Task Force on Merit Review. The Committee saw no need to approve the report, since it will receive full Board discussion, but it commended the Task Force on its excellent work.

Dr. Claudia Mitchell-Kernan reported for the Board/staff Task Force on GPRA. The Task Force had had a full discussion of the current draft of the GPRA strategic plan, which represents continuing excellent progress. The Task Force recommended that the plan could still benefit from greater focus, sharper priorities, and presentation of mission and value in a less abstract form. The Audit and Oversight Committee agreed with these recommendations, and suggested that examples of achievement of the objectives would facilitate communication with a lay audience.

Dr. Judy Sunley reported on the status of NSF's response on the proposed definition of research misconduct. Neal Lane and Dick Zare have incorporated the Board's discussion, at its last meeting, into a letter of response, which has been sent to OSTP. Copies were made available to committee members.

During the A&O Supervisory Session of the Committee, the IG and KPMG Peat Marwick (OIG's contract auditors) presented the Independent Auditors' Reports on NSF's FY 1996 financial statements: The Report on Financial Statements, the Report on Internal Controls, and the Report on Compliance with Laws and Regulations. After discussion and in response to the results, the Committee asked that the presentations by the IG, the CFO and the COO, previously planned for the May meeting, should also address problems and issues that have arisen in the course of developing NSF's financial statements and in performing OIG's audit of these statements and provide options that resolve these problems and issues.

c. Committee on Programs and Plans (CPP)

The Committee reviewed and recommended to the full Board approval of the proposed award to the Indiana University Cyclotron Facility (IUCF) [NSB-97-52], and waived its review of proposed awards for continued logistics support/ice breaking to the USAP by the U.S. Coast Guard and for continued overall logistics support to the USAP, currently provided by the Department of Defense (DOD) and the United States Navy (USN).

The Committee received a report from the Polar Task Force focusing on recent testimony by Dr. Norman Augustine before the House Science Committee, on findings by the panel looking at the USAP program chaired by Dr. Augustine.

Finally, the Committee had an information presentation on the history, practice, and current policy regarding recompetition of large projects and facilities at NSF. The Committee requested staff to explore options on how the process for determining whether recompetition is appropriate, depending on the program or specific project.

d. CPP Polar Issues Task Force (PI)

Dr. Sullivan reported on testimony by Dr. Norman Augustine to the House Science Committee on March 12, 1997 concerning the findings of the Antarctic External Review Panel.

Dr. Richard Greenfield, Director of the Division of Atmospheric Sciences in GEO, and Dr. Richard Roinson, program officer for the Polar Cap Observatory project, reported on plans to build an atmospheric observatory in the Polar Cap Region.

Dr. Carol Seifert, Program Officer in the Arctic Social Sciences Program, reported to the Task Force on findings from studies of ice core data and archeological studies of human behavior how humans reacted to climate change in the North Atlantic several centuries ago.

e. Committee on Education and Human Resources (EHR)

In an action item, the Committee gave a unanimous positive recommendation for the Integrative Graduate Education and Research Training (IGERT) Program. The Committee heard a presentation on the Professional Opportunities for Women in Research and Education (POWRE) Program, and was briefed on the Children's Initiative from the White House. The briefing was followed by a wide-ranging discussion on cognition and learning and the implications for NSF programs.

f. EHR Subcommittee on Science and Engineering Indicators (S&EI)

The S&EI Subcommittee met and discussed the general outline and approach for chapter 8 on the economic and social impacts of science and technology. The topic of computers and information technologies will be adopted as a major focus of the chapter. The chapter will examine the productivity paradox for computers and information and will highlight the difficulties and complexities in measuring the economic and social impacts of science and technology as well as the need for improved methodologies, research and data. The Subcommittee also received a briefing on the progress of the graduate data initiative from Jeanne Griffith, Director of the Division of Science Resources Studies, and was supportive of the direction that is being taken.

g. Ad Hoc Committee on Board Operations

The Committee discussed the presentation of its final report to the Board during Open Session on Friday, March 28. The Committee also discussed future plans for video conferencing in the conduct of Board business and for reviewing information provided to the Board with the intent to make access to information more flexible at the same time as the volume of printed information is reduced.

h. Task Force on Government Performance and Results Act (GPRA)

The Task Force and Dr. Joe Bordogna discussed the NSF draft GPRA Strategic Plan and the larger Washington context. The Task Force agreed that the general approach on NSF goals and how we achieve them in the NSF draft Plan was appropriate; that NSF should not adopt the strategic approach of the more directed, mission agencies; and that revisions to the draft Plan should provide greater focus, clearer priorities, and make the Plan easier to understand--less abstract and with more use of examples. Dr. Bordogna thanked the Task Force and indicated that their comments would be most helpful in revising the draft GPRA Strategic Plan and in developing additional GPRA documents (annual performance plans and annual performance reports). These will be discussed with the Task Force at future meetings.

i. Task Force on Merit Review (MR)

The Task Force reviewed and approved the following actions: Final Recommendations of the Merit Review Task Force, NSB/MR 97-05; wording of NSB resolution NSB 97-72, which approves the general merit review criteria set forth in the report and authorizes the Director to proceed expeditiously with their implementation; a presentation Dr. Washington was to make to the full Board on Friday, March 28; and a list of ancillary issues raised in the public responses received by NSF. The Task Force authorized the Chair to send a transmittal memo to the NSF Director calling attention to this list of issues and recommending that NSF analyze and appropriately respond.

Marta Cehelsky
Executive Officer