

NATIONAL ARCHIVES AND RECORDS SERVICE
WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
Letter	Letter from Hornig to Harold Brown <i>sanitized 12-8-04 NLJ/PAC 04-109</i>	5/29/64	A
Letter	Letter from Hornig to John McCones <i>sanitized 12-8-04 NLJ 04-133</i>	5/11/64	C
Letter	Letter from Hornig to James Wakelin	4/9/64	A
Memo	Memo from Hornig for the Record <i>open 3/10/04 per RG JCA</i>	4/7/64	C

FILE LOCATION

**Papers of Dr. Donald Hornig as Director of the Office of Science and Technology,
1964-69 Box 1 Folder: Chronological File: April-May, 1964**

RESTRICTION CODES

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April 1, 1964

MEMORANDUM FOR

THE PRESIDENT

**SUBJECT: Ceremony for Presentation of the Pakistan Report
to President Ayub Khan**

The Pakistan Waterlogging and Salinity Report (copy attached) was published March 25. A number of copies have already been transmitted to the Pakistani authorities.

The Government Printing Office will provide us tomorrow with hard cover copies to be used for presentation purposes. You may wish to inscribe one of these for presentation to President Ayub Khan.

If your schedule permits, the presentation could take place here. This would mean a brief ceremony (5-10 minutes) in which you would hand over the inscribed hard cover copy to Pakistani Ambassador Ghulam Ahmed for transmission to President Ayub Khan. I have checked this idea out with the State Department and AID and they favor it.

The alternative would be to have the ceremonial presentation made by Ambassador McConeaughey to President Ayub Khan in Pakistan.

If you approve a ceremony here, I will make the necessary arrangements, preferably for some time Friday, April 3.

DFH
Donald F. Hornig

Attachment (1 copy "Report on Land and Water Development in the Indus Plain" dtd. Jan., 1964)

IMTobin:gpw

cc: S&T Files; S&T Chron; DFH Chron; IMT Chron

20506

April 1, 1964

Dear Senator Pastore:

Enclosed for the use of your Committee are twenty-four copies of a report, entitled "An Assessment of Large Nuclear Powered Sea Water Distillation Plants," which is being issued today by the Office of Science and Technology.

The report sets forth the results of a study conducted by a special interagency task group on the prospects of providing both electricity and desalted water from very large combined nuclear power and desalination plants. The study, begun early in 1963, was chaired by Dr. Roger Revelle, consultant to the Office of Science and Technology, and former Science Adviser to the Secretary of Interior. Agencies participating in the study included the Atomic Energy Commission, the Department of Interior and the Federal Power Commission, as well as the Office of Science and Technology.

The study concludes that the technology for large combined plants could be developed by about 1975-80 at costs which could be reasonably amortized through construction of a few full-scale units. Major development of distillation methods, which have never been carried out on this scale, is one of the requirements. The study further concludes that at least under some circumstances and in certain localities, desalted water could be produced at prices competitive with water from other sources for municipal and industrial purposes. Costing depends in a

- 2 -

complex way, however, on such matters as location, method of financing, and sale price of by-product power.

Additional copies of the report are available from my Office if you have need of them.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Enclosure

Honorable John O. Pastore
Chairman
Joint Committee on Atomic Energy
United States Senate
Washington, D. C.

RBarlow:jan
cc: White House (2)
Dr. Revelle
RBarlow subj & chron
S&T file & chron
DFH chron

Identical ltr. sent those on attached list w/Encl (number of cys. indicated in parentheses)

Distribution:

U. S. Senate

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President pro Tempore

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Chairman
Subcmte. on Science Research & Development
Cmte. on Science and Astronautics

April 1, 1964

MEMORANDUM FOR

The Honorable Dean Rusk
Secretary of State

The matter which I would like to discuss is that I had dinner at the Soviet Embassy with Ambassador Debrynin and D. M. Gvishiani (Deputy Chairman, State Committee for the Coordination of Scientific Research of the USSR). Apparently Gvishiani came to Washington for this purpose and raised two matters:

1) He inquired about an exchange of official visits between me and Rudnev, Chairman of CCSR. This suggestion was repeated and was apparently serious.

2) He proposed (in general terms) broader technological cooperation and cited the principle that "the basis for collaboration must be mutual benefit rather than reciprocity" and elaborated somewhat.

LS/DFH
Donald F. Hornig

DFH/enc

DFH Chron. ✓
S&T Files
S&T Chron.
DFH File

April 1, 1964

Dear Mr. McGannon:

Thank you for your letter of March 25, inviting me to attend the reception to be given by the National Book Committee on April 13th. I would like to attend, however, I have a number of other commitments that evening which will prevent me from accepting your kind invitation.

Sincerely,

Donald F. Hornig

Mr. Donald H. McGannon
National Book Committee
c/o American Library Association
Washington Office
200 "C" Street, S. E.
Washington, D. C. 20003

eac

April 1, 1964

Dear Dr. Rollefson:

The Department of State is invited to name a representative and alternate to serve on the Committee on Water Resources Research of the Federal Council for Science and Technology. Consideration of such action seems appropriate at this time in view of the expected activity in connection with the International Hydrological Decade.

Representatives should be in a position to speak for their Department on matters of policy as well as technical program content in the area of the Committee's activities. A copy of the Statement of Function of the Committee on Water Resources Research is attached.

Sincerely yours,

(Signed) Don

Donald F. Hornig

Dr. Ragnar Rollefson, Director
Office of International Scientific Affairs
Department of State
Washington, D. C.

WCA:em

cc: DFH

OST file-chrono

WCA file-chrono

1 April 1964

Dear Mr. Seidman:

I am replying to your letter of February 5 to my predecessor, Dr. Wiesner, requesting comments on proposed revisions of the copyright law and, specifically, on an Executive Branch position on the question of what constitutes a "publication of the United States Government." Your letter enclosed a summary of questions involved and proposed policy statements prepared by the Copyright Office, to which I confine my remarks.

I find the proposed guidelines acceptable as a fair and equitable refinement of current practice, and wish to offer no dissent. However, I would hope that as a practical matter the recommended power of a "central Government agency ... to authorize exceptions to the general prohibition against copyright in 'publications of the U. S. Government' in special cases" would be drawn so as to permit exceptions by general categories, within which an agency would have authority to certify individual cases. Any more rigid procedure, it seems to me, would in practice limit the effectiveness of this useful reform.

Thank you for the opportunity to comment.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. Harold Seidman
Acting Asst. Director for
Management & Organization
Executive Office of the President
Bureau of the Budget
Washington, D. C. 20503

cc: Mr. Hornig ✓
Mr. Rivkin - file
Mr. Rivkin - chron
S&T - file
S&T - chron

Mr. Rivkin/ems

April 1, 1964

Dear Mr. Calder:

I have your letter of March 11 inquiring about the prospects of developing an article or articles that would give parallel treatment to U. S. processes in the Executive and Legislative Branches for the acquisition and presentation of scientific information for government decision-making.

I would like to bring to your attention two young men with interest and experience in this area: Philip C. Ritterbush, who has been Legislative Assistant to Senator Thomas McIntyre of New Hampshire, and after April 1 will be Special Assistant to the Secretary of the Smithsonian Institution; and Steven R. Rivkin, who is Technical Assistant for Legal Affairs on the staff of this Office.

Additionally, I would like to suggest Professor Harvey Brooks, Dean of Engineering and Applied Physics at Harvard, who has developed a special interest in this problem area. Dr. Brooks is a member of the President's Science Advisory Committee and is also serving as a member of the General Advisory Committee to the Select Committee on Government Research of the House of Representatives. Although he might be receptive to a request from you, I understand that he would not be in position to write such an article until some time this fall.

If I can be of further assistance, please let me hear from you.

Sincerely yours,

(Signed) Donald F. Hornig

Donald F. Hornig

Mr. Nigel Calder
Editor, New Scientist
Cromwell House
Fulwood Place
High Holborn, W. C. 1.
London, England

SR Rivkin/DZ Beckler;es;khb
CC: Dr. Hornig
Dr. Brooks
Mr. Ritterbush
Mr. Beckler
Mr. Rivkin
S&T File
S&T Chron

20506

April 2, 1964

Dear Dr. Brayfield:

Thank you for your kind letter of February 18, including copies of your testimony before the House Administration Committee and other documents.

As you are aware, we are increasingly concerned with problems of scientific information, so that I was very interested to see the study on communication among psychologists and to know of your interest in the general problem.

I appreciate your offer of assistance as well as your general concern for these critical issues of the day and will keep it in mind.

Sincerely yours,

(Signed) Donald F. Hornig

Donald F. Hornig

Dr. Arthur H. Brayfield
Executive Officer
American Psychological Assoc.
1333 Sixteenth Street, N. W.
Washington, D. C. 20036

JHKelley/las

OST file - chron (w/orig basic)

JHK file - chron

✓ DFHornig chron

April 2, 1964

Dear Dr. Lamberton:

As you will recall, arrangement had been made for Dr. Hornig to meet with the National Science Fair--International winners at the Smithsonian Institution on May 4th. We have recently been in contact with Dr. Benson, Chairman of the 1964 National Science Fair International, and at Dr. Benson's request, Dr. Hornig has agreed to participate with Dr. Glenn Seaborg in a lecture to be given in Baltimore on May 5 at which he will meet the winners. In view of Dr. Hornig's extremely crowded calendar, he does not feel he could do both, so he has asked me to tell you that he has regretfully decided that he will not be able to appear at the Smithsonian on May 4th.

Sincerely yours,

Eleanor A. Connors (Miss)
Secretary to Dr. Hornig

Dr. Berenice G. Lamberton
Advisor, Washington Junior
Academy of Sciences
Georgetown College Observatory
Washington 7, D. C.

eac

April 2, 1964

Dear Mr. Seyfert:

In fact, I haven't been able to get rid of the June 12th date. Nevertheless, Country Day did so much for me and had such a great influence on my subsequent career that I don't want to miss the opportunity to be at the last commencement MCDS will have in the form I knew it. I will get there somehow.

As to the honorarium, I couldn't think of accepting it.

Sincerely,

Donald F. Hornig

Mr. Warren C. Seyfert
Headmaster
Milwaukee Country Day School
6401 North Santa Monica Boulevard
Milwaukee 17, Wisconsin

DFH/eac

tickle 6/13

20506

April 2, 1964

Dear Dr. Seaborg:

Enclosed for your information, and for any comment you may wish to make, are two copies of a report entitled "An Assessment of Large Nuclear Powered Sea Water Distillation Plants." The report sets forth the results of a study conducted by a special interagency task group on the prospects of providing both electricity and desalted water from very large combined nuclear power and desalination plants.

The study, begun early in 1963, was undertaken by the Office of Science and Technology, together with the Atomic Energy Commission, the Department of Interior and the Federal Power Commission.

Sincerely yours,

(signed) Don

Donald F. Hornig

Enclosure

Honorable Glenn T. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington, D. C. 20545

cc: Cmr. James T. Ramey, AEC
Mr. R. W. Ritzmann, AEC

RBarlow subj & chron

S&T file & chron

DFH chron ✓

RBarlow:jsn

Identical ltrs. w/Encl. sent:

Hon. Joseph C. Swidler
Chairman, FPC
w/bcc to N. Nelson & J. Jessel

Hon. Stewart L. Udall
Secy. of the Interior
w/bcc to John C. Calhoun, Gilbert
Stamm, and W.S. Gillam

April 2, 1964

Bear Reverend Kelley:

I must apologize for my long delay in replying to your very kind invitation to deliver the 1964 John F. H. Douglas address at Marquette. I wanted very much to be able to do this but I had a number of conflicts on my calendar and it has taken some time to work them out. I am happy to report, however, that it will be possible for me to come to Milwaukee on May 4th and I am greatly looking forward to the occasion.

Sincerely,

Donald F. Hornig

The Reverend William F. Kelley, S. J.
President
Marquette University
Milwaukee 3, Wisconsin

eac

Tickle May 4

April 3, 1964

Dear Oskar:

Thank you for sending me Dr. Layton's very interesting letter in support of Project PLUTO.

I have not yet had an opportunity to study this project in any real depth. However, from what I have learned, I am afraid that both you and Dr. Layton seriously underestimate the problems associated with Project PLUTO. The principal problem is that there is no real interest at this time in OSD, the Navy, or the Air Force to undertake a systems development based on the nuclear ramjet concept. Moreover, OSD, Navy, and the Air Force are not prepared at this time to commit the very substantial funds that would be required to develop and flight test a prototype nuclear ramjet engine, in view of competing requirements for research and development funds.

It is recognized, however, that this concept may have long-range interest. To this end, I understand that funds have been provided in the FY 65 budget to permit continued work on reactor components. This program should advance the state-of-the-art of the reactor technology so that a higher performance nuclear ramjet engine could be developed if a future interest develops in this program.

In the absence of more clearly defined military interest in this project, I really do not believe it is possible to justify the very large expansion in the level of effort in Project PLUTO that would be involved in a decision to actually flight test a nuclear ramjet engine.

Sincerely,

(Signed) Don

Donald F. Hornig

**Dr. Oskar Morgenstern
Princeton University
Department of Economics
92-A Nassau Street
Princeton, New Jersey**

SMK:bbi

April 3, 1964

MEMORANDUM FOR
THE PRESIDENT

The Soviet Government has suggested that there be an exchange of official visits between me and K. N. Rudnev (Chairman of the State Committee for Coordination of Scientific Research, Deputy Chairman of the Council of Ministers and a member of the CPSU Central Committee). They suggest that I come later this year.

I have discussed this with Secretary Rusk and he thinks we ought to accept the invitation, with a view to my going in September or October.

I should appreciate knowing whether you have any wishes or suggestions in this matter. I will be glad to discuss it with you if you have questions.

Donald F. Hornig

DFH/eac

DFH Chron. ✓
S&T Files
S&T Chron.

April 3, 1964

Dear Dr. Hunter:

Thank you for calling my attention to your newly established Geophysics Laboratory at the Research Triangle Institute and to the special qualifications of the Laboratory Director, Mr. James J. B. Worth. I agree with you that Mr. Worth's previous experience might prove quite valuable to research connected with a future sea-level canal.

I suggest that the best way for you to proceed in this matter would be to contact Mr. John S. Kelly, Director, Peaceful Nuclear Explosives Division, U. S. Atomic Energy Commission, Washington, D. C. I am sure that Mr. Kelly will be in a position to advise you of the research opportunities in this field.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

**Dr. Hugh W. Hunter
Vice President
Research Triangle Institute
Post Office Box 490
Durham, North Carolina**

SMK:bbi

April 4, 1964

Dear Jim:

I would greatly appreciate your sending me a copy of the report concerning Ranger VI prepared by a group under the chairmanship of Mr. E. D. Hilburn of your agency. As you know, I have been intensely interested in this program from its very beginning, and this report would help a great deal in improving my understanding of the difficulties we have had with Ranger.

Sincerely,


Donald F. Hornig

Honorable James E. Webb
Administrator
National Aeronautics and
Space Administration
Washington, D. C.

NEG;DFH/eac

DFH Chron. ✓
NEG Chron.
S&T Files
S&T Chron.
NEG File

April 5, 1964

Dear Mr. Kimball:

Thank you for your invitation to participate in the Engineering Foundation Research Conference on "Technology and the Civilian Economy" to be held July 27-31. It is extremely difficult for me to predict at this time whether my schedule will permit me to attend. I am, however, very interested in the subject of your conference and would like to send a representative from my office.

Sincerely,

Donald F. Hornig

Mr. Charles Kimball
Engineering Foundation
345 East 47th Street
New York, New York 10017

DFH/eac

April 6, 1964

Dear John:

I was quite interested in plans outlined in your letter of March 27 concerning an exhibit at Smithsonian's new Museum of History and Technology that would present achievements of Federal science and technology to the public.

There are two separate problems to be met. In the first place, students must make intelligent career choices. A striking and well conceived exhibit can be very helpful in bringing to life the possibilities for excitement, personal satisfaction and constructive contribution to society which a student may find in science and engineering. Secondly, it is not sufficiently appreciated that not only does the Federal Government finance technology and science, but that careers in the Federal service provide one of the best ways to participate in the process.

The exhibit you describe, by presenting facts about achievements of Federal scientists and engineers, could be an important step in dissolving barriers of misunderstanding about the opportunities, challenges and satisfactions that those who choose science and engineering as a profession will find in the Federal service.

The Civil Service Commission is certainly to be congratulated in taking the initiative to plan this exhibit. I feel sure that you will find our many Federal agencies, individually and collectively, enthusiastic about this proposal. I hope they will find it possible to share in its support, both by contributions of funds and by technical assistance in planning exhibits to meet the objectives.

Sincerely,

Donald F. Hornig

cc: DFH; S&T Chron; S&T Files (w/incoming correspondence); EW Chron; EW Files (FCST Chron)

**Honorable John W. Macy, Jr.
Chairman
U. S. Civil Service Commission
Washington, D. C.**

April 6, 1964

Dear Steve:

Thank you for your letter urging me to attend the Army War College Seminar on 9 - 12 June. I would very much have liked to attend the Seminar, but, as I explained to the Commandant in my letter, I have so many commitments here in Washington during that period that it is absolutely impossible for me to get away. I hope, perhaps, that it will be possible for me to attend the next seminar at the College.

Sincerely,

Donald F. Hornig

Honorable Stephen Ailes
Secretary of the Army
The Pentagon
Washington, D. C.

eac - invitations regretted

April 6, 1964

Dear Senator Douglas:

At our first meeting in your office on March 12th we were informed that there is dramatic new evidence on the purification of Krebionex and on its efficacy in a limited number of patients with cancer. We expressed our great interest and discussed steps that might be taken. First among these was the provision to us in writing of data concerning the new preparation and tests of its effectiveness with the aim of presenting this information to a panel advisory to this office.

These points were discussed again and agreed to in our meeting in my office on March 24th. We are in the process of forming the advisory panel and expect that it will be ready to function in the near future. What concerns me, however, is that to date no information on the new preparation or its effectiveness has been provided to us, and since we are anxious to get on with the study, I would appreciate it greatly if this could be put into our hands at an early date.

Sincerely,

Donald F. Hornig

Honorable Paul R. Douglas
United States Senate
Washington, D. C.

CMM:mts

cc: Mr. Feldman, W.H.

WH Files (3)

Dr. Hornig Chron ✓

CMM subj. & chron

S&T file and chron

In reply to S&T Cont. No. 506

DA. BING

April 6, 1964

Dear Glenn:

I had hoped very much to go on the Polaris cruise you are planning for May 1-2. However, matters have now developed to a point where it would be nearly impossible for me to get away that week-end. Inasmuch as I have recently participated in an operational submarine exercise, I think I must beg off on this particular cruise. I trust this will not cause you any inconvenience.

Sincerely,

Donald F. Hornig

Honorable Glenn T. Seaborg
Chairman
Atomic Energy Commission
Washington, D. C.

eac

April 7, 1964

MEMORANDUM FOR THE RECORD

SUBJECT: Discussion with G. B. Kistiakowsky on 4/6/64

1. His return from Russia. It was in every respect a pleasant trip. He contemplated staying another week but under the general circumstances they were just so tired that they gave it up. He says he was treated very well and spent a week of discussions off and on with his brother and with at least one other scientist who was a friend from the old days. He had candid and cordial conversations at their respective homes.

2. Had the following message from Moscow Embassy re Wiesner. His trip should be very carefully planned in advance--and it has not been so far. They urge strongly that specific topics be proposed if his visit is to be successful. If general topics are left on the agenda, the visit will be a flop. The elaboration given by Schweitzer is not sufficiently specific and both Schweitzer and Stoessel expressed grave concern.

Kisty noted that his efforts to have discussions with members of the Rudnev Committee fell through over the absence of specific agenda items submitted far enough in advance.

3. For Ambassador Kohler. Kisty notes that he met with the Rector of Leningrad University (Alexandrov). Leningrad has been operating a private exchange with Harvard. Their meeting was cool and Alexandrov eventually broke loose with a violent attack on Harvard. He went back to a graduate student in philosophy who asked for asylum here. When refused, he tried to commit suicide. Members of the Embassy were invited to see him, and he told them he would not return. He attempted suicide a second time and has been committed to an asylum. Alexandrov says the man (Aseyeff???) talked twice to his wife in Leningrad on the telephone and assured her he

was anxious to return to Leningrad. Alexandrov implied he is being held against his wishes. GBK says the whole case history ought to be available in Moscow, but it isn't. Anyone going to Leningrad from here on ought to have all the facts at his disposal, for instance JBW.

4. Another point for Kohler: All private conversations eventually come around to the Kennedy murder about which Russians have strong feelings, derived from an article in "Aurora" by a man named Buchanan (???). It was widely distributed in Russia and made a deep impression. Most of the people GBK met believe its allegations, for instance, his brother. This is a serious issue and ought to be countered. The gist of the Aurora article is that Oswald was murdered to silence him, that there is evidence that he did not know how to use a rifle, etc. Visiting Americans should be alerted to this issue and given adequate materials and guidelines. The reply GBK found most effective to the accusation was that we have appointed the Warren Commission to study the evidence in detail and are waiting until they have finished their investigation before we pronounce final judgment. GBK says there is something phony about the article which ought to be looked into. The Warren Commission argument may not be the best answer, but it seemed to have the best effect.

5. Returning to Dr. Wiesner's trip, GBK says it is important to establish better relations with the Rudnev Committee which is concerned with applications of science. Thinks it might be well in connection with JBW's visit to submit specific technological issues for a discussion and open up matters of technology on which we have had very little contact, in contrast to pure science. He attempted to do so but failed. He thinks that should be a primary point of my visit.

Donald F. Hornig

DFH/ms;eac
DFH Chron.
S&T Chron.

April 7, 1964

Dear Professor Hyse:

In reply to your letter of April 3rd, if it were possible for me to participate in your lecture series, I could not accept any fee whatsoever for doing so.

Sincerely,

Donald F. Hornig

Dr. Richard Hyse
Professor of Economic
State University College
Oswego, New York

eac

20506

April 7, 1964

Dear Mr. Reed:

I appreciate your bringing to my attention through your letter of March 12 the report of the proposed Soviet research expedition to the North Pole area.

I understand that your suggestion as to an offer of U. S. cooperation with this expedition is being followed up energetically by the State Department Science Office and I hope that their efforts will bear fruit.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. John C. Reed
Executive Director
Arctic Institute of North America
1619 New Hampshire Avenue, N. W.
Washington, D. C. 20009

IMTobin:gpw

cc: S&T Files
S&T Chron
DFH Chron ✓
IMT Chron

7 April 1964

Dear Frank:

Thanks for keeping me informed as to the Committee for Chemistry work. We are anxious to cooperate with you as much as possible.

David Robinson of my staff will be at the meeting April 12. I am probably going to be out of town, but if I get back in time, I will try to drop by for a while.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. F. H. Westheimer
Department of Chemistry
Harvard University
12 Oxford Street
Cambridge 38, Massachusetts

DZRobinson:hh

S&T
S&T
~~DFH~~
DZR
DZR

April 7, 1964

Dear Herb:

**Thanks for sending me the notice of the
Committee meeting on Saturday, April 25th.
I'll do my best to attend.**

Sincerely,

Donald F. Hornig

**Dr. H. E. Carter
Department of Chemistry
and Chemical Engineering
University of Illinois
Urbana, Illinois**

DFH/eac

tickle 4/25

20906

April 8, 1964

Dear Lee:

As you are aware, the Federal Council for Science and Technology, with the assistance of its Committee on Scientific and Technical Information (COSTI), has recently made a number of decisions concerning the handling and availability of the Federal technical report literature. This is a good beginning but I believe that there is also a pressing need for greater attention to the complex problems associated with the journal literature in the sciences and in engineering. Lt. Gen. William J. Ely, USA, and I, have agreed that it is desirable to establish a special task group of COSTI for the purpose of considering existing bibliographic services in the Federal Government and the various proposals which have been advanced to effect an improvement in the bibliographic handling of the world's scientific and technical journal literature.

The objective of the group should be to establish the nature, size, and cost of steps that can be taken in the next several years to improve the net effectiveness of United States scientific and technical effort through better collection, indexing, abstracting, storage and retrieval, and secondary dissemination of the journal literature. Detailed consideration should be given to the future responsibilities of the publishing industry, commercial services for secondary publication, the professional societies, the Library of Congress, the National Library of Medicine, the National Agricultural Library, and the Executive agencies of the government. Obviously, this task group would not complete its work in one or two months; the problems to be solved are complicated and difficult.

Because the scope of this effort extends into the region of responsibility of the National Science Foundation, as clarified by our recent exchange of letters, it seems proper that the National Science Foundation provide the leadership and staff support for this task

group. I would prefer to have as chairman of the group Dr. Burton W. Adkinson, whose experience and background are particularly fitting. The scope of the work is such that in all likelihood it would require a significant portion of Dr. Adkinson's time.

Because the Library of Congress has shown great interest in the objectives of this task group, they have requested, and I have agreed, that they should participate in this effort. Thus, this effort would extend across both the Executive and Legislative branches of the government, and for this reason would require both high level personnel and recognition of its broad implications.

If you approve the plans outlined here, General Ely and Dr. Adkinson can proceed to draft a scope statement for the task group.

This is a step which I consider important and the group would have my wholehearted support.

Sincerely yours,

(Signed) Don

Donald F. Hornig

Dr. Leiland J. Haworth
Director
National Science Foundation
Washington, D.C. 20550

cc: J. Quincy Mumford, Librarian of Congress
Lt. Gen. Wm. J. Ely, USA, Chairman, COSATI

JHKelley/las

OST file - chron

JHK file - chron

✓ D.F. Hornig chron

April 8, 1964

Dear Mr. Conway:

Thank you very much for your informative letters on the nuclear carrier problem and the enclosed records of the Joint Committee on Atomic Energy. I have requested a copy of the classified letter to Senator Jackson which you mention and shall read it with great interest.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. John T. Conway
Executive Director
Joint Committee on Atomic Energy
Congress of the United States
Washington, D. C.

DFH;SMK/bbi;eac
cc: Jean Lewis, Mr. O'Brien's office

DFH Chron. ✓
SMK Chron.
SMK Files
S&T Files
S&T Chron.

Re S&T Nos. 505 & 489

JOHN D. PASTORE, R.I.
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JOHN S. ANDERSON, ILL.

Congress of the United States

JOINT COMMITTEE ON ATOMIC ENERGY

March 28, 1964

Dr. Donald F. Hornig
Director, Office of
Science and Technology
Executive Office Building
Washington, D. C.

Dear Dr. Hornig:

In our conversation last Thursday we briefly discussed whether or not the Navy would prefer fewer nuclear ships in lieu of a larger number of conventional ships. In this respect, your attention is invited to page 44 of the enclosed Joint Committee hearing on nuclear propulsion of naval surface ships where I have marked testimony by the then Secretary of the Navy, Mr. Korth, and the Chief of Naval Operations, concerning the Navy's proposed acceptance of fewer nuclear ships.

Reference to the Navy's study of this matter is contained on page 105 of the same hearing record. Please note that the study which indicates that five nuclear task groups will have the same combat effectiveness of six conventional groups also indicates that the nuclear task groups will cost on an annual basis between \$200 and \$250 million less than the conventional forces.

I am also enclosing a copy of the Committee's report on the naval nuclear surface ship hearings. As indicated on page 3 of the report, the testimony presented to the Committee indicates the over-all lifetime carrier costs (ship and aircraft procurement and operating costs) is estimated to be only 3% more per carrier than for a conventional ship--surely not a significant difference. Further, as noted in our report, on page 12, "the cost differential between the nuclear and conventional carrier is even less when the cost of the logistic support forces required to deliver propulsion fuel to the conventional carrier is taken into account."

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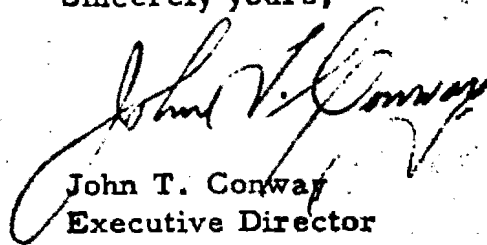
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14 to [unclear] 3-30-64

Dr. Donald F. Hornig
March 28, 1964
Page Two

I would be happy to discuss this matter with you further
any time you desire.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "John T. Conway". The signature is fluid and cursive, with the first name "John" being the most prominent.

John T. Conway
Executive Director

Enclosures:

- (1) "Nuclear Propulsion for
Naval Surface Vessels,"
JCAE Report, Dec. 1963
- (2) "Nuclear Propulsion for
Naval Surface Vessels"
JCAE Hearings, 1963

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JOHN T. CONWAY, N.H.
CHAIRMAN

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JOHN T. CONWAY, EXECUTIVE DIRECTOR

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JOHN B. ANDERSON, ILL.

Congress of the United States

JOINT COMMITTEE ON ATOMIC ENERGY

March 31, 1964

Dr. Donald F. Hornig
Director, Office of Science
and Technology
Executive Office Building
Washington, D. C.

Dear Dr. Hornig:

Enclosed is a letter which Senator Jackson recently received from the Navy which supplements the information that I sent to you last Saturday on nuclear propulsion for naval surface ships. Note that the classified items have been deleted from this letter. I recommend that you obtain a copy of the classified version since it contains an excellent summary of the military advantages of nuclear power for aircraft carrier propulsion.

I think the graph attached to the enclosed letter illustrates the advantages of nuclear propulsion in the aircraft carrier very well even when accompanied by conventionally-powered escort ships.

Note the transit distance on the graph where the conventional carrier with conventional escorts in making a high speed transit will use all of its aviation fuel for ship propulsion and thus will not be able to conduct any air strikes. Note at this same transit distance the nuclear CVAN-67 with the same conventional escorts could arrive with sufficient aviation fuel to deliver all of its ammunition (1.6 times as much ammunition as is carried in the conventional carrier). At this transit distance the conventional task group would be forced to make the transit at a slower speed in order to arrive with sufficient aviation fuel to make air strikes. However, as noted on page 4 of the Navy letter, the nuclear carrier would then arrive in two-thirds of the time and would still be able to stay in combat 1.6 times as long as the conventional carrier before retiring to replenish. According to the data, this gain in performance of the carrier can be achieved by making only the carrier nuclear powered and accompanying it with conventional escorts.

I sincerely hope that we can find ways to take advantage of our leadership in the naval nuclear propulsion field. I will be glad to discuss any thoughts you have on this matter.

Sincerely yours,

John T. Conway
John T. Conway
Executive Director

Enc:

Cpy ltr dtd 3/5/64 Connolly
to Jackson

Ref to Sec Review 4-1-64

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EST Cont. No. _____

0505

C O P Y

DEPARTMENT OF THE NAVY
Office of the Chief of Naval Operations
Washington 25, D.C.

In reply refer to

5 MAR 1964

My dear Senator:

This is in reply to your letter of 26 February 1964 requesting a specific comparison of the capabilities of the proposed four-reactor nuclear aircraft carrier (CVAN-67) and the conventional carrier (CVA-67) which is now proceeding. As discussed in the recent hearings of the Joint Committee on Atomic Energy, nuclear propulsion gives a surface warship many significant military advantages. This letter compares the specific capabilities of the nuclear CVAN-67 and the conventional CVA-67 to deliver air strikes without mobile logistic support. It does not attempt to restate the general advantages of the nuclear warships such as reduced vulnerability to submarine attack, rapid maneuverability, freedom from corrosive stack gases, etc.

Identical characteristics.

The nuclear and conventional carrier as now designed have the same armament, communications and electronic equipment, and (classified matter deleted). The same number and types of aircraft would normally be assigned to the air wing for either ship.

Endurance.

The conventional carrier has the ability to steam about (classified matter deleted) days at high speed before starting to use its normal combat fuel. The nuclear carrier can steam anywhere in the world without concern for replenishing propulsion fuel. The initial reactor fuel in the nuclear carrier is expected to provide for at least seven years of normal peacetime operations. The longer life cores that could be expected to be developed by the time refueling of the ship is needed would assure that the nuclear carrier would require refueling not more than twice during an expected operating life of about twenty-five years.

S&T Cont. No.

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Aircraft fuel.

The volume required for machinery in the four-reactor propulsion plant is about the same as the volume required for machinery in the conventional propulsion plant. However, the large volume that is required for propulsion fuel oil tanks in the conventional carrier can be used in the nuclear carrier for carrying more jet propulsion fuel for aircraft or ship propulsion fuel for escorts. When this tankage is all assigned to aircraft fuel the nuclear carrier can carry more than twice as much aviation fuel as can be carrier in the conventional carrier.

Fuel for conventional escorts.

Recognizing that for many years a new nuclear carrier would operate in company with conventional escorts the tankage would initially be divided between aircraft fuel and escort propulsion fuel, as is now done in the ENTERPRISE. The tankage in the four-reactor carrier can be divided so that the nuclear carrier has sixty percent more aircraft fuel than the conventional carrier and at the same time has sufficient escort fuel to more than double the effective range of a normal complement of four of our most modern conventional escorts without logistic support ships.

Aviation ammunition.

There is a major incentive also in the nuclear carrier to increase aviation ammunition in order to further reduce dependence on logistic support at sea. Therefore, the four-reactor carrier design is based on using an ENTERPRISE size hull which is fifty feet longer (five percent) than the conventional carrier. This increase in hull size provides room for about sixty percent more total tonnage of aircraft ammunition in the four-reactor nuclear carrier than in the conventional carrier.

A similar increase in hull size for the conventional carrier would, of course, allow its ammunition to be increased an equivalent amount. This increase in size of the conventional carrier would also allow an increase in aviation fuel (about 15%). A conventional aircraft carrier with the same capacity for aviation fuel and ammunition as the nuclear aircraft carrier and with additional propulsion fuel required for the carrier and its escorts to steam in the combat area

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while delivering the extra air strikes would be significantly larger than the nuclear carrier; it would exceed the maximum size of a ship that can be built or repaired in our docking facilities.

Relative capability without logistic support.

Your letter asked for "an analysis of the relative capabilities of each carrier, with and without conventional escorts, in circumstances where no logistic support ships are available."

The length of time a carrier can stay in combat without replenishment is determined by the rates of usage of ammunition, aircraft fuel, and ship propulsion fuel. These rates depend on how far and how fast the carrier has to transit to reach the combat area, how soon the air strikes are launched after arrival in the combat area, the flight distance from the carrier to the targets, and the sortie rates to be kept up.

Ammunition controlling.

The carrier will run out of ammunition before it runs out of fuel when the transit distance to the combat area is short, when ample targets are available and the flight distance from the carrier to the target is short. For example, conventional CVA-67 can use up all its aircraft ammunition in about (classified matter deleted) days at maximal sortie rates when the target is only about (classified matter deleted) air miles from the carrier. In the same situation the nuclear CVAN-67 would have ammunition for about 60 percent more days of maximal air strikes.

