The original documents are located in Box 43, folder "1975/03/21 - President and National Science Board" of the James M. Cannon Files at the Gerald R. Ford Presidential Library.

12:30 PM - National Science
Broad Meeting with the Presdient

Friday, March 21, 1975

Dr Hackerman - challenges ahead -
St. critical role in country's future
Best support system for Basic
research in the world
Basic act of discovery

Dr Press - discuss results
extension of 2/4 -
Columbia

Better when women look
after them

Dr Press - Solutions: ① early education ② content
Program is complex
award - support for
graduate research

Science on TV?

Dr Hubbard - application research
a 40% cut in equipment

if they need help

Dr Cooke - Industry find
ways to fill
applied research
Other Departments

Science -
Does gov't
support -
Research
products
down

Dr Cater =

Dr Cobb - concern re adequacy of Math
instruction + women -
2% men or females
2% drop in test positions

Press - 1972 water Act - need
more people to
meet problems

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 unforseen 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 Unviersity 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 tratement, 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 stablizes.

-- 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 tendancy 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 Henderson

Dr Hayes.

VP – Not for Boston
up [illegible] any
[illegible] &
[illegible]
focus on today's
problem & tomorrow's
problem & not
yesterday's problems

Dr Hamer =

Pres – upgrade faculties &
support in secondary schools

VP – Answer food challenge
energy – goes for the same
area of purpose as nation

Dr Hutchens – Remarkably successful
[illegible] institutions
[illegible]

Pres – How healthy municipal county is
[illegible] to our country & form b
Government.