The original documents are located in Box 7, folder "Science and Technology Adviser: February 6 - April 17, 1975" of the White House Special Files Unit Files at the Gerald R. Ford Presidential Library.

THE WHITE HOUSE

WASHINGTON

February 12, 1975

MEMORANDUM FOR THE PRESIDENT

FROM: JIM CAVANAUGH

SUBJECT: Science and Technology in the Executive Office of the President

This memorandum (a) identifies arguments for and against the science advisory arrangements recommended by the Vice President's staff, (b) discusses and assesses other alternatives, and (c) recommends an alternative plan for assuring that adequate scientific and technical advice is available for you and your advisers.

Background

The Vice President's staff recommendations (Tab A) call for the creation by law of an Office of Technology and Science (OTS) in the Executive Office of the President, with the head of the office also designated as the President's science and technology adviser. In addition to the Director, there would be a deputy, five assistant directors, up to 12 professional staff, and additional supporting staff. The Director and office would be assisted by ad hoc panels of experts from outside the government.

The recommended arrangements are quite comparable to the science advisory apparatus which was abolished in July 1973 -- which included the Office of Science and Technology, with the Director designated as Science Adviser, and the President's Science Advisory Committee which included experts from outside the government. In 1973 the civilian functions were transferred to the National Science Foundation and its Director has served as Science Adviser.

Except for the single Director rather than a three member Council as the leadership, the Vice President's staff recommendations are like those recommended in June 1974 by a National Academy of Sciences Committee chaired by James Killian and provided for in a bill passed last November by the Senate (the Kennedy bill). There are a number of advantages and disadvantages of this proposal, and there are other alternatives that warrant consideration.

Critical Considerations

Critical considerations that bear upon a decision on science advisory arrangements include:

1. Integration of staff advice. There are few problems and issues requiring Presidential or Executive Office attention that involve only scientific and technical considerations. A group limited primarily to scientists and engineers is not well equipped to deal with other pertinent considerations -- economic, social, legal, political, intergovernmental, etc. Thus, the output of a scientific and technical group, even if it reports to the President, must be integrated with the work of others to provide a full analysis of a problem or issue and a full range of alternatives -- not limited to scientific and technical alternatives.

2. Focus of special purpose offices. Past experience with special purpose offices in the Executive Office indicates that they tend to become "special pleaders" or advocates for particular alternatives or programs, thus making more difficult the job of reaching balanced decisions among competing interests. For example, they advocate programs which involve additional funding for their constituancy.

3. Scientific community views. Pressure is growing steadily from scientific community leaders for action to restore some science presence in the White House. Arguments are often more emotional than substantive. (If not resolved this year, the subject could even be a campaign issue for scientists in 1976.)

4. Congressional action. There is a good chance that Congress will act on its own initiative this year to create some new Executive Office organization.

Alternatives

There are four principal alternatives that have been advanced for organizing scientific and technical advice.

Alt. #1 Propose legislation to create an Office of Technology and Science (as recommended in the Vice President's staff report, Tab A)

Arguments for:

- Would be fully responsive to the scientific and technical community.
- Would defuse the pressures in Congress to mandate their solution.

. Having independent scientific and technical advice immediately available could be useful on occasions.

Arguments against:

. As in the case of the arrangements existing prior to July 1973, there will be problems of integrating the work of this single purpose group with other elements of the Executive Office.
. Reestablishes the special interest problem.
. Would add substantially to the White House staff and would be costly.
. Would be viewed as Administration endorsement of Senator Kennedy's bill. Establishes a permanent and rigid structure.

Alt. #2 Continue the existing arrangements, wherein the Director of NSF also serves as Science Adviser. Or strengthen it with a formal Science Adviser to the President designation and involve him in more issues, perhaps through Presidential assignment.

Arguments for:

. White House scientific oversight is less important now than in the 1950's and 1960's, because line agencies and NSF are much better staffed to deal with technical considerations. The Science Adviser can devote more staff and funding resources to the function since he can draw upon all NSF resources.
. The Science Adviser has functioned principally as an adviser to the OMB. His advice is integrated with other inputs -- avoiding the "special pleader" problem.

Arguments against:

. The arrangement is not satisfactory to the scientific community which has complained of three principal weaknesses:
  - The Science Adviser is not involved in national defense issues, thus there is essentially no scientific and technical review from outside DOD. (In fact, NSC established in 1973 a scientific advisory apparatus consisting of technical staff and 25 technical consultants.)
  - The Science Adviser is too far removed from the President.
  - The Science Adviser has a "conflict of interest" in that he must seek and defend before OMB NSF's request for R&D funds while also evaluating R&D requests of other agencies.
. Elements of the Executive Office other than OMB have received relatively little help from the Science Adviser.
. The selection of this alternative will probably result in legislation such as the Kennedy bill.

