The original documents are located in Box 45, folder "1975/05/13 - President, Vice President, and Rumsfeld" of the James M. Cannon Files at the Gerald R. Ford Presidential Library.

12:15 PM - Presidential MEeting on
Science Advisor
Vice President, Cannon
Rumsfeld (45 min.)

Tuesday, May 13, 1975

THE WHITE HOUSE

WASHINGTON

ACTION

April 24, 1975

MEMORANDUM FOR: THE PRESIDENT

FROM: JIM CANNON

SUBJECT: Science and Technology Adviser to the President

BACKGROUND:

Some time ago you requested a recommendation from the Vice President on a Science and Technology Adviser to the Administration.

The Vice President submitted a proposal, then conducted additional research and submitted another proposal on March 3, 1975 (Tab I).

You then indicated an interest in having a study made of what previous Presidential science advisers had actually accomplished for the Presidents they served. One outside analysis is at Tab II. An evaluation by Dr. James R. Killian, Jr., who was the first adviser to President Eisenhower and one of the best of all science advisers, is at Tab III.

The 15-year record of the office indicates, in sum, that when a Presidential science adviser had a clear and specific objective within the President's broader goals, provided a wider range of solutions for the President, and kept his own ambitions and ego in check, he made great contributions to government and was a major political asset.

The best example of the effectiveness of the Presidential scientific apparatus came in the late Fifties, under President Eisenhower. It met a visible need to catch up with the Russian space and missile technological advances, gave a sense of confidence to the American people, and thereby became a political plus for the President.

Today's need for scientific and technological advances to meet energy needs appears to be somewhat analogous.

backup of tabs in S+T folder

Any proposal for a Scientific Adviser would be a new spending program, but it seems to me that it could be justified if it were related closely to energy.

CONGRESSIONAL SITUATION

1. Congress is likely to pass some kind of Science and Technology bill at this session. The House Committee on Science and Technology is committed to passage of a bill creating a Council of Advisers on Science and Technology in the Executive Office. On March 6, 1975 Representatives Teague and Mosher introduced a comprehensive bill that would--

   a) write into law a national science policy,

   b) create a five-member Council of Advisers, with a Chairman to be Science Adviser to the President,

   c) establish a Cabinet level Secretary of Research and Technology Operations, and,

   d) form a government corporation to promote public use of research and development.

2. Informal discussions with House Science and Technology Committee members and staff indicates that the House Committee is flexible and wants to work with your staff on passage of a bill that is acceptable to you. But it appears that Chairman Teague's Committee does want the President and his Administration to have a strong, effective and visible scientific advisory group.

3. The Senate is likely to pass a Science and Technology bill at least as extensive as the proposed House bill.

OPTIONS

Following are three options offered by the Vice President and a fourth recommendation by Phil Buchen which have been staffed to your senior staff for comments and recommendations. Their responses have been summarized and are included with each option for your consideration on the following pages.

Description:

A three-member Council of Technology and Science Advisers with up to 20 assistants.

Cost:

$2.5 - $5 million annually.

Arguments for:

Such an approach would be a substantial commitment that would enable initiatives in a full range of subject areas. It would be well received by the scientific and academic community and would probably satisfy Congress.

Arguments against:

It would be a large and costly operation and difficult to integrate into the present White House Staff.

Recommend:

None

_____ Agree _____ Disagree

OPTION #2

Description:

A single Director of Technology and Science with up to 17 assistants as needed.

Cost:

Initial cost would be $1 - $1.5 million annually.

Arguments for:

A single director would provide a better reactive capacity and a clearer identity. This option would probably be acceptable to Congress, and would be less costly than what Congress is likely to come up with. The staff would be easier to organize and integrate than Option 1.

Arguments against:

Expenditures and staff additions are still large and the organization could not be set up quickly.

Recommend:

Jim Cannon — "Since previous Presidential science advisers were most effective in solving specific problems subject to scientific and technological resolution, I would recommend this option, with the Director specifically directed to work with your energy group toward reaching your energy independence goals. But I think the spending could be scaled down."

Russ Train — "An organization comparable to the former office of Science and Technology, if established, could have strong positive reactions throughout the scientific and academic community."

Ted Marrs — "With a larger budget this office would be a potentially, highly productive function which can pay its way - if properly managed - by savings through selectivity and coordination of scientific activities."

Russ Peterson — "Important for President to have a separate and direct input from a scientific adviser; thus, a single person rather than a Council."

_____ Agree _____ Disagree

Keep it
nonpols
Bring in pols

Description:

A Science and Technology adviser with up to three assistants.

Cost:

$100,00 - $200,00 annually. //

Arguments for:

Extremely simple approach whose cost would be relatively minor and such an effort could be in place quickly. Only administrative action would be required.