Days in combat versus transit distance.

The attached graph illustrates the relative capabilities of a nuclear CVAN-67 and a conventional CVA-67 to deliver air strikes following a high speed transit when logistic support is not available in the combat area. The graph illustrates the relative capabilities of each carrier with either conventional or nuclear escorts. The graph takes into consideration the fact that jet fuel can be used for ship propulsion when required.

C O P Y

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Ammunition or aviation fuel controlling.

When the aircraft flight distance from the carrier to the target is about (classified matter deleted) air miles the conventional CVA-67 can conduct air strikes at a maximum rate for about (classified matter deleted) days, provided the carrier and its escorts are not required to transit more than (classified matter deleted) miles at (classified matter deleted) knots (classified matter deleted) to reach the combat area. The nuclear CVAN-67 can conduct air operations at the same maximum rate for 1.6 times as long provided the nuclear carrier and its conventional escorts are not required to transit more than twice the maximum transit distance the conventional carrier can steam at (classified matter deleted) knots (classified matter deleted) to reach the combat area.

Aviation fuel controlling.

It can be seen from the graph that when the distance to the combat area requires the carrier and its escorts to transit as much as (classified matter deleted) miles (classified matter deleted) the conventional CVA-67 must have its fuel replenished prior to going into combat or the task group must transit at a slower speed in order to conserve fuel. For example, if a conventional task group made a transit of (classified matter deleted) miles at (classified matter deleted) knots it would arrive in (classified matter deleted) days with sufficient fuel and ammunition to conduct air operations for about (classified matter deleted) days before retiring for replenishment. The nuclear CVAN-67 transiting at (classified matter deleted) knots with the same conventional escorts will arrive in two-thirds the time required for the conventional carrier with sufficient fuel and ammunition to conduct air operations for 1.6 times as long as the conventional carrier before retiring to replenish.

CVAN-67 with conventional escorts versus CVA-67 with nuclear escorts.

It should be noted from the graph that since nuclear propulsion in the carrier is accompanied by a substantial increase in aviation fuel and ammunition carried the ability of the nuclear CVAN-67 with conventional escorts to conduct sustained air operations without replenishment is much greater even than that of a conventional CVA-67 with nuclear escorts.

Pre-hostility show-of-force role.

The graph indicates that for shorter transit distances both the nuclear and conventional carrier with conventional escorts will have more aviation fuel than is required to deliver all their ammunition at maximal sortie rates. Thus each carrier has a capability to operate aircraft in a pre-hostility show-of-force role while retaining aviation fuel

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to deliver the full ammunition load as this becomes necessary. Also, when less than maximal sortie rates are required, the time in combat will be longer and more jet fuel will be required for ship propulsion. Therefore, the greater aviation fuel capacity of the nuclear carrier is a significant advantage of CVAN-67.

CVAN-67 with nuclear escorts.

Of course, the highest advantages of nuclear propulsion are achieved when nuclear-powered escorts accompany the nuclear carrier. As can be seen from the graph, the all-nuclear task group can steam anywhere in the world at high speed, sustain a maximal level of air operations for many days prior to committing forces to combat and still have enough aviation fuel to deliver a full load of ammunition (160% of the conventional CVA-67 load) -- all without replenishment in the combat area.

Summary.

A nuclear CVAN-67 is designed to carry ammunition, aircraft fuel, and propulsion fuel for conventional escorts, sufficient to deliver at least 60% more air strikes than a conventional CVA-67 before replenishing. For situations requiring extended transits, the relative capabilities of the nuclear carrier are still greater. A capability to stay in combat extra days executing hundreds of extra aircraft sorties without stopping and retiring to replenish is a most desirable enhancement of military power and worth, especially to assaulting naval forces striking for initial gains and a foothold in a new and critical effort.

I trust the foregoing information is satisfactory. If it is not, please let me know what further data is desired.

Sincerely yours,

T. F. CONNOLLY
Rear Admiral, U.S. Navy
Director, Strike Warfare Division
By Direction

Honorable Henry M. Jackson
United States Senate
Washington, D. C.

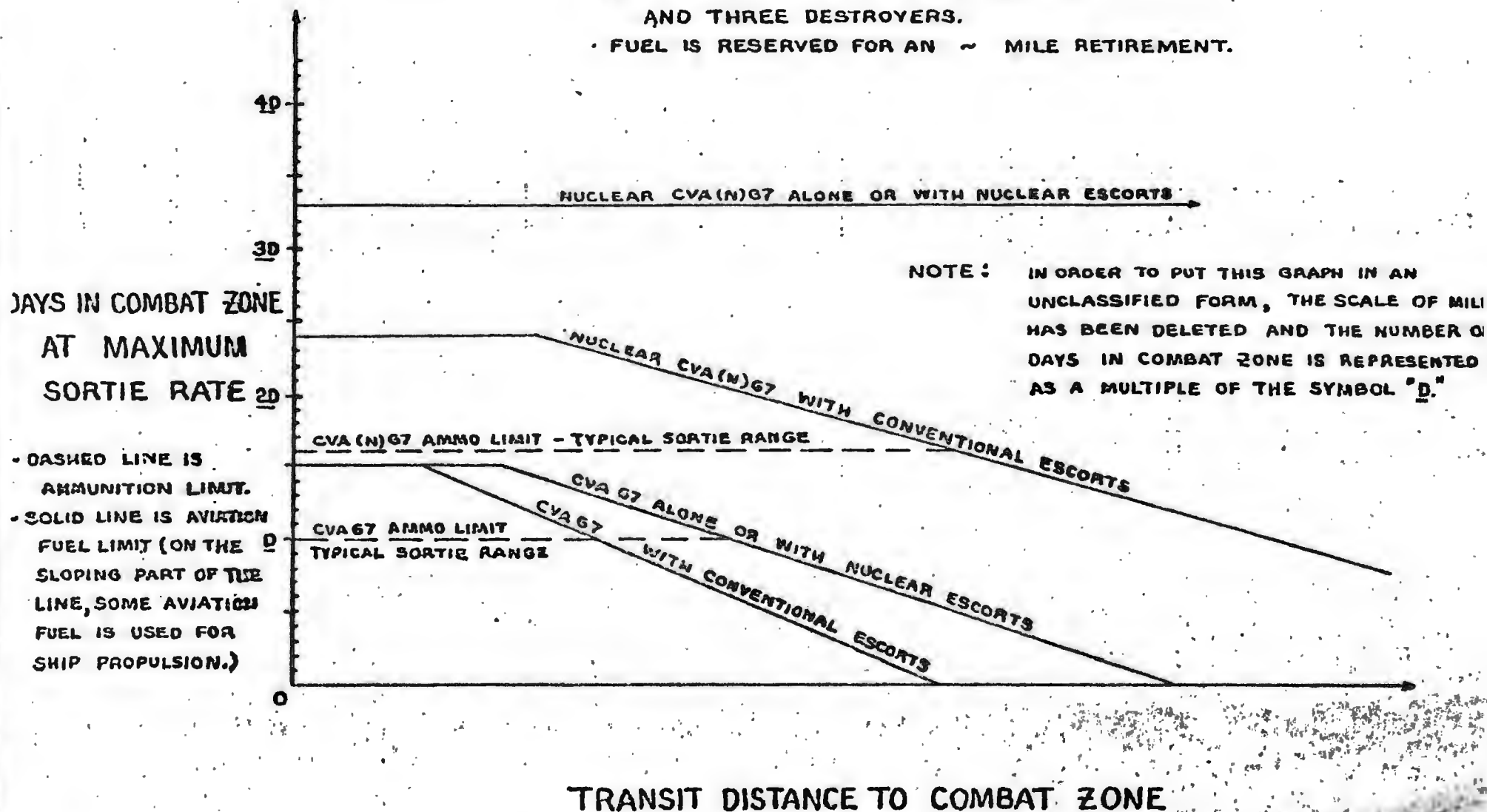
Enclosure: graph

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C O P Y

COMBAT CAPABILITY OF CVA67 AND CVA(N)67 AFTER HIGH SPEED TRANSIT

- ASSUMPTIONS:
- TRANSIT SPEED IS ~ KNOTS.
 - NO LOGISTICS SUPPORT IS AVAILABLE,
 - ESCORTS ARE ONE DESTROYER LEADER AND THREE DESTROYERS.
 - FUEL IS RESERVED FOR AN ~ MILE RETIREMENT.



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TYPICAL TRANSIT DISTANCES

from	to	nautical miles
SAN FRANCISCO	PEARL HARBOR	2,100
SAN FRANCISCO	PANAMA	3,200
SAN FRANCISCO	SINGAPORE	7,400
PEARL HARBOR	FORMOSA	4,500
YOKOHAMA	MANILA	3,800
YOKOHAMA	SAIGON	2,400
YOKOHAMA	KARACHI	5,300
MANILA	ZANZIBAR	5,400
MANILA	CALCUTTA	2,900
NORFOLK	GUANTANAMO	1,100
NORFOLK	PANAMA	1,800
NORFOLK	GIBBALTER	3,300
NORFOLK	DAKAR	3,400
NORFOLK	CAPE TOWN	6,800
NAPLES	HAIFA	1,200
NAPLES	LONDON	2,200
NAPLES	DAKAR	2,500

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Memo of Telephone Conversation
April 8, 1964

Dr. Hornig received a call from Mr. Agnello of the American Chemical Society. Agnello said he had heard reports that Dr. Hornig was having weekly meetings with representatives of some of the agencies and departments for the purpose of seeing how they could turn back about 7 1/2 % of their funds to the NSF to support university research. Agnello wanted to know if Dr. Hornig thought it would be wise to print anything about this at this time. Dr. Hornig indicated he thought it would not be wise, it was still in the very early stages and anything they were likely to print now might be inaccurate. Agnello asked for an assurance that if he didn't print anything now, when an announcement was to be made he would get advance notice. Dr. Hornig said he would give him that assurance.

on

April 8, 1964

Dear Mr. Carlisle:

**Thank you very much for the pictures.
They will help me remember an important and
very happy occasion for me.**

Sincerely,

Donald F. Hornig

**Mr. Albert R. Carlisle
Director
Office of Public Information
Temple University
Philadelphia, Pennsylvania 19122**

DFH/eac

Temple U. speech file

April 9, 1964

Dear Mr. Clark and Mr. Lesgold:

I was very pleased and honored to receive your letter informing me of my having been chosen to receive Steuben Junior High School's first Distinguished Citizen Award. Unfortunately, it would not be possible for me to be with you on May 1st due to a number of commitments here in Washington. My parents, Mr. and Mrs. C. A. Hornig, live at N. 5079, W. 176 Evelyn Terrace, Menominee Falls, Wisconsin (Milwaukee telephone), and I am sure they would be very pleased to accept the award on my behalf.

Coincidentally, however, I am scheduled to be in Milwaukee the night of May 4th and it might be possible for me to stop by at the school very briefly before catching my plane to Washington on the morning of May 5th.

Sincerely,

Donald F. Hornig

Mr. Earl L. B. Clark
Principal
Mr. Steven M. Lesgold
Student Council President
Steuben Junior High School
Milwaukee 10, Wisconsin

DFH/eac

April 9, 1964

Dear Fred:

Per our telephone conversation, I am
enclosing a copy of the letter I received from
Frank Press.

Sincerely,


(signed) Don

Donald F. Hornig

Encl.

Dr. Frederick Seitz
President
National Academy of Sciences
Washington, D. C.

DFH/eac

DFH Chron. 
S&T Files
S&T Chron.

~~XXXXXXXXXX~~

CALIFORNIA INSTITUTE OF TECHNOLOGY
DIVISION OF THE GEOLOGICAL SCIENCES

SEISMOLOGICAL LABORATORY
PASADENA

ADDRESS

SEISMOLOGICAL LABORATORY
220 NORTH SAN RAFAEL AVE
PASADENA, CALIFORNIA

April 2, 1964

Dr. Donald F. Hornig
Special Assistant to the President for
Science and Technology
The White House
Washington 25, D. C.

Dear Don:

The Alaskan earthquake is a unique event for the earth sciences. It ranks with the great Krakatoa explosion of 1883 and the San Francisco earthquake of 1906. It may have been the greatest earthquake instrumentally recorded.

It is something of a tradition in the earth sciences for major events like this to be fully documented. This provides an important service to local government and industry. Scientifically it is invaluable in that it provides in a single place a source book of data for researchers to use for the next few decades. The Royal Commission report on Krakatoa and the Carnegie report of the San Francisco earthquake provide valuable information to this day.

A committee for the Alaskan earthquake might be established by the Academy. If the Academy can arrange for cooperation with the Geological Survey, the Coast and Geodetic Survey, and the Alaskan state government (mandatory if the project is to succeed), well and good; otherwise government auspices may be necessary (Presidential commission, OST). I have in mind a report covering all aspects of the earthquake including geological and topographic mapping of the fault zone, fault mechanism, earthquake and aftershock magnitudes, locations and strain release, permanent sea level changes and tsunami, free oscillations, earthquake history of the region; engineering seismology, including reports of building and facility failures, soil mechanics, strong motion.

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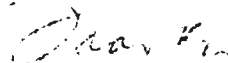
Dr. Hornig

2.

April 2, 1964

I have discussed the matter of NSF support of publication and field expenses with Lee Haworth, who seemed sympathetic to the idea.

Yours sincerely,



Frank Press
Director

FP/rw

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April 9, 1964

**MEMORANDUM FOR
THE PRESIDENT**

**(Hand-carried by
Mr. Tobin to discuss
with Mr. Meyers)**

**The original of your letter to President
Ayub Khan transmitting the Pakistan
Water Report came back from the GPO
in such condition that we cannot use it.**

**Would you please be good enough to sign
the attached exact copy of the letter you
previously signed.**

(signed) Donald F. Hornig

Donald F. Hornig

**Attachment (original letter to President Ayub Khan
as above stated)**

IMTobin:gpw

**cc: S&T Files
S&T Chron
DFH Chron ✓
IMT Chron**

20506

April 9, 1964

MEMORANDUM FOR

**Honorable Edward A. McDermott
Director, Office of Emergency Planning**

As you know, Dr. William G. Terpey of the OEP staff has been working since the first of the year on topics of interest to the Office of Science and Technology. OST has agreed to reimburse your Office for these services. These arrangements were made by an exchange of correspondence between you and Dr. Wiesner dated December 16 and December 24, 1963.

If you are willing to do so, I should like very much to extend these arrangements on the same basis through June 30, 1964. Dr. Terpey is continuing to provide valuable assistance to us, and it is our understanding that these arrangements would expire on April 15 unless action is taken to continue them in effect.

(signed) Don

Donald F. Hornig

RBarlow:jsn
cc: DFH chron
RBarlow subj & chron
S&T file & chron
MLC
Dr. Wenk

April 9, 1964

Dear Mr. Secretary:

It is apparent in the light of recent events that much more needs to be done to strengthen and coordinate the scientific and monitoring activities of the various agencies with respect to the use of pesticides and other environmental pollutants. Since the publication in May 1963 of the report of the President's Science Advisory Committee, "Use of Pesticides", some progress has been made but serious gaps still exist.

For these reasons I feel it is of great importance to strengthen the participation of this Office and would appreciate it if Dr. John Buckley, Chief, Office of Pesticides Coordination, Bureau of Sport Fisheries and Wildlife, could be detailed to OST. Dr. Buckley spent several months in this Office during late 1962 and early 1963 as a technical assistant to the Panel on the Use of Pesticides. His contributions to the work of the Panel and to its report were invaluable.

I recognize that Dr. Buckley is currently occupied with pesticide problems in the Department of the Interior and that detailing him to OST will leave a gap that other staff members will have to fill in. I believe, however, that because of the magnitude and urgency of the problems and in view of Dr. Buckley's particular competence, this personnel action at this time is in the best interests of the Government.

Sincerely yours,


Donald F. Hornig

The Honorable
Stewart L. Udall
Secretary of the Interior
Washington, D. C.

CMM:mts

cc: Dr. Hornig chron ✓
CMM subj. & chron
Dr. Hartgering
S&T file and chron
MR BARLOW

10 April 1964

MEMORANDUM FOR

**Dr. Leland J. Haworth
Director
National Science Foundation**

A small panel of leading scientists and engineers is being invited to meet under OST auspices to discuss scientific and technical problems relating to earthquakes and the adequacy and nature of the present research efforts. We should like to have the benefit of the experience and competence of the National Science Foundation in this area, and therefore will be glad for you to appoint one or more observers to meet with the Panel. It is hoped, however, to keep the group small enough so that a meaningful informal discussion can be conducted. Please report the name or names of observers to Dr. Robert Fleagle, who is serving as OST staff assistant for this meeting (Code 128, extension 28443).

Discussions will be limited to scientific and technical aspects of the problem, so that I suggest that the most technically qualified person or persons be selected. The group will meet in Room 208, Executive Office Building, on Sunday, April 19, at 9:30 a. m., and the meeting will last all day.

(Signed) Don

Donald F. Hornig

RGFleagle:hh

S&T

S&T

~~DFH~~

RGF

RGF

10 April 1964

MEMORANDUM FOR

**Dr. Eugene G. Fubini
Assistant Secretary of Defense
(Deputy Director, Defense Research
and Engineering)
Department of Defense**

**SUBJECT: OST Ad Hoc Panel on Seismological
Research**

A small panel of leading scientists and engineers is being invited to meet under OST auspices to discuss scientific and technical problems relating to earthquakes and the adequacy and nature of the present research efforts. We should like to have the benefit of the experience and competence of the ARPA in this area, and therefore will be glad for you to appoint one or more observers to meet with the Panel. It is hoped, however, to keep the group small enough so that a meaningful informal discussion can be conducted. Please report the name or names of observers to Dr. Robert Fleagle, who is serving as OST staff assistant for this meeting (Code 128, extension 28443).

Discussions will be limited to scientific and technical aspects of the problem, so that I suggest that the most technically qualified person or persons be selected. The group will meet in Room 208, Executive Office Building, on Sunday, April 19, at 9:30 a. m., and the meeting will last all day.

(Signed) Don

Donald F. Hornig

RGFleagle:hh

S&T

S&T

~~DFH~~

RGF

RGF

10 April 1964

MEMORANDUM FOR

**Dr. John C. Calhoun, Jr.
Science Adviser to the Secretary
Department of the Interior**

**SUBJECT: OST Ad Hoc Panel on Seismological
Research**

A small panel of leading scientists and engineers is being invited to meet under OST auspices to discuss scientific and technical problems relating to earthquakes and the adequacy and nature of the present research efforts. We should like to have the benefit of the experience and competence of the Geological Survey in this area, and therefore will be glad for you to appoint one or more observers to meet with the Panel. It is hoped, however, to keep the group small enough so that a meaningful informal discussion can be conducted. Please report the name or names of observers to Dr. Robert Fleagle, who is serving as OST staff assistant for this meeting (Code 128, extension 28443).

Discussions will be limited to scientific and technical aspects of the problem, so that I suggest that the most technically qualified person or persons be selected. The group will meet in Room 208, Executive Office Building, on Sunday, April 19, at 9:30 a. m., and the meeting will last all day.

(signed) Don

Donald F. Hornig

RGFleagle:hh

S&T

S&T

~~DFH~~

EGF

RGF

10 April 1964

MEMORANDUM FOR

**Dr. J. Herbert Hollomon
Assistant Secretary for Science
and Technology
Department of Commerce**

**SUBJECT: OST Ad Hoc Panel on Seismological
Research**

A small panel of leading scientists and engineers is being invited to meet under OST auspices to discuss scientific and technical problems relating to earthquakes and the adequacy and nature of the present research efforts. We should like to have the benefit of the experience and competence of the Coast and Geodetic Survey in this area, and therefore will be glad for you to appoint one or more observers to meet with the Panel. It is hoped, however, to keep the group small enough so that a meaningful informal discussion can be conducted. Please report the name or names of observers to Dr. Robert Fleagle, who is serving as OST staff assistant for this meeting (Code 128, extension 28443).

Discussions will be limited to scientific and technical aspects of the problem, so that I suggest that the most technically qualified person or persons be selected. The group will meet in Room 208, Executive Office Building, on Sunday, April 19, at 9:30 a. m., and the meeting will last all day.

(signed) Don

Donald F. Hornig

RGFleagle:hh

S&T

S&T

~~DFH~~

RGF

RGF

20506

April 19, 1964

AIR MAIL

Dear Pierre:

Dr. Hornig has asked me to provide you with some information on the possibilities of combined production of desalted water and nuclear power. The enclosed press release gives a one-paragraph summary, followed by six pages of detail. I think the following points are the most pertinent:

1. The technique considered by the OST interagency task group envisages extremely large plants, far larger than any now on the drawing boards. These would take about 15 years to develop on a reasonable basis of moderate urgency, short of a crash program. Smaller plants can of course be built earlier, but would not achieve the economic advantages inherent in very large size.
2. The water side of the plant is much less developed than the nuclear side. The largest sea water distillation plants in operation in the world produce on the order of two million gallons per day. One such plant is in Kuwait, another is planned for Guantanamo. The economics foreseen in the OST report are based on half a billion to one billion gallons per day. A scale-up of this magnitude would require several intermediate steps.
3. The largest nuclear reactor operating today, the New Production Reactor at Hanford, Washington, produces a few thousand megawatts of heat. The OST report envisages reactors at least twice this size. It is possible, though not certain, that the optimum reactor for this application would be of a different type which would require very extensive development. Alternatively, existing reactor types might be used. This approach might require more units in smaller unit sizes.

4. Total development costs, including the cost of intermediate size prototype plants, might be on the order of 800 million dollars, split about half and half between the nuclear side and the water side.
5. An optimum size plant foreseen in the 1975-80 time period would cost about 840 million dollars and would produce 500 to 800 million gallons of water per day, plus 1,000 to 1,500 megawatts of marketable electric energy.
6. There are relatively few locations that will provide markets for both water and power simultaneously in these amounts. Southern California is perhaps the most obvious such location. As a point of reference, the OST study contemplated the hypothetical location of such a plant at Camp Pendleton.
7. The OST study foresees power costing as little as 2 to 2.5 mills per kilowatt hour from such a plant, and water costing from 20 to 25 cents per thousand gallons. These figures appear very attractive compared to today's power costs of perhaps 5 mills or so (depending on location), and today's cost of desalted water which runs to a dollar a thousand gallons or more. The ground rules for these attractive economics, however, are extremely important; they assume public financing of both water and power plant, and do not include the cost of conveyance of the water and power from the plant site to the ultimate consumer. Water conveyance costs, for example, might add as much as 9 cents per thousand gallons.
8. It does not seem likely that water from combined plants such as this would be cheap enough to see much use for irrigation. Although water costing nearly 20 cents a thousand gallons is used for some irrigation purposes, it is necessary to get below 10 cents per thousand gallons before such use can become widespread. Water costing 20 to 25 cents can be quite attractive, however, for municipal and industrial purposes, and is competitive with the water costs expected from the Southwest Water Plan.

9. The OST study considered only one desalting technique: distillation, a process which requires heat. Other techniques which require much less energy, and in the electrical or mechanical form rather than as heat, are under intensive development by the Office of Saline Water. It is conceivable that distillation might be an obsolescent desalting technique by the mid-1970's.

I hope that this information will be of some help.

Sincerely yours,

Robert Barlow

Enclosures

Mr. Pierre Salinger
Ambassador Hotel
Room 414
Los Angeles, California

RBarlow:jsn

cc: Dr. Hornig

RBarlow subj & chron

S&T file & chron

April 18, 1964

MEMORANDUM FOR

**Frederick L. Holborn
Special Assistant to the White House Office**

Subject: Letter from A.J. Wesolowski dated March 11, 1964.

A large number of international technical conferences of the general type discussed in Mr. Wesolowski's letter are held annually in the United States. There is little question that such meetings contribute to scientific and technological progress at least for the reason that they enable a more rapid interchange of the most important current findings than can be normally achieved through other means such as publication. Accordingly, a statement by the President along the lines requested would serve a useful purpose.

However, just because of the frequency of such meetings, and of the difficulties involved in passing judgement on their relative importance, it may be inadvisable to set what might become a burdensome precedent. It is also possible, if such a precedent is set, that the President might be subjected to pressures for its extension to conferences of other types and in other fields.

It is suggested that the request be appropriately denied.

(signed) Donald F. Hornig

Donald F. Hornig

DFH Chron
NEG Chron
NEG Subj
OST Chron
OST Subj

NEG:hk

April 10, 1964

Dear Mr. Worthington:

Thank you for your invitation to join you and other representatives of the C&P Telephone Company of Maryland at dinner on May 5th prior to Dr. Seaborg's lecture in connection with the National Science Fair International, Inc. I would be most happy to do so. I expect to be in Milwaukee the morning of May 5 and plan to take a flight from Chicago which is scheduled to arrive at Friendship Airport at 5:00 p. m. Barring weather or mechanical delays, I hope to be able to get to Charles Center by 6:00 p. m.

Sincerely,

Donald F. Hornig

Mr. N. Page Worthington
General Public Relations Manager
The Chesapeake and Potomac Telephone
Company
320 St. Paul Place
Baltimore 2, Maryland

eac tickle May 5

April 10, 1964

Dear Dr. Dawson:

It is with very great regret that I am writing to say that events here in Washington have come to the point where it does not seem possible for me to come to Durham to attend the Symposium on Chemical Reactions in Shock Tubes on April 22nd. I had looked forward to this occasion as an opportunity to return, however briefly, to "pure" science again, but my schedule here is such that I do not feel I could take the time to be away from Washington on that day. If you plan to publish the proceedings of the Symposium, I would be most interested in receiving a copy.

Sincerely,

Donald F. Hornig

Dr. John W. Dawson
Chief Scientist
U. S. Army Research Office
Box CM, Duke Station
Durham, North Carolina 22706

eac

cc: Dr. Robinson

File: Invitations regretted

April 13, 1964

Dear Milton:

I would like to take this opportunity to express my appreciation for your able and conscientious service on the Space Science Panel which I had the privilege of chairing. Although the developing needs of the PSAC and the change in my position have made it necessary to revamp the structure and activities of this Panel, its efforts over the past two years have contributed in a very significant way to the maintenance of balance and reasonableness in the national space program.

Your services in particular have helped make the Panel useful to the Science Advisory Committee and, as former chairman of the Panel, I would like to thank you for your dedication and willingness to contribute time and energy in the service of the government.

Sincerely yours,

(signed) Doi.

Donald F. Hornig

**Dr. Milton U. Clauser
1 El Concho
Rolling Hills, California**

**DFH Chron
DHS Chron
DHS Subj
S&T Chron
S&T S_u bj**

DHS:NEG:DFH:hk

April 13, 1964

Dear Ted:

I would like to take this opportunity to express my appreciation for your able and conscientious service on the Space Vehicle Panel which I had the privilege of chairing. Although the developing needs of the PSAC and the change in my position have made it necessary to revamp the structure and activities of this Panel, its efforts over the past two years have contributed in a very significant way to the maintenance of balance and reasonableness in the national space program.

Your services in particular have helped make the Panel useful to the Science Advisory Committee and, as former chairman of the Panel, I would like to thank you for your dedication and willingness to contribute time and energy in the service of the government.

Sincerely yours,

(signed) Don

Donald F. Hornig

**Dr. Theodore C. Merkle, Jr.
Associate Director
Lawrence Radiation Laboratory
University of California
Livermore, California 94550**

**DFH Chron
DHS Chron
DHS S_u bj
OST Chron
OST Subj**

DHS:DFH:hk

April 13, 1964

Dear Don:

I would like to take this opportunity to express my appreciation for your able and conscientious service on the Space Science and Space Vehicle Panels which I had the privilege of chairing. Although the developing needs of the PSAC and the change in my position have made it necessary to revamp the structures and activities of these Panels, their efforts over the past two years have contributed in a very significant way to the maintenance of balance and reasonableness in the national space program.

Your services in particular have helped make the Panels useful to the Science Advisory Committee and, as former chairman of the Panels, I would like to thank you for your dedication and willingness to contribute time and energy in the service of the government.

Sincerely yours,

(signed) Don

Donald F. Hornig

**Dr. Donald P. Ling
Executive Director
Military Research Division
Bell Telephone Laboratories
Whippany, New Jersey**

**DFH Chron
DHS Chron
DHS Subj
S&T Chron
S&T Subj**

DHS:NEG:DFH:hk

April 13, 1964

Dear Bruno:

I would like to take this opportunity to express my appreciation for your able and conscientious service on the Space Science Panel which I had the privilege of chairing. Although the developing needs of the PSAC and the change in my position have made it necessary to revamp the structure and activities of this Panel, its efforts over the past two years have contributed in a very significant way to the maintenance of balance and reasonableness in the national space program.

Your services in particular have helped make the Panel useful to the Science Advisory Committee and, as former chairman of the Panel, I would like to thank you for your dedication and willingness to contribute time and energy in the service of the government.

Sincerely yours,

(Signed) Don

Donald F. Hornig

**Dr. Bruno Rossi
Department of Physics
Massachusetts Institute of Technology
Cambridge 39, Massachusetts**

**DFH Chron
DHS Chron
DHS Subj
S&T Chron
S&T Subj**

DHS:NEG:DFH:hk

April 13, 1964

Dear John:

I would like to take this opportunity to express my appreciation for your able and conscientious service on the Space Vehicle Panel which I had the privilege of chairing. Although the developing needs of the PSAC and the change in my position have made it necessary to revamp the structure and activities of this Panel, its efforts over the past two years have contributed in a very significant way to the maintenance of balance and reasonableness in the national space program.

Your services in particular have helped make the Panel useful to the Science Advisory Committee and, as former chairman of the Panel, I would like to thank you for your dedication and willingness to contribute time and energy in the service of the government.

Sincerely yours,

(signed) Don

Donald F. Hornig

**Dr. John F. Kincaid
International Mining and Chemical Corporation
Old Orchard Road
Shelie, Illinois**

**DFH Chron
DHS Chron
DHS Subj
S&T Chron
S&T Subj**

DHS:DFH:NEG:hk

April 13, 1964

Dear Mr. White:

Mr. David Beckler has forwarded your letter of April 9th to me for reply. By now, you probably have heard from Dr. Dawson that Dr. Hornig has had to cancel his attendance at the Symposium on April 22nd due to other commitments in Washington. I am assuming, therefore, that you no longer need the material requested in your letter.

Sincerely,

Eleonor A. Connors (Miss)
Secretary to Dr. Hornig

Mr. Peregrine White
Scientific Information Officer
U. S. Army Research Office
Box CM, Duke Station
Durham, North Carolina 27706

April 13, 1964

Dear Mr. Dowd:

Re: Report No. 2389-90-B
IRIA Annotated Bibliography of Infrared
Literature(U). Volume VIII, No. 1, Copy #483

The above referenced document was forwarded to this office by Dr. Donald F. Hornig's office at Princeton University since, as you may be aware, Dr. Hornig is now Director of the Office of Science and Technology in Washington, on leave from Princeton. We have been advised by the Institute of Science and Technology, to whom we returned the receipt for the document, that they are not authorized to make the change of address until official authorization has been received from the Contracting Officer for IRIA, and they suggested we write to you. We would appreciate your taking whatever action is necessary so that the mailing label can be changed to Dr. Hornig's current address which is, Director, Office of Science and Technology, Room 207, Executive Office Building, Washington, D. C. 20506.

Sincerely,

Eleanor A. Connors (Miss)
Secretary to Dr. Hornig

Mr. Thomas B. Dowd
Office of Naval Research
494 Summer Street
Boston 10, Massachusetts

April 13, 1964

Dear Mr. Seyfert:

In order to plan Dr. Hornig's schedule, which, as you can imagine, is rather tight, it would be appreciated if you could let us know the time of your commencement on June 13th. He will not be able to arrive the evening of the 12th because he has a speech in Princeton and we would like to know how early it would be necessary for him to arrive in Milwaukee on the 13th.

Sincerely,

Eleanor A. Connors (Miss)
Secretary to Dr. Hornig

Mr. Warren C. Seyfert
Headmaster
Milwaukee Country Day School
6401 North Santa Monica Boulevard
Milwaukee 17, Wisconsin

April 14, 1964

MEMORANDUM OF TELEPHONE
CONVERSATION 4/14/64

Mr. Agnello of Chemical and Engineering News called with further reference to the matter he called about on April 8th (see attached memorandum). He said he was getting more information on the matter, and wanted Dr. Hornig's comments. Dr. Hornig told him that while there is discussion, the matter has no status whatever at this point. Agnello asked if it was a proposal by Dr. Hornig and Dr. Hornig told him it was not. Agnello asked who made the proposal, and Dr. Hornig said the various people in the agencies who have responsibilities for this kind of thing have been discussing many different proposals. Agnello asked if the group had any formal title, and Dr. Hornig said it did not, that it was merely to discuss government-university relationships.

Agnello asked if Dr. Hornig would be disturbed to see this in print, and Dr. Hornig said he was disturbed that something like this which was internal discussions had been discussed on the outside by someone but he wouldn't be disturbed to see it in print. This was the end of the conversation.

Dr. Hornig called Mr. Agnello back and indicated in the interest of keeping the matter in a reasonable framework and on the basis he would not be quoted, he would give Mr. Agnello some more information. He said there have been discussions which have centered on the whole notion of the institutional grants system, i. e. whether the program should be broadened, etc. One aspect which has been discussed related to this is essentially administratively loosening the project grant system so as to give institutions some degree of flexibility, or to see how the educational institutions could be given a little more responsibility for the proper allocation of funds. The kind of scheme that has been talked about among various others is the notion of setting aside some small amount or percentage of the grants to be used in a more flexible way other than on the exact terms of the grant but still in general research.

Dr. Hornig said as far as he knew numbers like 7 1/2% were much too high. He didn't recall that this number had been discussed. The numbers talked about had been about 3 to 5%. He said there has very considerable divergence of views on the exact ways or details on how this all would be handled. One of the proposals was to turn this into a pool to be handled by NSF but this was just one of the proposals being discussed. The other extreme would be to do it directly with each grant. But the essential point was that methods of giving more responsibility to the universities in the administration of funds have been discussed.

Mr. Agnello asked if this were a group that had been called together by Dr. Hornig. Dr. Hornig said it has already been in existence before he came to Washington. Agnello said his information was that it was a fairly high-level groups which met every other Saturday morning and that it was a recent thing. Agnello said was it correct that Dr. Hornig didn't want to be associated with this, and Dr. Hornig said he didn't, not at this time.

Agnello asked how this fit in with NSF's institutional grants. Dr. Hornig said there are not institutional grants being made to the universities other than by NSF, there were NIH grants, but they were made only to health-professional schools. This is part of what is under discussion.

