

12:30 PM - National Science
Broad Meeting with the President
Friday, March 21, 1975

Dr. Haskins - excellent speech -
st. vital role in country's future
Best support system for Bonn
in the world
Bonn set of challenges

Dr. Pines - dinner pointed
entirely of 2/4 -
Colman

Beth who looks
then
Gordon: 2 early activities @ contact
to support in scientific &
world - support for
equivalent person

Science on
TV?

Dr. Pines -
Dr. Helfferd - implications: man
a 40% cut in equipment | if they
use
way

Dr. Cooke - Trade find
eyes to find
approximate
between systems
Science -
Don't you
know -
Dr. Pines
problems
down

Dr. Cobb - census a way of that
university & women
27% women on faculty
29% women in tenured positions

Pines - 1972 water, but - not
every people to
use problem



THE WHITE HOUSE

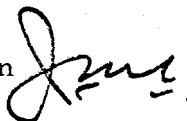
WASHINGTON

March 20, 1975

MEETING WITH NATIONAL SCIENCE BOARD

Friday, March 21, 1975
12:30 p.m. (30 minutes)
Cabinet Room

From: Jim Cannon



I. PURPOSE

To provide an opportunity for the Board, at its request, to meet with you and present views on how science and technology can make a greater contribution to the solution of important National problems.

II. BACKGROUND, PARTICIPANTS AND PRESS PLAN

A. Background

The National Science Board is the Presidentially-appointed policy making body of the National Science Foundation (NSF). Members serve six-year terms. You have appointed 6 of the 25 members (listed at Tab A). NSF Director Guy Stever is a member of the Board. The Board will be celebrating its 25th Anniversary next week.

The Board's sixth annual report with your letter of transmittal is being delivered to Congress and released to the press today (March 21).

Members of the Board have developed a proposed agenda for its meeting with you (enclosed at Tab B). Briefly, their plans call for:

- Brief opening remarks by Board Chairman Norman Hackerman commenting on the Board's past activities, the strength of

the Nation's research establishment, and the support you have given for research in the 1976 Budget (an increase of 10%, from \$7.4 billion in 1975 to \$8.2 billion in 1976).

. Members of the Board would:

- describe selected scientific applications, including applications in energy, medicine, hybrid crops, earthquake prediction, genetics, transistors and polymers.
- review some of the challenges facing the Nation where additional research is required and where science can contribute.
- comment on difficulties in the Nation's research establishment (especially colleges and universities) because of budgetary constraints and the impact of inflation in negating increases in Federal funding.

The Board will not bring up the issue of a White House Science Advisory organization. (A talking point is provided below if you wish to bring it up.)

B. Participants: See Tab A

C. Press Plan: Press Photo opportunity, White House photographer

III. TALKING POINTS

[Opening remarks by Chairman Ackerman who will present a bound copy of the Board's Annual Report.]

- . I appreciate receiving this special copy of your report. I am transmitting your report to the Congress and releasing it to the press today.
- . My 1976 Budget includes a 10% increase in funding for research. Ideally we would spend more for research. Many programs have been held to smaller increases.
- . EPA has announced that catalytic converters cause serious unforeseen health hazards. Do you have ideas on how to prevent such costly mistakes--recognizing that pressure for quick action forces regulatory agencies to act without adequate research.
- . I'm well aware of the strong interest in reestablishing a science advisory mechanism in the White House. This is a very important question which I will deal with soon. I'd welcome any comments you wish to make.

PARTICIPANTS

Members of the National Science Board

(23 of 25 members will attend)

- * DR. NORMAN HACKERMAN, (Chairman), President, Rice University
- DR. RUSSELL D. O'NEAL, (Vice Chairman), Executive Vice President
KMS Fusion, Inc., Ann Arbor
- DR. W. GLENN CAMPBELL, Director, Hoover Institution on War
Revolution, and Peace, Stanford University
- DR. H. E. CARTER, Coordinator of Interdisciplinary Programs
University of Arizona
- DR. ROBERT A. CHARPIE, President, Cabot Corporation
- * DR. JEWEL PLUMMER COBB, Dean, Connecticut College, New London
- DR. LLOYD M. COOKE, Director of Urban Affairs and University
Relations, Union Carbide Corporation, New York
- DR. ROBERT H. DICKE, Sherman Fairchild Distinguished Scholar
California Institute of Technology
- DR. DAVID M. GATES, Professor of Botany, Biological Station,
University of Michigan
- DR. T. MARSHALL HAHN, JR., Executive Vice President,
Georgia-Pacific Corporation, Portland, Oregon
- DR. ANNA J. HARRISON, Professor of Chemistry, Mount Holyoke College,
South Hadley, Massachusetts
- DR. ROGER W. HEYNS, President, American Council on Education,
Washington, D. C.
- DR. W. N. HUBBARD, JR., President, The Upjohn Company, Kalamazoo
- * DR. SAUNDERS MAC LANE, Max Mason Distinguished Service, Professor
of Mathematics, University of Chicago