Arguments against:

This approach would have limited capability in terms of issues it could deal with on its own and thus would have to rely almost exclusively on outside resources. It probably would not preclude further action by Congress.

Recommend:

Jack Marsh	"This group could get cracking quickly and instead of trying to become the big problem solvers themselves, could draw on the manifold sources already in place in a dozen existing agencies."
Bob Goldwin	"Should avoid establishing one more operative group within the White House. There is already a vast scientific enterprise in America but the President does need to be advised and informed by an S & T Adviser. However, three assistants are too low, just as seventeen would be too many."
Frank Zarb	"Appointment of a Science Adviser, but with a small staff, would draw favorable response from the science community, the Congress and the public at large."
Alan Greenspan	"Recommends this option but holds out for the possibility of a more elaborate apparatus at some future time pending further evaluation and review."
Paul O'Neill	Supports this option, with comments (Tab IV).
Max Friedersdorf	Supports this option.

_____ Agree _____ Disagree

OPTION #4

RECOMMENDED BY PHIL BUCHEN

Description:

The appointment of a Scientific and Technology Liaison Adviser to the President who would serve simply as a point of contact between the Administration and the Scientific community.

Cost:

Minimal (no dollar estimate)

Arguments for:

A simple step which could be taken immediately at little cost. It would be understood as having no substantive responsibility other than liaison and as a point of contact and therefore would not create false expectations.

Arguments against:

Would probably not satisfy Congress and might be viewed in the scientific community as no more than a token effort.

Recommend:

Phil Buchen — "The subject matter of science and technology is much too diverse to make feasible a substantive advisory role with anything less than the kind of staff indicated by Option 1. Since substantive advice is normally provided through the expertise of the departments and agencies who, if there is need on occasion for an additional viewpoint, can bring an appropriate outside adviser to the President -- not to formulate any in-house White House position on the subject."

Bill Seidman — "The S & T proposal falls under the umbrella of no new spending programs, and every effort should be made to hold the line against unnecessary expenditures as well as the appearance of a new spending program. A White House staff member designated to undertake liaison with the already existing National Science Foundation seems adequate. Another layer of bureaucracy is not needed."

_____ Agree _____ Disagree

TAB I

TAB A

THE VICE PRESIDENT
WASHINGTON

March 3, 1975

MEMORANDUM FOR THE PRESIDENT

FROM: The Vice President

SUBJECT: Re-establishing a Science and Technology Advisory Apparatus in the Executive Office of the President

This is in response to your request for a memorandum concerning the re-establishment of a science and technology advisory apparatus in the Executive Office of the President.

INDEX

PROBLEM

PROBLEM

The dissolution of the science advisory structure in the White House in 1973 was greeted with great dismay by the scientific community. Pressure is growing steadily from scientific community leaders for action to restore some science presence in the White House.

A June 1974 report by a special committee of the National Academy of Sciences, recommending the creation of a Council on Science and Technology in the Executive Office of the President, has heightened this pressure and has made likely Congressional action to re-establish some kind of scientific and technical policy organization in the Executive Office of the President.

B

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BACKGROUND

BACKGROUND

President Truman

The concept of providing scientific and technical advice directly to the President in a formal way was initiated by President Truman in 1951. The Scientific Advisory Committee in the Office of Defense Mobilization met occasionally with the President and, in spite of its location in the Department of Defense, had direct access to the President. President Truman, himself, recognized this function of the group and dealt with them as personal advisers.

President Eisenhower

The "Sputnik" crisis of 1957 created a political situation that made it advisable to locate a scientific advisory structure in the White House itself. Accordingly, the scientific advisory function which was located in the Office of Defense Mobilization was moved to the White House and greatly expanded. An official with the title of Science Adviser to the President was appointed and a President's Science Advisory Committee was established.

The President's Science Adviser also served as Chairman of the new interagency Federal Council on Science and Technology, which took over the function of coordinating all of the scientific research and technical development going on with the Federal Government.

President Kennedy

In 1962, under a reorganization measure of the Executive Branch, President Kennedy created a large staff office in the White House under the Science Adviser to assist in advising the President and in overseeing the burgeoning Federal responsibility for science and technology. This office, called the Office of Science and Technology, also served as the staff arm of the President's Science Advisory Committee.

The Office of Science and Technology and the President's Science Advisory Committee were remarkably successful in heightening the overall interest in scientific and technical developments among the various Departments of the Federal government. In fact, their creation sparked the establishment of line offices in charge of scientific research and development in all of the operating Departments of the Federal government.

Through the early and middle 1960s, the Office of Science and Technology enjoyed a fairly prominent position in the White House, as the space and defense programs dominated the national scene. As the national focus shifted to the economic and social problems of the late Sixties, however, the role of the Office of Science and Technology in national policy formulation became less clear and its influence in the White House less substantial.