Alt. #3 Appoint a Science Adviser to the President on the White House staff. Provide him with a few (1 to 3) professional assistants and expect him to draw upon scientific and technical expertise in agencies and from non-Federal ad hoc committees -- much the way Bob Goldwin functions with the academic community. The Science Adviser would continue to draw upon NSF for staff support. NSC's existing staff and advisory group would be continued and would work closely with the Science Adviser.

Arguments for:

- Provides a "science presence" in the White House.
- Provides additional expertise for addressing critical issues that involve scientific and technical considerations.
- Avoids institutionalizing another large special purpose staff.

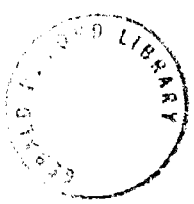
Arguments against:

- This limited arrangement may not be adequate to satisfy the scientific community (e.g., it might not meet the criticism that the President needs technical advice independent of NSC and DOD on defense matters) or head off Congressional action.
- Once created, pressure may still be strong to expand it to a full-blown office or council.
- The Science Adviser may become a special interest advocate.

Alt. #4 Expand significantly and restructure the policy analysis capability of the Executive Office of the President by creating a more broadly based analytical or planning group which includes scientific and engineering experts.

Arguments for:

- The policy analysis and long range planning capabilities of the Executive Office are not adequate and should be expanded.
- Scientific and technical expertise should be integrated with other parts of the policy analysis and decision making structure.



Arguments against:

- This would involve rethinking and restructuring the roles of OMB, NSC and Domestic Council and has not been developed adequately to permit serious consideration at this time.
- Such expanded White House-Executive Office capability probably would be opposed on the Hill and by line agencies.
- Probably would not be acceptable to the scientific community which tends to view integration of its advice at some level below the President as de facto subordination of scientific advice.

Recommendation

From the standpoint of substantive contribution to improve decisions, I do not believe that it is necessary to provide new scientific and technical capability in the White House or Executive Office. However, the growing pressures from the scientific community and the Congress are compelling reasons for some action. I believe Alternative #3 (Science Adviser with small staff) is the best course of action and recommend that you direct that further development of this alternative be undertaken. I also recommend that you meet with leaders of the community before deciding a course of action.

Brent Scowcroft, Jim Lynn (Paul O'Neill), Phil Areeda and Phil Buchen also recommend Alternative #3.

Decision

Proceed with the development of a detailed proposal to:

_____ Create an Office of Technology and Science (Alt. #1)

_____ Strengthen existing arrangements (Alt. #2)

_____ Appoint a Science Adviser with limited staff (Alt. #3)

_____ Explore further the development of a broad policy analysis capability (Alt. #4)

A

SCIENCE, TECHNOLOGY AND THE PRESIDENT'S EXECUTIVE OFFICE

Recommendations

February 5, 1975

February 5, 1975

SCIENCE, TECHNOLOGY AND THE PRESIDENT'S EXECUTIVE OFFICE

Recommendations

1. There should be a scientific and technological capability directly available to the President

   (a) Many issues that come to the President, either for decision or for initiative, involve science and technology, sometimes to a very high degree, in the analytical and judgmental process.

   (b) While the federal departments and agencies have, and should have, scientific and technological competence of high quality, the President should have available to him an independent source of scientific and technological judgment of the very highest quality. The organization set up to provide such a source for the President must not be, or be perceived as, the representative of the scientific and technical community in the President's office.

   (c) While the present need for such a capability is clear, in our complex and technologically varied society, the need to draw upon science and technology to meet urgent problems and opportunities will be even greater in the decades ahead.

2. This capability should be lodged in an Office of Technology and Science

(a) An Office of Technology and Science should be established by Congressional action and should be headed by a Director who should also have the title of Science and Technology Advisor to the President.

(b) An Office, better than a single Advisor, or a Council or Committee of Advisors, can

-- cover the full range of necessary competence without seeming to subordinate one area to another;

-- interact with (and "translate" the reports of) ad hoc expert task forces of consultants drawn from a variety of disciplines in and out of science and technology;

-- call on and utilize the best scientific, technological and professional talents in the country for specific tasks relevant to the President's responsibilites;

-- resist the pressures to make the President's Science Advisor the "spokesman for science and technology" as distinguished from the President's need for scientific competence in meeting his national responsibilities.