Agnello said if was going to try to get something down on paper on this and he would like to have Dr. Hornig look it over before he goes on with it. He said it would not be attributed to Dr. Hornig. Dr. Hornig said he would be glad to look it over.

eac

April 14, 1964

Dear Dr. Lederberg:

I would like to take this opportunity to express my appreciation for your services on the Space Science Panel which I had the privilege of chairing. The developing needs of the PSAC and recent change in my position have made it necessary to revamp the structure and activities of this panel.

Your work on the Panel has contributed to its usefulness and I wish to thank you for your efforts in the service of the government.

Sincerely,

(Signed) Don

Donald F. Hornig

**Dr. Joshua Lederberg
Department of Genetics
School of Medicine
Stanford University
Palo Alto, California**

**DFH Chron
NEG Chron
NEG S_a bj
S&T CHron
S&T Subj**

NEG:hk

20506

April 14, 1964

Dear Lee:

I was very pleased to get your letter of April 7 regarding funding of the amenities which go with the National Medal of Science. May I wish you every success in the appropriations process for this item.

Sincerely yours,

(signed) Don

Donald F. Hornig

Dr. Leland J. Haworth
Director
National Science Foundation
Washington, D. C. 20550

RBarlow:jsn
cc: DFH chron
RBarlow subj & chron
S&T file & chron

S&T Cont. No. 0548

April 15, 1964

Dear Dr. Hartmann:

Thank you for your invitation to visit the Naval Ordnance Laboratory on Special Guest Day, May 21st. This is something I would very much like to do, but unfortunately previous commitments make it impossible for me to attend. I would, however, like to have representatives of my office attend; specifically, Dr. Richard L. Garwin, who is a member of the President's Science Advisory Committee and Chairman of its Panel on Anti-Submarine Warfare, and Dr. Vincent V. McRae of my staff. I am sure both Dr. Garwin and Dr. McRae would find the visit most profitable.

Sincerely,

Donald F. Hornig

**Dr. G. K. Hartmann
Technical Director
U. S. Naval Ordnance Laboratory
White Oak
Silver Spring, Maryland 20910**

eac

cc with incoming to Dr. McRae (Note: Security forms sent to Vivian Graff with request she send them in to NOL with information on Garwin & McRae)

15 April 1964

Dear Senator Nelson:

This is in reply to your letter of March 11, in which you inquire about geographic distribution of Federal funds for research and development. Dr. Robinson of my staff has already discussed the information we have with Mr. Bechtel and Mrs. Stewart of your staff.

With regard to the availability of information as to the distribution of Federal funds for research and development, a major effort is being undertaken now by the National Science Foundation to obtain this information for the last four fiscal years from the agencies. The questionnaire, results of which should be available within a few weeks, will give information as to the distribution of funds for Federal research and development on a prime contract basis at universities, non-profit research institutes, and private industry. The information will then be available on a uniform basis and should meet the need you expressed to obtain the information when the definitions vary so widely.

The best analysis of military procurement is in the booklet which you have from the Department of Defense entitled "Five Year Trends in Defense Procurement, 1958-1962." This careful study shows, for example, that there is not much correlation between military procurement contracts in a state and the amount of RDT&E going on there, at least in those states with over \$300 million in military funds (p. 29).

The role of research and development and science education on regional development has not had wide study, primarily because R&D has been such a small part of the GNP. However, under contract with the National Science Foundation, a pilot study on the Regional Distribution of Scientific Activity in the United States by

Dr. Charles Stewart of George Washington University has been completed. A considerable quantity of data has been compiled, and in the next phase of the study the focus will be on the relationship of science and technology to economic characteristics of a specific area.

The subject of geographic distribution of Federal R&D funds will be one of the subjects of hearings by the Daddario Subcommittee of the House Science and Astronautics Committee. All the major agencies involved in R&D will testify at that time.

In summary, therefore, we will supply to you the data which will cover FY 1961 to FY 1964 on geographic distribution of Federal research and development expenditures as soon as it becomes available, which should be before the end of the month. The data on military procurement trends since 1951 are found in the booklet, *The Changing Patterns of Defense Procurement* (June 1962). Unfortunately, the data in this booklet on R&D does not go back in time, although the data on procurement does.

I am sure that you understand the limitations of this information. The subcontracts and purchases are not available, and can affect the large awards significantly. Furthermore, geographic distribution of R&D funds for years before FY 1961 will not be available for some time. The contributions which the universities themselves make to research (as, for example, the Wisconsin Alumni Research Foundation, or the money appropriated for this purpose by a State Legislature) are not normally available, and can distort the picture of actual effort expended in a state.

I hope that the information we will supply, together with that which you have had already, will be useful. I would be interested

in discussing the conclusions you have reached. As a Milwaukee boy who came East, I would like to understand it better.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Gaylord Nelson
United States Senate
Washington, D. C.

DZROBINSON:hh

S&T

S&T

DFH

DZR

DZR

WH

WH

April 15, 1964

Dear Howard:

I would like to extend an invitation to you to serve as a member of the Space Technology Panel of the President's Science Advisory Committee. In order to meet the changing needs of the space program the Space Vehicle Panel has been discontinued and its functions encompassed by the broader responsibilities of the Space Technology Panel. The Chairman of the Panel will be Dr. Franklin A. Long.

The function of the Space Technology Panel will be to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on matters pertaining to the national needs for space systems and the adequacy of the government's response to these needs as reflected in the content of the National Space Program at any time. The technical areas of primary concern to the Panel are the technologies connected with rockets, spacecraft, launch, tracking and communications facilities used in the space program, as well as space mission planning and the research and development programs needed to maintain the desired tempo of space exploration and associated progress in space related technology.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about three days every two months for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(signed) Don

Donald F. Hornig

**Dr. Howard W. Emmens
Division of Engineering and Applied Physics
Harvard University
Cambridge 38, Massachusetts**

CC: Dr. F. A. Long

✓ DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj

April 15, 1964

Dear Loren:

I would like to extend an invitation to you to serve as a member of the Space Technology Panel of the President's Science Advisory Committee. In order to meet the changing needs of the space program the Space Vehicle Panel has been discontinued and its functions encompassed by the broader responsibilities of the Space Technology Panel. The Chairman of the Panel will be Dr. Franklin A Long.

The function of the Space Technology Panel will be to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on matters pertaining to the national needs for space systems and the adequacy of the government's response to these needs as reflected in the content of the National Space Program at any time. The technical areas of primary concern to the Panel are the technologies connected with rockets, spacecraft, launch, tracking and communications facilities used in the space program, as well as space mission planning and the research and development programs needed to maintain the desired tempo of space exploration and associated progress in space related technology.

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I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(signed) Don

Donald F. Hornig

Dr. Loren D. Carlson
Chairman, Department of Physiology
University of Kentucky
Lexington, Kentucky

CC: Dr. F.A. Long

✓ DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T S^ubj

April 15, 1964

Dear Frank:

I would like to extend an invitation to you to serve as a member of the Space Technology Panel of the President's Science Advisory Committee. In order to meet the changing needs of the space program the Space Vehicle Panel has been discontinued and its functions encompassed by the broader responsibilities of the Space Technology Panel. The Chairman of the Panel will be Dr. Franklin A. Long.

The function of the Space Technology Panel will be to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on matters pertaining to the national needs for space systems and the adequacy of the government's response to these needs as reflected in the content of the National Space Program at any time. The technical areas of primary concern to the Panel are the technologies connected with rockets, spacecraft, launch, tracking and communications facilities used in the space program, as well as space mission planning and the research and development programs needed to maintain the desired tempo of space exploration and associated progress in space related technology.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about three days every two months for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(signed) Don

Donald F. Hornig

**Dr. Frank T. McClure
Applied Physics Laboratory of the
Johns Hopkins University
8621 Georgia Avenue
Silver Spring, Maryland**

CC: Dr. F.A. Long

✓ DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj

April 15, 1964

Dear Lee:

I would like to extend an invitation to you to serve as a member of the Space Technology Panel of the President's Science Advisory Committee. In order to meet the changing needs of the space program the Space Vehicle Panel has been discontinued and its functions encompassed by the broader responsibilities of the Space Technology Panel. The Chairman of the Panel will be Dr. Franklin A. Long.

The function of the Space Technology Panel will be to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on matters pertaining to the national needs for space systems and the adequacy of the government's response to these needs as reflected in the content of the National Space Program at any time. The technical areas of primary concern to the Panel are the technologies connected with rockets, spacecraft, launch, tracking and communications facilities used in the space program, as well as space mission planning and the research and development programs needed to maintain the desired tempo of space exploration and associated progress in space related technology.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about three days every two months for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(Signed) Don

Donald F. Hornig

**Dr. Lester Lees
Firestone Flight Science Laboratory
California Institute of Technology
1201 E. California Street
Pasadena 4, California**

CC. Dr. F. A. Long

DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj

April 15, 1964

Dear Mr. Bain:

Thank you for invitation me to a presentation of RCA's current scientific work to be held at Princeton on April 29 and 30th. The program looks very interesting indeed, but I unfortunately have a number of other commitments in Washington which will make it impossible for me to attend.

Sincerely,

Donald F. Hornig

Mr. Walter G. Bain
Vice President
Defense Electronic Products
Radio Corporation of America
Camden 2, New Jersey

eac

April 15, 1964

Dear Al:

I would like to extend an invitation to you to serve as a member of the Space Technology Panel of the President's Science Advisory Committee. In order to meet the changing needs of the space program the Space Vehicle Panel has been discontinued and its functions encompassed by the broader responsibilities of the Space Technology Panel. The Chairman of the Panel will be Dr. Franklin A. Long.

The function of the Space Technology Panel will be to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on matters pertaining to the national needs for space systems and the adequacy of the government's response to these needs as reflected in the content of the National Space Program at any time. The technical areas of primary concern to the Panel are the technologies connected with rockets, spacecraft, launch, tracking and communications facilities used in the space program, as well as space mission planning and the research and development programs needed to maintain the desired tempo of space exploration and associated progress in space related technology.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about three days every two months for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(signed) Don

Donald F. Hornig

Mr. A. F. Donovan
Aerospace Corporation
P.O. Box 95085
Los Angeles 45, California

CC: Dr. A. F. Long

✓ DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj

April 16, 1964

Dear Mr. Gleason:

At its meeting on November 7, 1963, the Federal Council for Science and Technology acted to establish a patent advisory panel pursuant to the Presidential Statement of Government Patent Policy issued October 10, 1963.

As provided in the Statement, it will be the function of this panel to:

(a) develop by mutual consultation and coordination with the agencies common guidelines for the implementation of this policy, consistent with existing statutes, and to provide over-all guidance as to disposition of inventions and patents in which the government has any right or interest; and

(b) encourage the acquisition of data by government agencies on the disposition of patent rights to inventions resulting from federally-financed research and development and on the use and practice of such inventions, to serve as basis for policy review and development; and

(c) make recommendations for advancing the use and exploitation of government-owned domestic and foreign patents.

The question has arisen as to whether the Veterans Administration should be represented on the panel. If you feel that such representation would be beneficial to your agency, I would appreciate an early designation. The complexities of the subject matter involved appear to call for competence in the administration of patents together with an understanding of the process of research, development and industrial innovation.

Sincerely yours,

DS/D FA

Donald F. Hornig
Chairman

Honorable John S. Gleason, Jr.
Administrator of Veterans Affairs
Veterans Administration
Washington, D. C.

DZBeckler;khb
CC: Dr. W. Eaton, Dept. of Commerce
Mr. Denny, Dept. of Commerce
Dr. Hornig
Mr. Beckler
S&T File
S&T Chron

FEDERAL COUNCIL FOR SCIENCE AND TECHNOLOGY
EXECUTIVE OFFICE BUILDING
WASHINGTON 25, D.C.

April 16, 1964

Dear Jim:

Staff of the Office of Science and Technology and the Bureau of the Budget have discussed certain issues in oceanography that require resolution for the development of the FY 1966 President's Budget, in accord with our recent exchange of correspondence. Because views of the Federal Council will be of value in reaching decisions on this interagency program, assistance by the Interagency Committee on Oceanography is requested to develop facts, analyses and alternatives for action related to the following questions:

- 1) Ship Operating Costs - With research budgets expected to grow more slowly in the future, it is important to determine what fraction of total expenditures is devoted to ship operations. What are the estimated ship operating costs for FY 1963, 1964 and 1965 - for research and for surveys? What are projected costs for the next four years, based on the existing fleet plus ships now under construction? What will be these projections, if ships proposed in FY 1965 are approved, or if others being considered for the near future are also added? What steps can be taken to minimize ship operating costs?
- 2) Ocean-wide Surveys - Because survey operations are growing in terms of both absolute expenditures and the fraction of the total oceanographic effort, both the objectives and mode of survey operation deserve evaluation. What are the Federal agency needs and what are the scientific community needs during the next 5 years, in terms of descriptive versus problem-oriented surveys? How are priorities set? What alternatives exist in methodology? What are our present commitments?
- 3) Manpower Development - The FY 1961 step increase in oceanographic funding and portions of subsequent budgets have been rationalized in terms of strengthening the national capability of oceanographic manpower and facilities. What have been our accomplishments? What are our present manpower goals, the training and educational needs for their achievements, and the adequacy of existing programs? What are the objectives, methodology and interpretation of preliminary results from the special survey being undertaken by NSF? How many graduate students from specifically relevant fields and at various levels are being supported by the Federal Government? What is the source and level of funding devoted to stipends and to thesis research in oceanography?

4) Air-Sea Interaction Plans - The Department of Commerce has been identified by interagency agreement as a "delegated agent" to develop plans in this field, for submission to the Council through ICO and ICAS. What progress has been made?

5) FY 1966 Program - Each yearly increment in oceanography should be assessed in relation to long range goals enunciated by the Federal Council in ICO Pamphlet #10. To what extent do agency proposals for FY 1966 reflect consistency with these plans? What research growth is anticipated in relation to the 5 problem categories? What progress is being made in categorizing the existing and the projected program by goals set forth in the long range report?

6) Ocean Engineering - It has been recognized that the translation of scientific discoveries to the accomplishment of a number of oceanographic goals will require applied scientific and engineering R&D. What are the types and sizes of such efforts now foreseen as required for the accomplishment of explicit agency missions? What ocean engineering is involved to meet needs of new instruments and facilities for the more effective conduct of scientific research? What goals have been established for a national ocean engineering capability? What steps have been taken to implement recommendations of DSSRG and how do these Navy decisions relate to Government-wide programs?

7) Deep Ocean Research - The achievement of a number of oceanographic goals requires research conducted throughout the entire ocean. What scientific plans have been formulated regarding such deep sea research, by field and by objective? What engineering capabilities have been deemed required for this accomplishment? What are the Government-wide plans for FY 1966?

8) Naval Institute of Oceanology - Tentative plans have been developed within the Navy to strengthen their oceanographic research and survey capability. Do these plans relate to the strengthening of the Government-wide capability in oceanography? What immediate and long term funding requirements are anticipated?

It would be appreciated if your Committee's study and analysis of the above issues could be completed for discussion at the May 28 session of the Federal Council. Copies should be available for distribution to Council members one week in advance.

We have found, incidentally, that the processes of program development during the past four years - through the preparation of ICO recommendations, their analysis by an outside group of consultants and review by the Federal Council - is sufficiently effective that we plan to repeat it again this year. To meet the necessary schedules by which proposals for a national program could be reviewed and endorsed by the Council before agencies complete their budget submissions, it is necessary that the ICO complete its study by mid-July. For this purpose, a draft should be completed of the report in the form and content that would be suitable for transmittal by the President to the Congress in January 1965, and incorporating results of studies requested earlier in this letter. We would be pleased to receive any suggestions about refinement of this process, and we would be pleased to confer with you and your Committee staff in connection with these plans.

I am sure you know how important we regard the contributions of the ICO to development and coordination of the National Oceanographic Program and how much we value the time and effort that you, Committee members, and your staff invest in this activity.

Sincerely,

(Signed) Don

Donald F. Hornig
Chairman

Honorable James H. Wakelin, Jr.
Chairman
Interagency Committee on Oceanography
Federal Council for Science and Technology

bcc: DFHornig; RFleagle; S&T Chron; S&T Files; EW Chron;
EW Files (FCST-ICO)

15 copies to Robert Abel (ICO Secretary)

20506

April 16, 1964

Dear Mr. Shipper:

In my capacity as Director of the Office of Science and Technology, I am directly concerned with the coordination and planning of science and technology within the Executive Branch of the Federal Government. One useful mechanism for such coordination and planning is the Federal Council for Science and Technology, representing as it does the Executive departments and the principal independent agencies. The Federal Council has established the Committee on Scientific and Technical Information (COSATI) to assist them in dealing with the special problems involving scientific and technical information.

One of these problems, a common set of rules for the descriptive cataloging of technical reports issued by agencies of the Executive Branch, has recently been resolved by COSATI. The "Standard for Descriptive Cataloging of Government Scientific and Technical Reports" has been approved by COSATI. The work necessary to achieve this standard was done by an ad hoc subcommittee chaired by Mr. Bernard Fry of the Office of Technical Services, Department of Commerce.

This standard differs in a number of particulars from those in use in libraries today for cataloging the conventional published literature. The same reasons that urged a single standard within the Executive Branch for the technical report literature dictate that every effort should be made to arrive at a common standard for use with this literature as well as the conventional literature, if feasible. Mr. Fry and members of his subcommittee have, I understand, been in contact with both your Association and the American Library Association on the possibility of such a common standard. I would like to urge that constructive work on such a standard continue with a rather high priority.

If a mutually agreeable common standard can be reached by all the interested activities, I am sure that the Federal Council and my Office would approve and endorse it. I have asked Lt. General William J. Ely, USA, Chairman of COSATI, to check periodically on the progress of these negotiations. We all have a common aim in this matter -- improved communications in the field of scientific and technical information.

Sincerely yours,

Donald F. Hornig

Mr. James E. Shipper
Executive Secretary
Association of Research Libraries
1755 Massachusetts Avenue, N. W.
Washington, D. C. 20036

cc: Mr. David R. Clift, Executive Director, American Library Assn.
50 East Huron Street, Chicago 11, Illinois

(Identical letter, except for change of Association name, sent to Mr. Clift with copy to Mr. Shipper)

cc: Dr. Vernon W. Clapp, President, Council on Library Resources
1025 Connecticut Avenue, N. W., Washington, D. C. 20036

Mr. Bernard Fry, OTS, Dept. of Commerce
Lt. Gen. Wm. J. Ely, USA, Chairman, COSATI

Prepd: ODDRA&E/ODTHSpiegler 4/6/64

Rewritten: OST/JHKelley/las

cys to: OST file - chron (pink)

ODDRA&E/ODTH W. M. Carlson 3D1040 Pentagon (yellow)

JHK file - chron

✓ D. F. Hornig chron

April 17, 1964

Dear Dr. Adair:

I am most appreciative of your willingness to serve on the advisory panel about which Dr. MacLeod called you yesterday. We shall let you know at the earliest possible moment when the Committee will meet.

Sincerely,

DFH
Donald F. Hornig

Dr. Frank Adair
1 E. 66th Street
New York, New York

CMM;cac

DFH Chron. ✓
CMM Chron.
S&T Files
S&T Chron.
CMM File
Dr. Bing

Identical letters sent to:

x Dr. Wallace Graham
518 Argyle Building
Kansas City, Missouri (Dear Dr. Graham)

Dr. William MacElroy, Johns Hopkins U.
Baltimore, Md. (Dear Bill)

17 April 1964

Dear Mr. Olive:

I have sent your interesting correspondence of March 24 on anti-shark measures to the Federal Trade Commission, for consideration in connection with their responsibility to regulate deceptive practices in advertising. While there may be additional interests of the Federal Government in this area, I think that FTC consideration would be a good beginning.

Thank you for calling this matter to my attention.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. John R. Olive
Executive Director
American Institute of Biological Sciences
2000 P Street, N.W.
Washington, D. C., 20036

cc: Mr. Gotschall - FTC
S&T - chron
S&T - file
~~Mr. Rivkin~~ Chron ✓

DFH

April 17, 1964

Dear Ned:

Thanks for your note. As you guessed, I can't possibly make it for the colloquium. Many apologies. I have heard rumors that you will all be in Washington. Perhaps we can get together here. Our address is 2810 Brandywine, Tel. (unlisted) is 362-4558.

Sincerely,

Donald F. Hornig

Dr. E. F. Greene
Professor of Chemistry
Brown University
Providence 12, Rhode Island

DFH/eac

"G"

April 17, 1964

Dear Gordon:

I'm sorry that I still can't give you a definite answer to your letter of March 23rd. There is a possibility that I may be out of the country during part of September and October. I hope to firm up my travel plans in the very near future and I will let you know as promptly as possible if I will be able to make it to the Cleveland meeting. However, if this uncertainty causes you any difficulties, please don't hesitate to make other arrangements.

Sincerely,

Donald F. Hornig

Dr. Gordon M. Barrow
Head, Department of Chemistry
Case Institute of Technology
University Circle
Cleveland 6, Ohio

eac

April 17, 1964

Dear Mr. Lester:

In order to make Dr. Hornig's travel plans for June 12 and 13, it would be appreciated if you would let us know what time his talk is scheduled for on June 12th and how long you would expect the program to last that evening. He has to be in Milwaukee by 10:30 the next morning as he mentioned in his previous letter.

Sincerely,

Eleanor A. Connors (Miss)
Secretary to Dr. Hornig

Mr. Richard A. Lester
President
Association of Princeton Graduate Alumni
Princeton University
Princeton, New Jersey

eac

20506

April 17, 1964

Dear Senator Magnuson:

During the course of the hearings before your Subcommittee on April 13, you made several requests and inquiries to which I am very pleased to respond.

Reports

Six copies of each report which has been published wholly or partly under the auspices of this Office during the past year are being forwarded for the use of your Subcommittee. The titles of the reports are listed as an appendix to this letter.

Patent Policy

I am enclosing several copies of the patent policy statement issued by President Kennedy on October 10, 1963. The Office of Science and Technology had a substantial role in the preparation of this Government-wide policy statement.

Oceanography

I would like to take this opportunity to amend a statement I made during the hearing with reference to the Federal budget for oceanographic research. In connection with your statement on page 54 of the transcript that the agencies are doing "just what the minimum (Academy) program called for, but a little more," I would like to substitute the following response:

The expenditure budget for oceanography was below that called for by the Academy's study until 1962. Since then it has been somewhat greater than the Academy's projection, reflecting subsequent assessments of national requirements

in the light of agency missions and the need to strengthen our national oceanographic capability. It also reflects changes in the scope and make-up of the national oceanographic research program.

Interdepartmental Energy Study

President Kennedy's directive of February 15, 1963, a copy of which is included with this letter, established a steering committee consisting of the heads of nine Federal departments and agencies to conduct "a comprehensive study... of the development and utilization of our total energy resources to aid in determining the most effective allocation of our research and development resources." The Director of the Office of Science and Technology was named Chairman of the study, and the Chairman of the Council of Economic Advisers was named the study's Vice Chairman

The staff work for this study was placed under the direction of Dr. A. B. Cambel, Chairman of the Department of Mechanical Engineering and Astronautical Sciences at Northwestern University. All told, nearly 100 technical papers were prepared for internal use of the Energy Study. These were reviewed by more than 150 qualified technical reviewers and by about 225 members of 22 special ad hoc committees. Drafting of the staff report based on this effort is nearly complete.

The costs of this study, which is being carried forward mainly by Government personnel and by consultants, are being shared by the major participating agencies. OST's contribution consists largely of professional staff time and clerical support.

PSAC Membership

Enclosed is a current list of the members of the President's Science Advisory Committee. Members of this Committee are appointed directly by the President and normally serve for four-year terms. The Committee meets as a body in Washington for two days each month, in addition to a substantial amount of panel work which the individual members perform.

OST Budget

The breakdown of the \$70,000 increase requested by the Office for FY 1965 is as follows: \$46,000 for personnel compensation; \$3,000 for personnel benefits; \$9,000 for printing and reproduction; \$10,000 for contractual services, and \$1,000 for supplies and materials.

These increases will permit the Office to pay its consultants at the newly authorized rate of \$75 per day (this rate was limited to \$50 per day until a few months ago), to provide statutory salary increases for its staff, to print the studies and reports anticipated by the Federal Council for Science and Technology and other activities served by the Office, and to obtain very limited contractual assistance.

Costs of Activities

You also inquired about the costs involved in such activities, undertaken by the Office and its consultants, as those leading to the reports on "Innovation and Experiment in Education" and "Federal Water Resources Research Program for Fiscal Year 1965."

In the case of the water resources report, the participants are entirely employees of agencies of the Federal Government, so that no consulting costs are involved. One senior professional man on my staff devotes full time to water resources research activities, a level of effort which seems well justified by the major importance of the subject to the national well-being, and by the roughly \$72 million per year devoted to it in the Federal budget.

As I pointed out in my prepared testimony, there are roughly twenty-five Federal bureaus and agencies with program responsibilities in this field. It is the responsibility of the Federal Council for Science and Technology, acting through its newly established Committee on Water Resources Research, to coordinate the planning and budgeting for this diverse activity. This first report of the new Federal Council Committee makes an important beginning in determining the scope of an adequate long-range program and in identifying the most urgent priorities.

Congress in the past several years has repeatedly expressed its concern about the Nation's growing water problems, and the President has stated that he shares this concern. An effective program to meet these concerns must have balance, it must avoid duplication of effort, and it must assure that important gaps are not left unfilled. The cost in agency staff time required to achieve the necessary coordination is difficult to measure precisely, but is a relatively trivial item. The printing cost for a report of this kind is on the order of \$2,000.

The purpose of the Panel on Educational Research and Development, on the other hand, is to help apply the experience gained in the recent curriculum development efforts in science and mathematics instruction to other areas in elementary and secondary education. Outside consultants are employed to work with the Federal agencies involved. The progress report, "Innovation and Experiment in Education," is intended to provide information about the Panel's activities so far.

OST's costs for the Panel on Educational Research and Development and related activities, exclusive of the time devoted by Federal employees, are estimated at approximately \$16,000 for the current fiscal year, of which about \$3,000 represents the cost of printing the report. Additional activities which the Panel has helped to initiate have been funded by the Office of Education, the National Science Foundation, the Office of Juvenile Delinquency and Youth Development, and the National Institute of Mental Health.

I hope very much that this response satisfactorily meets your needs.

Sincerely yours,

Donald F. Hornig

Enclosures

Honorable Warren Magnuson
Chairman
Subcommittee on Independent Offices
Committee on Appropriations
United States Senate
Washington, D. C.

RBarlow:jsn
cc: White House (2)
DFH chron
Mr. Beckler
Dr. Wenk
RBarlow subj & chron
S&T file & chron

APPENDIX

Documents Published Under the Auspices of the Office of Science and Technology During the Past Year

PSAC Publications

<u>Title</u>	<u>Date</u>
High Energy Accelerator Physics (with AEC General Advisory Comte.)	Apr. 26, 1963
Use of Pesticides	May 15, 1963

FCST Publications

<u>Title</u>	
National Plan for Ocean Surveys. ICO No. 7	May 1963
Bibliography of Oceanographic Publications. ICO No. 9	April 1963
Oceanography - The Ten Years Ahead. ICO No. 10	June 1963
National Oceanography Program, FY '64. ICO No. 11	April 1963
Oceanographic Ship Operating Schedules, FY '64	May 1963
University Curricula in Oceanography, Academic Year 1963-64. ICO No. 14	June 1963
Research and Development on Natural Resources	May 1963
Status Report on Scientific and Technical Information in the Federal Government	June 18, 1963
Annual Report - 1962	October 1963

FCST Publications (Cont'd)

<u>Title</u>	<u>Date</u>
Federal Water Resources Research Program for Fiscal Year 1965	February 1964
National Oceanographic Program - Fiscal Year 1965 ICO No. 15	March 1964

OST or Interagency Publications

<u>Title</u>	
Better Housing for the Future	April 1963
Report on Land and Water Development in the Indus Plain	January 1964
An Assessment of Large Nuclear Powered Sea Water Distillation Plants	March 1964
Innovation and Experiment in Education	March 1964
Meson Factories	March 1964

April 15, 1964

April 17, 1964

Dear Dr. Thompson:

Thank you for your invitation to attend the Field Inspection of Advanced Research and Technology at NASA Langley Research Center May 18th through 21st. I'm sure I would enjoy a visit to the Langley Research Center, but unfortunately I have a number of commitments in Washington during that period which will make it impossible for me to attend the Field Inspection.

Sincerely,

Donald F. Hornig

**Mr. Floyd L. Thompson
Director
Langley Research Center
National Aeronautics and Space Administration
Mail Stop 710
Langley Station
Hampton Virginia 23365**

EX

eac

Invitations regretted

April 18, 1964

Dear Jim:

Please accept my apologies for the delay in replying to your letter of February 7, in which you offered your resignation as a consultant to this office.

We appreciate the assistance you have given us in the past, and in order to maintain your clearance status, I would like very much to keep you on our consultants list so that I may take advantage of your offer to be of help at appropriate times. I hope this will be agreeable.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. J. A. Van Allen
Department of Physics and
Astronomy
State University of Iowa
Iowa City, Iowa

DFH/eac

DFH Chron. ✓
S&T Files
S&T Chron.
R. Barlow
D. Beckler (for info)

April 18, 1964

Dear Admiral Coates:

I regret that it will not be possible for me to attend the presentation of the Captain Robert Dexter Conrad Award to Dr. Herbert Friedman on April 21st, but the Science Advisory Committee will be meeting in Washington on that day and, as you know, I am Chairman of the Committee. I have written a note to Dr. Friedman congratulating him on the award.

Sincerely,

Donald F. Hornig

Rear Admiral L. D. Coates, USN
Chief of Naval Research
Office of Naval Research
Department of the Navy
Washington, D. C. 20360

eac

April 20, 1964

Dear Senator Douglas:

I was disturbed to get your letter of April 10th because of the misunderstanding that prompted it.

It was not my desire to set up prior conditions. I am simply eager to get on with the work in the most efficient manner possible. Three outstanding men have agreed to serve on the advisory panel, namely Dr. Frank Adair, Dr. Wallace Graham and Dr. William McKelroy, and we have been trying to complete the membership as soon as possible. Information on the nature of the material to be presented by Dr. Ivy and Dr. Durovic is important in guiding us in the selection of the additional members. For example, if Drs. Ivy and Durovic intend to present data on the histology of the tumors in patients they have treated, it is desirable that Panel membership include a histopathologist. Furthermore, it would help me in my own orientation if background data were available.

May I again assure you that you may have absolute confidence in our handling of these data, and of my wish to assist in resolving this prolonged scientific dispute as speedily as possible.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Paul Douglas
United States Senate
Washington, D. C.

CMM;DFH;eac
cc: Jean Lewis, Mr. O'Brien's office

CMM Chron.
DFH Chron.
CMM File
S&T Files
S&T Chron.
Dr. HMMg Bing

In reply to S&T no. 565

April 20, 1964

Dear Herb:

A meeting of the President's Science Advisory Committee will prevent me from being at the presentation of the Robert Dexter Conrad Award to you on April 21st, for which I am most regretful. Since I can't be there in person, I would like to take this opportunity to extend to you my congratulations on this most fitting tribute to your dedicated service to the Navy and to the Government. Our country is fortunate, indeed, to have men of your caliber in its service.

With best wishes,

Sincerely,

Donald F. Hornig

Dr. Herbert Friedman
Superintendent of the Atmosphere
and Astrophysics Division
U. S. Naval Research Laboratory
Department of the Navy
Washington, D. C.

eac

April 20, 1964

Dear Dr. Coggeshall:

Thank you very much for your letter of April 10th regarding the Special Planning Committee of the Association of the American Medical Colleges.

Although my own background and experience do not qualify me to comment on medical and health needs of our people, I am very fortunate to have as Deputy Director of the Office of Science and Technology, Dr. Colin MacLeod. I am sure that you will want to seek his counsel repeatedly during your study, and I would suggest you make preliminary arrangements directly through him.

Despite my inability to contribute to your study, I am intensely interested in this problem and in your forthcoming suggestions. I hope you will keep me informed of the results which are produced by your extremely distinguished committee.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Dr. Lowell T. Coggeshall
University of Chicago
Chicago, Illinois 60637

PSB/ems
✓DH Chron
S&T File
S&T Chron

April 20, 1964

Dear Dr. Netterberg:

The President has referred to me your letter of March 9th regarding the possibility of a cure for cancer as outlined by Drs. Crofton and Fonti.

This issue was intensively explored by both the staff of this office and outside consultants last year. It was their judgement at that time that without additional evidence from Drs. Crofton and Fonti there was no scientific justification for proceeding farther. The work of Dr. Alexander-Jackson was also reviewed, and she is presently supported by a grant from the National Institutes of Health.

If there is available at the present time new evidence which was not presented last year, I will always be eager to receive it. I am extremely anxious that no possibility be overlooked in our search for a mechanism for dealing with cancer.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Dr. Robert E. Netterberg
22 West Front Street
Butte, Montana

PSB/ems Chron
✓DH/Chron
S&T File
S&T Chron

S+T. No. 0471

20506

April 20, 1964

Dear Mr. McDowell:

In response to your request of April 16, I am most pleased to enclose two copies of the report prepared for this Office entitled, "An Assessment of Large Nuclear Powered Sea Water Distillation Plants."

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Enclosure

Honorable Harris B. McDowell, Jr.
House of Representatives
Washington, D. C.

RBarlow:jen
cc: White House (2)
Jean Lewis
DFH chron ✓
RBarlow subj & chron
S&T file & chron

In reply to S&T Cont. No. 0588

April 28, 1964

MEMORANDUM FOR

Mr. Kermit Gordon

Attached is the quarterly report to the President required of the Office of Science and Technology under Circular No. A-44 dated March 31, 1964. As the reports points out, we are trying to do the best we can within stringent limitations.

Donald F. Hornig

Attachment

RBarlow:jsn
so&2cc: Gordon /
cc: DFH chron
RBarlow subj & chron
S&T file & chron

S&T Cont. No. 0523

April 20, 1964

MEMORANDUM FOR

THE PRESIDENT

This constitutes the quarterly report of the Office of Science and Technology required by Budget Bureau Circular No. A-64 dated March 31, 1964.

The Office has been required to maintain its total employment figure at 70 with full-time permanent positions at 34, for both fiscal year 1964 and fiscal year 1965. As was indicated in Dr. Jerome Wiesner's memorandum to Budget Director Kermit Gordon dated December 13, 1963, these figures are less than are felt necessary to perform the Office mission adequately. However, these levels have been maintained with a resultant heavy demand on the small staff now constituting the Office. I shall continue to make every effort to utilize our present manpower effectively, and to reduce costs in every way consistent with fulfillment of our mission. I do not anticipate being able to lower the year-end ceilings which have been previously approved.