President Nixon

During the late Sixties and the early Seventies, the Office of Science and Technology became more and more of a "special pleader" for its science constituency -- advocating positions and ideologies not always consistent with Administration policy. Instead of serving to advise the President, the Office of Science and Technology often became his critic.

Finally, in July 1973, President Nixon abolished the position of Science Adviser, the Office of Science and Technology and the President's Science Advisory Committee. The functions of the Science Adviser were given to the Director of the National Science Foundation and those of the Office of Science and Technology and the President's Science Advisory Committee transferred to the National Science Foundation in civilian areas and the National Security Council in military areas.

Although many scientists viewed the dissolution of the science advisory structure in the White House as purely politically motivated, there were several good reasons for making some kind of change.

1. By the early 1970s, virtually all Federal Departments had developed their own scientific and technical arms. This significantly lessened the need for a large scientific and technical staff in the White House (which, after all, had no line functions).

2. The failure of the Office of Science and Technology's staff to relate to the White House policy formulating procedure made it difficult to integrate that Office's recommendations with those of other advisory functions in the White House. Therefore, as emerging national problems began to include components other than "hard" technology, the Office of Science and Technology became less effective and useful in contributing to Presidential-level decision-making.

3. As the Office of Science and Technology's allegiance to its constituency grew, its effectiveness in serving the President diminished.

C

FUNCTIONS

C

FUNCTIONS

The scientific community is now generally united in the belief that the President should have available to him an independent source of scientific and technological judgment on a wide range of areas, including:

-- social and behavioral sciences;
-- physical and life sciences;
-- medicine;
-- engineering;
-- international aspects of science and technology;
-- science and technology in the private sector;
-- education and training of scientific manpower.

They have pointed out that a White House science and technology advisory apparatus could perform the following vital functions:

1. Advising the President in the formulation and review of national policies in areas involving science and technology development. Energy, transportation, environmental planning, health care delivery and food supply are examples of these.

2. Providing technical advice for the President and his staff, including the Domestic Council, the Council of Economic Advisers, and the Office of Management and Budget, on specific issues and questions dealing with science and technology.

3. Working with the Federal Council on Science and Technology in coordinating the large existing in-house capability of the Federal government in scientific and technological research and development. There are approximately 100,000 people employed in Federal research and development establishments, and it is important to see that this large and sophisticated work force is properly and effectively employed.

4. Identifying and reporting on gaps in scientific research and technological developments in the public and private sector and initiating studies where appropriate.

5. Providing the President with "early warning" of problems, opportunities or developments that have a scientific or technological component, including some longer-range forecasting of such problems, opportunities and developments.

6. Consulting with the President on the appointments of various scientific and technical officials in the Federal agencies.

Moreover, the scientific community is now in full agreement that the proper function of such an advisory apparatus is to advise and service the President -- not to be public advocates.

STRUCTURE

D

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STRUCTURE

OPTION 1. CREATION OF A COUNCIL OF TECHNOLOGY AND SCIENCE ADVISERS

The President could propose legislation creating a 3-member Council of Technology and Science Advisers in the Executive Office of the President. The Council would be similar in function to the Council of Economic Advisers. The members of the Council would be appointed by the President from among the different disciplines in the science and technology fields. The Chairman of the Council would also serve as the President's Technology and Science Adviser.

(VARIATION: Some have proposed creation of a 7-member Council, composed of four Presidential appointees and the Presidents of the National Academy of Science, the National Academy of Engineering and the Institute of Medicine serving ex officio.)

STAFFING: The Council's staff would consist of an Executive Assistant to the Chairman and a number of professional assistants (15-20) and supporting clerical staff. The Council would also be authorized to establish ad hoc committees composed of governmental and/or non-governmental experts to do in-depth analyses of selected problems and issues.

FISCAL IMPLICATIONS: $2.5 - $5 million annually.

ARGUMENTS FOR:

-- In essence, this is the approach embodied in the "Kennedy bill" passed by the Senate last year. It incorporates the recommendation of the National Academy of Science's special committee, and is fully responsive to the scientific community's demands.

-- This assures greater depth in the science and technology advisory apparatus and greater representation and input from the various disciplines in the science and technology field.

-- This would ensure an ongoing structure in the Executive Office of the President fully capable of rendering scientific and technological advice or performing such other related responsibilities as the President may assign to it.

-- The authority to create ad hoc groups permits tapping of the resources of the scientific community.

ARGUMENTS AGAINST:

-- This structure might be difficult to integrate into the existing White House operation.