3. The areas of potential activity for the Office of Technology and Science should be principally:

[Note: Not all of the following activities need be undertaken at the outset. The functions of the Office should be allowed to grow as the President may require, as relationships with the departments and agencies of government develop, and as emerging national programs, policies and issues may make desirable and useful.]

(a) To respond on scientific and technical matters to requests from the President with respect to issues that are before him for decision, or new initiatives.

(b) To help the President resolve conflicting advice involving scientific matters that come to the President from departments, agencies or the Congress.

(c) To organize ad hoc panels of consultants to assist in the collection and evaluation of relevant data with respect to particular technical and scientific issues.

The membership of such panels would be drawn from the special competence available in the private and public sectors including universities, the National Academies, industry, and government laboratories.

(d) To provide the President with early warning of either

-- opportunities, or

-- problems

that have a scientific or technological component, including some longer range forecasting of such opportunities, problems or developments.

(e) To identify and report on any gaps in scientific research and technological development in the public or private sectors that merit attention.

(f) To consult with the President on the appointments of various scientific and technical officials in the federal agencies.

(g) To stay in contact with the professional staffs of the federal departments and agencies, and of state and local governments, as well as with private sector organizations involved in science and technology.

(h) To be available for participation in reviews of policies and programs of the departments and agencies having technical responsibilities and thus to assist in the formulation of national policy on technical and scientific matters.

(i) To assist the Domestic Council, the National Security Council and the OMB in reviewing department and agency programs that have technical and scientific content.

(j) To have a modest budget to initiate analyses and studies in support of the ad hoc panels mentioned in subparagraph (c) above. These analyses and studies would be performed in

universities, private industry or federally supported institutions.

4. Organization of the Office

(a) The full-time Director of the Office should serve at the pleasure of the President.

(b) The Director should have a full-time deputy responsible for the administration of the Office who need not be a scientist.

(c) There should be provision for a flexible number of full-time Assitant Directors (up to five) so as to cover a decent range of professional disciplines without trying for "representation" of every professional discipline or interest. and to respond to the possible growth in Presidential needs for special competence.

(d) Provision should be made for a flexible number of full-time professionally qualified staff (up to a dozen) as well as a clerical staff to meet the responsibilities of the Office as they may develop.

(e) The ad hoc advisory panels (mentioned in paragraph 3 above) which are central to the effective functioning of the Office should:

(i) be exempt from the Federal Advisory Committee Act.

Frank and objective advice cannot be expected to be available if exposed to continuous and public scrutiny and controversy.

(ii) have their members, in general, appointed by the President.

(iii) serve on a part-time basis for a limited term;

(f) The Director would maintain close relationships with the National Academies of Science and of Engineering and the Institute of Medicine and, in establishing ad hoc panels, would make full use of their membership, as well as of academic faculties and such organizations as the Social Science Research Council.

(g) The Office in its initial full year of operation should have an annual budget in the $1 to $3 million range.

(h) Since science and technology are profoundly interrelated (not only among the scientific disciplines themselves, but with domestic and foreign social and political issues and the intellectual activity of the nation) the area of the Office's concern should be broad and include:

-- social and behavioral sciences

-- physical and life sciences

-- medicine

-- engineering

-- military applications

-- international aspects of science and technology

-- science and technology in the private sector

-- education and training of scientific manpower

5. The Qualifications of the Director

The Director must have, or be the type of person who can readily gain, the personal confidence of the President.

He or she should be a scientist, engineer or medical person of proven scientific or technical capability, have some experience in public service or administration, and should preferably be a member of one of the National Academies of Science or Technology or the Institute of Medicine.

2/13/75

THE WHITE HOUSE

WASHINGTON

Don R.

On paper #3 may seem like an answer but Congress (not only Ted K. but Tiger Teague) thinks something more should be done.

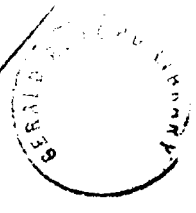
Before we land on #3 I think Jack M or Max should check with Tiger. If there is to be legislation, it should be #1.

① Go leg
② Sign [illegible]
③ Sh-1-5-

1 RC

go to 1

THE WHITE HOUSE
WASHINGTON



THE WHITE HOUSE

WASHINGTON

February 18, 1975

MEMORANDUM FOR: BILL WALKER

FROM: JERRY JONES

The Vice President has recommended four people as potential candidates to be the Science Advisor to the President or to be members of a National Science Advisory Board. While the President has not yet decided what type of organizational structure required to provide scientific advice here in the White House, I am forwarding these names to you for your information. You should find it helpful for recruiting purposes once the decision is made. These names are attached.