The Office of Science and Technology will be able to effect some very small savings due to lapsed positions for part of fiscal year 1964. There was one secretarial resignation effective March 4, 1964 for which a suitable replacement has not yet been found. Little saving will result in this area, as it was necessary to obtain a temporary replacement on a reimbursable basis from another agency.

It also appears that the single remaining vacancy at the professional staff level will be filled in the last quarter of FY 64.

Due to the lack of a full-time staff person for this position, it has been necessary during the 3rd and 4th quarter of FY 64 to obtain on a reimbursable loan basis a staff assistant whose salary and related costs will be deducted from any savings which will result from this vacancy. Taking these facts into consideration, the total estimated saving of \$20,000 would be reduced to a net overall saving of approximately \$11,000.

Donald F. Hornig

Enclosure

RBarlow:jsn

so&2cc: Gordon

cc: DFH chron

RBarlow subj & chron

S&T file & chron

OFFICE OF SCIENCE AND TECHNOLOGY

QUARTERLY REPORT ON EMPLOYMENT CONTROL

Number of employees:	<u>Quarter Ending 12/31/62</u>	<u>Quarter Ending 12/31/63</u>	<u>Quarter Ending 3/31/63</u>	<u>Quarter Ending 3/31/64</u>
Full-time permanent	23*	32	26	32*
Intermittent	63	48	45	53

*The Office of Science and Technology was only 6 months old in December 1962 and was still in the process of hiring suitable personnel for the positions which had been approved. Successful recruitment during the calendar year December 1962-December 1963 enabled the Office to increase its professional staff in such areas as atmospheric sciences, water resources, and scientific and technical manpower as well as a minimum increase in secretarial and administrative staff, thus raising the Office full-time permanent employment to its present total of 32.

April 21, 1964

Dear Mr. Michanowsky:

I have read the report of the Amazonia Foundation with interest, and it seems apparent that you have contributed substantially to aerial exploration.

However, it is not clear that there is anything with respect to which this office should be involved. I can only repeat my suggestion that you call your observations to the attention of Dr. Alexander Flax, Assistant Secretary of the Air Force for Research and Development, and to Dr. Bruno Argenstein, Office of the Director of Defense Research and Engineering.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. George Michanowsky
Project Director
President, Amazonia Foundation
50 West 77th Street
New York 24, New York

DFH/eac

DFH Chron
S&T Files
S&T Chron.
DFH File

April 21, 1964

Dear Mr. Laskowitz:

Thank you for your invitation to speak to the New York Academy of Sciences on January 11, 1965. It is virtually impossible for me to predict what my schedule will be like next January, so I am not in a position to give you a definite answer. If you would care to contact me some time in September, I would be glad to consider your request.

Sincerely,

Donald F. Hornig

Mr. L. B. Laskowitz
884 Eastern Parkway
Brooklyn, New York 11225

eac

21 April 1964

Dear Jack:

Thank you very much for sending me the results of your poll of scientists. The results are not surprising, but I find the individual comments very interesting.

As I told you, my own view is that in the Foundation's activities intrinsic scientific interest must come first; understanding this factor will require knowledge of the quality of the scientists involved. Significance to the development of allied fields is a complex issue. Developments arise from many directions; I don't think that one could have foreseen that matrix theory and group theory would have any relevance to physics at the time they were developed. The effect on education and the national economy must be considered in the general program structure, although the Foundation should be more involved on long-range than short-term effects. All in all, I think your choice of people to put the questions to very good, since they came out the same way I would!

The only thing that disturbs me is the impression that somehow the Foundation works in a vacuum. People should apparently get together and decide that this field is interesting (molecular biology); this field is less interesting (geology); therefore we should sink more money into one than into the other. Actually, from the Foundation's point of view, it is essential that it consider the quality of the proposals it is receiving, and the cost of doing a particular experiment. It may be that high energy physics is intrinsically more interesting than atomic physics these days, but if the proposals received by the Foundation in high energy physics are not from the best people in the field (who are already being supported by the AEC and DOD), there is not much point in the Foundation's putting much money in it. This is particularly true if the experiments proposed are costly. Similarly, it is not obvious that everyone in molecular biology should be supported no

matter how bad his proposal is, even if the field is the most exciting in the world.

How to work in cost is another important factor. Some things are inherently expensive. Observational sciences like oceanography which requires ships, or meteorology requiring planes, or mohole, are examples; even if the intrinsic interest is high and the quality of the proposals is great, we may decide not to do them. Or, we may decide that a meaningful effort requires exceeding a threshold of expenditures. But in making budgetary decisions on these large items, they are normally separated from the smaller items and justified separately.

Finally, particularly with regard to basic research, we cannot disregard history. Continuity is important, and so changes in appropriation should be made only gradually. These changes are easier to make in an expanding budget where you manage some programs on a level-of-effort basis, and start new programs where you see deficiencies. For example, there has been a conscious effort to expand meteorology and oceanography support in the Foundation, as well as engineering research. I must say that I particularly like the comment from the professor about the distribution of the loaf of bread. But why, when the loaves have multiplied many times over the last fifteen years, are the hunger pangs just as great? Perhaps now that we are wed to bread we need meat!

Thanks for letting me see the results. I hope that your work with the Chemistry panel of the Academy will also lead to fruitful conclusions.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. John D. Roberts
Department of Chemistry
California Institute of Technology
Pasadena, California 91109

DZROBINSON:hh
S&T S&T JFH DZR DZR

April 22, 1964

Dear Dr. Brown:

I would be glad to see you some time on one of your trips to Washington. Unfortunately, the week of April 27th would be virtually impossible for me, although there is a possibility that I might have some free time on Friday, May 1st. If you are still going to be in town on the 1st, I suggest you call my office (DU 2-2345) and perhaps we can work something out.

Sincerely,

Donald F. Hornig

Dr. Glenn H. Brown
Dean for Research
Kent State University
Kent, Ohio 44240

DFH/eac

tickle April 27

April 22, 1964

Dear General Clifton:

Through some oversight, Dr. Colin MacLeod, Deputy Director of the Office of Science and Technology, has never been made a member of the White House Mess. He should certainly be treated in the same way as the deputy directors of the Council of Economic Advisers, the Bureau of the Budget, etc. I hope this matter can be rectified soon.

Sincerely,

Donald F. Hornig

Major General Chester V. Clifton
Military Aide to the President
The White House

DFH/eac

WH Procedures file

April 22, 1964

MEMORANDUM FOR

Mr. Moyers

Attached is a letter which I propose the President sign to mark the occasion of Dr. Bronk's retirement. Since his formal retirement will be marked by a dinner on Thursday night, at which I would like to read the letter, it is extremely urgent that it be signed by the President before his departure.

Donald F. Hornig

Attachment

DFH/eac

DFH Chron.
S&T Files
S&T Chron.

April 23, 1964

Dear Dr. Bronk:

As you near retirement from the National Science Board after fourteen years of membership, nine of them as Chairman, I want you to know how much we appreciate your many services to the country. During this time you lent a sturdy hand and perceptive eye in guiding the Foundation through its formative years so that it could play a leading role in American science and science education.

No one has spoken more consistently and eloquently before the committees of the Congress on the nature of basic scientific research, its importance to the national welfare, and the role of the Federal Government in its support.

During these same years, while President of The Johns Hopkins University and later of The Rockefeller Institute, you provided wise counsel as a member of the President's Science Advisory Committee and distinguished leadership to the scientific community as President of the National Academy of Sciences. Yours is a remarkable record of dedication and accomplishment that has earned heartfelt admiration and appreciation.

To all of these undertakings, you have brought wit as well as wisdom. To young Americans who aspire to excellence, you provide a model of an outstanding citizen and public servant.

Fortunately, your retirement from the Board on which you have served under four Presidents will not deprive us of the wisdom and experience that have made you a leader among statesmen of science. I hope that you will remain available in the ranks of those whose advice and counsel are sought and valued at the highest levels of government.

Sincerely yours,

B/2 BT

Dr. Detlev W. Bronk
Chairman
National Science Board
Washington, D. C.

LBJ:DFH:DZB:khh
CC: Presidential Files
White House Files (2)
Dr. Hornig's Files - Rm. 200 EOB
Mr. Beckler
S&T File
S&T Chron

April 23, 1964

Dear Admiral Coates:

Thank you for your invitation to attend the presentation of the Navy Distinguished Civilian Service Award to Dr. Wilson on May 11th. I would be very pleased to attend the presentation. Unfortunately, it will not be possible for me to attend the luncheon because of a previous engagement.

Sincerely,

Donald F. Hornig

Rear Admiral L. D. Coates, USN
Chief of Naval Research
Department of the Navy
Washington, D. C. 20360

DFH/eac

tickle 5/11

April 23, 1964

Dear Charlie:

Thanks for your letter of April 17th. It looks like quite a good committee. I would like to take up your invitation to have members of PSAC or its panels join you at meetings and would appreciate your keeping us informed.

With best regards,

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Charles H. Townes
Provost
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

DFH/eac

cc:Goloving/Steininger

DFH Chron. ✓

S&T Files

S&T Chron.



OFFICE OF THE PROVOST

CAMBRIDGE, MASSACHUSETTS

April 17, 1964

Dr. Donald Hornig
Director, Office of Science and Technology
Executive Office Building - Room 200
Washington, D. C.

Dear Don:

I understand that George Mueller has told you how we have come out in organizing the NASA Advisory Committee for the Man-in-Space Program. We had our first meeting at Cape Kennedy and have another one scheduled in Houston during June. I will try to send your office copies of our agenda, and hope you will feel free to have members of PSAC or its panels join with us at any meeting. For your records, the make-up of the committee is as follows:

Dr. Stanley Bennett
Dean, Division of Biological Sciences
University of Chicago
Chicago, Illinois

Dr. Francis H. Clauser
Head, Department of Aeronautics
Johns-Hopkins University
Baltimore, Maryland

Dr. Lee A. DuBridge
President, California Institute of
Technology
Pasadena 4, California

Dr. Leo Goldberg
Harvard College Observatory
Cambridge, Massachusetts

XEROX FROM QUICK COPY

Dr. Donald Hornig
April 17, 1964
Page Two

Dr. Gordon F. McDonald
Department of Geophysics
University of California
Los Angeles, California

Dr. Kenneth S. Pitzer
President, Rice University
Houston 1, Texas

Dr. William G. Shepherd
Head, Department of Electrical Engineering
University of Minnesota
Minneapolis, Minnesota

Dr. William Shockley
Stanford University
Stanford, California

Dr. William H. Sweet
Massachusetts General Hospital (and Harvard Medical
Boston 14, Massachusetts School)

Dr. Charles H. Townes (chairman of the committee)
Provost, Massachusetts Institute of Technology
Cambridge, Massachusetts

Dr. John Whinnery (on leave at Bell Tel. Labs.)
Department of Electrical Engineering
University of California
Berkeley, California

Best regards.

Sincerely yours,

Charles H. Townes

CHT:pd

XEROX FROM QUICK COPY

April 24, 1964

Dear Mr. Repplier:

Thank you for your invitation to attend the annual dinner of the Advertising Council on May 5th. I would very much like to attend, but unfortunately I have another engagement out of the city that evening.

Sincerely,

Donald F. Hornig

Mr. Theodore S. Repplier
President
The Advertising Council
1200 Eighteenth Street, N. W.

eac

Invitations regretted

April 24, 1964

Dear Dr. Brady:

Thank you for the information regarding the task force you have set up to examine the training and environment of USDA scientists. This strikes me as a sound and far-sighted step which should be an example to other agencies if it does its work well. It can certainly make a major contribution to the scientific work of USDA. I hope you will keep me informed as the study progresses.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. N. C. Brady
Director of Science and Education
Department of Agriculture
Washington, D. C.

DFH:eac

cc: Dr. MacLeod for info.
Dr. Hartgering for info.

✓ DFH Chron.
S&T Files
S&T Chron.

April 24, 1964

Dear Dr. Masson:

I would be most pleased to see Professor Münnig when he visits the United States in May. May 25th at 10:00 a.m. would be a convenient time for me. My office is located in the Executive Office Building, Room 200. I look forward to seeing Professor Münnig then.

Sincerely,

Donald F. Hornig

Dr. D. R. Masson
Scientific Attaché
South African Scientific
Liaison Office
DuPont Circle Building
Washington, D. C. 20006

DFH/eac

tickle 5/25

April 24, 1964

Dear Dr. Wilson:

Thank you for your invitation to serve on a panel to discuss "Developing Policy for Governmental Action," at the annual meeting of the American Council on Education on October 2nd. This is something I would like to do, however I expect to be out of the country at that time. Since you are interested in obtaining someone with a knowledge of Federal policy for science and technology, you might wish to consider contacting either Dr. Harvey Brooks, Dean of Engineering and Applied Physics, Harvard, or Dr. Jerome B. Wiesner, Dean of Science, Massachusetts Institute of Technology.

Sincerely,

Donald F. Hornig

Dr. Logan Wilson
President
American Council on Education
1785 Massachusetts Avenue
Washington 36, D. C.

eac

April 27, 1964

Dear Bob:

Thanks for your letter of April 21st about the meeting of the Society for Applied Spectroscopy to be held in Cleveland at the end of September. Gordon Barrow had written to me about the meeting, asking that I give the key-note address. As I told him, I expect that I may be out of the country during part of September and October, but my plans are not yet firm. I told Gordon I would let him know as promptly as possible if I could attend, but if this presented any difficulty I suggested he go ahead and make other plans.

With best regards,

Sincerely,

Donald F. Hornig

Dr. R. M. Hexter
Mellon Institute
4400 Fifth Avenue
Pittsburgh, Pa.

eac

April 27, 1964

Dear Dr. Hawkins:

Thank you for your invitation to attend the Spring Meeting of the Army Scientific Advisory Panel on May 25 and 26 at Fort Ord, California. I regret that it will not be possible for me to attend the meeting since I have a number of commitments here in Washington on those days.

Sincerely,

Donald F. Hornig

Dr. Willis M. Hawkins
Assistant Secretary of
the Army (R&D)
Department of the Army
The Pentagon
Washington, D. C.

eac invitations regretted

April 28, 1964

Dear Mr. Henderson:

Thank you for your letter of April 24, enclosing a copy of Stephen Dole's recent book "Habitable Planets for Man." It looks like a most interesting volume, and I appreciate your kindness in sending it to me.

Sincerely yours,

Donald F. Hornig

**Mr. L. J. Henderson, Jr.
Vice President
The Rand Corporation
1000 Connecticut Avenue
Washington, D. C. 20006**

eac

20506

April 18, 1964

Dear John:

I wanted to look very thoroughly into the suggestion raised in your letter of March 2 and that has taken a little time.

While your suggestion for a gift of NMR spectrometers to the Soviet Union does not strike me as timely, I understand that the situation with regard to the exportation of such equipment to the Soviet Union has materially changed in just the last few weeks. In particular, NMR spectrometers have been removed from the international control list (COCOM). The people at Varian Associates have been in direct touch with the Department of Commerce and have been brought up to date as to the current situation. Apparently if there is to be a next move it will have to come from the Soviet side in the form of a purchase order.

I hope that this information will prove helpful to you.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. John Turkevich
Frick Chemical Laboratory
Department of Chemistry
Princeton University
Princeton, New Jersey

IMTobin:gpw

cc: S&T Files

S&T Chron

DFH Chron ✓

IMT Chron

April 29, 1964

Dear Mr. Riggs:

Thank you for your invitation to speak at the Nineteenth Annual Meeting of the Armed Forces Chemical Association to be held November 4 - 6. It is very difficult to predict what my schedule will be in the early part of November, but there is a possibility that I will be out of the country at that time. If you do not require an immediate answer, I would be glad to discuss the matter at some later date when my travel plans are firm.

Sincerely yours,

Donald F. Hornig

**Mr. Thomas H. Riggs
General Chairman
19th Annual Meeting
Armed Forces Chemical Association
1025 Connecticut Avenue, N. W.
Washington, D. C. 20036**

eac

Mr. Robert Barlow, OST

April 29, 1964

Donald F. Hernig, OST

Travel Orders for Soviet trip

Dr. Wiesner, during his incumbency as Special Assistant to the President and Director of OST, was invited to visit the Soviet Union by Konstantin M. Rudnev, Vice President of the Soviet Council of Ministers and Chairman of the State Committee for the Coordination of Scientific Research. The visit was originally scheduled to take place in January of this year, but had to be deferred, and has now been fixed for the period approximately May 21 to June 1. Including travel time the duration of the trip should be stated as May 19 to June 5. Dr. Wiesner will be making the trip in his official capacity as a member of PSAC and should be so described on the Travel Orders.

The invitation was extended to Dr. Wiesner and any others he might choose to accompany him. The arrangement as approved by me is that Dr. Wiesner will be accompanied by Mrs. Wiesner and by Spurgeon M. Keeny, Jr. and Irwin M. Tobin.

According to the arrangements agreed with the Russians, Dr. and Mrs. Wiesner will be the guests of the Soviet authorities during their stay in the Soviet Union, while the U. S. Government will take care of the expenses incurred by Keeny and Tobin. It is accordingly requested that in lieu of per diem authority be given for reimbursement of expenses actually incurred, since Keeny and Tobin will have to accept facilities offered by the Russians to Dr. and Mrs. Wiesner and will not be able to be selective. Mrs. Wiesner's travel to and from Moscow will not be at U. S. Government expense.

In issuing the Travel Authorization you may wish to use the following information:

Dates of Travel: From approximately May 19 to June 5

Itinerary: Washington, D. C. to Moscow, Leningrad, and Novosibirsk, Russia, and to such other places and at such times as may be required in the course of official duty and return to Washington, D. C.

IMTobin:gpw

cc: S&T Files
S&T Chron
IMT Chron

DEH Chron

29 April 1964

Dear Senator Bartlett:

Thank you for sending to this office a copy of the special earthquake edition of the Fairbanks Daily News-Miner. It provides an excellent account of the awesome results of the quake, and I hope will serve a useful purpose in helping to disseminate the factual information necessary for reconstruction.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

**Honorable E. L. Bartlett
United States Senate
Washington, D. C.**

DFH:hh

S&T

S&T

~~DFH~~

RGF

RGF

April 29, 1964

MEMORANDUM FOR

**Mr. Frederick L. Holborn
The White House**

Enclosed is a letter suggested for the President's signature to the American Society for Testing and Materials on the occasion of the dedication of ASTM's new headquarters building. I note that the ceremony is planned for May 11, so that the dispatch of the letter would need to be timed accordingly.

The related correspondence is returned herewith.

Donald F. Hornig

Enclosures

**RBarlow:jsn
cc: DFH chron
RBarlow subj & chron
S&T file & chron**

20506

April 29, 1964

Dear Mr. Marshall:

I regret exceedingly that, because of my schedule on May 11, I am forced to decline your very kind invitation to be present at the dedication of the new ASTM Headquarters Building.

This obviously will be a day which you will greet with pride and pleasure, and justifiably so. I have the greatest respect for ASTM's fine work and would like nothing better than to share this happy occasion with you.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. Thomas A. Marshall, Jr.
Executive Secretary
The American Society for Testing
and Materials
1916 Race Street
Philadelphia 3, Pennsylvania

RBarlow:jsn
cc: DFH chron
RBarlow subj & chron
S&T file & chron

30 April 1964

Dear Dr. Perry:

I am writing to ask you to serve as the representative of the Department of the Interior on the Interagency Committee for Atmospheric Sciences (ICAS). I understand from Dr. Calhoun's letter of January 21 that Mr. Thomas Austin will serve as your alternate.

With the growing national program in atmospheric sciences and the exciting opportunities for major international developments, the decisions made by ICAS will be of great importance. I hope that you continue to find the Committee activities stimulating and worthwhile.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Dr. Harry Perry
Bureau of Mines
Department of the Interior
Washington, D. C. 20240

RGFleagle:hh

S&T

S&T

~~DFH~~

RGF

RGF

30 April 1964

Dear John:

As requested in your letter of January 21, 1964, to Dr. Wiesner, I am accepting your resignation from ICAS. Your interest and counsel while a member of ICAS have been valuable not only to your Department, but to the Government and the nation as a whole.

I hope that you can continue to keep in touch through Dr. Harry Perry with those issues which concern the Department of the Interior.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. John C. Calhoun, Jr.
Science Advisor
Department of the Interior
Washington, D. C. 20240

RGFleagle:hh

S&T

S&T

~~DEH~~

RGF

RGF

30 April 1964

Dear Senator Moss:

I regret very much the long delay in this Office's evaluation of S. 1020. This has been due to the fact that a thorough and carefully planned study of all aspects of the weather modification problem has been undertaken under the National Science Foundation. The scientific evaluation is being conducted under National Academy of Sciences auspices and will be coordinated with the NSF study. A report from these studies will not be available for some time.

Based on such completed studies of Weather Modification as have been carried out by NSF and by a Panel of the President's Science Advisory Committee, it is clear that the major need in this field is for careful, well-planned research on the physical processes occurring in clouds and on atmospheric circulation, and that large scale efforts directed at increasing water supply would be premature at this time. New legislation does not seem to be needed for a research program.

The Department of the Interior supports a small research program in cloud physics and it is in the national interest that this be made as effective and successful as possible. My office stands ready to assist by providing advice and helping in coordination with related programs in other agencies.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Frank E. Moss
United States Senate
Washington, D. C.

RGFleagle:hh

S&T

S&T

~~DPH~~

RGF

RGF

WH

WH

ST 0606

30 April 1964

MEMORANDUM FOR:

**Dr. J. Herbert Hollomon
The Assistant Secretary of Commerce**

SUBJECT: Meteorological Services

I am glad to have your memorandum of April 8 indicating adoption of the names "Federal Plan for Meteorological Services and Supporting Research" and "Federal Coordinator for Meteorological Services and Supporting Research." These names should help to insure that the functions referred to are understood clearly both inside and outside the Government.

My understanding is that the boundaries of "supporting research" are not sharply defined and that the Coordinator and ICAS will both have a valid interest in the overlapping part of the federal research program.

(signed) Don

Donald F. Hornig

RGF:hh
S&T
S&T
RGF
RGF
~~DFH~~

34T 0546

April 30, 1964

Dear Mr. Marshall:

Please accept my warm personal greetings on the dedication of the new headquarters building of the American Society for Testing and Materials.

The United States Government fully recognizes the substantial contributions made by the Society to the development of knowledge about materials. ASTM's work has been of great importance to this country in two World Wars, and has furthered the peacetime development of the country's engineering and scientific professions.

I would note especially the fine record of cooperation between the Society and the Federal departments and agencies.

In promoting knowledge of the materials of engineering, and the standardization of specifications and methods of testing, the Society has developed important scientific data that has aided the national and international trade and commerce.

I salute the 12,000 members of ASTM and I urge them to continue to perpetuate the high standards achieved by the Society.

Sincerely yours,

Mr. Thomas A. Marshall, Jr.
Executive Secretary
The American Society for Testing
and Materials
1916 Race Street
Philadelphia 3, Pennsylvania

LBJ:DFH:RB:jcn
cc: President's Files
w/incoming
White House Files (2)
Dr. Hornig
RBarlow subj & chron
S&T file & chron

In reply to S&T Control 0612

30 April 1964

Dear Mr. Wall:

Thank you very much for your letter of April 27, with its thoughtful comments on the Bethe Panel report. Unfortunately Dr. Bethe is away in Europe, but I am sending your second letter on to another Panel member for his views.

With regard to your letter on the question of the pion factories, it is clearly too expensive a facility for training to be considered its principal value. The machine must be justified on the grounds of the science which will be produced. The Panel felt that such a facility should be built in a national laboratory with close connection with universities, primarily because the radioactivity problems associated with designing and operating a machine were of the type which could best be dealt with in the National Laboratory setting rather than in a university laboratory setting. Nuclear structure physics is very important to the Atomic Energy Commission laboratories, since their business both in weapons and reactors involves the nucleus. It is not out of line for some of their budgets to be spent in this field. However, it should be emphasized that if such a machine goes to a National Laboratory it will be made available to university groups for experiments on an equitable and scientific basis.

I appreciate your thoughtful comments, and when we have had a reply to your second letter from the Panel member, my office will be in communication with you.

Sincerely,

(Signed) Donald F. Hornig

Donald F. Hornig

Mr. Nathan S. Wall
Laboratory for Nuclear Science
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

DZR:hh
S&T S&T ~~DPH~~
DZR DZR

April 30, 1964

MEMORANDUM FOR

**Mr. Frederick L. Holborn
The White House**

I would like to recommend transmittal of the attached message from the President. If agreeable, it should be sent not later than May 8 to Dr. Carl F. Benson, Chairman, 1964 National Science Fair-International, Inc., 5111 York Road, Baltimore, Maryland.

(signed) Donald F. Hornig

Donald F. Hornig

Attachment

RBarlow:jan

cc: DFH chron ✓

RBarlow subj & chron

S&T file & chron

Ref: S&T Control No. 0204

**Suggested Message from President Johnson
to the
1964 National Science Fair-International
May 5 - 9th
Baltimore, Maryland**

I take the greatest personal pleasure in sending good wishes to you who are participating in the 1964 National Science Fair-International.

It is you young people who are this country's greatest asset, its richest resource. For it is you who are going to assume the responsibility for the welfare of this great land in just a few short years. These are the crucial years of your preparation to bear this responsibility well. If you are prepared, if you have the ability and the maturity which I believe I see today in the overwhelming majority of the nation's children, then you have the chance to see a better world than any of your elders have every known. It is a vision that I cherish.

I therefore want to salute you for your sound scholarship and initiative, exemplified in this Fair, and to salute the sponsors of the Fair for the fine civic spirit they have shown in encouraging these gifted young people. You can all be proud, and the City of Baltimore can be proud, of this effort. My only regret is that I am unable to be present to participate directly in this tribute to you.

April

May 1, 1964

Dear Dr. Brady:

Following the establishment of the President's Committee on Manpower under Executive Order 11152, Secretary Willard Wirtz has invited comment to lay the groundwork for the first meeting.

It is my own view that the Committee should recognize the special importance of scientific, technical and managerial manpower in developing the Nation's technological capability and economic situation. It should examine means for dealing with the special problems associated with this manpower sector. In order to respond to the Secretary's request, I would very much appreciate comments from members of the Federal Council for Science and Technology, especially regarding steps to strengthen the Government's ability to deal with its requirements for scientists and engineers, with collection and analysis of statistics regarding manpower resources, and with manpower implications of current or projected policies and programs.

The Council received several briefings April 10 on the need for coordination. A brief analysis of present and of alternative mechanisms, and of possible recommendations for FCST consideration is attached.

Your reaction to these alternatives, and to these possible recommendations for FCST, would be of great value. A reply would be appreciated by May 11.

Sincerely,

Donald F. Hornig

Dr. N. C. Brady
Director, Science and Education
Department of Agriculture
Washington, D. C.

cc: DFH; S&T Chron; S&T Files;
EW Chron; EW Files (FCST Chron)

Identical letter to:

May 1, 1964

Dr. Hae

**Dr. Harold Brown (Dear Harold)
Director of Research and Engineering
DOD**

**Dr. John C. Calhoun, Jr. (Dear John)
Science Adviser
Dept of Interior**

**Dr. Leland J. Haworth (Dear Lee)
Director, NSF**

**Dr. J. Herbert Hollomon (Dear Herb)
Assistant Secretary for
Science and Technology
Dept of Commerce**

**Mr. Boisfeuillet Jones (Dear Mr. Jones)
Special Assistant for Health and Medical Affairs
Dept of HEW**

**Dr. Glenn T. Seaborg (Dear Glenn)
Chairman, AEC**

**Mr. James E Webb
Administrator, NASA**

**Mr. N. E. Halaby (Dear Mr. Halaby)
Administrator, FAA**

**Dr. Ragnar Rallefson (Dear Rellie)
Director, Office of International Scientific Affairs
Dept of State**

**Mr. Elmer B. Staats (Dear Elmer)
Deputy Director, BOB**

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY
Washington

OFFICIAL
USE
ONLY

April 27, 1964

MEMORANDUM FOR

Members, Federal Council for Science and Technology

SUBJECT: Analysis of Issues in Coordination of Information and Policies
Concerning Scientific and Technical Manpower

I. Introduction

At its April 10 session, the Federal Council for Science and Technology received briefings on needs to strengthen the Government-wide capability in relation to scientific and technical manpower when dealing with its own requirements, with the collection and analysis of statistics regarding the Nation's resources, and with manpower implications of its policies and programs. A number of proposals to improve coordination were brought to the Council's attention, but action was deferred pending preparation by the Office of Science and Technology of a paper summarizing issues and outlining alternative steps.

II. Requirements for Coordination

Questions which concern development and utilization of specialized high level manpower:

- 1) Shorter range impact of Federal policies and programs on manpower--initiation or cancellation of major projects related to mission requirements; deliberate acceleration of scientific areas that require new kinds of specialization; support of major new R&D facilities; changes in contracting procedures,
- 2) Longer range impact of Federal policies and programs on manpower--arms control and disarmament; extension in R&D orientation beyond security goals to include economic and social objectives; technical assistance to developing nations; multi-agency support of university research and educational programs; consideration of geographical distribution of Federal R&D.
- 3) Long range impact of new technological, political or economic factors--automation; problems in retraining generally; increased foreign competition in consumer goods; growing manpower effects of state and local activities; growing population, urbanization and environmental

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hazards; faculty needs to meet growing university enrollments; reorientation of U. S. R&D industry; international flow of manpower and ideas.

4) Consideration of Federal manpower needs--factors promoting recruitment and retention of high level talent for in-house labs; changes in mission of Federal laboratories, in-house and contract; utilization of Federal laboratories in graduate education programs.

5) Development of information, projections, analyses and research on manpower--formulation of Government-wide and national requirements; establishing standards; coordinating efforts of 29 agencies now participating.

6) Long range planning of Federal R&D--goal setting; consideration of manpower resources required; program alternatives; high risk investments; Federal-non-Federal relationships and responsibilities.

III. Agencies having Government-wide Responsibilities in Manpower

In some degree or other, all agencies have mission-oriented responsibilities with manpower implications, arising out of management practices, contracting policies, support for education and research related to missions, etc. A brief summary follows of individual agencies assigned major responsibilities for Government-wide planning, policy-making or information gathering and analysis.

Secretary of Labor, under the Manpower Development and Training Act of 1962, is assigned responsibility to:

- (1) "Evaluate the impact of various changes in the structure of production and demand on the use of the Nation's human resources."
- (2) "Establish techniques or methods for detecting in advance the potential impact of such developments and develop solutions to problems."
- (3) "Appraise the adequacy of the Nation's manpower development efforts to meet foreseeable needs and recommend needed adjustments."

The Office of Education is the principal agency of the Federal Government responsible for formulating educational policy and coordinating educational activities at the national level. Its major functions are:

- (1) To collect and disseminate information with respect to education in the States and in other countries;

- (2) To make studies and provide services of a national character;
- (3) To evaluate educational and social trends affecting education;
- (4) To identify some of the larger problems in education calling for immediate research and action programs;
- (5) To provide major leadership and impetus for educational research;
- (6) To provide professional educational advisory service primarily based on findings of research and to aid in improving educational practice; and
- (7) To administer grants-in-aid to education.

The National Science Foundation in its role of promoting the progress of science and advancing the national welfare is commissioned to develop and encourage the pursuit of a national policy for the promotion of basic research and education in the sciences. NSF also bears other responsibilities, including appraising the impact of research upon industrial development and upon the general welfare; awarding scholarships, graduate fellowships and institutional and development grants in engineering and the sciences; and providing a central clearinghouse for information covering all scientific and technical personnel in the U. S.

The Office of Science and Technology provides advice and assistance to the President with respect to developing policies, evaluating and coordinating programs to assure that science and technology are used most effectively in the interests of national security and general welfare.

Office of Emergency Planning assists and advises the President in coordinating and determining policy for all emergency preparedness activities, including emergency use of resources such as manpower.

The Civil Service Commission coordinates specific aspects of Federal personnel management (including scientific and technical personnel), recruitment, job classification, training and fringe benefits, personnel management practices.

Bureau of the Budget coordinates Federal science and technology programs (and personnel) through program review and analysis, with direct or indirect effects upon scientific and technical personnel.

The Bureau formulates, for presentation to President (and to Congress) legislative proposals on behalf of Federal agencies which involve plans for Federal personnel management (such plans often affect Federal scientific and technical personnel).

IV. Committees Having Government-wide Responsibilities

1. President's Committee on Manpower (E. O. 11152 of April 15, 1964)

In connection with the Manpower Development and Training Act of 1962, the Committee assists the Secretary of Labor, as requested, in assessing the Nation's current and prospective manpower requirements and supplies, and in developing recommendations to deal with current and prospective manpower problems; advises the Secretary of Labor and other Federal officials in developing improved methods and programs for appraising national manpower needs and resources. In carrying out these functions, the Committee (1) evaluates and recommends improvements in methods and programs for assessing resources and requirements and the impact of Federal programs on the Nation's manpower; (2) evaluates and makes recommendations for the coordination of information and action programs concerned with measuring and projecting manpower needs and supplies; (3) makes recommendations concerning procedures for obtaining consistency among projections of manpower resources and requirements.

Issues falling within the Committee's scope include all the questions listed previously in Section II, but embracing all sectors of the Nation's manpower, not just scientists, engineers and managers.

2. Federal Council for Science and Technology serves in an advisory capacity to the President to provide more effective planning and administration of Federal scientific and technological programs, and to achieve more effective utilization of relevant resources. It has dealt with a limited number of individual components of manpower-related issues. Council Committees that plan national programs such as in water research and oceanography consider compatibility between program scope and growth, and manpower; they also include program elements to develop specialized manpower needed for the future.

The **FCST Committee on Long Range Planning** is charged with identifying and coordinating long range goals of Federal agencies involving science and technology, with inventorying and projecting demands for manpower and facilities, and with developing recommendations for program emphasis and allocation of resources. Although this Committee on Long Range Planning has been dealing with projections of manpower resources, the Committee Chairman is recommending that some other group develop methodology and analyze implications of Government-wide manpower projections so that the Committee can concentrate on substantive planning related to identification and rationalization of choices, using projections as one important tool.

The FCST Committee on Scientific Personnel superceded the Panel on Environment and Incentives for Research and is responsible for studies that bear on strengthening staff and performance of Federal R&D establishments.

3. NSF Advisory Council on Manpower and Education acts as an advisory body to NSF in the area of studies on manpower and education; proposed NSF manpower and education studies are referred to the Council for reaction; agency representatives are informed of studies in individual agencies; a forum is provided to review the merits of proposed studies. Representation includes OE, NIH, AEC, DOD, NASA, Census, Labor, CSC, Selective Service, Agriculture, Public Health Service. While utilizing its Advisory Council through approximately semi-annual meetings to comment on its own program of manpower-related studies, the Council has not formulated Government-wide requirements for data, projections or studies, or sought to coordinate activities of member agencies.