-- It is more susceptible to "politization" both as to its internal operation (with each of the three members representing the views of his own constituency) and as to its relationship with the Administration (because of the structural autonomy of a council).

-- It would result in a visible increase in the size and budget of the White House.

-- This structure is larger than is necessary to meet the problem and is also unwieldy.

OPTION 2. CREATION OF AN OFFICE OF TECHNOLOGY AND SCIENCE

The President could propose legislation creating an Office of Technology and Science in the Executive Office of the President. The Director of the office would be a highly qualified scientist appointed by the President, who would serve also as the President's Technology and Science Adviser.

STAFFING: In addition to the Director, the office would have a Deputy Director (for administration) and, as is required

- -- up to five Assistant Directors (for various specialties);
- -- up to twelve professional assistants; and
- -- supporting clerical staff.

The Director would also be empowered to establish ad hoc committees composed of governmental and/or nongovernmental experts to do in-depth analyses of selected problems and issues.

FISCAL IMPLICATIONS: $1 - $1.5 million annually.

ARGUMENTS FOR:

- -- This is largely responsive to the legitimate demands of the scientific community and could, therefore, be expected to satisfy the Congress.

- -- It assures to the President and his staff the availability of a broad range of scientific and technical expertise. This would be tremendously useful to the Domestic Council, the Council of Economic Advisers, the Office of Management and Budget, et al.

-- This structure will help to assure the development of an ongoing scientific and technological capacity in the Executive Office of the President.

-- The authority to create ad hoc groups permits tapping of the resources of the scientific community.

-- This structure is sufficiently flexible to permit growth of in-house capacity when and as necessary.

ARGUMENTS AGAINST:

-- This would involve Congressional action to implement (and, of course, to undo).

-- There are those who feel that this would unduly increase the size of the President's staff.

-- Some contend that the need for a science and technology capacity in the White House does not justify the creation of an office.

OPTION 3. APPOINTMENT OF A SCIENCE AND TECHNOLOGY ADVISER TO THE PRESIDENT

The President could, by administrative action, appoint a full-time Science and Technology Adviser to the President to serve on the White House staff.

STAFFING: The Science and Technology Adviser would be authorized a few (1-3) professional assistants and supporting clerical staff, but would otherwise have to rely on National Science Foundation professional staff for support.

FISCAL IMPLICATIONS: $100,000 - $200,000 annually.

ARGUMENTS FOR:

-- This could be accomplished by administrative act of the President.

-- It would relieve some of the pressure for Congressional action on this issue.

-- This would make available to the President and his staff at least some independent scientific and technological expertise.

-- This would be relatively inexpensive and would not significantly increase the size of the President's staff.

ARGUMENTS AGAINST:

-- This approach would satisfy neither the scientific community nor the Congress and, therefore, it could not be expected to avert independent Congressional action on the issue.

-- It is doubtful whether, under this structure, the Science and Technology Adviser could "cover the waterfront." Therefore, pressure to increase the size and scope of this apparatus will continue.

-- This structure is not suitable for the development of an on-going scientific and technological capacity in the White House.

-- This structure is not suitable for tapping the resources of the scientific community on an interim basis since the Science and Technology Adviser would not be empowered to create ad hoc panels for special research purposes.

PRESIDENTIAL DECISION

Proceed with further development of:

Option 1 _____

Option 2 _____

Option 3 JM

Discuss JM

THE WHITE HOUSE

WASHINGTON

March 10, 1975

MEMORANDUM FOR: JIM CANNON

FROM: TED MARRS

SUBJECT: Re-establishing a Science and Technology Advisory Apparatus in the Executive Office of the President

Thanks for my inclusion in distribution of the paper on Science Advisory apparatus. My thoughts are as follows:

1. There is a real advantage in the President's taking action in this matter to prevent being preempted by establishment of a Congressional creation which would become a focal point of advocacy and embarrassment to this and future administrations.

2. The functions as stated are indeed vital ones, but we should have little confidence in the scientific community's intent that the advisory role be kept out. Also, there are strongly polarized elements in that community which are currently jockeying for future control.

3. Of the three options offered, Option 1, the establishment of a "Council" would be most acceptable in the highly vocal parts of the politico/scientific world. Option 3 would probably be ineffective and unproductive and not acceptable to the Congress or to the scientific community. Option 2 should be modified.

4. Option 2 should have a larger budget if it is intended to have a productive ad hoc committee capability. This "Office" is a potentially highly productive function which can pay its way - if properly managed - by savings through selectivity and coordination of scientific activities.

5. Because of the internal battles within the scientific community, consideration should be given to having a well qualified administrator rather than a well qualified scientist as the Director in Option 2 - a referee rather than a player. In any event, I would recommend keeping this open at this stage.