Attachment

MAR 0 5 1975

March 5, 1975

DICK:

Ask Jerry Jones where we stand on the Science Advisor question.

DR

THE WHITE HOUSE
WASHINGTON

OR
as pending
3-10-75

~~xxxxxx~~
I show all science advisor papers to the President through my system outstanding -- still with the ~~P~~ Pres.

lets send a note to OR reminding him to look

OK

I have covered with Duck - He is looking for the paper -

NO!

any luck?

File

THE WHITE HOUSE

WASHINGTON

March 13, 1975

MEMORANDUM FOR: DON RUMSFELD

FROM: JERRY H. JONES

Just a reminder that you were going to look for the science advisor paper that had been sent into the President.

4/4/75

Don:

I'd appreciate your getting this letter to the President.

Many thanks.

Ed David

EDWARD E. DAVID, JR.
1000 INTERNATIONAL TOWER BUILDING
8550 WEST BRYN MAWR AVENUE
CHICAGO, ILLINOIS 60631

April 3, 1975

Dear Mr. President:

I am taking the liberty of writing to you directly concerning science in the White House. You may recall that we discussed this matter some months ago when you were Vice President. Subsequently, I wrote to you detailing my thoughts during that conversation.

I am aware that events regarding science in the White House have progressed, and am knowledgeable about some of the relevant private discussions. Furthermore, within the scientific and engineering community itself, there have been many symposia, conferences, and rump discussions. Still further, the Congress has moved and bills are in train in both the House and Senate. All of this activity has revealed additional dimensions of the problem which were not evident at the time of our earlier discussion.

To outline the situation as I now see it, let me oversimplify somewhat. Remembering our previous discussion, I assume you are still anxious to have sound scientific influences in Presidential policy-making and execution. The technical community is unanimous in wanting to see scientific and technological inputs for government processes at the top level. However, the community is not unanimous on how this should be done, though they are anxious to serve. The White House staff and Executive Offices (particularly OMB, NSC, and the Domestic Council) have in many instances taken on technical advisers of their own and have operated satisfactorily with them. Thus, they are reluctant to relinquish their capabilities to any new science mechanism. The White House staff has become well knit, and no one that I have spoken with there sees clearly how a new independent technical element would fit into the staff, nor what its function would be. The Congress feels that something is needed, but is not anxious to legislate a mechansim for the Executive.

Taking all this into account, it seems to me that the problem is how to establish a science mechanism which has an accepted function to perform and sits at a high enough level in government that it can ensure that the nation's profound technical capabilities can be brought to bear for our benefit.

This puzzle has a solution, I believe, along the following lines. Appoint a Counsellor for Science and Technology with a small staff. He would have two assigned functions: First, have all federal R&D budgets funneled through his office for approval and submission to OMB for further action. Second, have the R&D-intensive agencies "report" to the Counsellor on your behalf. These agencies are NSF, NASA, ERDA, NOAA, and NBS. Note that no R&D activity vital to the function of any existing department would be included. The R&D arms of DOD, HEW, Interior, Agriculture, and so on would remain in place to perform their service. Nevertheless, the aggregation under the Counsellor could be pictured as a budding department of government, as proposed in the Teague-Mosher bill now in the House. If the aggregation eventually were legislated as a new Department of Science and Technology, it could function as such. Meanwhile, it could provide a focal point for science and technology. This would be a statesmanlike move and would I believe satisfy most of the constituencies. At the same time it would provide you with one of the tools you desire to aid you in getting the job done.

The question of candidates for the Counsellorship will be a critical one. I would be happy to advise Mr. Rumsfeld and his personnel chief Walker in this task should you so desire.

I would be privileged to discuss this matter with you more fully and to clear up any remaining points.

Yours very truly,

Edward E. David Jr.

The Honorable Gerald M. Ford
President of the United States
The White House
Washington, D. C.

ACTION

THE WHITE HOUSE

WASHINGTON

February 7, 1975

MEMORANDUM FOR THE PRESIDENT

FROM: JIM CAVANAUGH

SUBJECT: Science and Technology in the Executive Office of the President

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Background

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The recommended arrangements are quite comparable to the science advisory apparatus which was abolished in July 1973 -- which included the Office of Science and Technology, with the Director designated as Science Adviser, and the President's Science Advisory Committee which included experts from outside the government. In 1973 the civilian functions were transferred to the National Science Foundation and its Director has served as Science Adviser.