V. Summary of Criticisms Set Before FCST

Arguments for improvement in coordinating mechanisms, arising out of studies by the Secretary of Labor leading to E.O. 11152, by NAS, PSAC Manpower Panel and by NSF, were presented to the Council as follows:

- 1) Manpower statistics, projections, analyses and research studies are inadequate: requirements have been vaguely and only occasionally defined; present data collection and analysis activities are too small, too slow, often inexpertly handled; Government-wide standards and designation of agency responsibility frequently lacking.
- 2) Manpower implications have too seldom been considered in setting goals, formulating policy and making choices as to programs, either at Executive Office or agency level.
- 3) Coordination has been lacking between policies and programs of individual agencies, in relation to the impact of one activity on manpower-related concerns of another, and in relation to developing consistency and communication between Federal and non-Federal interests.
- 4) Neither long nor short range manpower resources required for Federal programs have been identified; compatibility has not been developed in Federal policies for manpower development.
- 5) No single unit in the Executive Branch above the operating level has assumed responsibility for developing an over-all view of scientific and technical manpower, designated sufficient and continuous staffing or

assumed a leadership role for Government-wide coordination of planning, promoting manpower research and integrating data collection and analysis.

6) Forecasts of Federal in-house requirements for manpower and systematic steps to improve utilization of in-house and contract personnel are yet lacking.

VI. Alternatives for New Coordinating Mechanisms

To the previous discussion of manpower-related issues and of coordinating mechanisms should be added the following premises:

- a) There is no single "manpower problem." Rather there are a variety of manpower-related issues covering a wide spectrum of topics, each with different degrees of urgency. These often require study in the context of the substantive program or policy, rather than in the context of "manpower."
- b) While drawing on a common base of information, analysis and insights, a variety of separate but articulated mechanisms rather than a single one may be indicated for effective study, action and coordination.
- c) Coordination is no substitute for exercise of agency authority, initiative, competence, and adequacy of manpower studies.
- d) The departmental structure of Government focuses agency attention on limited goals, engenders rivalries and has no incentives for consistency.
- e) Excessive central domination squeezes out advantages of diversity of view and of specialized knowledge.

Possible alternatives for action:

- 1) Leave coordination entirely to new President's Committee on Manpower, and any panels it may establish;
- 2) Establish new Executive Office Council of Scientific and Technical Manpower Advisors;
- 3) Establish new White House Special Assistant for Scientific and Technical Manpower;
- 4) Assign coordinating responsibility to one operating agency to serve as delegated agent; i. e., Labor Department, NSF;

- 5) Assign continuing coordinating responsibility to existing Executive Office agency; i. e., BOB, OST, OEP;
- 6) Establish new FCST Committee;
- 7) Meet coordinating problems on ad hoc basis, with Executive Office direction.

VII. Possible Recommendations for FCST Consideration

- 1) Each operating agency should establish a high-level focal point of responsibility so as to integrate and elevate the status of functions related to scientific, technical and managerial manpower within their management, and take steps to strengthen their current program.
- 2) OST should assume the responsibility for general policy guidance, but not central direction or control. It should be a major source of policy recommendations to the President's Committee on Manpower, related to scientists and engineers.
- 3) NSF should assume more initiative to serve as a focal agency concerning information and analysis -- by developing Government-wide requirements; recommending methodology and standards; establishing Government-wide responsibilities and compatibility between individual agency studies; sponsoring necessary research and special studies.
- 4) A Panel under the President's Committee on Manpower or a Federal Council Committee on Scientific and Technical Manpower should be established to:
 - a) consider problems in the development and utilization of scientific and technical manpower arising out of Federal programs and activities which involve more than one Federal agency, or concern the Nation's manpower resources as a whole,
 - b) consider methods and programs for assessing present and anticipated specialized manpower resources and requirements of the Nation, especially those resulting from diverse and changing Federal programs.

This group shall undertake studies and make recommendations to improve Government-wide communication, coordination and planning as to

- a) Federal programs and policies having potentially serious short- or long-range impact on the Nation's scientific and technical manpower;

b) impact of new technological, political or economic factors affecting the Nation's manpower resources;

c) Federal in-house manpower requirements;

d) agency responsibilities to fill gaps, development of compatibility in standards and methodology for collection of information, projections and research bearing on short- and long-range requirements for manpower resources, and

e) exchange of manpower information between Federal and non-Federal interests.

5) The NSF Advisory Council on Manpower Statistics should be made a panel of a new Council Committee or the President's Committee, chaired by NSF, broadened in its responsibilities, and asked to coordinate manpower-related studies of other FCST Committees.

6) The FCST Committee on Scientific Personnel should accelerate its studies to strengthen Federal Career Service. Its name should be changed to "Committee on Federal Scientific and Technical Personnel."

May 1, 1964

MEMORANDUM FOR

Walter Jenkins

SUBJECT: Office Space

The Office of Science and Technology has an extremely urgent need for additional office space convenient to its present quarters in the Executive Office Building. We were forced to double up some of our senior staff men in the office juggling which followed the assassination, and we have just lost two more offices which have been on loan to us from the National Security Council. We literally have no place to put the men displaced by this latest development, let alone the new man (a Vice President of Westinghouse) who will be joining us next week, nor have we any place where our very distinguished consultants (300 of them) can work when they are in Washington. It is very hard to persuade outstanding men that their services are needed by the White House, at considerable personal sacrifice, and then not be able to provide them with an office.

As a solution, I should like to urge that the three offices adjacent to our space in the East Corridor of the Second Floor be permanently assigned to us. These rooms are numbered 277, 279 and 281. Two of them were occupied until a few weeks ago by Mr. Carmine Bellino, who has resigned. OST has occupied one of Mr. Bellino's former rooms, number 281, on a loan basis to take care of an emergency overflow from a major study this Office is conducting.

I should like to discuss this with you further and to reemphasize that the need is urgent and immediate.



Donald F. Hornig

May 1, 1964

Dear Congressman:

Thank you for the opportunity to comment on H. R. 10904, a bill to establish a National Oceanographic Agency. As you know, the Office of Science and Technology and the Federal Council for Science and Technology have been assigned responsibility by the President for planning and coordination of the Nation's growing programs in this vitally important scientific field. Consequently, I share the general purposes of H. R. 10904 -- to ensure the existence of the most appropriate organizational framework for developing Federal policies and programs in oceanography.

Section 4 of H. R. 10904 would transfer to the proposed National Oceanographic Agency "all functions relating to oceanography and related sciences which are vested on the date of enactment of this Act in any office, employee, department, agency and instrumentality of the United States." This mechanism would centralize in a single operating agency certain mission support activities of 20 Federal bureaus in major fields currently related to oceanography. In concentrating these activities in a single agency, the bill would excise from these 20 agencies functions that are integral to accomplishment of their broad statutory missions. The result would make exceedingly cumbersome the direct utilization of oceanographic knowledge in prosecuting such important national objectives as defense, maritime commerce, commercial fishing, protection of lives and property and development of mineral resources.

Thus, what the bill envisions as its greatest strength in fostering coordination in oceanography would be more than offset by loss in effectiveness of the program to accomplish national goals.

Such goals in relation to oceanography, transmitted to the Congress last June, were "to comprehend the world ocean, its boundaries, its properties, and its processes, and to exploit this comprehension in the public interest, in enhancement of our security, our culture, international posture, and our economic growth." I wish especially to emphasize the second part of these goals. The accelerated advancement of oceanography has been largely rationalized in terms

of exploitation of knowledge about the ocean environment, for example, by the Navy Department to develop its sea-based Polaris deterrent, and to enhance our broad capabilities in anti-submarine warfare. The Bureau of Commercial Fisheries, charged with increasing fishery resources to yield the maximum annual product and with strengthening the fishing industry, must study characteristics of the ocean that influence fish productivity, variability and migration. In another area, the Coast and Geodetic Survey, to provide charts and related information for safe navigation and provide basic data for development of national resources and for other commercial and industrial needs, must undertake oceanographic surveys of tides and currents, magnetic, gravimetric and seismological phenomena. The Weather Bureau, to carry out responsibilities for weather forecasting, requires knowledge of meteorologic processes which in turn depend on significant inter-relationships of ocean and atmosphere. The Geological Survey, Maritime Administration, Corps of Engineers, Bureau of Sports Fisheries, Bureau of Mines, Atomic Energy Commission, Public Health Service, the Coast Guard and Smithsonian Institution have specific missions which similarly depend on knowledge of the sea, and engage in programs of research to achieve these practical goals. The National Science Foundation is also a major sponsor of oceanographic research -- with a different objective of fostering science and education that provides a broad base of both fundamental knowledge and of trained manpower on which all agencies and the country as a whole may draw to maintain this Nation's pre-eminence in this important field.

The fact that so many agencies are engaged in oceanographic research, incidentally, reflects the inevitable lack of matching between our departmental structure of Government and major fields of science. Increasingly, all Federal departments and agencies utilize science and engineering in the accomplishment of their respective missions. But in so doing, each draws on a variety of disciplines, and often on fruits of research conducted by a sister agency with different objectives. These research requirements also change and change rapidly -- faster than is possible or desirable to modify Governmental structure.

Thus in the case of oceanography, we have sought to foster a vigorous program within the present framework of Government, but enhanced through new mechanisms of coordination. The OST, FCST, and its Interagency Committee on Oceanography have been developed and strengthened accordingly. These efforts to develop coherent oceanographic plans are summarized in annual reports to the Congress which set forth Government-wide goals, plans and budgets; those for FY 1965 were transmitted by President Johnson on March 19, 1964.

Last year, the House took steps toward strengthening procedures for interagency coordination in the passage of H. R. 6997, which your Committee characterized as "a proper and workable solution to the problem of coordinating the activities in the marine sciences of a large number of Government agencies without destroying or impeding their autonomy." My Office supported the enactment of H. R. 6997. I hope this bill will receive favorable treatment in the Senate this session.

In the light of H. R. 6997 passed by the House, and of the central weakness of H. R. 10904 discussed previously, I must recommend against the enactment of the latter measure.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Herbert C. Benner
Chairman
Committee on Merchant Marine and Fisheries
U. S. House of Representatives
Washington, D. C.

cc: Jean Lewis (White House)

cc: DFH; S&T Chron; S&T Files (with incoming correspondence);
EW Chron; EW Files (Oceanography)

In reply to S&T Cont. 607

May 1, 1964

Dear Mr. Secretary:

I should like to reply to your invitation to develop groundwork for the first meeting of the new President's Committee on Manpower.

It is my own view that the President's Committee should recognize the special importance of scientific, technical and managerial manpower in economic growth and the development of our technological capability. One of the first steps that I would suggest, therefore, is that we explore ways to strengthen the capability of the Government to deal with problems of scientists and engineers. To this end, I am also seeking the views of members of the Federal Council for Science and Technology as to steps which could be taken to serve the new President's Committee.

In replying to your further invitation, I should like to designate Dr. Edward Wenk, Jr. of my staff as liaison.

Sincerely,

(signed) Don

Donald F. Hornig
Director

Honorable W. Willard Wirtz
Secretary of Labor
Washington, D. C.

cc: DFH; S&T Chron, S&T Files (w/incoming correspondence);
EW Chron; EW Files (Manpower - President's Committee)

In reply to S&T Cont 596

May 2, 1964

MEMORANDUM FOR

THE PRESIDENT

In addition to reconstructing Alaska, it is important that a good scientific account of the earthquake be assembled as a basis for longer range efforts, there and elsewhere. In order that it be of the greatest possible value, it should be done under the guidance of the very best scientists in the country, and I propose that we get this going in a hurry since much of the evidence degrades as time passes.

I therefore attach for your signature a proposed letter from you directing me to carry out such a study. It has the agreement of Senator Anderson, Mr. McDermott and of the other offices concerned.

I will be happy to discuss it with you.

Donald F. Hornig

Attachment

DFH/eac

DFH Chron.
S&T Files
S&T Chron.
DFH File

May 2, 1964

Dear Dr. Harnig:

It is important we learn as many lessons as possible from the disastrous Alaskan earthquake. A scientific understanding of the events that occurred may make it possible to anticipate future earthquakes, there and elsewhere, so as to cope with them more adequately.

I, therefore, request that your office undertake to assemble a comprehensive scientific and technical account of the Alaskan earthquake and its effects. To insure an integrated approach to the collection and evaluation of the information, the scientific work of the U. S. Coast and Geodetic Survey, the U. S. Geological Survey, the National Science Foundation, the U. S. Air Force, the Corps of Engineers and such other agencies as are involved should be coordinated by your office. As you know, the early engineering work related to reconstruction is being coordinated by the Federal Reconstruction and Development Planning Commission for Alaska. In order to learn the most, the scientific effort should be carried out as soon as practicable.

In defining the scientific and technical questions involved and the related informational requirements for collection and assessment, I hope that you will be able to enlist the aid of the National Academy of Sciences.

The scientific and engineering information acquired as a result of this activity should be made available to assist the efforts of the Federal Reconstruction and Development Planning Commission, and your office should be available to provide such other technical assistance to the Commission as you feel appropriate. This information should, of course, also be provided to the Director of the Office of Emergency Planning and

other government agencies having reconstruction responsibilities in Alaska. Your office should coordinate its activities with the Commission, taking full advantage of its field activities and of the information being acquired for use in the early reconstruction phase.

The foregoing activities of your office should be carried out in consultation with the other agencies which have specific responsibilities for Federal operations in Alaska during the emergency period.

Sincerely yours,

Honorable Donald F. Hornig
Special Assistant to the President
for Science and Technology
The White House
Washington, D. C.

LBJ / DFH; eac

cc: The President's file
WH Central files (2)
Dr. Hornig, R. 200, EOB

DFH Chron. ✓
S&T Files
S&T Chron.
Mr. Beckler
Dr. Fleagle

May 3, 1964

Dear Mr. Kelakos:

Thank you very much for your letter of April 27th. I hope this matter hasn't caused you any inconvenience and would appreciate your keeping me informed as to developments.

Sincerely,

Donald F. Hornig

Mr. Michael G. Kelakos
Deputy Science Officer
Embassy of the United States
Rome, Italy

DFH/eac

"K"

May 4, 1964

Dear Senator Douglas:

I have appointed Dr. Richard E. Shope as the fourth member of the advisory panel to examine the new evidence that Drs. Fry and Durovic have obtained. I feel we are now ready to go ahead and would like to set a date for the meeting.

I have consulted with the four panel members on dates after the middle of May when they can be available to come to Washington. May 23, 24 and 27 appear to be the most suitable. I hope arrangements can be made to meet on one of those days, preferably the 25th or the 27th.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Paul H. Douglas
United States Senate
Washington, D. C.

CMM:mts

cc: Mr. Feldman, WH
WH Files (3)
Dr. Hornig ✓
Dr. MacLeod subj. & chron
Dr. Bing
S&T file and chron

PAUL H. DOUGLAS, ILL., CHAIRMAN
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WILLIAM B. WIDNALL, N.J.

Congress of the United States

JOINT ECONOMIC COMMITTEE

(CREATED PURSUANT TO SEC. 9(a) OF PUBLIC LAW 86, 78TH CONGRESS)

April 27, 1964

Dr. Donald F. Hornig, Director
Office of Science and Technology
Executive Office Building
Washington, D. C.

Dear Dr. Hornig:

I am delighted with your letter of April 20 and I am especially pleased with the three people you have invited. Dr. McElroy has a fine reputation and is precisely the kind of person who should serve.

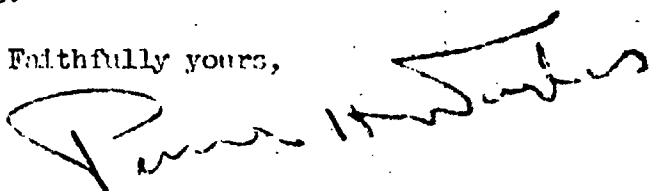
I would like to suggest the following timetable. Let us proceed with the appointment of the remaining persons on the panel. It is our judgment that it is much more important to have men who are broadly trained in the fundamental disciplines than to have a series of specialists, on the grounds that if any narrow work needs to be done, the panel can always ask that it be done by competent people. I hope very much that the names can be submitted to us and, if they are of the quality of Dr. McElroy, I am sure we will have no problems.

Once this is done, let us then establish a date for the meeting. I would think that a period of two to three weeks after the panel is established would be adequate.

In the meantime, we are insisting that the chemistry be reviewed by no less than two independent laboratories so that there will be no danger of even minor differences. And we are submitting the clinical cases to the most severe pre-panel critical analysis. We want to do this for our own protection before it is presented to a distinguished group.

With all best wishes.

Faithfully yours,


Paul H. Douglas

PHD:hsd

5/4 to be discussed 4-28-64

6639

XEROX FROM QUICK COPY

May 4, 1964

MEMORANDUM FOR

Mr. Walter Jenkins

I want to express my sincere appreciation for the consideration you have given to my urgent request for additional space for the Office of Science and Technology.

The irreducible minimum requirement, as I indicated, is housing for one senior staff member who joined us today. Accommodations for this secretarial support are also required. The next order of urgency concerns the two senior staff members about to be evicted from quarters they have occupied on temporary loan from the NSC.

I shall be extremely grateful if something can be done to relieve this emergency situation.

(signed) Don

Donald F. Hornig

RBarlow:jsn

cc: DFH chron

RBarlow subj & chron

S&T file & chron

May 4, 1964

Dear Dr. Shope:

I am most grateful to you for your willingness to serve on the Advisory Panel to consider the new evidence on the material about which Colin MacLeod spoke to you.

Present plans call for a one day meeting in Washington on May 25, 26 or 27. I shall let you know as soon as possible which of these dates is most suitable to all concerned.

With much appreciation.

Sincerely yours,

S/DFH

Donald F. Hornig
Special Assistant to the President
for Science and Technology

Dr. Richard E. Shope
Rockefeller Institute
York Av. at 67th Street
New York, N. Y.

CMM:mts

cc: Dr. Hornig chron ✓
CMM subj. and chron
Dr. Bing
S&T file and chron

20506

May 5, 1964

Dear Herb:

Thank you for your letter of April 29 concerning your plans to re-convene IGIPAS.

I shall be very glad to serve on the group. Mr. Tobin is prepared to be helpful on the staff level, together with other OST specialists concerned with particular aspects of the problem.

Sincerely,

(signed) Don

Donald F. Hornig

Honorable J. Herbert Holloman
Assistant Secretary of Commerce
Washington, D. C. 20230

IMTobin:gpw
cc: S&T Files
S&T Chron
DFH Chron ✓
IMT Chron

Reply to S&T Cont. No. 0647

20506

May 5, 1966

Dear Mr. Chase:

Thank you for the copy of Science
Fortnightly. I was glad to look at the material
on the education of gifted children. It was a
thoughtful and useful article.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. Allan Chase
Science Fortnightly, Inc.
1860 Broadway
New York 23, New York

JTurner/ekb
OST file - chron
JT file - chron
cc:Dr. Hornig (chron)

20306

May 2, 1964

Dear Mrs. O'Ferrall:

Your letter of April 25, addressed to President Johnson, inquired about the possibility of a Presidential note of felicitation in connection with the June 7 luncheon of the Los Angeles Council of the National Council of Negro Women. It would be most helpful in considering your request if you could supply me with information on the nature of the awards to be presented at the luncheon, and on the specific achievements of those being honored.

Sincerely yours,

(Signed) Donald F. Hornig

Donald F. Hornig

Mrs. E. B. O'Ferrall
Chairman, Souvenir Program Committee
Los Angeles Council of the National
Council of Negro Women
3500 Canyon Crest Road
Altadena, California 91002

cc: Mr. Frederick L. Holborn
The White House
RBarlow subj & chron
S&T file & chron
DFH chron✓
RBarlow:jsn

In reply to S&T Cont. No. 0655

May 6, 1964

Dear General Luedcke:

Thank you very much for your invitation to attend the test of Tery HC to be conducted at the Nevada Test Site May 20th. Unfortunately, I have a number of commitments in Washington on the 20th which will make it impossible for me to attend the test.

Sincerely,

Donald F. Hornig

General A. R. Luedcke
General Manager
Atomic Energy Commission
Washington 25, D. C.

Invitations regretted A (AEC)

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY
WASHINGTON

May 6, 1964

Dear Harvey:

Your suggestions as to FY 1966 issues in long-range planning for science and technology that deserve immediate study have been most helpful, and form the basis for next steps of deliberation. Based on review of these topics by the Office of Science and Technology and the Bureau of the Budget, together with others proposed by Dr. Leland Haworth, two major issues have been selected to be brought to the Federal Council for their discussion and advice as to Government-wide policy guidelines. To this end, I am requesting assistance from the National Science Foundation which has statutory responsibility in this area and from your Long Range Planning Committee in developing staff studies and recommendations.

The two areas of immediate interest are:

Guidelines to establish priorities for special fields of science. Over the past five years, a number of scientific fields have been singled out for special emphasis such as oceanography, atmospheric sciences, water research, high energy physics, materials research and natural resources. Consideration is now being given to broad research needs in environmental pollution. Designation of these areas as "national programs" and their stimulation has been rationalized on the basis of a) research requirements to meet either explicit agency missions or needs and opportunities in science; and b) need to develop leadership and coordination of programs whose responsibility is spread among a number of agencies, with no single one having a predominant role. In addition to these multi-agency programs, others under jurisdiction of only one or two agencies have received special attention, such as in radio astronomy. Questions on which we need your advice concern 1) the extent to which the past delineation of fields as national programs has fostered achievement of objectives for improved support and management; and 2) the establishment of criteria and administrative processes of decision-making on which basis merits of existing national programs can be confirmed, or new ones deserving special emphasis selected.

Goals and program alternatives for support of academic research and graduate students. It has become increasingly clear that the Federal Government, through programs in numerous agencies, now furnishes most of the funds for the support of graduate research and for the support of the graduate students themselves. To a very large extent, this support has grown on the basis of anticipated contributions to missions of the sponsoring agencies, through a variety of specific programs but without reference to any central guidelines. With the sharp growth anticipated of graduate enrollments during the remainder of this decade and with the transition in Federal R&D expenditures generally, questions arise as to 1) goals for the overall level of Government-wide support, 2) criteria for determination of balance as between different fields of science and engineering, and 3) merits of alternatives as between different programs and different sponsoring agencies.

As you will note in the attached copy of a letter to the Director of the National Science Foundation, I am suggesting that relevant portions of staff studies his agency is undertaking for the BOB in connection with FY 1966 Spring Preview be brought to your Committee for discussion and possible amendment, and then brought to the Council with both NSF and your Committee's recommendations. You and NSF staff may wish to determine most effective procedures and schedules that would permit presentation of your views to the Council at its June 9 session.

There is an additional question on which I would appreciate your Committee's comments -- on how to undertake long range planning through analysis of alternatives. As you may recall, the Federal Council at its April 28 session supported the concept of long range planning for science and technology in terms of identifying alternative Federal programs of research and development which contribute to achievement of national goals, and the costs and benefits of each. Such analysis would consider relative priorities for research, for development and for a balance between short term programs and long term investments, such as in manpower. In bringing to bear the collective judgment of the Federal Council on issues of this kind, it is clear that intense staff analysis is essential to identify

-3-

scope and definition of proposed new programs and in estimating costs and benefits. Your Committee's advice as to mechanisms for carrying out such studies would be of very considerable value.

Sincerely,

(signed) Don

Donald F. Hornig

Enclosure

a/s

Dr. Harvey Brooks
Dean, Division of Engineering
and Applied Physics
217 Pierce Hall
Harvard University
Cambridge, Massachusetts

cc: Dr. Leland J. Haworth
BOB (Loweth)

bcc: DFH; S&T Chron; S&T Files; EW Chron; EW Files(Spring Preview '66)

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY
WASHINGTON

May 6, 1964

Dear Lee:

Your very thoughtful reply to my inquiry regarding FY 1966 Spring Budget Issues is indeed appreciated.

Of the topics you proposed be discussed by the Council, the Office of Science and Technology and the Bureau of the Budget believe that two issues deserve immediate Government-wide assessment:

- 1) Guidelines and techniques to establish priorities for special fields of science, and
- 2) Goals and program alternatives for support of academic research and graduate students.

I believe that your response to the Bureau of the Budget's April 13 questions on "recognition of science needs", "relative balance among types of Federal support for science activities at universities", and "impact of Federal programs to expand scientific manpower" should provide factual background and analysis essential for Council deliberation. Such discussion, however, might well benefit by a prior Government-wide evaluation of the issues and alternative guidelines through the Council's Long Range Planning Committee and an exchange of views with NSF staff. I have thus suggested to Harvey Brooks in the attached letter that he determine with you the most effective procedures and schedules by which NSF's studies for BOB could be considered by his Committee.

I realize that these issues are exceedingly complex and may require further data gathering, analysis and extensive discussion. But to the extent that the short time available permits, it would be appreciated if relevant portions of the NSF study for BOB, your recommendations on these two issues, and those of the Committee could be brought to the Federal Council for consideration at its June 9 session.

There is an additional question on which I would appreciate your views, related to support of specialized university research facilities (computers, optical and radio astronomy telescopes, etc.). Specifically, by what means might the Government establish priorities for support?

Your advice on these three matters will be of considerable importance in setting guidelines for preparation of the FY 1966 budget.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Leland J. Haworth
Director
National Science Foundation
Washington, D. C.

cc: Dr. Harvey Brooks

bcc: DFH; S&T Chron; S&T Files; EW Chron; EW Files (spring preview '66)

May 6, 1964

Dear Mr. Harker:

Thank you very much for your invitation to speak at the American Nuclear Society-American Society for Testing and Materials banquet on October 6, 1964. I am sorry to report that it will not be possible for me to accept your invitation since I expect to be out of the country at that time. With respect to your request for suggestions as to alternate speakers, you might wish to consider Dr. Eugene Fubini, Assistant Secretary of Defense for Research and Engineering; Dr. Robert Sproull, Director of the Advanced Research Projects Agency; or Dr. Hugh L. Dryden, Deputy Administrator of the National Aeronautics and Space Administration.

Sincerely,

Donald F. Hornig

Mr. Wesley H. Harker
General Electric Company
Bldg. 14, Electric Park
Syracuse, New York

Eac

Speech Declines "N" (American Nuclear Society)

20506

May 6, 1964

Dear Dr. Hopper:

I am happy to respond to your request of April 23 for a list of the members of the President's Science Advisory Committee, together with a list of the consultants to the Office of Science and Technology.

The list of consultants is divided into two parts - those who have served for seven days or more, and those who served less than seven days, during calendar year 1963. In addition to these 281 people who are formally designated as consultants to the Office, many individuals are invited to serve the Office on an ad hoc basis for a day or two as specific issues arise.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Enclosures

Dr. Robert Hopper
Staff Director
Select Committee on Government
Research
U. S. House of Representatives
900 Independence Avenue, S. W.
Washington, D. C.

RBarlow:jsn

cc: White House (3)

DEH chron

Mr. Beckler

Dr. Wenk

Mr. Rivkin

RBarlow subj & chron

S&T file & chron

In reply to S&T Cont. No. 0625

May 6, 1964

Dear Mr. Kirchner:

I appreciate your giving me an opportunity to comment for your forthcoming article on MOL and orbiting space stations. However, MOL is still in the process of being defined by the Air Force and DOD and I do not believe that a discussion by me of MOL's capabilities or its relationship to the space program in general would be informative or useful at this time. At the same time I do not think that I could realistically assess the situation with regard to space stations in general without a knowledge of the role to be played by MOL.

Accordingly, I hope you will understand my declining your invitation at this time. You have my best wishes, however, for the success of your article.

Sincerely,

(signed) Donald F. Hornig

D. F. Hornig

Mr. Englebert Kirchner
Executive Editor
Space/Aeronautics
205 East 42nd Street
New York, N. Y. 10017

DHS Chron
DHS Subj
→ DFH Chron
S&T Chron
S&T S_a bj

DHS:hk

May 6, 1964

Dear Mr. Goodwin:

Just to follow up our telephone conversation, I should note that the development of long-range programs has been one of the major activities of my office, so that your thoughts were very interesting to me. I am, however, a little concerned that you mentioned a Presidential Commission; its functions would need to be very carefully considered. You are undoubtedly aware that the provision of advice to the President on major policies and issues involving science and technology has been one of the central functions of the PSAC and OST.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. Richard Goodwin
Secretary-General
International Peace Corps Secretariat
806 Connecticut Avenue
Washington, D. C.

DPH/enc

DPH chim.

7 May 1964

Dear Fred:

The President has asked the Office of Science and Technology to assemble a comprehensive scientific and technical account of the Alaskan earthquake and its consequences (attached). Although this effort may prove to be useful in certain aspects of reconstruction, the focus of attention will be on thorough scientific study and on learning as much as possible about the characteristics of this particular earthquake. I should like to ask the National Academy of Sciences to play a key role in this endeavor by providing a committee of scientists and engineers who will be responsible for

- (a) outlining the types and sources of information needed for the guidance of the Federal agencies and private scientific groups;**
- (b) analysing and interpreting the data and the reports provided by Government agencies, universities, and other sources;**
- (c) preparing an appropriate report.**

My office will undertake to bring together the information available through the Federal Reconstruction and Development Planning Commission and the following agencies: Coast and Geodetic Survey, Geological Survey, National Science Foundation, ARPA, Air Force, Navy, and Corps of Engineers. I am asking each of these agencies to select a competent representative who will be able to provide all pertinent information being acquired by their agencies. We

hope to convene these representatives for an initial meeting during the last week of May, and I hope that the Academy committee can be organized as rapidly as possible so that it can engage in its first discussion with the agency representatives at that time. I am appointing Frank Press as my adviser on this study.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Frederick Seitz
President
National Academy of Sciences
2101 Constitution Avenue, N. W.
Washington, D. C.

Enclosure

cc: Dr. William R. Wood
President, U Alaska

RGFleagle:hh

S&T

S&T

~~DFH~~

RGF

RGF

20506

May 7, 1964

Dear Mr. Thompson:

This is in reply to your letter of May 4, 1964, which was addressed to my predecessor, Jerome B. Wiesner. The subject of the letter, Mr. Ezra Kohn, does indeed sound like a very capable person. At the moment, however, there is not a single vacancy within my Office and there is none in prospect in the foreseeable future.

I should like very much to be helpful to Mr. Kohn if there is any way in which I can do so. It may be worthwhile for Mr. Kohn to discuss his employment interests with Mr. Robert Barlow on my staff, who is in contact with employment officers in other Federal agencies and might have some suggestions to offer.

Mr. Kohn's application papers are being returned to you with this letter. A copy has been made for our files.

Sincerely yours,

(SIGNED) - Donald F. Hornig

Donald F. Hornig

Enclosure

Honorable Frank Thompson, Jr.
House of Representatives
Washington, D. C.

RBarlow:jsn
cc: White House (3)
DFH chron ✓
RBarlow subj & chron
S&T file & chron

In reply to S&T Cont. No. 0667

7 May 1964

MEMORANDUM FOR

**Dr. Harold Brown
Director, Defense Research and Engineering
Department of Defense**

SUBJECT: Scientific and Technical Study of Alaskan Earthquake

The President has asked the Office of Science and Technology to assemble a comprehensive scientific and technical account of the Alaskan earthquake and its consequences (attached). Although this effort may prove to be useful in certain aspects of reconstruction, which is being coordinated by the Federal Reconstruction and Development Planning Commission, the focus of our study will be on a thorough scientific evaluation, and on learning as much as possible from this earthquake. I am asking the National Academy of Sciences to provide a committee of highly qualified scientists and engineers who will be responsible for

- (a) outlining the types and sources of information needed for the guidance of the Federal agencies and private scientific groups;
- (b) analysing and interpreting the data and the reports provided by Government agencies, universities, and other sources;
- (c) preparing an appropriate report.

The detailed information on which this report will be based must be obtained in large part from the Government agencies, including ARPA, Air Force, Navy, and Corps of Engineers, which have conducted and are conducting observational and analytical studies relating to the Alaskan earthquake. Therefore, I should like you to appoint a re-

representative from each of these agencies to meet with representatives of other Government agencies and my staff to assist in the study. The representatives should be able to speak to the scientific aspects and to identify relevant information throughout the agency. In choosing your representatives, please do not feel limited to the Washington area.

We hope to convene the agency representatives during the last week of May, and I shall appreciate being informed of your choice as soon as possible.

Dr. Robert G. Fleagle (Code 128, x 28443) will serve as my staff assistant for this study.

Donald F. Hornig

Enclosure

DFH

RGFleagle:hh

S&T

S&T

~~DFH~~

RGF

RGF

May 7, 1964

Dear Lee:

The Bureau of the Budget has called to our attention your plans to brief them on progress and recommendations regarding MOHOLE on Monday, May 11.

Our office continues to be deeply concerned with the problem of MOHOLE. Would there be any particular difficulty if our office were represented at that session?

Sincerely,

(signed) Don

Donald F. Hornig

**Dr. Leland J. Haworth
Director
National Science Foundation
Washington, D. C.**

cc: DFH; S&T Chron; S&T Files; EW Chron; EW Files (Mohole)

7 May 1964

MEMORANDUM FOR

**Dr. Leland J. Haworth
Director
National Science Foundation**

SUBJECT: Scientific and Technical Study of Alaskan Earthquake

The President has asked the Office of Science and Technology to assemble a comprehensive scientific and technical account of the Alaskan earthquake and its consequences (attached). Although this effort may prove to be useful in certain aspects of reconstruction, which is being coordinated by the Federal Reconstruction and Development Planning Commission, the focus of our study will be on a thorough scientific evaluation, and on learning as much as possible from this earthquake. I am asking the National Academy of Sciences to provide a committee of highly qualified scientists and engineers who will be responsible for

- (a) outlining the types and sources of information needed for the guidance of the Federal agencies and private scientific groups;
- (b) analysing and interpreting the data and the reports provided by Government agencies, universities, and other sources;
- (c) preparing an appropriate report.

The detailed information on which this report will be based must be obtained in large part from the Government agencies, including the National Science Foundation, which have conducted and are conducting observational and analytical studies relating to the Alaskan earthquake. Therefore, I should like you to appoint a representative of the National

Science Foundation to meet with representatives of other Government agencies and my staff to assist in the study. The representative should be able to speak to the scientific aspects and to identify relevant information throughout the agency. In choosing your representative, please do not feel limited to the Washington area.

We hope to convene the agency representatives during the last week of May, and I shall appreciate being informed of your choice as soon as possible.

Dr. Robert G. Fleagle (Code 128, x 28443) will serve as my staff assistant for this study.