TAB II

II

THE WHITE HOUSE

WASHINGTON April 18, 1975

MEMORANDUM FOR THE PRESIDENT

FROM: JIM CANNON

SUBJECT: Contributions of Science Advisers to Previous Presidents

SUMMARY:

The Presidential scientific apparatus was a splendid tool in the early days under President Eisenhower. It met a visible need to catch up with the Russians, and was an important political plus for the President.

But in time, the scientists corrected the specific weaknesses that had at first made them necessary. Then their proposals became more diffuse, and seemed directed at preventing ills that had not yet materialized e.g., food and energy. Thus they lost out to greater demands within the White House for solutions to problems that were immediate and pressing. To make matters worse, the scientific community became politicized during the Vietnam war, and was perceived as critical and unfriendly.

The 15-year record of the office indicates that when a Presidential science adviser supported the President's goals, broadened his range of solutions, and kept his ego and ambitions in check, he made great contributions to government and was a major political asset.

EISENHOWER ADMINISTRATION

James Killian of MIT became science adviser to President Eisenhower in 1957 and was later succeeded by George Kistiakowski, a Harvard chemist. This was probably the most effective and influential period for science advisers.

ACCOMPLISHMENTS:

1. Following SPUTNIK, helped assure the U. S. public that the country's missile and space program was in good hands and moving ahead.

2. Prompted creation of National Aeronautics and Space Administration.

3. Provided the scientific basis for President Eisenhower's proposal which ultimately resulted in the 1963 test ban treaty.

4. Made a major impact on the ICBM program, including emphasis on solid fuel rockets.

5. Accelerated the development of a ballistic missile early warning system and anti-submarine capabilities.

6. Assisted in advancing photo reconnaissance by satellite.

7. Helped make available scientific and technical information for dealing with such problems as food additives and environmental health.

8. Helped strengthen programs for the education of U. S. scientists and engineers.

9. Through the respect and prestige they commanded, Killian and George Kistiakowski, helped reassure a shaken public that the U. S. ballistic missile and space programs would close the "technological gap" between the U. S. and Soviet Union.

PROBLEMS:

No major problems other than some criticism of their focus on defense and space-related questions.

KENNEDY ADMINISTRATION

Dr. Jerry Wiesner of MIT was President Kennedy's science adviser. Some of the successes and most of the problems of this period were a product of Wiesner's personal and his assertive attempts to seek a bigger and bigger role in government decision making.

ACCOMPLISHMENTS:

1. Provided valuable guidance leading to the rejection of a number of Pentagon proposals which subsequent research has shown would have indeed been mistakes. e.g. the Dynasoar space plane.

2. Introduced interests beyond space and defense and focused on many other areas of government scientific research such as health.

PROBLEMS:

1. Bitter public debates with NASA over techniques to be used in moon landing, which became a personal struggle between Wiesner and Wernher von Braun.

2. Alienated the scientific community by high-handed attitude and suspicion that he was ambitious to become the "Czar" of American science.

3. Criticism of the Defense Department. For example, he boasted that he could make a better evaluation of defense development projects than Secretary McNamara.

4. Expanded his authority to the point that he was attempting simultaneously to be an unbiased and impartial staff adviser as well as director of a scientific operations unit advocating specific programs.

JOHNSON ADMINISTRATION:

President Johnson's adviser was Donald Hornig, a chemist from Princeton. Hornig has a stormy and unfriendly relationship with the President and therefore appears to have had very little influence on policy.

ACCOMPLISHMENTS:

1. Instituted many siginificant long-range studies, e.g. the potential of the oceans; the world food problem; restoring the environment.

2. In 1965 conducted the first major assessment of the U. S. energy situation.

PROBLEMS:

1. Despite the predictive merit of his proposals, Hornig had little impact because he had no access to the President and little standing within the White House staff.

2. As the Viet Nam war expanded, the scientific communitie's mounting opposition to the war made it even more difficult for Hornig to serve as an adviser.

NIXON ADMINISTRATION:

Lee DuBridge was President Nixon's first science adviser and was succeeded by Ed David of Bell Laboratories in 1970. The decline of influence which began during the Johnson Administration accelerated until 1972, when President Nixon abolished the science adviser.

ACCOMPLISHMENTS:

1. Attempted to develop practical applications of science research.

PROBLEMS:

1. Presidential Science Advisory Committee strongly and publicly opposed SST proposal at a time when the Administration was actively seeking support for the SST.

2. Acquired a reputation within the White House for generating proposals to spend more Federal money.

3. Scientific community regarded Ed David as lacking credentials because of his background as an engineer.

TAB III

III

JAMES R. KILLIAN, JR.

77 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139

March 20, 1975

The Honorable Nelson A. Rockefeller
Vice President of the United States
The White House
Washington, D. C.