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2. Focus of special purpose offices. Past experience with special purpose offices in the Executive Office indicates that they tend to become "special pleaders" or advocates for particular alternatives or programs, thus making more difficult the job of reaching balanced decisions among competing interests. For example, they advocate programs which involve additional funding for their constituancy.

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Alternatives

There are four principal alternatives that have been advanced for organizing scientific and technical advice.

Alt. #1 Propose legislation to create an Office of Technology and Science (as recommended in the Vice President's staff report, Tab A)

Arguments for:

- Would be fully responsive to the scientific and technical community.
- Would defuse the pressures in Congress to mandate their solution.
- Having independent scientific and technical advice immediately available could be useful on occasions.

Arguments against:

- As in the case of the arrangements existing prior to July 1973, there will be problems of integrating the work of the group

with other elements of the Executive Office and with the scientific capacity in the line agencies.
- Reestablishes the special interest problem.
- Would add substantially to the White House staff and would be costly.
- Would be viewed as Administration endorsement of Senator Kennedy's bill.

Alt. #2 Continue the existing arrangements, wherein the Director of NSF also serves as Science Adviser. Or strengthen it with a formal Science Adviser to the President designation and involve him in more issues, perhaps through Presidential assignment.

Arguments for:
- White House scientific oversight is less important now than in the 1950's and 1960's, because line agencies and NSF are much better staffed to deal with technical considerations. The Science Adviser can devote more staff and funding resources to the function since he can draw upon all NSF resources.
- The Science Adviser has functioned principally as an adviser to the OMB. His advice is integrated with other inputs -- avoiding the "special pleader" problem.

Arguments against:
- The arrangement is not satisfactory to the scientific community which has complained of three principal weaknesses:
  - The Science Adviser is not involved in national defense issues, thus there is essentially no scientific and technical review from outside DOD. (NSC does have some scientific staff.)
  - The Science Adviser is too far removed from the President.
  - The Science Adviser has a "conflict of interest" in that he must seek and defend before OMB NSF's requests for R&D funds while also evaluating R&D requests of other agencies.
- Elements of the Executive Office other than OMB have received relatively little help from the Science Adviser.
- The selection of this alternative will probably result in legislation such as the Kennedy bill.

Alt. #3 Appoint a Science Adviser to the President on the White House staff. Provide him with a few (1 to 3) professional assistants and expect him to draw upon scientific and technical expertise in agencies and from non-Federal ad hoc committees -- much the way Bob Goldwin functions with the academic community.

Arguments for:
- Provides a "science presence" in the White House.
- Provides additional expertise for addressing critical issues that involve scientific and technical considerations.
- Avoids institutionalizing another large special purpose staff.

Arguments against:

- This limited arrangement may not be adequate to satisfy the scientific community (e.g., it would not meet the defense R&D oversight criticism) or head off Congressional action.
- Once created, pressure may still be strong to expand it to a full-blown office or council.
- The Science Adviser may become a special interest advocate.

(Note: This alternative could be modified by integrating the Science Adviser's small staff into the Domestic Council staff. This would provide better coordination and control.)

Alt. #4 Expand significantly and restructure the policy analysis capability of the Executive Office of the President by creating a more broadly based analytical or planning group which includes scientific and engineering experts.

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- The policy analysis and long range planning capabilities of the Executive Office are not adequate and should be expanded.
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- Such expanded White House-Executive Office capability probably would be opposed on the Hill and by line agencies.
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Recommendation

From the standpoint of substantive contribution to improve decisions, I do not believe that it is necessary to provide new scientific and technical capability in the White House or Executive Office. However, the growing pressures from the scientific community and the Congress are compelling reasons for some action. I believe Alternative #3 (Science Adviser with small staff) is the best course of action and recommend that you direct that further development of this alternative be undertaken. I also recommend that you meet with leaders of the community before deciding a course of action.

Decision

Proceed with the development of a detailed proposal to:

_____ create an Office of Technology and Science (Alt. #1)
_____ strengthen existing arrangements (Alt. #2)
_____ appoint a Science Adviser with limited staff (Alt. #3)
_____ explore further the development of a broad policy analysis capability (Alt. #4)

THE WHITE

ACTION MEMORANDUM WASHINGTON

Date: February 5, 1975 Time:

FOR ACTION: Phil Buchen
Jim Cavanaugh
Jack Marsh
Paul O'Neill
Brent Scowcroft

cc (for information):

FROM THE STAFF SECRETARY

DUE: Date: Friday, February 7, 1975 Time: 2:00 p.m.