*Members you appointed

- MR. WILLIAM H. MECKLING, Dean, Graduate School of Management
The University of Rochester
- DR. WILLIAM A. NIERENBERG, Director, Scripps Institution of
Oceanography, University of California at San Diego
- DR. FRANK PRESS, Chairman, Department of Earth and Planetary
Sciences, Massachusetts Institute of Technology
- DR. JOSEPH M. REYNOLDS, Boyd Professor of Physics and
Vice President, Louisiana State University
- * DR. DONALD B. RICE, JR., President, The Rand Corporation,
Santa Monica, California
- DR. L. DONALD SHIELDS, President, California State University
Fullerton, California
- DR. H. GUYFORD STEVER, Director, National Science Foundation
- DR. F. P. THIEME, Special Consultant to the Board of Regents and
Professor of Anthropology, University of Colorado
- * DR. JAMES H. ZUMBERGE, Chancellor, University of Nebraska

Others

- MISS VERNICE ANDERSON, Executive Secretary, National Science
Board
- DR. PHILIP SMITH, Assistant to the Director, National Science
Foundation

White House Staff

Robert Goldwin
James Cannon
Mike Duval

Members not Attending

- DR. HUBERT HEFFNER, Chairman, Department of Applied Physics,
Stanford University
- DR. GROVER E. MURRAY, President, Texas Tech University and
School of Medicine, Lubbock, Texas

PROPOSED AGENDA: MEETING OF PRESIDENT FORD WITH THE NATIONAL SCIENCE
BOARD (NSB)

- o Briefly, in opening the meeting, NSB Chairman Hackerman would note that in its 25th Anniversary year the NSB appreciates the opportunity for a meeting with the President.
 - The first meeting of the NSB took place with President Truman in the Cabinet Room in 1950.
 - The Board has had the occasion to meet with other Presidents over the years.
- o It would be noted that over the post World War II years with continued Presidential and Congressional support and through the establishment of agencies such as NIH and NSF, the Nation has constructed the world's best structure for the support of research. The Board appreciates President Ford's support and notes especially that in the face of economic constraints the FY 76 budget for R&D evidences the continuing commitment of the Administration through scientific research and development.
 - Basic research--as contrasted to applied research and development more characteristic of the mission agencies--is the principal investment in the Nation's long-term future scientific and technological future. It requires the sizeable and sophisticated scientific establishment with trained people, facilities, and instrumentation and the continued support which has come to be recognized as a proper Federal role since pay-off is distant and less attractive to industry.
 - There are a growing number of studies that illustrate the fact that science and technology are contributing an ever larger portion of the total GNP.
- o It would be noted that there have been some significant advances in sciences that draw upon the Federal investment made through agencies such as NSF, NIH, Agriculture, etc.
 - The advances in nuclear physics that have led to dramatic applications, ranging from energy to medicine.
 - Successes in biology that have led to the new hybrid crops.
 - The new understanding of plate tectonics and the sea floor spreading process and the implications for future mineral supplies and the possibility of predicting earthquakes.

- The evolving understanding of genetics, DNA, and the genetic code.
- The advances in solid state physics that have produced the transistor, integrated circuits, and the computer.
- The profound effect that basic research in polymer chemistry has had on our industrially-based economy.
- o There are before the Nation a number of challenges where science can be of assistance. This has been the theme of the 1974 report of the National Science Board (Science And The Challenges Ahead) which is now being forwarded by the President to the Congress. Some of the national needs and scientific opportunities are not now being fully met. Continued attention is required to ensure that the best Federal and industrial strategy develops for prosecuting these opportunities. There are some examples that can be cited.
 - Through work in the U.S. (and also investigation in the USSR the results of which became available through the exchanges following the May 1972 agreements) the scientific community believes that earthquake prediction is possible.
 - Though materials shortages are cited as a future crisis it is difficult to identify specific shortages in the near term. Accelerating longer term materials research may provide the best alternative in ensuring the necessary base for our economy.
 - The environmental data base necessary to better understand the technical basis for regulatory standards, short and longer term climate variations severe storms, problems of water quality and waste treatment, the management of the Great Lakes and so on needs to be greatly enlarged. We do not now have a sufficient understanding, for example, to unequivocally specify ambient air standards.
- o Some difficulties exist in the research establishment especially the Nation's colleges and universities. These problems stem from inflation, budgetary constraints (in constant dollars), changing age of the industrial and academic science and engineering population and finally from institutional problems related to the very rapid acceleration of growth in the 1960's and the subsequent leveling of growth in the 1970's. Some specific indicators are:
 - The fact that the number of doctoral candidates entering graduate schools in science and engineering has dropped.

- The numbers of minorities and women entering science continues to be disappointing in spite of the national mandate to make improvements in this area.
 - Young investigators are being squeezed out as the institutional base stabilizes.
 - New instrumentation needs (not the large facilities but the laboratory and other general instrumentation needs) are not being fully met.
 - Tight budget periods create a tendency to put aside high risk research and other new initiatives that may have especially high yield but very unpredictable payoff.
- o It is the National Science Board's belief that these are problems in which the scientific and engineering community, the Administration, the Congress, and the public must work together to bring about the best possible resolution.

Dr Anderson

Dr Hunter

VP - met from Boston
up from every
Mormon
focus on today's
problem & tomorrow's
water & not
yesterday's problems

Dr Hunter

Pres - up from foundation &
equipment in secondary schools

VP - Answered food challenge
energy - for the
sense of purpose as a nation

Dr Huber - remarkably successful
man published
potential program

Pres - from healthy country is
tribute to our country & from to
Government.