My dear Mr. Vice President:

In response to your request, I have prepared the attached list of some of the contributions to Presidential policy-making in the Eisenhower administration made by the Special Assistant for Science and Technology and the President's Science Advisory Committee. At the beginning of this list, I have summarized the longer statement which follows. In listing these contributions made during the period when I was a participant, may I express some personal views bearing on the study you are making of proposed science advisory arrangements.

I fully recognize that present circumstances differ from those of the Eisenhower years both in the organization of the Presidential staff machinery and in the diversity and complexity of the issues faced by the President.

President Eisenhower looked to his science advisory mechanism for assistance in the national defense area and for supporting the work of the National Security Council. I am aware that the National Security Council now has staff competence and consultant panels which are providing a technological dimension to the examination of national security issues. These did not exist in the Eisenhower period. This arrangement appears to be working

effectively and to have the confidence of the Special Assistant for National Security Affairs. I personally do not recommend that these arrangements be supplanted by a new science and technology advisory mechanism but I do feel that the proposals for the new mechanism are no less essential because these NSC panels exist. The existing NSC arrangements have a national security policy focus on a very limited number of problems, and I am convinced that there are important issues involved in assuring a healthy scientific and technological foundation for military research and development, and the proposals of the National Academy Committee are directed toward providing this foundation.

I am also convinced that the scientific and technical feasibility and soundness of major weapons systems developments evaluated by objective panels of the proposed advisory mechanism could serve the needs of the President and the Office of Management and Budget as well as the National Security Council as the NSC might request. In my view it would be a mistake to exclude the Science Adviser from the national security area and from the deliberations and studies of the National Security Council because of the inseparability of policy and program considerations and the special perspective and judgments that a science advisory group could contribute to Presidential-level discussion of national security issues.

In the Domestic Council area there is, of course, much greater emphasis on problems in the civilian sector, where developments in science and technology in many instances offer the best hope of long-term solutions. The existence of the Domestic Council means that there is a focus for scientific and technological assessments of domestic problems and an opportunity to couple scientific and technological considerations with economic, sociological, institutional, and political factors, all of which must

be brought to bear in developing options for Presidential consideration. The effectiveness of the Special Assistant for Science and Technology in the national security area in past years was in no small measure attributable to the existence of the National Security Council as a mechanism for assuring serious consideration of scientific studies.

In the latter days of the Special Assistants and the President's Science Advisory Committee many of the excellent, farseeing studies which were made by the advisory setup were not systematically considered and followed up because there was no mechanism such as the Domestic Council and its staff to receive and assess them. During the Kennedy, Johnson, and Nixon administrations there were numerous important studies made by PSAC and its panels which dealt with environmental matters, energy policy, and the world food problem which could have been of great value to the administration in the formulation of policy and the taking of initiative in areas that later came to be of great national concern. There was a national loss in the fact that these farseeing studies did not receive the necessary follow-through attention.

In making these observations, I am mindful of the arguments that by strengthening the scientific and technical capabilities of the National Security Council, the Domestic Council, and the Office of Management and Budget, there may be less need for a separate White House level science and technology mechanism and that a separate mechanism might have difficulty in relating its scientific and technological analyses to the issues as they are perceived by those staff agencies. These arguments were carefully examined by the National Academy of Sciences Committee on Science and Technology, which I chaired. The membership

of that Committee included a former Assistant Director of the Office of Management and Budget and a former member of the Council of Economic Advisers, both of whom were experienced in the operations of the White House staff. It was the strongly held view of the Committee that the scientific and technical capabilities of the National Security Council, Domestic Council, and OMB should be strengthened and by so doing there would be a more effective interaction achieved and a two-way coupling between those offices and a new science and technology mechanism. The new mechanism proposed can look at the totality of the nation's scientific and technical resources in relation to national needs and by having this broader view, can help to offset a fragmented approach occasioned by the differing missions of the executive agencies, both at operating and Presidential staff levels.

The reasons supporting the establishment of a new science and technology mechanism have been intensively treated in the National Academy and other excellent reports and articles in the past year. My interest in making the foregoing observations is to emphasize a few points arising out of the discussions which were prompted by the Academy report.

I am in full accord with the comments made by President Handler of the National Academy of Sciences when he wrote you recently emphasizing that the mission of the new science and technology advisory mechanism which has been proposed should be to serve the needs of the President. "It should," as he wrote, "not be a privileged means to represent special interests of the scientific and technological communities. Nor should it be a privileged advocate

for science and technology per se. To be useful, its analyses must recognize the essential interdependence of science, technology and fiscal, economic, social, political, and institutional factors in developing policy alternatives."