SUBJECT:

Attached paper entitled "Science, Technology and the President's Executive Office"

ACTION REQUESTED:

____ For Necessary Action
____ Prepare Agenda and Brief
X For Your Comments
X For Your Recommendations
____ Draft Reply
____ Draft Remarks

REMARKS:

2/7 2:30 p Cavanaugh will be late this afternoon
3:30 Scowcroft ketzpurs

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Jerry H. Jones
Staff Secretary

SCIENCE, TECHNOLOGY AND THE PRESIDENT'S EXECUTIVE OFFICE

Recommendations

February 5, 1975

February 5, 1975

SCIENCE, TECHNOLOGY AND THE PRESIDENT'S EXECUTIVE OFFICE

Recommendations

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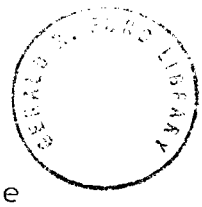

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-- problems

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(c) There should be provision for a flexible number of full-time Assitant Directors (up to five) so as to cover a decent range of professional disciplines without trying for "representation" of every professional discipline or interest, and to respond to the possible growth in Presidential needs for special competence.

(d) Provision should be made for a flexible number of full-time professionally qualified staff (up to a dozen) as well as a clerical staff to meet the responsibilities of the Office as they may develop.

(e) The ad hoc advisory panels (mentioned in paragraph 3 above) which are central to the effective functioning of the Office should:

(i) be exempt from the Federal Advisory Committee Act.

Frank and objective advice cannot be expected to be available if exposed to continuous and public scrutiny and controversy.

(ii) have their members, in general, appointed by the President.

(iii) serve on a part-time basis for a limited term;

(f) The Director would maintain close relationships with the National Academies of Science and of Engineering and the Institute of Medicine and, in establishing ad hoc panels, would make full use of their membership, as well as of academic faculties and such organizations as the Social Science Research Council.

(g) The Office in its initial full year of operation should have an annual budget in the $1 to $3 million range.

(h) Since science and technology are profoundly interrelated (not only among the scientific disciplines themselves, but with domestic and foreign social and political issues and the intellectual activity of the nation) the area of the Office's concern should be broad and include:

-- social and behavioral sciences

-- physical and life sciences

-- medicine

-- engineering

-- military applications

-- international aspects of science and technology

-- science and technology in the private sector

-- education and training of scientific manpower

5. The Qualifications of the Director

The Director must have, or be the type of person who can readily gain, the personal confidence of the President.

He or she should be a scientist, engineer or medical person of proven scientific or technical capability, have some experience in public service or administration, and should preferably be a member of one of the National Academies of Science or Technology or the Institute of Medicine.

THE WHITE HOUSE

ACTION MEMORANDUM WASHINGTON LOG NO.:

Date: February 5, 1975 Time:

FOR ACTION: Phil Buchen
Jim Cavanaugh
Jack Marsh
Paul O'Neill
Brent Scowcroft

cc (for information):

FROM THE STAFF SECRETARY

DUE: Date: Friday, February 7, 1975 Time: 2:00 p.m.

SUBJECT:

Attached paper entitled "Science, Technology and the President's Executive Office"

ACTION REQUESTED:

____ For Necessary Action

____ Prepare Agenda and Brief

X ____ For Your Comments

X ____ For Your Recommendations

____ Draft Reply

____ Draft Remarks

REMARKS:

This proposal is exceedingly unwise in the following respects
(1) Statutory organization of such advisory bodies is too permanent and inflexible.
(2) A science advisor (with a deputy) is far preferable to a large Science Office
(3) A office that includes social and behavioral science is broad without limit.
The President should not adopt this proposal.

P. Areeda
P. Buchen

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Jerry H. Jones
Staff Secretary

THE WHITE HOUSE

WASHINGTON

February 8, 1975

MEMORANDUM FOR THE PRESIDENT

FROM: DONALD RUMSFELD

SUBJECT: White House Science Adviser

Early last week the Vice President submitted his recommendations to you for the organization of a Science and Technology function in the Executive Office of the President (see Tab A). You asked that these recommendations be staffed to the key White House policy offices. This staffing has now been completed and the views were unanimously negative (see the Domestic Council response at Tab B, the NSC response at Tab C, and Dr. Robert Machol's recommendation at Tab D. Dr. Machol is a recognized scientific authority whom I asked to submit views). In addition to these comments, Paul O'Neill and OMB endorse the Domestic Council's views and recommendations and Phil Buchen and Phil Areeda make the following comments:

> "This proposal is exceedingly unwise in the following respects:
>
> 1) Statutory organization of such advisory bodies is too permanent and inflexible.
>
> 2) A science adviser (with a deputy) is far preferable to a large science office.
>
> 3) An office that includes social and behavioral sciences is broad without limit.
>
> The President should not adopt this proposal."