Donald F. Hornig

Enclosure

cc:

Dr. William R. Wood
President
U Alaska

RGF:hh

S&T

S&T

~~DFH~~

RGF

RGF

7 May 1964

MEMORANDUM FOR

**Dr. J. Herbert Hollomon
Assistant Secretary for Science
and Technology
Department of Commerce**

SUBJECT: Scientific and Technical Study of Alaskan Earthquake

The President has asked the Office of Science and Technology to assemble a comprehensive scientific and technical account of the Alaskan earthquake and its consequences (attached). Although this effort may prove to be useful in certain aspects of reconstruction, which is being coordinated by the Federal Reconstruction and Development Planning Commission, the focus of our study will be on a thorough scientific evaluation, and on learning as much as possible from this earthquake. I am asking the National Academy of Sciences to provide a committee of highly qualified scientists and engineers who will be responsible for

- (a) outlining the types and sources of information needed for the guidance of the Federal agencies and private scientific groups;
- (b) analysing and interpreting the data and the reports provided by Government agencies, universities, and other sources;
- (c) preparing an appropriate report.

The detailed information on which this report will be based must be obtained in large part from the Government agencies, including the Coast and Geodetic Survey, which have conducted and are conducting observational and analytical studies relating to the Alaskan earthquake. Therefore, I should like you to appoint a representative of the Coast

and Geodetic Survey to meet with representatives of other Government agencies and my staff to assist in the study. The representative should be able to speak to the scientific aspects and to identify relevant information throughout the agency. In choosing your representative, please do not feel limited to the Washington area.

We hope to convene the agency representatives during the last week of May, and I shall appreciate being informed of your choice as soon as possible.

Dr. Robert G. Fleagle (Code 128, x 28443) will serve as my staff assistant for this study.

Donald F. Hornig

Enclosure

RGFleagle:hh

S&T

S&T

~~DPH~~

RGF

RGF

7 May 1964

MEMORANDUM FOR

**Dr. John C. Calhoun, Jr.
Science Adviser
Department of the Interior**

SUBJECT: Scientific and Technical Study of Alaskan Earthquake

The President has asked the Office of Science and Technology to assemble a comprehensive scientific and technical account of the Alaskan earthquake and its consequences (attached). Although this effort may prove to be useful in certain aspects of reconstruction, which is being coordinated by the Federal Reconstruction and Development Planning Commission, the focus of our study will be on a thorough scientific evaluation, and on learning as much as possible from this earthquake. I am asking the National Academy of Sciences to provide a committee of highly qualified scientists and engineers who will be responsible for

- (a) outlining the types and sources of information needed for the guidance of the Federal agencies and private scientific groups;
- (b) analysing and interpreting the data and the reports provided by Government agencies, universities, and other sources;
- (c) preparing an appropriate report.

The detailed information on which this report will be based must be obtained in large part from the Government agencies, including the Geological Survey, which have conducted and are conducting observational and analytical studies relating to the Alaskan earthquake. Therefore, I should like you to appoint a representative of the Geological Survey to meet with representatives of other Government agencies and my staff to assist in the study. The representative should be able

to speak to the scientific aspects and to identify relevant information throughout the agency. In choosing your representative, please do not feel limited to the Washington area.

We hope to convene the agency representatives during the last week of May, and I shall appreciate being informed of your choice as soon as possible.

Dr. Robert G. Fleagle (Code 128, x 28443) will serve as my staff assistant for this study.

Donald F. Hornig

Enclosure

RGFleagle:hh

S&T

S&T

~~DPH~~

RGF

RGF

7 May 1964

Dear Mr. Rosenbaum:

I am pleased to designate you as the Department of the Interior's representative on the Coordinating Committee on Materials Research and Development, and look forward to your continued participation in the work of this committee. Your experience and ability in this field has been a valuable contribution to this group, and I hope that as the Department's official representative you will continue to find your representation on this committee to be interesting and worthwhile.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. Joe B. Rosenbaum
Director of Metallurgy Research
Bureau of Mines
Department of the Interior
Washington, D. C.

cc: Robert L. Sproull,
Chairman, CCMRD

DZRobinson:hh

S&T

S&T

✓ DFH

DZR

DZR

7 May 1964

Dear Mr. Wells:

**I am pleased to designate you as an Alternate
for the Department of the Interior on the
Coordinating Committee on Materials Research
and Development.**

**I know that your experience and ability will be
a valuable asset to the group, and I hope that
you will find the meetings to be interesting and
worthwhile.**

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

**Mr. Rollian R. Wells
Assistant Director for
Metallurgy Research
Department of the Interior**

**cc:
Dr. Robert L. Sproull
Chairman, CCMRD**

DZRobinson:hh

S&T

S&T

~~DEH~~

DZR

D ZR

May 7, 1964

Dear Dr.. Garwin:

Thank you for the information recently provided to this office on the activities of IBM in the military aircraft and ASW fields, and your assurances in regard to safeguarding confidential information arising from your forthcoming studies and your future responsibilities for IBM in these areas.

This is also to indicate in the light of information on file with this office, that your current involvement in the work of the International Business Machines Corporation is not such as to be deemed likely to affect the integrity of the services which the government may expect from you in your forthcoming studies.

Sincerely,

Donald F. Hornig

Dr. R. L. Garwin
Watsons Research Lab.
Columbia University - IBM
New York 25, N. Y.

20306

May 7, 1964

Dear Lloyd:

Referring back to our discussion in the International Panel last Friday morning, Irv Tobin tells me that the proposal to have a full-scale review of the AID program came up again during the afternoon session. Apparently there were differences over timing, with a consensus favoring a one-day review in the early fall, but the question of a larger effort, such as a conference as you had earlier proposed, was left dangling.

I'm sorry I missed the afternoon discussion on this point, since before going down this road I would like to be clearer than I am now as to what we intend to accomplish by a PSAC review of the AID program. It would be very helpful to me if you could sketch out in a page or two where you think the emphasis should lie, and what in your judgment we should be shooting for. It would for example make a tremendous difference whether we were just making a review within the limits of the existing program as authorized by Congress or whether we were thinking of something much broader. Also, whether we are thinking just of an internal PSAC review, or of sponsorship of some wider conference with an expected public and Congressional impact.

Do let me have your thoughts on the whole sweep of the question. They will be of great help to me.

Sincerely,

(Signed) D.

Donald F. Hornig

Dr. Lloyd V. Berkner
President
Graduate Research Center, Inc.
P. O. Box 8478
Dallas, Texas 75205

IMTobin:gpw
bcc: Dr. Bronk
cc: S&T Files; S&T Chron; DFH Chron; IMT Chron

May 7, 1964

Dear Mr. Van Geuns:

**Thank you for sending me a copy of your
paper, "The Engineering of Peace."**

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

**Mr. Robert E. Van Geuns
Industrial and Economic Development
204 Bedford Road
Pleasantville, New York 10570**

SMK:bbi

7 May 1964

Dear Dr. Calhoun:

In accordance with your letter of April 8, I am pleased to designate Mr. Joe B. Rosenbaum as the Department of the Interior's representative, and Mr. Rollien R. Wells as his alternate, on the Coordinating Committee on Materials Research and Development.

Sincerely,

(Signed) Don

Donald F. Hornig

**Dr. John C. Calhoun, Jr.
Science Adviser
Department of the Interior
Washington, D. C.**

**cc: Dr. Robert L. Sproull,
Chairman, CCMRD**

DZRobinson:hh

S&T

S&T

✓DFH

DZR

DZR

May 8, 1964

Dear Mr. Clark and Mr. Lesgold:

I want to thank the Student Council of Steuben Junior High School again for presenting me with its first Distinguished Citizen Award. It is a very handsome present, and I thought I should report to you that it also writes beautifully. I have placed it proudly on my desk and am using it to sign all my papers and correspondence. I shall treasure it and the memory of the occasion.

It was a great pleasure for me to revisit Steuben, to see some of my old teachers and to meet at least some of the present teachers and students; I wish I could have met more. My visit has enhanced the pride I have always had in Steuben.

Sincerely yours,

Donald F. Hornig

Mr. Earl L. B. Clark
Principal
Mr. Steven M. Lesgold
Student Council President
Steuben Junior High School
Milwaukee 10, Wisconsin

DFH/eac

May 8, 1964

Dear Walter:

Thank you for your very kind letter. Yours were the friendliest words I have had from the Midwest re MURA.

I remember you well from Country Day days and hope everything is going well for you.

With best regards,

Sincerely,

Donald F. Hernig

Mr. Walter B. Clarkson
Clarkson Engineering Company
4411 West Montrose Avenue
Chicago, Illinois 60641

DFH/eac

▼

"C"

May 8, 1964

Dear Mr. McCuen:

Thank you for sending me the Temple University Alumni Review with the article on the Beury Hall dedication. It's a pleasant reminder of an occasion which I very much enjoyed.

Sincerely,

Donald F. Hornig

Mr. David H. McCuen
Editor
Temple University Alumni Review
Temple University
Philadelphia 22, Pennsylvania

eac

May 2, 1964

Dear Ray:

Thanks for your paper on the support of
computers. It makes excellent sense.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Raymond J. Woodrow
Director
Office of Research Administration
Princeton University
Princeton, New Jersey

DFH/eac

S&T Files
S&T Chron.
DFH Chron. ✓

May 8, 1964

Dear Herb:

The definition of scope for our National Oceanographic Program that you questioned recently has been under discussion ever since this area was selected for special emphasis. The definition of the word oceanography is neither clearly understood nor agreed upon. Moreover, there is a general problem in research planning of determining whether or not to include data collection activities when such information is motivated primarily for routine use, but incidentally can be employed by the scientific community in studying geophysical processes.

I am told that there are often advantages of closely relating oceanographic research and data collection activities; i. e., data collection may be standardized, data may be centrally stored, systematically and expeditiously exchanged, and advancement in instrumentation technology for research may be applied to improve the availability, reliability, and economy of data collection.

Others have raised the same question as you, but in the direction of including all the Navy's classified activities within the Inter-agency Committee on Oceanography. In any event, I suggest you solicit advice from the ICO as to whether the present scope of the National Oceanographic Program should be re-evaluated.

Sincerely,

(Signed) Don
Donald F. Hornig

Dr. J. Herbert Hollomon
Assistant Secretary for
Science and Technology
Department of Commerce
Washington, D. C.

In reply to S&T Cont 659

cc: DFH; S&T Chron; S&T Files (w/incoming correspondence); EW Chron;
EW Files (FCST-ICO)

May 9, 1964

Dear Senator Douglas:

I have given considerable thought to your letter of April 28th requesting that I intervene to halt or modify the statements from Health, Education and Welfare concerning interpretation of the spectrograms involved in the Krebsien controversy. We have consistently tried to remain entirely neutral in this matter in order to be able to keep open the lines of communication in the hope and expectation that a satisfactory outcome can be arranged. This seems to me to be the first priority and I do not wish to do anything at this time to upset that possibility.

I am most reluctant therefore to consider any direct intervention in the operating functions of HEW.

Sincerely yours,

(signed) Don

Donald F. Hornig

Honorable Paul H. Douglas
United States Senate
Washington, D. C.

CMM:mts

cc: Dr. Hornig chron ✓

Dr. Bing

CMM subj. and chron

S&T file and chron

In reply to S&T Cent. No. 640

W.H. Files (3)

11 May 1964

Dear Mr. McCone:

The CIA report "Soviet Research on Atmospheric Turbulence and Diffusion" dated 3 April 1964 has come to my attention. There are two aspects of the report which are worth special note.

3.3
(b)(1)

1. The report, which concerns a specialized scientific field of some complexity, is a thorough and perceptive summary of research which is of great potential value to specialists in this country. The project officer, [REDACTED] is to be commended for his part in producing the study.

2. This report would have its greatest value for scientists interested in research in atmospheric turbulence and diffusion. It is all to the good, therefore, that a summary of the report in disguised form has been published in the open literature. The summary is less valuable than the full report, however, and I suggest that classification (except for aerial photographs) may not have been desirable in this case. Perhaps a sanitized version ought to be released.

Sincerely,

(Signed) Don

Donald F. Hornig

Honorable John A. McCone
Director
Central Intelligence Agency
Washington, D. C.

RGFleagle:hh
S&T
S&T
DFH

RGF
RG F

SANITIZED
E.O. 13292, Sec. 3.5
NLJ 04-133
By ius, NARA, Date 10-18-04

May 11, 1964

Dear Dr. Price:

Thank you for sending me the manuscript of your symposium talk "Ethics of Scientific Publication." I wish I could have heard it, but I enjoyed reading it. While I do not concur in all of your judgments in detail, your general point is well taken and should prove stimulating in Science. I will be interested in the response you get.

Sincerely,

Donald F. Hornig

Dr. Derek J. de Solla Price
Chairman
Department of History of Science
and Medicine
Yale University
Box 2036, Yale Station
New Haven, Connecticut

DFH/eac

"p"

11 May 1964

Dear President Wood:

The initiative which the University of Alaska has taken in providing for the timely collection of data relating to the March 27 earthquake is greatly appreciated by the scientific community. This action will insure that unique data will be available for use in planning for reconstruction and in scientific studies.

In response to a request by the President to undertake to assemble a comprehensive scientific and technical account of the earthquake, I have asked the National Academy of Sciences to assume central responsibility for insuring the scientific adequacy and completeness of the study. The letters setting this study in motion are attached. Although the Academy committee has not yet met, I am sure that the steps which the University of Alaska has already taken can be most valuable to the Academy study. Therefore, I should like to request your assistance and cooperation in making the results of this study available to the Academy committee.

Please let me know if my office can be helpful in the coordination of the earthquake studies.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Dr. William R. Wood
President
University of Alaska
College, Alaska

RGFleagle:hh

&ST S&T

RGF RGF

~~DFH~~

Enclosures:

1. Ltr, President to DFHornig, 5/2/64
2. Ltr, DFHornig to FSeitz, 5/7/64
3. Memo, DFHornig to LJHaworth, 5/7/64

11 May 1964

Dear Mr. Drekolias:

This is in reply to your telegram to the President of April 23, in which you state your needs in order to industrialize your scientific works for:

1. A grant of \$100,000;
2. Initial loan of \$10 million to establish a research laboratory and pilot plant; and
3. Coastal land of about 50 square miles, with five miles waterfront, for scientific, technological, educational, and residential structures.

I am sorry that in general the Federal Government does not at present give grants for economic development. Normally, economic improvements of the kind you wish are carried on through private support of funds. However, you might wish to inquire from the Area Redevelopment Administration or the Small Business Administration with regard to possibilities for technical assistance contracts or small loans for your program.

We appreciate your letting us know your views on this matter.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. Adam T. Drekolias
312 North Montgomery Avenue
Sheffield, Alabama

DZROBINSON:hh
S&T S&T
DZR DZR

~~DPH~~
WH

WH WH

May 12, 1964

MEMORANDUM FOR


Kermit Gordon

Since our luncheon with Mr. Hollifield concerning his letter to the President, additional public discussion, such as Mr. Ramey's speech, for example, has persuaded me that a letter reply from the President outlining our basic policy would help clear the air of misconceptions.

Attached is a draft which I have checked out with Harold Brown. To make the letter follow reasonably close after the public statements which give us a justification for sending it, I would like to try to get it across the street in the next couple of days.

I will appreciate your comments.

D. F. Hornig

 DFH Chron
DHS Chron
DHS Subj
S&T Chron
S&T Subj

DHS:hk

AIRMAIL

May 12, 1964

Dear Dr. Kolb:

Thank you for your letter of May 5, inviting me to attend the Alaskan Science Conference to be held September 1st through 4th. I would very much like to attend, but I expect to be out of the country during the first part of September. However, I would like to visit Alaska and hope that it will be possible to do so. I have read the material you sent on the conference, and I think it is an important event. I hope it will be highly successful.

Sincerely,

Donald F. Hornig

Dr. Charles R. Kolb
Research & Development
Office, Alaska
APO #371
Seattle, Washington

DFH/eac

Invitations regretted A

May 12, 1964

MEMORANDUM FOR

Walter Jenkins

As I told you on the phone, I would not regard as acceptable any solution to the space problems of OST, the Special Assistant for Science and Technology, and PSAC which moved them further from the White House, physically or symbolically.

The office is not an Independent Agency. It was set up to provide staff support for the President, the Special Assistant and the President's Science Advisory Committee; in the language of Reorganization Plan No. 2, which established it, "... staff resources capable of advising and assisting the President on matters of national policy affected by or pertaining to science and technology." The Science Advisory Committee is appointed by the President and its members are part of the White House staff. If the tie to the White House is attenuated, the enthusiasm of outstanding people and their willingness to spend up to 50 days per year working for the President's Science Advisory Committee would certainly diminish. I think, for example, that to move their meeting place from EOB might actually bring resignations.

There is a more practical problem. The main other task of the office is to integrate and coordinate the \$15 billion R&D program of the Federal Government. This requires close coordination between my staff and that of the Bureau of the Budget, who are presently down the hall. I think it fairly essential, therefore, that OST and BOB be in the same building.

I appreciate your problems regarding space in the EOB. Nevertheless, our immediately critical problem is to find an office for Dr. Patrick Conley, who has left his post as Vice President of Westinghouse to come here

- 2 -

at great financial sacrifice. He presently shares a secretary's office, and we must do something more for him. Can't we find either an office for him and a secretary, or a single large office we could partition?

Donald F. Hornig

DFH/eac

DFH Chron. ✓

S&T Files

S&T Chron.

Mr. Barlow

Mr. Beckler

May 12, 1964

Dear Mr. Secretary:

**I much appreciate your generous
response to my request for Dr. John L.
Buckley's services. We certainly
shall encourage Dr. Buckley to complete
his obligations for your department as
promptly as possible.**

Sincerely yours,

Donald F. Hornig

**Honorable D. Otis Beasley
Assistant Secretary of the Interior
Washington, D. C. 20240**

**JLB/jm Chron
Dr. Hornig Chron ✓
S&T Chron
S&T File - Central Files**

May 12, 1964

Dear Dr. Netterberg:

Thank you for your letter of May 6th
and the enclosures. I shall submit them for
advice from people thoroughly competent
in this field.

Sincerely yours,

Donald F. Hornig

Dr. Robert E. Netterberg
22 West Front Street
Butte, Montana

PSB/ems Chron
✓DFH/Chron
S&T File Cancer
S&T Chron

Dear

OX M QUICK COPY

Thomas F. Anderson, Inst. for Cancer Research, U. of Pennsylvania

Jim James R. Arnold, Proffesor of Chemistry, U. of Calif.

Lipman Bers, Prof. of Math., N. Y. U.

Raoul Bott, Prof. of Math., Harvard

Louis B. Flexner, Prof. of Anatomy, U. of Penn.

Alfred Gilman, Prof. of Pharmacology, Yeshiva U.

Robert J. Braidwood, Prof. of Anthropology, U. of Chicago

Jule G. Charney, Prof. of Meteorology, MIT

Done David Y. Curtin, Prof. of Organic Chemistry, U. of Ill.

Philip J. Darlington, Jr. Prof. of Zoology, Harvard

Freeman Freeman J. Dyson, Prof. of Physics, Institute for Advanced Study

Harold Harold E. Edgerton, Prof. of Electrical Eng., MIT

Walter Walter Gordy, Prof. of Physics, Duke

Phil Philip Handler, Prof. of Biochemistry, Duke

George H. Herbig, Assistant Dir., Lick Observatory

Fritz John, Prof. of Mathematics, NYU

Walter J. Kauzmann, Prof. of Chemistry, Princeton

Eugene P. Kennedy, Prof. of Biological Chemistry, Harvard Medical School

Otto Kreyer, Prof. of Pharmacology, Harvard Medical School

Stephen W. Kuffler, Prof. of Neurophysiology, Harvard Medical School
Tsung-Dao Lee, Prof. of Physics, Columbia
Hans Lewy, Prof. of Math., U. of Calif.
Oliver Howe Lowry, Prof. of Pharmacology, Washington U. School of Medicine
Clark B. Millikan, Prof. of Aeronautics, Cal. Tech.
George P. Murdock, Prof. of Social Anthropology, U. of Pittsburgh
William D. Neff, Prof. of Psychology, Indiana U.
Keith R. Porter, Prof. of Biology, Harvard U.
John R. Raper, Prof. of Botany, Harvard U.
Oscar Oscar K. Rice, Prof. of Chemistry, U. of North Carolina
Kenneth D. Roeder, Prof. of Physiology, Tufts U.
Earnest R. Sears, Senior Geneticist, U. S. D. A.
Dick Richard B. Turner, Prof. of Chemistry, Rice
Chaves Cheves T. Walling, Prof. of Chemistry, Columbia
Aaron C. Waters, Prof. of Geology, U. of Calif.
Thomas H. Weller, Prof. of Tropical Health, Harvard School of Public Health

XEROX FROM QUICK COPY

May 12, 1964

Dear Dr. Anderson:

I was delighted to learn of your election to the National Academy of Sciences and would like to offer my congratulations. The recognition is certainly a well-deserved one. I look forward to the opportunity of seeing you at future Academy meetings.

With best wishes,

Sincerely,

Donald F. Hornig

Dr. Thomas F. Anderson
Institute for Cancer Research
University of Pennsylvania
Philadelphia, Pennsylvania

cac

Identical letters sent to those on attached list

W.F.H. ✓

May 13, 1964

Dear Miss Ennis:

Thank you for sending me Jeremy Bernstein's new book, **THE ANALYTICAL ENGINE: Computers, Past, Present and Future**. I have not yet had an opportunity to read it, but look forward to doing so in the near future.

Sincerely,

Donald F. Hornig

Miss Jean Ennis
Random House, Inc.
457 Madison Avenue
New York, N. Y.

DFH:mts

May 13, 1964

Dear Dr. Gelbart:

Thank you very much for inviting us to the Distinguished Science Award dinner. It was kind of you to think of us but it will be quite impossible for me to be away from Washington that evening. Both Lilli and I will miss not only the ceremony but the pleasure of seeing you again.

With best regards,

Sincerely yours,

Donald F. Hornig

**Dr. Abe Gelbart, Dean
Belfer Graduate School of Science
Yeshiva University
New York, N. Y.**

DFH:mts

Invitations Regretted

AFTER SIGNATURE, PLEASE RETURN THIS COPY TO DR. D. F. HORNIG,
DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY.

Dear Mr. Marshall:

Please accept my warm personal greetings on the dedication of the new headquarters building of the American Society for Testing and Materials.

The United States Government fully recognizes the substantial contributions made by the Society to the development of knowledge about materials. ASTM's work has been of great importance to this country in two World Wars, and has furthered the peacetime development of the country's engineering and scientific professions.

I would note especially the fine record of cooperation between the Society and the Federal departments and agencies.

In promoting knowledge of the materials of engineering, and the standardization of specifications and methods of testing, the Society has developed important scientific data that has aided the national and international trade and commerce.

I salute the 12,000 members of ASTM and I urge them to continue to perpetuate the high standards achieved by the Society.

Sincerely yours

Mr. Thomas A. Marshall, Jr.
Executive Secretary
The American Society for Testing
and Materials
1916 Race Street
Philadelphia 3, Pennsylvania

LBJ:DFH:RB:jsn
cc: President's Files
w/incoming
White House Files (2)
Dr. Hornig
RBarlow subj & chron
S&T file & chron

In reply to S&T Control 0612

XEROX FROM QUICK COPY

13 May 1964

MEMORANDUM FOR

**Dr. Leland J. Haworth
Director
National Science Foundation**

SUBJECT: Upper Mantle Budget Issues

In order to help the Office of Science and Technology and the Bureau of the Budget in projecting the outlines of the FY 66 budget, I should appreciate having a brief report from the National Science Foundation which was designated in Dr. Wiesner's letter of April 17, 1963 to Dr. Waterman as the lead agency for the government supported program. The following questions are of particular interest at this time:

1. In what programs are there evidences of significant progress?
2. What programs appear to be making little headway, and for what reasons?
3. What evidence is there of increasing basic strength in national manpower and in university research capability?
4. What evidence is there of increasing strength in agency in-house manpower?
5. What significant budget issues have been identified? Please support with a brief analysis.
6. Will agency activities related to the Alaskan earthquake have an important impact on the Upper Mantle Project?

(signed) Don

Donald F. Hornig

RGFLEAGLE:hh

S&T

S&T

~~DFH~~

RGF

RGF

cc:

E. Wenk

D. Z. Robinson

May 13, 1964

MEMORANDUM FOR

Kermit Gordon

Subject: Position Levels Under Executive Pay Bill

Reorganization Plan No. 2 of 1962 provides for a Director and a Deputy Director of the Office of Science and Technology, both of whom are appointed by the President by and with the consent of the Senate. The Reorganization Plan fixes the current salary of the Director at \$22,500, and the salary of the Deputy Director at \$20,500.

H. R. 11049 would explicitly place the OST Director in Level II. The Deputy Director's position, I believe, should logically be established at Level IV.

I should also like to urge strongly that two positions on the OST staff, currently at the GS-18 level, be included in Level V under the terms of H. R. 11049. These are the top executive staff positions for the two major boards which this Office serves: the President's Science Advisory Committee and the Federal Council for Science and Technology.

Both of these positions require executive competence in the broadest sense - determining issues for the consideration of the board; carrying out the board's decisions and directives; mobilizing staff resources, including those of other agencies where appropriate; and continuing contacts at Cabinet and sub-Cabinet levels, with members and key staff of the Congress, and with the nation's outstanding scientists and

research administrators. The incumbents in these two positions also serve as the principal assistants to the Director and Deputy Director of this Office.

Current descriptions of these two positions, as approved by the Civil Service Commission, are attached.

(Signed) Don

Donald F. Hornig

Attachments

RBarlow:jan

cc: DFH chron

Mr. Beckler

RBarlow subj & chron

S&T file & chron

Carl Schafer, BoB

Dr. Wenk

May 13, 1964

MEMORANDUM FOR

**Mr. Frederick L. Holborn
The White House**

Attached is a message suggested for Presidential transmittal to the Los Angeles Council of the National Council of Negro Women, on the occasion of its first annual Tribute-Awards Luncheon. The relevant correspondence is also attached.

I note that May 20 is the Council's deadline for printing the programs which would contain any Presidential message.

(signed) Donald F. Hornig

Donald F. Hornig

Attachments

RBarlow:jsn
cc: DFH chron ✓
RBarlow subj & chron
S&T file & chron

Ref: S&T Cont, No. 0655

**Suggested Message from President Johnson
to the
Los Angeles Council of the National Council of Negro Women
on the
Occasion of its First Annual Tribute-Awards Luncheon**

June 7, 1964

**It gives me the greatest pleasure to send good wishes to you of
the Los Angeles Council of the National Council of Negro Women, on
the occasion of your First Annual Tribute-Awards Luncheon.**

**The talents and the contributions which you are honoring at
this time are very heart-warming to me. It is terribly important
that every person in this country have the fullest opportunity to develop
all of his abilities, and to serve his country and his fellow men and
women productively and with satisfaction. I can't tell you how pleased
I am that progress is being made in this direction, and that it is being
recognized and encouraged by groups such as yours.**

**I should like to extend my personal congratulations to each of
the ladies being honored for their achievements in the arts and sciences.
May your accomplishments be an inspiration to others to achieve
self-fulfillment and to make this a better world.**

May 13, 1964

Dear Dr. Wild:

Thank you for your letter of April 3, 1964, in which you describe your experiences with the National Institutes of Health, relative to the support of your research.

My staff has discussed your problems extensively with representatives of the NIH and has concluded that in the absence of a sponsoring organization, the Institutes are not able to provide grant funds to any investigator. They have also concluded that the communication between the NIH and yourself has been adequate to inform the Institutes of the details of your situation.

I hope that you will be successful in your efforts to continue your research and that your future relationships with the NIH will be more satisfactory.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig
Director

Dr. John J. Wild
1100 East 36th Street
Minneapolis, Minnesota 55407

PSB/ems Chron
✓ DFH/Chron
S&T File NIH General
S&T Chron

AIRMAIL

May 14, 1964

Dear Viki:

Thank you very much for your letter of May 6. There are still many troubles ahead but I don't doubt that we shall continue to move ahead in high energy physics.

I shall be in Geneva this fall and will look forward to talking with you then.

With best regards,

Sincerely,

Donald F. Hornig

Dr. Victor F. Weisskopf
European Organization for
Nuclear Research
Geneva 23 CERN
Switzerland

DFH:mts

20506

May 14, 1964

Dear John:

In response to your request, I am enclosing a copy of the submission by this Office to the Appropriations Committees in connection with the FY 1965 Budget, together with copies of my statements this spring before the two Subcommittees on Independent Offices. This material comprehensively describes what the Office does and what its budgetary and personnel status is. A Table of Organization is included as the last item in the supporting material for the appropriations request.

I should like to point out that the total complement of the Office for both FY 1964 and FY 1965 is 34 permanent positions, of which the 15 listed on the Table of Organization are professional. The Office is now fully staffed at this level. Professional personnel also serve with the Office on loan from other agencies as special needs arise.

The figures which you noted in the Congressional Record reflect the use of consultants by the Office. This use is very intensive and may vary widely from month to month.

I hope this material meets your needs, and will be glad to provide additional information if you require it.

Sincerely,

(signed) Don

Donald F. Hornig

Enclosure

Mr. John T. Conway
Executive Director
Joint Committee on Atomic Energy
Congress of the United States
Washington, D. C.

RBarlow:jan
cc: White House Files (3)
DFH chron ✓
Mr. Beckler
RBarlow subj & chron
S&T file & chron

In reply to S&T Cont. No. 0714

May 14, 1964

Dear Mr. Werthington:

Thank you for the invitation to the Greenbrier meeting extended in your letter of 8 May.

Previous commitments will prevent my being there. However, I would like to have Dr. Patrick Conley of Office of Science and Technology attend in my place.

Dr. Conley will plan to arrive Monday morning and depart Wednesday afternoon. I would appreciate your securing room reservations for Monday and Tuesday evenings.

Sincerely,

D. F. Hornig

**Mr. C. G. Werthington
Secretary-Treasurer
Industrial Research Institute, Inc.
100 Park Avenue
New York 17, N. Y.**

**DFH Chron
PC Chron
PC Subj
S&T Chron
S&T Subj**

PC:hk

May 14, 1964

Dear Mr. Germany:

Your letter of April 20, addressed to President Johnson, has been referred to me for reply. I have read the file of previous correspondence with care but find it hard to agree with all of your conclusions. There is no question that the management of our very large research and development enterprises can be improved but I can find no evidence of the gross mismanagement which you allege but do not document.

We are most interested in handling scientific information expeditiously and for several years have been actively exploring the use of computers for this purpose. As you are undoubtedly aware, there are already a number of computer based or computer assisted information systems in active operation but it seems clear that more exploratory work needs to be done before a central information system could be considered.

Sincerely,

(Signed) Donald F. Hornig

Donald F. Hornig

Mr. O. Germany
Germany, Klees and Bliven, Inc.
18650 West McNichols Road
Detroit 19, Michigan

DFH:mts

cc: WH Files (3)

Dr. Hornig Chron ✓

Dr. Kelley subj. & chron

S&T file and chron

In reply to S&T Cont. No. 618

May 14, 1964

Dear Dr. Miller:

**Your letter of May 8th addressed
to the President has been referred to me
for reply.**

**Thank you for enclosing a copy of
the resolution passed by the Intersociety
Committee for Research Potential in Pathology
and also for your interest and support in
this important matter.**

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

**Dr. C. Arden Miller
Dean of the Medical School
and Director of the Medical Center
University of Kansas Medical Center
Kansas City, Kansas**

**JLB/jm Chron ✓
Dr. Hornig Chron
S&T Chron
S&T File -Central Files
White House copies (3)**

S&T CONT. NO. 0711

May 14, 1964

MEMORANDUM FOR

Mr. Frederick L. Holborn
The White House

Based on what we have been able to learn from the National Science Foundation regarding Mr. Lukens, the subject of the attached correspondence, I really think it is inappropriate for the President to send a message of any kind. The Lukens program, for example, is only 1 of 185 in its general class receiving support this summer from NSF.

Mr. O'Brien will presumably want to respond to Senator Muskie's letter.

(signed) Donald F. Hornig

Donald F. Hornig

Attachment

RBarlow:jsn
cc: DFH chron ✓
RBarlow subj & chron
S&T file & chron

In reply to S&T Cont, No. 0717

SECRET

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY
WASHINGTON

May 15, 1964

Dear Walter:

The Federal Council for Science and Technology has recently completed a survey of Federal requirements for funds and manpower in research and development, projected through 1970. Because of the potential value of long range technical planning to studies of the impact of Federal R&D activities on economic development, I thought you would be interested in having the attached copy.

At its most recent session, the Federal Council determined that it should continue working toward Government-wide planning, but possibly extending its scope to examine economic as well as technological factors when assessing merits of alternative R&D programs, considered for future Government support. Dr. William Capra from your office participated in these discussions, and a copy of the Council minutes is enclosed.

This is an exceedingly complex area, and one on which more intimate collaboration with the Council of Economic Advisors and the Bureau of the Budget will be needed. I should like to propose that staff from our offices meet shortly to develop plans for further consideration of the Federal Council.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Walter Heller
Chairman
Council of Economic Advisors
Washington, D. C.

Enclosures

cc: DFH; S&T Chron; S&R Files; EW Chron; EW Files (FCST Long Range Planning Com)

944 10/19/73

15 May 1964

Dear Governor Hughes:

Thank you very much for your letter of April 17, which discusses the desire of Stevens Institute of Technology for support from the National Aeronautics and Space Administration to establish a Center for Fluid Dynamics.

The decision as to whether NASA can support such a center depends on the funds available to it and the scientific desirability for supporting such a center, and the relevance of this center to the national space program. NASA gets many more proposals than it can support, and it must be extremely selective. I know that NASA has had discussions with Stevens Institute and will consider its proposal carefully. NASA, of course, has the prime responsibility for making the decision of program relevance and need.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Richard J. Hughes
Governor of New Jersey
Trenton, New Jersey

DZRobinson:hh

&ST

S&T

DFH

DZR

DZR

S&T 0617

20506

15 May 1964

Dear Mr. Skipper:

Thank you for your letter of April 24 which raises some unusual aspects of the problems in standardizing documents used by the government agencies and in the non-government library services.

With regard to your interest in obtaining observer status in the Committee on Scientific and Technical Information (COSATI), I am sure you will appreciate the fact that COSATI, being a Committee of the Federal Council for Science and Technology, is an organization of government people established for the coordination of the scientific and technical programs of the various member agencies. As such, neither the Federal Council nor its committees have members or observers who are not government employees. Although your reasons are quite valid that having a strong liaison between those in the non-government sector and COSATI would render benefits, I do not believe that we should deviate from this policy at the present time.

The issue you raise, however, might be solved by other means. For example, in other areas of science and technology we call together consultant groups and convene panels either under the aegis of the Office of Science and Technology or the President's Science Advisory Committee, to provide necessary liaison between the government and non-government interests. This mechanism has proven effective in the past and it may be an opportune time to consider the same kind of mechanism now in the area of documentation standards and compatibility.