I am grateful for this opportunity to provide supplemental information and to recall the many ways in which the scientific mechanism established by President Eisenhower served him and successive Presidents and assisted greatly in the formulation of sound national policies.

Yours respectfully,

J. R. Killian, Jr.

JRK:cp
enclosure

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

May 12, 1975

MEMORANDUM FOR: Jim Cavanaugh

FROM: Kathleen Ryan KR

SUBJECT: Science Advisory Issue

I have been told that there will be a "high powered" meeting to discuss the Science Advisory issue tomorrow.

Phil Smith of the National Science Foundation told me today that discussion of the Teague bill (H.R. 4461) on the Hill will begin June 10, 1975.

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

May 12, 1975

MEMORANDUM FOR: James M. Cannon

FROM: Kathleen Ryan KR

SUBJECT: Schedule Proposal

Attached is a Presidential schedule proposal for your approval and initials. Jim Cavanaugh and I think it would be a good idea for the President to drop by the National Science Foundation's 25th Anniversary reception on May 15, 1975.

Jim
If you get a
good outcome on
the Science mtg.
you might suggest
that the
announce it at
this event.

SCHEDULE PROPOSAL
DATE: May 15, 1975
FROM: JIM CANNON
VIA: WARREN RUSTAND

MEETING:	Drop by National Science Foundation's 25th Anniversary Reception
DATE:	May 15, 1975
PURPOSE:	To show your interest in and support of science.
FORMAT:	Reception, with brief remarks.
CABINET PARTICIPATION:	None
SPEECH MATERIAL:	To be prepared by Paul Theis.
PRESS COVERAGE:	Press pool
STAFF:	Kathleen Ryan
RECOMMEND:	Jim Cannon, Kathleen Ryan
PREVIOUS PARTICIPATION:	On March 21, you met with the National Science Board of the National Science Foundation.
BACKGROUND:	The Foundation, which is the Nation's principal agency for the support of research and science, has invited you to attend a reception and dinner celebrating its 25th Anniversary. There will be 250 guests from science, engineering, industry, Congress, and government. This would be a good opportunity for you to announce your science advisory decision, and also to show your continued interest in and support of science. The black tie reception and dinner is only a few blocks from the White House. Before hosting the State dinner for the Shah of Iran, you could make a twenty-minute appearance (7:20-7:40 p.m.).

THE VICE PRESIDENT

WASHINGTON

May 13, 1975

MEMORANDUM FOR: THE PRESIDENT

FROM: THE VICE PRESIDENT

SUBJECT: Science and Technology Adviser to the President

I. BACKGROUND

A number of options regarding the creation of a Science and Technology Adviser to the President have been presented for your review.

It seems to me that whatever option is accepted should meet all of the following criteria:

- assure the development of an ongoing scientific and technology capacity in the Executive Office of the President;

- assure the availability of a broad range of scientific and technical expertise;

- respond to the legitimate demands of the scientific community for a technical role in the consideration of science and science-related policy;

- meet Congressional support for some kind of strong, effective, and visible science advisory group;

- demonstrate unequivocally the Administration's commitment to using the resources of the nation's scientific community and technology industry to meet the overriding ~~economic and defense~~ needs of our time;

- make known to the nation the Administration's ability to develop and support new and innovative ideas through the creation of Executive Branch task forces - operating out of the Office of the Science and Technology Adviser to the President - to study, for example:

    - how to increase the world's food supply through improved oceanic food cultivation and food harvesting;

    - how to increase the nation's supply of raw materials through the extraction of manganese nodules from the ocean floor in order to provide enough copper and nickel for the next 2000 years.

II. PROPOSAL

The best way to meet these criteria - by providing a flexible but effective capability with broad bipartisan support and popular national appeal - is to create an Office of Science and Technology in the Executive Office of the President - by Act of Congress.

The elements of this office would be, in outline, as follows:

- Staffing:

    - The Director, a highly qualified scientist, appointed by the President; the Director would also serve as the President's Science and Technology Adviser;

    - A Deputy Director (for Administration), and up to five assistants for various specialities;

    - The authority to set up ad hoc committees or task forces for various projects.

- Fiscal implications: ~~$2.5 - $3.5~~ $1 - 1.5 million annually

To move this proposal along, the next steps would be to:

- Draft legislation;

- Hold informal conversations with Congressional leaders in order to develop a legislative package that both the Administration and the Congress will support.

III. RECOMMENDATION

That you approve the following steps for the creation of a Science and Technology Adviser to the President by Act of Congress:

- Draft legislation;

- Proceed with discussions with Congressional leaders.

Approve _____ Disapprove _____

THE WHITE HOUSE

WASHINGTON

MEETING ON SCIENCE ADVISER
Tuesday, May 13, 1975
12:15 p.m. (30 mins.)
The Oval Office

From: Jim Cannon

I. PURPOSE:

To resolve organizational issue on the Science Adviser question.