In summary, the following conclusions came out of the staffing process:

1) The Vice President's paper was not a Presidential decision paper presenting a series of options with an indepth analysis of each, but rather is an advocacy paper.

2) The Vice President's paper recommends essentially the structure that was abolished in 1973 because it was not functioning properly and was not contributing to the Presidential decision making process. In essence, it is the bill Senator Kennedy introduced in the last session.

3) You must be given the opportunity to consider other options which potentially would be more effective.

You must make a decision quickly because the press publicity on the Vice President's work is beginning to generate a momentum which, given time, may limit your options to only the Vice President's recommendation. Therefore, in addition to this status report, I have asked that a Presidential decision memorandum on the Science Adviser issue be prepared immediately for your consideration.

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

February 7, 1975

MEMORANDUM FOR: JERRY JONES

FROM: BRENT SCOWCROFT

SUBJECT: Comments on the Draft Paper "Science, Technology and the President's Executive Office"

The subject draft paper, in my estimation, should be returned for considerable rework since it contains little analysis on which to base a decision and no options which serve to authorize the range of reasonable choices.

There is a body of available experience that is amenable to analysis. For ten years, a structure (OST/PSAC, which was nearly identical to that proposed in the draft paper) existed in the Executive Office. OST/PSAC was abolished in 1973 and some of its functions were vested in NSF and NSC. It would be advisable (1) to enumerate in fairly definitive terms the objectives of an independent science advisory apparatus in the Executive Office, (2) consider how OST/PSAC performed in meeting such objectives, (3) analyze the reasons for the disestablishment of OST/PSAC and consider the relevance of those reasons in today's context, (4) evaluate how the technical advisory function has been carried out since 1973, and (5) detail the function of any new science advisory mechanism in relationship to the White House organization and process (e.g., the current draft mentions in passing the Domestic Council and NSC but not OMB, which through the budget has the greatest impact of any office on federal science programs and policies). Based on such a study, a series of organizational options could be developed, with pros and cons, and a recommendation offered.

In addition to these general remarks, I would observe that the two functions directly involving NSC responsibilities -- military technology and international technology policy -- have been discharged very satisfactorily under the system which now prevails; that is, by technical panels operating within the NSC system. Our technical consultants review technical issues within the context of our broader policy interests, particularly foreign policy and international political

considerations, our disarmament positions, and military posture and security relationships. Any new White House science office would be involved in questions of military technology and international technology affairs, but there seems little reason to shift prime responsibility for these matters from the NSC. Ed David, the last Presidential Science Adviser, agrees with this view.

In summary, the draft memorandum needs to be thoroughly reworked to make it a Presidential decision paper. We are willing, of course, to provide the Vice President's staff any assistance within our competence in the development of such a paper.

The Science Advisory Process

The President will have some sort of Science Advisory Council. However this need not, and should not, be the sole source of technical input to executive decision making. Nor should it interfere with the normal political control of allocations and budgetary decisions. There need be no special coordination of science and technology. There should not be a cabinet-level Department of Science and Technology, which would curb the flexibility and diversity so necessary to science.

The Science Advisory Council should have ten to fifteen members; they should be appointed for terms of two to three years, with possibility of reappointment. Perhaps three will be full-time, of whom one will be the head. This Science Advisor to the President will have visible access to the President. He will also carry on ceremonial and titular functions, including negotiations with such as the head of the Soviet Academy of Science. The Council should include some active young researchers as well as the administrators who have dominated it in the past. The scientific "establishment", which can be reached through the academies (NAS and NAE) and the previous science advisors, must have a voice in nominating members of the Council and must feel they have access to it. To avoid concentration of power, and permit separate voices, such people as the heads of the academies should not be ex officio members of the Council. The Council will meet regularly, and will render written reports to the President which will be public (unless security is involved); it will also convene panels of experts to make (public) reports to the President. The Council's small staff will service these panels, and maintain knowledge of where expertise is lodged in the government.