I greatly appreciate the manner in which you have acted as a catalyst in bringing the ad hoc group together to resolve some of the cataloging inconsistencies. I hope these meetings will continue because I have a strong personal interest in this matter.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. James E. Skipper
Executive Secretary
Association of Research Libraries
1755 Massachusetts Avenue N. W.
Washington, D. C. 20036

cc: Messrs. David Clift - American Library Assn.
Wm. Woods - Special Libraries Assn.

JHKelley/lac

CC: LtGen Wm. J. Ely, Chron, Cosati
Mrs. D. F. Spiegel, Exec. Secy, Cosati
Dr. Edw. Wenk
✓ Dr. D. F. Hornig
JHK file - chron
OST file - chron

SECRET

May 18, 1964

Dear Mr. Secretary:

I was pleased indeed to have the opportunity, albeit brief, to explore with Stanley Rittenberg and others of your staff some of the questions concerning scientific and technical manpower on which the President's Committee might initially focus its attention.

Two studies undertaken through our office were mentioned in the course of our discussion, and copies are attached herewith for possible use by your staff.

The first report, entitled "An Analysis of Fiscal and Manpower Projections Through 1970 for Federal Research and Development," (classified SECRET) contains a summary of results and general observations from a long range planning survey undertaken by the National Science Foundation in collaboration with the Federal Council for Science and Technology. Certain elements of statistical data are currently being updated, and supplements to the attached report will be forwarded as soon as available.

The second study concerning problems in manpower statistics, projections and analysis was undertaken by the President's Science Advisory Committee's Panel on Scientific and Technical Manpower. A copy of the most recent draft (April 15) is enclosed, although I understand it is undergoing further extensive revision.

An OST staff paper briefly analyzing issues in coordination of information and policies concerning scientists and engineers, following up April 10 presentations to the Federal Council, was made available to Mr. Rittenberg at our conference.

SECRET

this transcript

Unclassified.

94H 10/19/73

SECRET

I hope that you and your staff will call on our office if we can be of further assistance in preparing for the forthcoming meeting of the new President's Committee on Manpower.

Sincerely,

(signed) Don

Donald F. Hornig

Honorable W. Willard Wirtz
Secretary of Labor
Washington, D. C.

Enclosures

bcc: DFH; S&T Chron; S&T Files; EW Chron; EW Files (President's
Committee on Manpower)

SECRET

When the attachments are removed,
this transmittal letter becomes
Unclassified.

20906

May 15, 1964

Dear Mr. Beal:

I am sorry to be slow in replying to your letter of March 20. Like Dr. Wiesner, I am interested in improving instruction in science in the schools. The best way to answer your letter is by reviewing the present situation.

Funds are currently available, of course, for development and demonstration projects in curriculum development and teacher education--from the Division of Educational Research in the U. S. Office of Education and from the Division of Scientific Personnel and Education in the National Science Foundation.

Legislation is now pending before Congress that bears on school construction. Whether this will lead to funds being made available for the establishment of high schools of science is something else again.

The National Education Improvement Act, introduced in 1963, has provisions for school construction. Under Title IV, funds could be sought for a high school of science if included in a State plan. The bill is before Congressman Powell's Committee on Education and Labor and Senator Hill's Committee on Labor and Public Welfare. Unfortunately, the hopes for getting the bill through Congress are not very high.

There is more hope for the new anti-poverty bill or Economic Opportunity Act of 1964. Funds for building new schools can be sought under Title II. But, so far as it affects education, the explicit purpose of this bill is to improve education--to be sure, all kinds of education--offered in urban slums and rural depressed areas.

Sincerely,

Donald F. Hornig

Donald F. Hornig

Mr. Frank S. Beal
143 Westward Ho Drive
Pittsburgh 35, Pennsylvania

JTurner/ekb
OST file - chron
JT file - chron
✓ Dr. Hornig chron

May 18, 1964

Dear Tuffy:

Thanks for the copy of your speech.

**I don't think it's that black but you make
some good points.**

Sincerely,

Donald F. Hornig

**Dr. T. L. Taylor
Department of Chemistry
Columbia University
New York, N. Y.**

DFH:mts

May 18, 1964

Dear Ellis:

Thank you very much for your invitation to attend the 1964 Gordon Conference on Infrared Spectroscopy to be held August 23 through 28 at Kimball Union Academy. Although the program looks very interesting, I cannot tell at this time whether it will be possible for me to attend. However, if I find that my schedule permits, I shall most certainly let you know.

Sincerely,

Donald F. Hornig

Dr. Ellis R. Lippincott
Department of Chemistry
University of Maryland
College Park, Maryland

DFH:mts

Invitation regretted

20506

May 18, 1964

Dear Dr. Hutchisson:

Your letter of February 13 was helpful in stimulating my interest in the ratification of the Florence Agreement.

As you know there were some problems in the compatibility of the Agreement with the U. S. Tariff terminology and this has required considerable work prior to submission of the bill to the Congress. I agree with you as to the importance of the Agreement and will do what I can to encourage its early ratification.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Elmer Hutchisson
Director
American Institute of Physics
335 East 45th Street
New York 17, New York

IMTobin:gpw

cc: S&T Files
S&T Chron
IMT Chron
DFH Chron ✓

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY
WASHINGTON

May 18, 1964

Dear Mr. Schachter:

Your inquiry to President Johnson as to possible geographical areas of professional manpower shortages has been referred to my office for study and reply.

The problem that you have encountered in finding employment, notwithstanding specialized training and experience in space physics, reflects somewhat curtailed recruitment by defense-oriented industries during the past year. Such relaxation in a previously tight labor market is certainly related to a leveling off of Federally-sponsored research and development, coupled with changes in contract procedures. Some dislocation is inevitable whenever there are program cancellations, and we have come to recognize the associated mobility of professional staff as a characteristic of this market deserving accelerated study. It certainly will be one of the topics to be given priority attention by the recently established President's Committee on Manpower.

Information as to areas having well identified shortages of physicists has not been developed systematically. However, the Department of Labor informs us that reports coupled with 77 job vacancies listed with the USES Professional Office network showed hard-to-fill demand located in Washington, D. C. and in Southern California. Multiple vacancies were also identified in Los Angeles; St. Louis; Binghamton, N. Y.; Colorado; Boston and Columbus, Ohio.

They suggest, incidentally, that you contact the New York State Employment Service Professional Placement Center at 444 Madison Avenue, New York City, where interviewers could

-2-

help pinpoint a job search by reviewing your qualifications in relation to these and other vacancies they may have listed.

I hope this information may be of some assistance.

Sincerely,

(signed) Donald F. Hornig
Donald F. Hornig
Director

Mr. Richard Schachter
125-16 83rd Drive
Kew Gardens 15, New York

cc: White House Records (2)

bcc: DFH; S&T Chron; S&T Files (w/incoming correspondence);
EW Chron; EW Files (PSAC Manpower)

In Reply to S&T Cont. 661

20506

May 13, 1964

Dear Mr. Remke:

Through Congressman Price I have received your application for a position with the Federal Government and have reviewed it carefully. Unfortunately there are no positions whatever available in this Office, and no vacancies are in prospect.

The most suitable opportunities for one with your engineering background might be in one of the major technical program agencies such as the Defense Department, NASA, or the AEC. I suggest that you contact one or more of these agencies, and wish you success in locating satisfying employment.

Your Form 57 is returned herewith.

Sincerely yours,

(s/smd) Donald F. Hornig

Donald F. Hornig

Enclosure

Mr. Charles Remke
No. 5 Estellelane
East St. Louis, Illinois

cc: Congressman Price
White House Files (3)
DFH chron ✓
RBarlow subj & chron
S&T File & chron

In reply to S&T Cont. No. 0728

20506

May 12, 1964

Dear Congressman Price:

Enclosed is a letter to Mr. Charles Reunke in response to his expression to you of interest in employment. I regret very much that I know of no suitable position to which to guide him.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Enclosure

Honorable Melvin Price
House of Representatives
Washington, D. C.

RBarlow:jcn
cc: White House Files (3)
DFH chron
RBarlow subj & chron
S&T file & chron

In reply to S&T Cont. No. 0728

THE WHITE HOUSE
WASHINGTON

May 19, 1964

Dear Congressmen:

Your inquiry to Mr. Lawrence O'Brien concerning Congressman Bob Wilson's proposal to establish a National Oceanographic Agency has been forwarded to me for comment.

The importance of oceanography to the Nation has been previously associated by the Administration, most recently in President Johnson's March 19 letter to the Congress transmitting details of research contained within the proposed FY 1965 budget. Such a program is intended to enhance our military defense, to develop marine mineral and fishery resources, to control pollution, to predict more accurately storms and tides that endanger life and property, to assist in development of wise legislation and regulation of commerce on the sea, and to extend scientific knowledge generally. In view of these objectives, we very much share the general purposes of Congressman Wilson's legislation to insure the existence of the most appropriate organizational framework in which Federal policies and programs in oceanography will flourish.

There is, however, one major problem with the proposed legislation. Section 4 would transfer to the proposed National Oceanographic Agency all functions related to oceanography now vested in other departments and agencies of the Government. This mechanism would combine from some 20 Federal bureau functions that are integral to accomplishment of their broad statutory missions which currently relate to oceanography. Thus what the bill envisions as a benefit in the coordination of a multi-agency program would be more than offset by a loss in effectiveness because the result would make exceedingly cumbersome the direct utilization of oceanographic knowledge in the accomplishment of agency missions.

The Navy Department, for example, draws on oceanography in development of its POLARIS seabased deterrent and its capabilities in anti-submarine warfare. The Bureau of Commercial Fisheries studies the ocean to determine means of improving productivity of our fishing industry. The Coast and Geodetic Survey provides

charts for safe navigation and data for the development of natural resources. The Weather Bureau must study the interrelationship of ocean and atmosphere to carry out its responsibility for weather forecasting. The Geological Survey, Maritime Administration, Corps of Engineers, Bureau of Sport Fisheries, Bureau of Mines, Atomic Energy Commission, Public Health Service, the Coast Guard and the Smithsonian Institution similarly have specific missions which depend on knowledge of the sea. Finally, the National Science Foundation sponsors oceanographic research with the objective of developing a broad base of fundamental knowledge and of trained manpower upon which Federal agencies and the country as a whole may draw to maintain this Nation's pre-eminence in this important field.

Because of the number of agencies engaged in this endeavor, we have taken special steps to assure both a vigorous program and ample coordination. The Office of Science and Technology and the Federal Council for Science and Technology foster interagency planning, results of which are summarized in annual reports to the Congress setting forth Government-wide goals, programs and budgets.

Some measure of support in this important field may be gained from the trend in Federal obligations, growing from \$42 million in FY 1961 to \$138 million in the FY 1965 budget now before the Congress.

We have given Congressman Wilson's proposal careful study and trust these brief comments may be of assistance in your consideration of further developments in oceanography.

Sincerely,

(Signed) Donald F. Hornig

Donald F. Hornig

Honorable Lucien N. Nedel
U. S. House of Representatives
Washington, D. C.

EWash/fb

bcc: Mr. Lawrence O'Brien
White House Records (2)
Joan Lewis

DFH: S&T Chron; S&T Files (w/incoming
correspondence); EW Chron; EW Files (Ocean-
graphy-legislation)

In reply to S&T Cont. 680

20506

May 20, 1964

MEMORANDUM FOR

**The Secretary of the Interior
The Secretary of Commerce
The Secretary of Defense
Chairman, Atomic Energy Commission
Chairman, Council of Economic Advisers
Chairman, Federal Power Commission
Director, Bureau of the Budget
Director, National Science Foundation
Director, Office of Emergency Planning**

SUBJECT: Interdepartmental Energy Study

Enclosed is a copy of a new draft of the staff report prepared under Dr. A. B. Cambel's direction on behalf of the Interdepartmental Energy Study. This draft is substantially reduced in volume from the preliminary draft which you commented upon last fall, and has incorporated many of your previous comments.

It appears to be a useful step, preparatory to the next Steering Committee meeting, to have an interagency staff discussion of the present document. This should afford an opportunity to resolve some of the remaining issues, and to identify those which require the attention of the Steering Committee. Accordingly, I should like to ask you to designate a single representative from your agency who can spend a day at a meeting with the authors of the report to give the document a final review at the staff level. This meeting is scheduled for Friday, June 5 in Room 213 of the Executive Office Building, and will begin at 9:00 a.m.

The Steering Committee must determine what steps should be taken next, and I shall call a meeting shortly for that purpose.

It could, for example, include its own conclusions and recommendations in the staff document and publish the whole as a single package. My own suggestion, however, is that the staff report be published as a monograph without formal concurrence or endorsement by the Steering Committee, with the Steering Committee separately issuing its own conclusions and recommendations for action.

A summary of the principal findings and conclusions of the study staff is now being prepared by Dr. Cambel, and will be made available to you as soon as it is completed.

(signed) Donald F. Hornig

Donald F. Hornig

Enclosure

RBarlow:jan

cc: Cmr. Ramey, AEC, w/5 cys. Encl.
Dr. Calhoun, Interior, w/4 cys. Encl.
Mr. Schultze, BoE, w/3 cys. Encl.
Mr. Capton, CEA, w/cy Encl.
Dr. Hollomon, Commerce, w/cy Encl.
Dr. Sproull, Defense, w/cy Encl.
F. Stewart Brown, FPC, w/cy Encl.
Lyle Belsley, OEP, w/cy Encl.

Dr. Ali Cambel
Mr. Harry Perry
DFH chron ✓
RBarlow subj & chron
S&T file & chron

May 20, 1964

MEMORANDUM FOR

Mr. Valenti

As I told you in our conversation, I must make a speech in Princeton, New Jersey, on the night of June 12th and another in Milwaukee, Wisconsin on the morning of June 13th. The commercial connections are essentially impossible, so that I would like to use Government air transportation. There are two possibilities; the preferable one would be to fly directly from Trenton, New Jersey to Milwaukee, the alternative is that I could just make it in Milwaukee if I were to go to Chicago commercially and be met there by a helicopter. Are you agreeable?

Donald F. Hornig

DFH/eac

May 28, 1964

Dear Martin:

I would like to extend an invitation to you to serve as a member of the Space Sciences Panel of the President's Science Advisory Committee. The Space Science Panel which served under my chairmanship over the past two years has been discontinued and will be superseded by this new panel with somewhat broader responsibilities. The Panel chairman will be Dr. Edward M. Purcell. The first meeting of the Panel will be held on June 4, 1964 at 9:30 am in Washington, D. C.

The function of the Space Sciences Panel is to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on the scientific aspects of the space program. The Panel will seek to develop guidelines for a sound scientific program which is compatible with the changing national technological capabilities, and whose timing and scale are reasonably related to their intrinsic scientific interest. The overall goal of the Panel's efforts in these joint activities should be the development, on a continuing basis, of objective recommendations concerning the general character and tempo of the national effort in space exploration for scientific purposes.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about one day per month for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(Signed) Don

Donald F. Hornig

Dr. Martin J. Schwarzschild
Princeton University Observatory
Princeton, New Jersey 08540

CC: DFM, CHron, DHS Chron, DHS Subj, S&T Chron, S&T Subj DHS:hk

May 20, 1964

Dear Lewis:

I would like to extend an invitation to you to serve as a member of the Space Sciences Panel of the President's Science Advisory Committee. The Space Science Panel which served under my chairmanship over the past two years has been discontinued and will be superseded by this new panel with somewhat broader responsibilities. The Panel chairman will be Dr. Edward M. Purcell. The first meeting of the Panel will be held on June 4, 1964 at 9:30 am in Washington, D. C.

The function of the Space Sciences Panel is to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on the scientific aspects of the space program. The Panel will seek to develop guidelines for a sound scientific program which is compatible with the changing national technological capabilities, and whose timing and scale are reasonably related to their intrinsic scientific interest. The overall goal of the Panel's efforts in these joint activities should be the development, on a continuing basis, of objective recommendations concerning the general character and tempo of the national effort in space exploration for scientific purposes.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about one day per month for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(signed) Don

Donald F. Hornig

Dr. Lewis McA. Branscomb
Joint Institute for Laboratory Astrophysics
1511 University Avenue
Boulder, Colorado 80301

CC: DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj DHS:hk

May 20, 1964

Dear Barkley:

I would like to extend an invitation to you to serve as a member of the Space Technology Panel of the President's Science Advisory Committee. In order to meet the changing needs of the space program the Space Vehicle Panel has been discontinued and its functions encompassed by the broader responsibilities of the Space Technology Panel. The Chairman of the Panel will be Dr. Franklin A. Long. The first meeting of the Panel will be held on June 6, 1964 at 9:30 am in Washington, D. C.

The function of the Space Technology Panel will be to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on matters pertaining to the national needs for space systems and the adequacy of the government's response to these needs as reflected in the content of the National Space Program at any time. The technical areas of primary concern to the Panel are the technologies connected with rockets, spacecraft, launch, tracking and communications facilities used in the space program, as well as space mission planning and the research and development programs needed to maintain the desired tempo of space exploration and associated progress in space related technology.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about three days every two months for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,
(signed) Don

Donald F. Hornig

Professor J. Barkley Rosser
Mathematics Research Center, U.S. Army
University of Wisconsin
Madison, Wisconsin 53706

CC: F. A. Long

DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj

DHS:hk

May 20, 1964

Dear Herb:

I would like to extend an invitation to you to serve as a member of the Space Sciences Panel of the President's Science Advisory Committee. The Space Science Panel which served under my chairmanship over the past two years has been discontinued and will be superseded by this new panel with somewhat broader responsibilities. The Panel chairman will be Dr. Edward M. Purcell. The first meeting of the Panel will be held on June 4, 1964 at 9:30 am in Washington, D.C.

The function of the Space Sciences Panel is to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on the scientific aspects of the space program. The Panel will seek to develop guidelines for a sound scientific program which is compatible with the changing national technological capabilities, and whose timing and scale are reasonably related to their intrinsic scientific interest. The overall goal of the Panel's efforts in these joint activities should be the development, on a continuing basis, of objective recommendations concerning the general character and tempo of the national effort in space exploration for scientific purposes.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about one day per month for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,

(Signed) Don

Donald F. Hornig

Dr. Herbert Friedman
U. S. Naval Research Laboratory
4555 Overlook Avenue, S.W.
Washington, D.C. 20309

CC: DFH Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj

DHS:hk

May 20, 1964

Dear Tom:

I would like to extend an invitation to you to serve as a member of the Space Sciences Panel of the President's Science Advisory Committee. The Space Science Panel which served under my chairmanship over the past two years has been discontinued and will be superseded by this new panel with somewhat broader responsibilities. The Panel chairman will be Dr. Edward M. Purcell. The first meeting of the Panel will be held on June 4, 1964 at 9:30 am in Washington, D.C.

The function of the Space Sciences Panel is to advise the President's Science Advisory Committee and the Director, Office of Science and Technology, on the scientific aspects of the space program. The Panel will seek to develop guidelines for a sound scientific program which is compatible with the changing national technological capabilities, and whose timing and scale are reasonably related to their intrinsic scientific interest. The overall goal of the Panel's efforts in these joint activities should be the development, on a continuing basis, of objective recommendations concerning the general character and tempo of the national effort in space exploration for scientific purposes.

An estimate of the workload implied by the problems facing the Panel leads me to believe that a Panel member should expect to give about one day per month for panel meetings and for personal investigations in support of panel activities.

I would like very much to have the benefit of your experience and judgment on this panel and I believe your contribution would be extremely valuable in meeting the needs of the nation in this complex and important area. Please let me know if you are able and willing to participate.

Sincerely yours,



Donald F. Hornig

Dr. Thomas Gold
Cornell University
Ithaca, New York 14850

CC: DFM Chron, DHS Chron, DHS Subj, S&T Chron, S&T Subj DHS:hk

May 20, 1964

Dear Dr. Leymaster:

The President has asked me to thank you for your gracious letter of May 8, 1964, and for the enclosed resolution from the Intersociety Committee of Research Potential in Pathology, Inc. I agree that training programs of the NIH have served a unique and important function in the past and that the furtherance of their goals should continue to be of highest priority.

Yours sincerely,

(Signed) Donald F. Hornig

Donald F. Hornig

Dr. Glen R. Leymaster
President and Dean
Woman's Medical College
of Pennsylvania
Philadelphia, Pennsylvania 19129

S&T Control Number - 736 + 787

PSB/ems Chron
✓ DFH/Chron
S&T File NIH Gen.
S&T Chron
2 WH Copies

May 20, 1964

MEMORANDUM FOR

THE PRESIDENT

In a very thoughtful letter to you of March 12, Mr. Hollifield raised serious questions concerning development expenditures, challenging what he incorrectly believed to be our policy to demand that a mission requirement exist before initiating or continuing development programs. Soon after his letter was received, Mr. Gordon and I met with Mr. Hollifield to explain our policy concerning the points that he had made.

Recently, however, public statements made by Mr. Hollifield and others indicate that our policy is still misunderstood and, therefore, misrepresented. I believe that a brief policy letter from you in answer to Mr. Hollifield is now necessary to provide the base we need to clarify our point of view both with the Joint Committee and with the AEC. Attached for signature is a suggested reply.

The letter has the concurrence of Mr. Gordon and of Dr. Brown in DOD.

Donald F. Hornig

DFH Chron
DHS Chron
DHS Subj
S&T Chron
S&T Subj

DHS:hk
DFH:

May 20, 1964

Dear Chet,

Thank you for your letter concerning our general philosophy for starting and stopping development programs. I know that Don Hornig and Kermit Gordon have discussed this in detail with you; however, recent public discussion of the questions that you raised indicate that it may be useful for me to make some general remarks on the subject.

I think we are really in agreement concerning development expenditures. I would like to assure you that it is definitely not our policy to demand a mission requirement as justification for the expenditure of development funds. Development programs are also authorized to advance the technology in an area where it is anticipated that applications may arise.

The main reason for engaging in these programs is to provide technical "options" to be exercised at a later time, should a specific need arise. In particular, in matters relating to the National Defense and space exploration, our ability to keep such options open so that they can be applied to military needs on a short time schedule contributes greatly to the flexibility of our response to changing conditions. At the same time we recognize that as time passes the applications we anticipated may disappear or become less urgent.

Therefore, since most of the larger costs come in the later phases of development, some programs will be cut back before full development or demonstration is reached.

- 2 -

Such action in no way reflects on the wisdom of initiating a program to start with or on the quality of its execution or management. If we are to feel sufficiently free to initiate this kind of program in the first place, we must not expect each development to find a mission use, nor restrict ourselves by a policy that would require every program to be carried to a full demonstration.

Again I would like to thank you for raising these points and for giving me the opportunity to express my views on this important subject.

Sincerely,

Honorable Chet Holtfield
Vice Chairman
Joint Committee on Atomic Energy
Congress of the United States
Washington 25, D. C.

LBJ:DFH:DHS:hk

LBJ File

bcc: White House Files (2 copies)

D. F. Hornig, OST - PLEASE RETURN THIS WHEN SIGNED

DFH Chron

DHS Chron

DHS Subj

OST Chron

OST Subj

XX

May 21, 1964

Donald F. Hornig

Mr. Glenn Dunke
General Chairman
Seventh Science and Industry Awards Banquet
Beverly Hilton Hotel
Los Angeles, California

The President has asked me to convey his very best wishes
to the California Museum of Science and Industry on the
occasion of the Seventh Science and Industry Awards Banquet.

This Nation can take great pride in the outstanding people
whose achievements have brought us to a position of leadership
in many fields of industry and science. Public recognition not
only is richly deserved by those honored, but serves a larger
purpose in making these achievements conspicuous and
surrounded with community esteem, thus encouraging
achievement by others.

I should like to add my own warmest congratulations to those
of President Johnson.

Copy to: Joseph R. Cerrell
Executive Secretary
1 Democratic State Central
Committee of California
417 South Hill Street (Suite 321), Los Angeles, Calif.

RBarlow:jan
cc: White House Files (2)
DFH chron ✓
RBarlow subj & chron
S&T file & chron
In reply to S&T Cont. No. 0767

May 21, 1964

MEMORANDUM FOR

Mr. Busby

I was delighted to receive your memorandum of May 19. I had been concerned for some time that the President's public pronouncements have contained very little reference to scientific matters, so that I would be more than happy to talk to you about your various suggestions as soon as possible. You can get some idea of my own thinking from a couple of speeches I enclose.

(signed) Donald F. Hornig

Donald F. Hornig

Encls. (2)

APS

+ hazuette speech -

DFH/eac

Re S&T No. 756

S&T Files

S&T Chron.

DFH Chron. ✓

DFH Files

THE WHITE HOUSE

WASHINGTON, D.C.

May 19, 1964

MEMORANDUM FOR DR. DONALD S. HORNIG

From: Horace Busby *Horace Busby*

If you will pardon me for sending this memorandum before actually meeting and talking with you, as I have been intending to do, I would like to ask your guidance, suggestions and information regarding the following:

Over the next several months, the President is anxious that his public statements portray -- in perspective and proportion -- the challenges of our National future which remain poorly-focused or, at least, inadequately identified. Certainly the future implications of our science and technology deserve far more focus from the White House.

Under the circumstances, I would like at your convenience to discuss with you the possibilities of the following:

1. Developing from your office a flow of material suitable for Presidential use at news conferences, relating not only to scientific matters within the Government's own sphere, but, more broadly, to the National implications of findings, discoveries, reports on research-in-progress, etc.
2. Similarly, a flow of guideline information suitable for incorporation in the President's public statements and speeches would be most helpful. Generally, the statements of President Johnson -- like Presidents Kennedy and Eisenhower -- have tended to be confined to statistics and comment regarding problems of scientific manpower. While this is important, the manpower problems are neither the broadest nor most meaningful horizons for the implications of science for our society. President Johnson likes to emphasize our challenges to higher education -- a personal

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WT Cont. No. 1779

preference reflected in many of his past speeches. The forum of the Presidency, however, can be put to broader uses, opening new doors of public interest and understanding.

3. In addition to materials for press conferences and speeches, a further -- and potentially even more constructive -- contribution could be made by developing a pattern of informational papers related for example to projected trend lines of scientific research, description of obstacles in the path of scientific progress, projection of likely breakthroughs to be anticipated over the next ten-twenty years, etc. Such papers, either prepared by or compiled by the Office of the President's Science Advisor, could -- through White House release -- possibly serve a very good cause in awakening the Nation to a more perceptive understanding of the promise of the next ten to fifty years.

This kind of activity is, of course, much more educational than operational. To the extent that it serves the President and enables him to focus National thought in this realm, I believe such a function is entirely compatible with the original conception of the Advisory Office. Please understand it is not my thought or purpose to suggest superimposing additional duties or burdens. I would like, however, to talk with you as soon as it is convenient to secure both your reactions and better suggestions on the uses which might be made of the expertise already present in your office.

The President has several Commencement Addresses on his schedule over the next few weeks. These would be especially suitable opportunities to experiment with and explore the application of the ideas outlined -- and, if possible, I would like to talk with you this week.

XEROX FROM QUICK COPY

21 May 1964

Dear Herb:

I am glad to have your letter of May 11 describing ICAS and Department of Commerce actions with respect to weather modification. It appears that the studies now underway under ICAS (NSF), the Weather Bureau, and the Academy, have been soundly planned and the leadership is thoroughly competent. This has not always been true in earlier studies of weather modification.

I am glad to hear of the study efforts. Clearly, a large scale field program aimed at increased precipitation, such as the program proposed by the Bureau of Reclamation, is not justified at this time. I should prefer to see the efforts of Government agencies directed toward increasing their in-house competence and toward support of research and education. This should improve the nation's ability to make effective use of the results of the weather modification studies when they are completed. Nevertheless, I also think we must keep our eye on practical possibilities at all times.

Sincerely,

(Signed) Don

Donald F. Hornig

Dr. J. Herbert Hollomon
Chairman, ICAS
Department of Commerce
Washington, D. C. 20230

RGF:hh

S&T

S&T

~~DPH~~

RGF

RGF

S&T 0705

May 21, 1964

Dear Miss Lubkin:

I am attaching an edited copy of my speech before the American Physical Society for printing in Physics Today, as requested in your letter of May 19th.

Sincerely,

Donald F. Hornig

Encl.

Miss Gloria B. Lubkin
Associate Editor
Physics Today
335 East 45th Street
New York 17, New York

eac

APS Speech file

20506

May 21, 1964

Dear Mr. Johnson:

I want to acknowledge your letter of May 8 to Mr. George Reedy, in which you inquired about the possibility of a Presidential message to the Convention of the Society of Technical Writers and Publishers.

The President's extremely busy schedule regretfully made such a message impossible, especially in view of the late date at which your letter arrived. I do want to assure you, however, of the Federal Government's recognition of the great importance of the work which the Society and its members perform. Effective communication in science and technology is a direct concern of mine - and, indeed, is a direct and urgent concern of all who labor in these fields.

Please accept my personal congratulations to the Society on its Convention and on its many contributions.

Sincerely yours,

Donald F. Hornig

Mr. Carl M. Johnson
General Chairman
1964 STWP Convention
El Cortes Convention Center
San Diego, California

RBarlow:jsn
cc: White House Files (2)
✓DPH chron
RBarlow subj & chron
S&T file & chron

Ref: S&T Cont. No. 0716

AIR MAIL

20506

May 21, 1964

Dear Lloyd:

I appreciate your letter of May 11 replying so promptly to mine of May 7. Your eloquent critique of the development process is certainly thought-provoking, and I intend to draw on your thesis in discussions I will be having on the subject in the near future.

How the scientific-analytical approach can best be applied by scientists to the broad problems of development seems to be a tantalizing question. The AID Research Program, though several years old, seems a very fragile growth. The Latin America Science Board of the Academy, and the Africa Committee of the NAS both have close ties to AID and are offering their best advice. The concept of a "Scientific Adviser" to the AID Administrator is accepted, but it is hard to find a man and supporting staff. Whether a summer study conference in 1965 would add anything new or be productive will have to be thought through carefully, and your ideas as to the shape such a conference should take would help. Meanwhile, as Roger Revelle and Harrison Brown have suggested, we should have a chance this fall to weigh the results of the AID-sponsored Conference on Agricultural Productivity which Max Millikan is running this summer. Although I'm not familiar with the details, the subject-matter would seem to cover an important segment of the ground embraced in your proposal.

In any case, I should think a discussion in the PSAC International Panel in the Fall would be helpful, to review the scientific and research aspects of the AID program, and I will discuss plans for such a meeting with Det Break.

Sincerely,

~~(signed) Don~~
~~Donald F. Hornig~~

Donald F. Hornig

Dr. Lloyd V. Berkner
President
Graduate Research Center
Dallas, Texas 75205

IMTobin:gpw

cc: S&T Files; S&T Chron; DFH Chron; IMT Chron
bcc: F. Seitz; D. Break; H. Brown; EMJKretzmann (State)

GRADUATE RESEARCH CENTER

OF THE SOUTHWEST
POST OFFICE BOX 8478
DALLAS 5, TEXAS

OFFICE OF THE PRESIDENT

EMERSON 1-5211

GADLEY GRADRESSEN

May 11, 1964

Dr. Donald F. Hornig
Executive Office of the President
Office of Science and Technology
Washington, D. C. 20506

Dear Don:

In response to your letter of May 7, in view of the question raised I shall reply at some length. I hope you will forgive my verbosity.

Perhaps the most compelling challenge facing us today is the provision of opportunity for the underdeveloped peoples of the world. No problem is so unextricably linked to the worst elements of the past--indeed it is the voice of the past re-echoing in our own day. Moreover, though it cannot be proven, one suspects intuitively that there is a finite limit to the imbalance of opportunity that the world can tolerate as the economies of the industrialized nations continue to rise in the face of the deepening misery in other parts of the world. How and at what time, or at what level this limit will be imposed one cannot foresee. Perhaps the limit is economic, arising out of a growing price differential in basic commodities, or the mere cost of our more sophisticated products. Perhaps the limit is political, and envy and hatred directed at the "privileged status" of our society will result in reprisals that will drag our economy down. Perhaps the limit is military, with an ever-growing wave of revolt and unrest sweeping quite uncontrollably over the world to engulf us. Perhaps the limit will be imposed by some unpredictable combination of all of these.

The dangers of this growing imbalance led the Committee for Economic Development to point out that:

"The greatest economic problem facing the United States is not how she can raise her own standard of living but how she can harmonize her economic development with the world-wide process of growth." (Problems of United States Economic Development, Volume 1, Committee for Economic Development, 711 Fifth Avenue, New York 22, New York, page 69. January, 1958.)

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Quite curiously, out of our economic achievement in creating from science our economy of plenty, we have become a nation of "privileged status" among nations. Thus we find our whole country in much the same position as were the privileged individuals of old. We have inherited as a whole nation all of those problems of those often hated individuals of the past, and, at the same time all of the same responsibilities. Only, where before, the "privileged classes" were composed of individuals, now whole nations have been substituted in the minds of the underprivileged.

The entire problem is aggravated by the population explosion, growing out of the export of our new-found health, but without concomitant conveyance of the means of serving the "poor" who are thus multiplied.

The dangers as well as the essential immorality arising out of the disparity between the "have" and "have not" nations have been recognized by our political leaders in connection with the explosion of our own economy since World War II. It is said that we have expended foreign aid of more than 100 billions of dollars since that time--more than a whole annual federal budget.

Our foreign aid has generally taken the form of resources put in the hands of the nations concerned, to be allocated largely under their own management. This is done on the hypothesis that each nation knows best its own problems, and how best to manage its own affairs. The only important exceptions were President Truman's Point IV program under which part of the funds were devoted to technical assistance, and the technical military assistance accompanying some of our military aid.

The results have been varied, and their pattern forms an interesting study. The Marshall Plan was a historical achievement of the first magnitude. Our aid went to nations with high scientific and technological skills, and with it, they have almost duplicated our own economy of plenty in a virile post-war Europe. In a mere two decades they have arisen from the war's incredible destruction to join us as "privileged nations."

Our military aid to NATO was equally successful. Managing an alliance of 14 nations is a neat trick, but it has been done with extraordinary understanding and success. NATO has bridged a very dangerous time gap in which the possibility of another world conflagration was very real. And, despite inevitable problems, NATO still functions well as a major tool of Western policy.

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But the major proportion of our aid, to the underdeveloped world, has enjoyed no such success. We perhaps should not have expected such dramatic results. Yet the self-interest of all suggests that such aid is a failure if it does not at least narrow the widening gap of disparity. And yet the disparity is seriously and visibly growing, year by year. (See Eugene R. Black, 1963 Commencement Address, MIT; The Technology Review, July 1963, who comments: ". . . the gap between the thousand and hundred dollar countries does not seem to be closing. In fact, it is probably growing wider.") In contrast to this failure is our growing and almost unique success in aiding rehabilitation of Puerto Rico.