II. BACKGROUND, PARTICIPANTS AND PRESS PLAN

A. Background: In December, you asked the Vice President to study this issue and report to you. Since that time various options have been recommended by the Vice President and others. A paper identifying these options is at Tab A.

B. Participants: The Vice President
Don Rumsfeld
Jim Lynn
Jim Cannon

C. Press Plan: Not to be announced.

THE WHITE HOUSE

WASHINGTON

May 13, 1975

MEMORANDUM FOR: JIM CANNON

FROM: JIM CAVANAUGH

SUBJECT: Science Advisor

It is my understanding that the following was agreed upon at today's 12:15 meeting:

- We will have a Science Advisory.
- He will have a small staff.
- It will be established by legislation.
- President will meet with Congressional types next week.
- We are looking for a guy like Bob Goldwin -- only for Science -- one who knows scientists -- and can convene them and get their advice into the system.

Here's what I plan to do:

- Work with Max Friedersdorf to set up Congressional meeting for next week.

- Have "concept" paper developed to use so that people around here know what's been agreed to. It will also be useful in dealing with candidates for the position.

- Do briefing paper, with Q&A's for next week's meeting.

- Set up meeting with Bill Walker on a Candidate Search Plan.

- Ask Jack Walker to do a proposed Functional Statement and proposed Organization and Staffing Plan for the new activity.

THE VICE PRESIDENT
WASHINGTON

May 13, 1975

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- meet Congressional support for some kind of strong, effective, and visible science advisory group;

- demonstrate unequivocally the Administration's commitment to using the resources of the nation's scientific community and technology industry to meet the overriding needs of our time;

- make known to the nation the Administration's ability to develop and support new and innovative ideas through the creation of Executive Branch task forces - operating out of the Office of the Science and Technology Adviser to the President - to study, for example:

- how to increase the world's food supply through improved oceanic food cultivation and food harvesting;

- how to increase the nation's supply of raw materials through the extraction of manganese nodules from the ocean floor in order to provide enough copper and nickel for the next 2000 years.

II. PROPOSAL

The best way to meet these criteria - by providing a flexible but effective capability with broad bi-partisan support and popular national appeal - is to create an Office of Science and Technology in the Executive Office of the President - by Act of Congress.

The elements of this office would be, in outline, as follows:

- Staffing:

  - The Director, a highly qualified scientist, appointed by the President; the Director would also serve as the President's Science and Technology Adviser;

  - A Deputy Director for Administration, and up to five assistants for specialities;

  - The authority to set up ad hoc committees or task forces for various projects.

- Fiscal implications:

  - $1 - $1.5 million annually;

  - It should be noted that this figure is much lower than the one contemplated by the House and Senate bills.

To move this proposal along, the next steps would be to:

- Draft legislation;

- Hold informal conversations with Congressional leaders in order to develop a legislative package that both the Administration and the Congress will support.

III. RECOMMENDATION

That you approve the following steps for the creation of a Science and Technology Adviser to the President by Act of Congress:

- Draft legislation;

- Proceed with discussions with Congressional leaders.

Approve _____ Disapprove _____

THE WHITE HOUSE

WASHINGTON

June 3, 1975

MEMORANDUM FOR : DR. GUY STEVER

FROM : JIM CANNON

SUBJECT : SCIENCE ADVISER

I believe Jim Cavanaugh has already talked with you about this.

The purpose of this memorandum is to provide you with the elements of the President's decision.

Attachment

I

This is the President's decision and direction for action:

1. There will be a Science and Technology Adviser to the President.

2. The office and staff will be authorized by legislation.

3. There will be a single director, someone of great ability and scientific standing. The Director should know scientists, be able to attract the best minds, and know how to include their counsel in the executive decision-making process.

4. He will have from 10-15 assistants.

5. Extensive use will be made of consultants as members of scientific and technological task forces for various projects.

6. The budget should be $1 million - $1.5 million annually.

II

We certainly appreciate your assistance in

-- Drafting legislation to carry forward the President's decision.

-- Drafting a message to the Congress.

III

In broad terms, our objectives are to:

-- assure the development of an ongoing scientific and technology capacity in the Executive Office of the President;

-- assure the availability of a broad range of scientific and technical expertise;

-- acknowledge Congressional support for an effective and visible science advisory group;

-- demonstrate unequivocally the Administration's commitment to using the resources of the nation's scientific community and technology industry to meet the overriding needs of our times; and

-- make known to the nation the Administration's ability to develop and support new and innovative ideas through the creation of Executive Branch task forces operating out of the Office of the Science and Technology Adviser to the President.