Less visible but more important in bringing science and technology into executive decision making is the routine staff work which goes on in the White House and EOB. Bringing science to bear here requires conscious effort by the top-level staff more than structural bureaucratic changes. Ideally, many of the political appointees should have technical training--note the utter falsity of the often implicit assumption that scientific training interferes with the breadth or competence that one otherwise brings to a political or administrative position. Next best is to have analysts with broad technical backgrounds scattered through the executive office (not in one place where they would represent a center of power). Of course the technical competence in the agencies, OMB, the academies, etc., will also be used, but these analysts will be the President's own staff whose advice will be confidential, without special bias, and hopefully not self-serving. To familiarize the staff with these people, and for other reasons, there should be a weekly technical briefing of the staff on a timely issue: auto pollution, supersonic aircraft, ICBM, or whatever. What are the known facts; what is the meadning of key terms in the controversy; what are the areas of uncertainty; which of these are likely to be resolved on a technical basis, and which remain in the political sphere.

SCIENCE, TECHNOLOGY AND THE PRESIDENT'S EXECUTIVE OFFICE

Recommendations

February 5, 1975

February 5, 1975

SCIENCE, TECHNOLOGY AND THE PRESIDENT'S EXECUTIVE OFFICE

Recommendations

1. There should be a scientific and technological capability directly available to the President

   (a) Many issues that come to the President, either for decision or for initiative, involve science and technology, sometimes to a very high degree, in the analytical and judgmental process.

   (b) While the federal departments and agencies have, and should have, scientific and technological competence of high quality, the President should have available to him an independent source of scientific and technological judgment of the very highest quality. The organization set up to provide such a source for the President must not be, or be perceived as, the representative of the scientific and technical community in the President's office.

   (c) While the present need for such a capability is clear, in our complex and technologically varied society, the need to draw upon science and technology to meet urgent problems and opportunities will be even greater in the decades ahead.

2. This capability should be lodged in an Office of Technology and Science

(a) An Office of Technology and Science should be established by Congressional action and should be headed by a Director who should also have the title of Science and Technology Advisor to the President.

(b) An Office, better than a single Advisor, or a Council or Committee of Advisors, can

-- cover the full range of necessary competence without seeming to subordinate one area to another;

-- interact with (and "translate" the reports of) ad hoc expert task forces of consultants drawn from a variety of disciplines in and out of science and technology;

-- call on and utilize the best scientific, technological and professional talents in the country for specific tasks relevant to the President's responsibilites;

-- resist the pressures to make the President's Science Advisor the "spokesman for science and technology" as distinguished from the President's need for scientific competence in meeting his national responsibilities.

3. The areas of potential activity for the Office of Technology and Science should be principally:

[Note: Not all of the following activities need be undertaken at the outset. The functions of the Office should be allowed to grow as the President may require, as relationships with the departments and agencies of government develop, and as emerging national programs, policies and issues may make desirable and useful.]

(a) To respond on scientific and technical matters to requests from the President with respect to issues that are before him for decision, or new initiatives.

(b) To help the President resolve conflicting advice involving scientific matters that come to the President from departments, agencies or the Congress.

(c) To organize ad hoc panels of consultants to assist in the collection and evaluation of relevant data with respect to particular technical and scientific issues.

The membership of such panels would be drawn from the special competence available in the private and public sectors including universities, the National Academies, industry, and government laboratories.

(d) To provide the President with early warning of either

-- opportunities, or

-- problems

that have a scientific or technological component, including some longer range forecasting of such opportunities, problems or developments.

(e) To identify and report on any gaps in scientific research and technological development in the public or private sectors that merit attention.

(f) To consult with the President on the appointments of various scientific and technical officials in the federal agencies.

(g) To stay in contact with the professional staffs of the federal departments and agencies, and of state and local governments, as well as with private sector organizations involved in science and technology.

(h) To be available for participation in reviews of policies and programs of the departments and agencies having technical responsibilities and thus to assist in the formulation of national policy on technical and scientific matters.

(i) To assist the Domestic Council, the National Security Council and the OMB in reviewing department and agency programs that have technical and scientific content.

(j) To have a modest budget to initiate analyses and studies in support of the ad hoc panels mentioned in subparagraph (c) above. These analyses and studies would be performed in

universities, private industry or federally supported institutions.

4. Organization of the Office

(a) The full-time Director of the Office should serve at the pleasure of the President.

(b) The Director should have a full-time deputy responsible for the administration of the Office who need not be a scientist.

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