Experience tells us that we just have not yet learned how to give effective aid to the "have nots." It is easy enough to place all kinds of blame for the failure, which may or may not be justified. Some say it is dissipated by irresponsible officials of weak nations that cannot control their leaders. Others say that without education on a sufficiently broad base, money spent to trigger a modern economy is useless. Still others suggest that we are trying futilely to supply basic needs directly, and to do this would take several times our whole economy. Some blame the Communists. Others level the finger at our own inept administration of the program, and our failure to pursue Point IV.

Regardless of the merit of the various criticisms, the first order fact is that none of us has yet learned how to do the job with the resources that are accessible. And we had better find out quickly.

Since the disparity continues to grow in spite of great expenditures, the Congress has responded to the public evaluation of the result by cutting the program about \$1 billion per year, and may well insist on its total obliteration in the foreseeable future. Yet I believe that to fail to meet this challenge would lead eventually to serious national difficulties.

The military have faced strategic problems of this magnitude many times since the war. With their new science-orientation, they have developed a number of devices to deal with such problems. One is to bring together great leaders of thought for many months to analyze each aspect of our experience (country by country if you like), and then weave the pattern together analytically. (The learning time for man is about the length of one university semester. He must examine a field of knowledge that long to comprehend it).

May 11, 1964

Another approach is the initiation of high-level operational research. Still other forms of study and analysis have been well tested.

The point is that as a nation we have developed the techniques to solve tough problems. The time has come to turn our attention to the problem of the underdeveloped areas in a big way!--and in so doing to use every iota of experience that we have acquired in problem solving.

I emphasize the importance of a major attack, because it is too late to permit further experimentation by non-scientific theoreticians whose ideas have no more established validity than those of the man on the street. And it has also become too expensive.

All the ideas and theories, and suggestions, as well as tested experience, should be subjected to the intellectual rigor of analysis and study, so that a more viable plan of administering and effectuating our foreign aid can be evolved.

What might come out cannot be predicted, though it might be surprising. One suspects that the solution to this dreadful problem may involve a compassionate, people-to-people approach at every level--education, technical aid, leadership in business management and organization. Simply to send money, without the master-student relationship is both too cold and too uncommunicative of the skills required. To try to superimpose the pattern of our own development in this science-oriented age would leave struggling young nations far behind and non-competitive. Yet somehow our program of aid should draw on America's greatest strengths--its educational potential, its technological know-how, and its tremendous acumen in business which now draws these things together to create wealth for any people at an optimum rate. The Peace Corps is only the merest beginning of a genuine people-to-people approach to this difficult problem.

With the greater leisure available to us, our own leaders of thought and method must perhaps dedicate some portion of their lives and effort to the solution of this problem and to the development of these peoples. In particular, with its analytical methods and its scientific philosophy, science might well turn a greater proportion of its efforts to this problem--though to do so effectively would require a substantial measure of government recognition of the part that scientists might play both in the analysis of the problem and with respect to its substance. Men who are close to the problem like Black have suggested trying such a course.

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May 11, 1964

" . . . one of the most brilliant successes in international cooperation since the war was one organized by scientists, -- the International Geophysical Year . . . It seems clear that the scientific community is the best possible source of inspiration and of planning for the rational and energetic attack on the technical gap separating the developed and the under-developed nations." (Eugene R. Black, 1963 Commencement Address, MIT; The Technology Review, July 1963.)

It is my strong conviction that in spite of the individual successes of particular parts of the AID program, the growing disparity and the erosion of available funds is leading to its early collapse. The approach to aid so far has been essentially that of the lawyer and the financier. This now appears inadequate. Therefore, we as scientists should concern ourselves with the determination of the principles and methods underlying a program that could be mounted with some measurable expectation of success with the resources conceivably available.

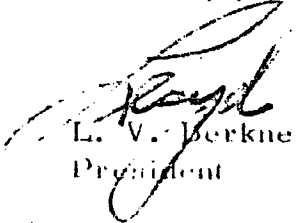
The success of scientists in the creation of a "quasi-stable" military situation working in close conjunction with the military establishment in the revolution of their posture encourages one to believe that principles for effective administration of an aid program might be discovered. The analytical study approach so familiar to scientists could conceivably yield a whole new perspective within which our efforts could more effectively be developed.

Let me be quite clear that I have no delusion that a solution necessarily lies within the realm of science, itself--but it may be found within the scope of analytical methods familiar to scientists.

I have written at length because science and scientists have been elevated to a position of tremendous responsibility to their nation through the creation of your office. This responsibility requires that we be alert to the application of our scientific philosophy to the solution of major national problems.

Sincerely yours,

XEROX FROM QUICK COPY


L. V. Berkner
President

cc: Dr. Frederick Seitz
Dr. Detlev Bronk
Dr. Harrison Brown
Mr. I. M. Tobin
Dr. Edwin M. J. Kretzmann

20506

May 22, 1964

Dear Senator Magnuson:

I should like to request restoration by the Senate of the cut of \$70,000 made by the House in the appropriation proposed for the Office of Science and Technology for fiscal year 1965.

The sum of money involved is relatively small, but is very important to the operation of this Office. It represents 7-8% of the total request.

The Office will begin the new fiscal year fully staffed at its maximum authorized strength of 34 permanent positions. The personnel and associated costs for the Office will thus be higher for the coming year than they have been during its first two years of existence while it was gradually building up to an effective size.

There are also some very extensive and demanding new efforts in the offing for the next year. One of these, for example, is a study of environmental health problems, including a follow-up to the pesticides study. Another is an examination of the quality and effectiveness of major research laboratories supported with Federal funds. The role and responsibilities of the Office are expanding, and we foresee the necessity for increased consultant use in meeting these and other obligations.

- 2 -

I feel that the total request of the Office is exceedingly modest and represents a rigorous minimum amount for effective operation, to the extent that even seemingly small cuts will prove detrimental.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Warren Magnuson
Chairman
Subcommittee on Independent Offices
Committee on Appropriations
United States Senate
Washington, D. C.

RBarlow:jsn
cc: White House Files (3)
✓ DFH chron
RBarlow subj & chron
S&T file & chron

May 22, 1964

MEMORANDUM FOR

Myer Feldman

Stafford Warren's proposal for a National Library of Science System is a bold approach to solving a significant portion of the very difficult problem of scientific and technological communications. Since he discussed his first draft with us in February, the presentation has been improved greatly.

There is no doubt about the validity of the goals of the program and of the need to push it forward. The mechanisms he suggests for operating the system have not been adequately thought through and it would be a mistake to take any steps at this time.

We intend to go ahead immediately by having two or three consultants examine the proposal and make recommendation as to the next steps. You are, of course, aware that we have a fairly extensive general effort going to bring the information problem under control. I'll be glad to explain this problem to you at your convenience.

(signed) Don

Donald F. Hornig

CMM/DFH:mts

cc: Dr. Hornig chron ✓

CMM subj. & chron

Dr. Kelley

S&T file and chron

S&T Cont. No. 712

20506

May 22, 1964

AIR MAIL

Dear Mr. Snyder:

Thank you for your letter of April 4 telling me about your project. It is certainly imaginative, and I appreciate your letting me know about it.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Mr. Philip L. Snyder
Permanent Construction Company
14708 Keswick Street
Van Nuys, California

DZRobinson:gpw

cc: S&T Files
S&T Chron
DZR Chron
DFH Chron ✓

May 22, 1964

MEMORANDUM FOR

Mr. Myer Feldman

Attached is a statement of justification for the establishment of a Presidential Commission on the U. S. Patent system which has been submitted to the Secretary of Commerce by Dr. Hollomon, and a draft Executive Order to establish the Commission. This proposal is based on recommendations to the Secretary prepared by the Department of Commerce Technical Advisory Board, also attached.

When the initial idea for the establishment of a Commission was advanced about a year ago, we urged that the matter be examined by an outside group of experts, on the thesis that a Presidential Commission would be questionable unless one could visualize the types of concrete recommendations that might emerge. Based on the examination by the panel which was established by Dr. Hollomon, we are in agreement with the Department of Commerce that such a Commission could serve a very useful purpose in reexamining the patent system with a view to its improvement.

Last week we arranged a meeting with the staff of the Bureau of the Budget, and a consensus was reached concerning the desirability of establishing a Presidential Commission on the U. S. Patent system. The group preferred the Executive Order route rather than requesting legislation to establish the Commission, because of the possibility that hearings on the need for the Commission will arouse such strong feelings on the part of those who wish to preserve the status quo that it might die before it is born.

It was the feeling of the group that I should contact you for general reactions prior to encouraging the Secretary of Commerce to submit the proposal to the Bureau of the Budget. Since the Department is not permitted to use its regular appropriation to finance the work of such a Commission established by Executive Order, it would be necessary to

utilise Special Projects funds. It is expected that the Commission's work could be completed within a year's time at a cost of approximately \$100,000.

I would appreciate your informal reactions.

(signed) Don

Donald F. Hornig

Attachments

DZBeckler;khb

CC: DFH ✓

Mr. Beckler

S&T File without attachments

S&T Chron

May 22, 1964

Dear Mr. Keenan:

As requested in your letter of May 14,
I am enclosing a copy of Dr. Hornig's speech before
the American Physical Society.

Sincerely,

Eleanor A. Connors (Miss)
Secretary to Dr. Hornig

Encl.

Mr. Boyd R. Keenan
Head
Department of Political Science
Purdue University
Lafayette, Indiana 47907

22 May 1964

Dear George:

Sorry for the delay in replying
to your note of April 20. Please keep me
informed as things go on.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. George W. Beadle
President
The University of Chicago
5801 Ellis Avenue
Chicago 37, Illinois

DZRobinson:hh
S&T
S&T
DZR
DZR
DFH

May 23, 1964

Dear Mr. Chairman:

We would like to request a copy of the report prepared for the House Appropriations Committee relating to Federal water resources research activities. The study on which the report is based was conducted from approximately September to December of 1963.

The Office of Science and Technology carries a particular responsibility for coordination of the 25 agencies involved in water research. Much of our effort is in response to recommendations by the Congress that the Executive Department develop an adequate program and degree of coordination in this field. We believe that a good start has been made, but this is a difficult area because of broad legislative authorities and the long-standing and highly developed agency programs. It is believed that your report which represents the work of ten investigators over a period of four months will be of great value to our efforts to improve coordination. The investigation was also expensive in terms of your people as well as the time of the agencies who answered questions and furnished information. Therefore, it seems desirable that maximum use should be made of the product.

We will scrupulously respect any restrictions or limitations you impose in the event this request is granted.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable George H. Mahon
Chairman, Committee on Appropriations
House of Representatives
Washington, D. C.

WCA:em

WH

WH (Jean Lewis)

OST file-chrono

DFH file

DFH chrono

WCA file-chrono

20506

May 22, 1964

Dear Mike:

I want to acknowledge with thanks your letter of May 20 enclosing a description of some of the professional talent available within the Arthur D. Little organization. It is a good list, and you can be assured that the Office will keep these people in mind as relevant future panel and consulting needs develop.

Sincerely,

(signed) Don

Donald F. Hornig

Mr. Michael Michaelis
Manager
Arthur D. Little, Inc.
1725 Eye Street, N. W.
Washington, D. C. 20006

RBarlow:jsn
cc: DFH chron ✓
RBarlow subj & chron
S&T file & chron

May 23, 1964

MEMORANDUM FOR

Eric Goldman

I gather you were somewhat involved in the excellent ideas presented by the President in his University of Michigan address. In connection with the education items mentioned in the speech, I thought you might be interested to know that there is already going forward an energetic exploration of the new things we might do at all levels under the joint auspices of this office, the Office of Education and the National Science Foundation. Attached is a copy of a recent report, "Innovation and Experiment in Education," which has received an excellent press and in which you might find further ideas.

/s/ Don
Donald F. Hornig

Attachment

dfh/eac

Identical memos sent to: Richard Goodwin
Horace Busby

DFCH Chron. ✓
S&T Files
S&T Chron.

May 23, 1964

MEMORANDUM FOR

Major Cook

Dr. Hornig has secured permission from Mr. Valenti to use government air transportation in connection with an upcoming trip he is scheduled to make which involves a very tight schedule. On Friday, June 12th, he has to be in Princeton, New Jersey by at least 6:00 p. m. to give a speech; he then has to be in Milwaukee by 9:00 am the next morning, June 13th. If it is possible, he would like to arrange for a plane to fly him from Washington to the Trenton airport and then from Trenton to Milwaukee that same evening. He will be through with his speech in Princeton by 9:30 pm and we understand it takes about 30 minutes to get from Princeton to the Trenton airport.

We'd appreciate your letting us know if this can be arranged. He would plan to return from Milwaukee commercially on Sunday, June 14th.

Eleanor Connors
Secretary to Dr. Hornig

P. S. There is also the Forrestal airport which is located directly in Princeton which, as you may remember, we used once before. This might save some time, but Dr. Hornig will accept whatever arrangements you think best for the plane.

May 23, 1964

MEMORANDUM FOR
THE PRESIDENT

Your forceful exposition at the University of Michigan of our need to improve the quality of American education will provide impetus to those of us who have been working towards that goal. You should be aware that my office, the Office of Education and the National Science Foundation have been actively collaborating in seeking out new possibilities. The attached report, "Experiment and Innovation in Education" which has received an excellent press, outlines some fresh approaches to the problem.

Donald F. Hornig

Attachment

DFH/eac

DFH Chron. ✓

S&T Files

S&T Chron.

May 23, 1964

Dear Mr. Christensen:

Thank you very much for your invitation to be the keynote speaker at the Aerospace Section of the Southern Safety Conference to be held in March of 1965. I appreciate your thinking of me, however, if my present experience is any guide, it would not be possible for me to be there. I am sorry, therefore, that I must decline your kind invitation.

Sincerely,

Donald F. Hornig

Mr. Wayne C. Christensen
President
P. O. Box 11508
St. Petersburg, Florida

eac

speech declines "S"

May 23, 1964

Dear Dr. Arveson:

Thank you for your invitation to attend the American Chemical Society Dinner to be held on August 31st in Chicago. I would be pleased to attend the dinner if my schedule permits, however, as I am sure you will appreciate, it is impossible for me to make a firm commitment at the present time.

Sincerely,

Donald F. Hornig

Dr. M. H. Arveson
President
American Chemical Society
130 East Randolph Drive
Chicago, Illinois 60601

eac

May 25, 1964

Dear Dr. Deutch:

Thank you for showing me your Biarritz paper. I haven't been able to study it intensively, but found nothing I strongly questioned. I do feel that the attitude in item 5, page 3, ought to be more firmly rebutted. In companies I have known the basic research group has served to keep the company fresh, to introduce fresh ideas to the development groups, and has served as a communications link to the scientific community, all in addition to its research work.

Altogether, I found your analysis stimulating and thought-provoking. I shall look forward to talking to you again one day.

Sincerely,

Donald F. Hornig

Dr. Michael J. Deutch
Suite 910
1625 Eye Street, N. W.
Washington 6, D. C.

DFH/eac

"D"

May 25, 1964

Dear Dr. Zimmerman:

Thank you for your letter of May 19, inviting me to give the guest address at the sixteenth Defense Research Board Symposium to be held in Ottawa on December 2nd. I am pleased to accept your kind invitation and look forward to the opportunity to visit Ottawa and meet with you and the other participants in the Symposium.

Sincerely,

Donald F. Hornig

Dr. A. Zimmerman
Chairman
Defence Research Board
Ottawa 4, Canada

eac

tickle 12/2

25 May 1964

Dear Lee:

Thank you for your prompt reply to my request for Upper Mantle budget issues. Your plan to base a reply in part on the results of the International Steering Committee meeting seems wise, even though this may require a delay of a week or two.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Leland J. Haworth
Director
National Science Foundation
Washington, D. C.

RGFleagle:hh
S&T
S&T
~~DEH~~
RGF
RGF

S&T 0757

25 May 1964

Dear Mr. Sullivan:

Thank you very much for sending us your thoughtful paper with regard to your theories of gravitation.

We are not really competent to evaluate your theory. The normal method by which these basic principles have been proposed and tested is through the scientific literature, and I believe that this is the appropriate way for these views to be made more widely known. Despite your convictions to the contrary, there are very many people in the scientific community with open minds. You might also consider discussing aspects of gravitation and relativity with physicists in your local region.

We appreciate very much your calling your work to our attention.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig
Special Assistant to the President
for Science and Technology

Mr. Patrick M. Sullivan
Technical Electronics, Inc.
P.O. Box 13151
Houston 19, Texas

cc: Eric F. Goldman, WH

DZRobinson:hh

S&T

S&T

~~DFH~~

DZR

DZR

WH

S&T 0707

20506

May 26, 1964

Dear Roger:

I am very grateful for your recent letter regarding assistance to Israel in nuclear power and water desalting technology. This matter is engaging a lot of current attention, since it will come up next week during the visit to this country of Prime Minister Eshkol.

The current thinking is along the lines of a joint U. S. -Israel survey mission to consider exactly the types of questions you have raised. Any follow-on steps would of course depend in part on the results of the survey.

After the Eshkol visit we should have a better idea where we stand. AEC and Interior would probably share the responsibility for putting together a survey team, but it certainly should include people of the caliber you mention. I intend to follow these developments closely and greatly appreciate your suggestions.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Roger Revelle
University Dean of Research
714 University Hall
University of California
Berkeley, California

AIR MAIL

RBarlow:jan ✓
cc: DFH chron
RBarlow subj & chron
S&T file & chron

May 26, 1964

Dear Admiral Knoll:

Thank you for your invitation to attend the First Annual U. S. Navy Symposium on Military Oceanography to be held in Washington June 17 through 19. I'd very much like to attend, but unfortunately I have commitments out of town on the 17th and 18th and an extremely full calendar on the 19th.

Sincerely,

Donald F. Hornig

Rear Admiral Denys W. Knoll, USN
Oceanographer of the Navy
Office of the Chief of Naval Operations
Washington, D. C. 20350

DFH/eac

invitations regretted

26 May 1964

Dear Fred:

I am glad to know that the Academy, through its Geophysics Research Board, has proposed issuance of a stamp commemorating the International Years of the Quiet Sun. This should help to increase public awareness of the program and should further emphasize the uniquely international character of much of geophysical research. As you suggest in your letter, I shall be glad to endorse issuance of the stamp if the occasion arises. Please let me know if I can be of specific help.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Frederick Seitz
President
National Academy of Sciences
Washington, D. C.

RGFleagle:hh
S&T

S&T

DFH

RGF

RGF

S&T 0720

26 May 1964

Dear Jerry:

Thank you very much for showing me the correspondence with Eklund. I must say I agree with you that a purely scientific discussion is not particularly useful, and that the real problems involve organization, funding, location, etc. However, I think you probably should go ahead in any event and try to go as far in exploring these extra-scientific items as feasible.

I must say I don't yet really know the basis on which this country would be willing to cooperate in an international accelerator, but if the above problems are not discussed, we clearly will not be committing ourselves to anything except the general proposition that we are interested in negotiation.

Perhaps you should check with the Joint Committee. I hope you will keep me informed as the plans go further.

Sincerely,

(Signed) Don

Donald F. Hornig

Dr. Gerald F. Tape
Commissioner
U. S. Atomic Energy Commission
Washington, D. C.

DZRobinson:hh

S&T

S&T

~~DPH~~

DZR

DZR S&T 0702

20506

May 26, 1964

Dear Mr. Hollifield:

In your letter of May 23 you have inquired about the status of the Interdepartmental Energy Study. It is as follows:

We have in hand what we think is a final draft of the staff study, subject to the last round of agency comments, and are pushing hard to complete this portion of the effort by the middle of June. What happens then depends on the 10 agency Steering Committee which was appointed by President Kennedy, but I do not anticipate further delay. Of course the final disposition of the products of the effort will be the prerogative of the President.

Your interest in the progress of the study is much appreciated.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Cbet Hollifield
Vice Chairman
Joint Committee on Atomic Energy
Congress of the United States
Washington, D. C.

RBarlow:jcn
cc: White House Files (3)
~~DFH~~ chron
RBarlow subj & chron
S&T file & chron

In reply to S&T Cont. No. 0795

20506

May 26, 1964

Dear Mr. Lest:

Thank you for sending me a copy of your publication, "At the Edge of the Dream." I was glad to have the opportunity to learn about your interesting and worthwhile activities.

Sincerely,

Donald F. Hornig

Mr. Glen Lest
Executive Director
Community Development Foundation
United Nations Plaza at 46 Street
New York 17, New York

JTurner/ekb
OST file - chron
JT file - chron

✓ cc:Dr. Hornig (chron)

May 26, 1964

MEMORANDUM FOR

Mr. Valenti

As I requested on the telephone yesterday, I should like an appointment with the President in the near future. I should like to talk with him quite generally about my job as Special Assistant, with special reference to some of the following:

1. Ways in which I (and my office, OST) can be more responsive to the current needs of the President.

2. Ways in which the Federal Council for Science and Technology can become a more effective instrument for the President.

3. Current activities and the President's views concerning priorities. Aside from day to day matters, ongoing efforts are generally directed toward:

- a) Military technology and its interaction with strategic problems
- b) Intelligence
- c) Disarmament and Arms Control
- d) Space
- e) Evaluation and coordination of the \$15 billion R&D program -
Budget issues
- f) Long-range planning
- g) Science and foreign affairs
- h) Civilian technology and economic development
- i) Environmental problems, such as pollution, water resources
- j) Innovation and Experiment in education
- k) Nuclear Desalting of Water

This list is for background and is illustrative. I don't intend to discuss it in any detail.

DFH/eac

DFH Chron.

S&T Files, S&T Chron.

LS/Don
Donald F. Hornig

May 26, 1964

Dear Dean Moeller:

Thank you for your letter of May 19th.
I have no objection to your reproducing my address
at the Marquette Awards Convocation and am en-
closing an edited copy for your use.

I very much enjoyed my visit to Marquette
and especially the opportunity to meet the members
of the faculty. I hope there will be an opportunity
for us to meet again in the not-too-distant future.

Sincerely,

Donald F. Hornig

Dr. Arthur C. Moeller
Dean, College of Engineering
Marquette University
1515 West Wisconsin Avenue
Milwaukee, Wisconsin 53233

eac

May 26, 1964

MEMORANDUM FOR

Kermit Gordon

SUBJECT: Resume of OST Views on Environmental Health

OST is interested and active in relation to the proposed PHS Environmental Health Center. We intend to establish a PSAC panel on Environmental Contamination that will consider, among other things, problems related to the Environmental Health Center.

At this time we offer a few tentative conclusions based on our understanding of the current PHS plans as outlined below:

<u>Beltsville</u>	<u>Institutional Grants</u>	<u>Program Grants</u>
Environmental Health	At 4 Universities	To Universities
Administrative Center	(400 People in Each)	2 Now Exist
to House 1200 People	Combined Govt. -	for \$200-\$300,000
(200 Scientists)	University Programs	annually. 2 Additional Contemplated
		for 1966

Our present views do not differ significantly from the conclusions of the Ad Hoc PSAC Panel of May, 1961:

1. The basic research functions related to environmental health can be most productive if they are physically located at Universities, and integrated into the University programs.
2. The Administrative and Technical Assistance functions related to the Environmental Health program should be in the Washington area. Some testing and applied research might be carried out at such a

center. There is less guarantee that basic research would be productive and the additional benefits of trained manpower available through graduate education at universities would of course be missing. In view of our understanding that 1000 to 1100 people related to the facility already are housed in the Washington area, we question the need for the Beltsville facility.

3. It appears to us that the proposed Institutional Grants and extension of the Program Grants may well fulfill the need for environmental health sciences, and replace the single Environmental Health Center.

4. We fail to see evidence of planning that will translate these general concepts into a single viable program.

5. The proposed Institutional Grants would provide facilities at selected Universities, but would not contribute to solution of the urgent environmental pollution problems prior to 1967 or 1968 because of the inherent delays in constitution and staffing. The "Program Grants" on the other hand, are already in effect; expansion of these should lead to rapid progress in the field of Environmental Health Sciences and in education of manpower.

6. Our understanding of the implications of the Senate Committee action regarding the 1200 man Beltsville facility is not clear. We do believe the "satellite" or "adjunct" 400 man facility might be made into one of the Institutional Grant-supported basic research centers rather than an applied research laboratory as proposed by the Senate Committee.

(signed) Donald F. Hornig

Donald F. Hornig

CMM/JB:mts

cc: Dr. Hornig chron ✓

CMM subj. and chron

Dr. Buckley

St T File & Chron

May 27, 1964

MEMORANDUM FOR

Maj. General C. V. Clifton

I notice that Dr. Colin MacLeod, Deputy Director of the Office of Science and Technology, is presently a Class I member of the White House Mess. Since it is frequently urgent for him to be able to bring in more than one guest, as well as to utilize the lunch hour to meet with his counterparts, who are already in Class II, I should like to plead very strongly that he be made a Class II member.

Donald F. Hornig

DFH/eac

WH Procedures file

**Points Involved in Discussion of United States Cooperation
With Israel on Nuclear Desalting**

D. F. Hornig

- 1. The Palfrey (AEC) paper is excellent. The proposal that we agree to sponsor a joint economic and technical study is sound and is the maximum commitment we should make at this time.**
- 2. Any implications regarding follow on steps should be avoided. The smallest size plant which would substantially benefit Israel is at least ten times as big as any we have yet constructed. We have not yet reached any internal decisions as to whether or when we will develop large scale desalting plants. Hence, we cannot now foresee the reciprocal benefits which might be derived from a joint program. In particular, we do not know whether we will be in a position to share our knowledge or if we might be thinking in terms of a joint development program.**
- 3. The development of a moderate scale plant will probably take 5-10 years after we reach an internal decision.**
- 4. The need to avoid implicit or explicit commitments beyond the study stage is underscored by the President's offer on the record to cooperate with other countries as well.**
- 5. An additional point, which the briefing paper makes but which needs to be underscored, is the U. S. interest in assuring that any U. S. fueled nuclear power desalting plant which might be built in Israel comes under the safeguards of the IAEA. Israel is resistant to IAEA safeguards because of her concern that unfriendly Arab countries would be represented on IAEA inspection teams, and thus would have uncomfortably intimate access to her internal activities. The U. S. feeling is that providing observer status to the IAEA during preliminary studies of the Israeli situation will acknowledge the U. S. interest without prematurely forcing the issue. The U. S. desire to keep the IAEA in the picture is very strong.**

May 27, 1964

MEMORANDUM FOR

Mr. Feldman

Attached are some comments regarding the AEC briefing paper. It is clear from what has been done so far that water for municipal, industrial and specialized agricultural (but not general irrigation) purposes can be produced economically in Israel by large scale nuclear desalting of sea water. It is also clear that if water needs are met, there may be a problem in utilizing all of the electricity produced. Some of these questions would be answered by the proposed joint study.

We are continuing to explore this problem. If I can be of further assistance, please let me know.

Donald F. Hornig

Attachment

DFH/eac

DFH Chron ✓

S&T Files

S&T Chron.

DFH File

May 27, 1964

Dear Miss Arndt:

I'm sorry I haven't been able to reply to your letter of May 11th any sooner, but it has been difficult to get Dr. Hornig to be in one place long enough to get the title of his speech from him. However, he tells me we can use the title, "Unfinished Business," for his address. He would appreciate knowing how long he is scheduled to speak at the Commencement so he can gear his remarks accordingly.

Sincerely,

Eleanor A. Connors (Miss)
Secretary to Dr. Hornig

Miss Audrey H. Arndt
Secretary to Mr. Seyfert
Milwaukee Country Day School
6401 North Santa Monica Boulevard
Milwaukee, Wisconsin 53217

eac

tickle 6/13

May 27, 1964

Dear Bill:

Yours is one of a large number of letters which has been inspired by a letter from Jack Roberts, which asked that people write me to express the problems which their Chemistry Department faces due to the slowing down of the funds available for chemistry research in the country. The main purpose of the letters was to urge me and the NSF to increase the proportion of the funds going to chemistry.

I very much appreciate receiving these letters, which were detailed and careful in their analysis. I would like to mention a few things with regard to the facts as I know them.

1. The information on distribution of funds was obtained by Roberts at a time when the final allocation of funds for FY 1964 had not yet been made by the NSF. In the end, instead of a decrease from \$9.5 million in FY 1963 to \$8.75 million in FY 1964, there was a slight increase programmed to \$9.85 million. For FY 1965 (i. e., beginning July 1, 1964), if the NSF budget is approved by the Congress, approximately \$10.7 million would be expended for research and an additional amount of \$1.7 million for instrumentation. This would lead to an expansion of more than 25% in the funds available, at least from NSF. In addition to these funds, one should also take into account that the NSF also allocated \$3.4 million for fellowships of all kinds to chemists, and spent almost \$7 million in matching grants to chemistry departments for graduate facilities in fiscal year 1963.

2. Insofar as fraction of good proposals supported by NSF, there is no significant difference between support for chemistry and support for other fields of science.

3. One should consider the total support for chemistry in universities and not merely the support given by NSF. Insofar as we can tell, the support for universities proper in chemistry has been estimated by the agencies to have gone from \$29.2 million in FY 1961 to \$48.0 million in FY 1963. This is a substantial rise.

Nonetheless, despite the record stated above, there is no doubt that significant problems exist in chemistry and in all university research. The demands are rising for more equipment; universities are expanding their staffs; graduate students (and especially post-doctoral students) are increasing. The large increases made in the past have whetted the appetite for more and better facilities for research.

Many of our universities are facing a rapid rise in undergraduate enrollment, and feel that they need graduate students to take care of this undergraduate service function.

The National Academy of Sciences is at this time conducting a study of the present situation in basic chemical research. The Chairman of this study is Dr. Frank Westheimer of Harvard University. I hope that you will write him in as thoughtful and straightforward a way as you have written me, so that he can get a complete picture of the problem.

Much of the present support of chemistry is supplied by the mission-oriented agencies (Defense, AEC, NASA) whose development budgets are not growing rapidly. At the present time their basic research budgets are growing much more rapidly than their applied research budgets, but it is not clear whether the rate of rise is adequate, on the one hand, or whether it can continue to grow faster than development, on the other. The NIH budget is growing, but its funds are limited to fields related to health.

Therefore, university chemistry (and, in fact, all fields of science) expect to get their major new growth from NSF. The NSF budget has grown substantially during the Kennedy administration. However, it does not supply more than 10% of all university research support, and faces demands for very important education programs (such as in engineering) which it can uniquely supply. We must all support the increases in the NSF total budget.

Attacks on other parts of the nation's program, while emotionally satisfying, do not lead to increases in chemistry funding, even if these other programs are curtailed. And in moving for increased chemistry support, we will have to analyze together the needs and the reasons for support. Some illustrative questions might be:

1. Are we supporting research in chemistry in universities chiefly for the value of the research? Because of the need to train future chemists? Or, in the case of institutions with no or few graduate students, to keep the teachers vigorous in the field?
2. Why has the number of Ph. D. 's in chemistry stayed static while the funds for chemistry have increased tremendously?
3. Should we support all excellent research, or all "competent" research? If we say the latter, then should it be justified on its teaching rather than on its research value?
4. What is the "right" number of post-doctoral fellows, and other senior full time research associates in a university?
5. Since much of the justification for support in chemistry was the need to produce chemists for the civilian economy, what kind of support for research is now coming from industry, and should we encourage programs of outside support in, say, the Department of Commerce for this reason?

Let me close by saying that since I am on leave from a Chemistry Department, I can deeply appreciate your problems. I appreciate receiving such a thoughtful presentation of your views.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. William S. Johnson
Executive Head
Department of Chemistry
Stanford University
Stanford, California

Same letter sent to those
on attached list,

DZRobinson:hh

S&T

S&T

DFH

DZR

DZR

The same letter was also sent to the following:

Dr. Lamar Field
Chairman, Dept Chemistry
Vanderbilt U
Nashville, Tenn.

Dear Dr. Field:

Dr. Richard M. Noyes
Head, Dept Chemistry
Univ. Oregon
Eugene, Oregon

Dear Dick:

Dr. M. Kent Wilson
Pearson Chemical Laboratory
Dept Chemistry
Tufts University
Medford, Mass.

Dear Kent:

Dr. William Rieman III
Director, School of Chemistry
Rutgers Univ.
Brunswick, New Jersey

Dear Dr. Rieman:

Dr. Earl Frieden
Professor and Chairman
Dept Chemistry
The Florida State Univ.
Tallahassee, Florida

Dear Dr. Frieden:

Dr. Alexander R. Amell
Chairman, Dept Chemistry
U New Hampshire
Durham, N. H.

Dear Dr. Amell:

Dr. Arthur E. Martell
Chairman, Dept Chemistry
Illinois Inst of Technology
Chicago 16, ~~Ch~~ Illinois

Dear Dr. Martell:

Dr. Alexander I. Popov
Chairman, Dept Chemistry
Michigan State Univ
East Lansing, Michigan

Dear Dr. Popov:

Dr. Adrian H. Daane
Head, Dept Chemistry
Kansas State Univ.
Manhattan, Kansas

Dear Dr. Daane:

Dr. H. E. Carter
Head, Dept Chemistry & Chem Engr.
Univ Illinois
Urbana, Illinois

Dear Herb:

Dr. Walter S. Koski
Professor of Chemistry
Johns Hopkins U
Baltimore, Maryland

Dear Walt:

Dr. Leigh C. Anderson
Chairman, Dept Chemistry
Univ Michigan
Ann Arbor, Michigan

Dear Dr. Anderson:

Dr. Cheves Walling
Chairman, Dept Chemistry
Columbia U
New York 27, New York

Dear Cheves:

Dr. B. E. Christensen
Chairman, Dept Chemistry
Oregon State Univ.
Corvallis, Oregon

Dear Dr. Christensen:

MORE....

Dr. J. F. Bunnett
Chairman, Dept Chemistry
Brown Univ.
Providence, R. I.
Dear Joe:

Dr. Harry W. Johnson
Chairman, Dept Chemistry
Univ California, Riverside
Riverside, California
Dear Dr. Johnson:

Dr. W. E. Wallace
Chairman, Dept Chemistry
Univ Pittsburgh
Pittsburgh, Pa.
Dear Dr. Wallace

Dr. H. A. Scheraga
Chairman, Dept Chemistry
Cornell University
Ithaca, New York
Dear Harold:

Dr. John D. Ferry
Chairman, Dept Chemistry
Univ Wisconsin
Madison, Wisconsin
Dear John:

Dr. William H. Jones
Dept Chemistry
Emory Univ
Atlanta, Georgia
Dear Dr. Jones;

Dr. George H. Cady
Chairman, Dept Chemistry
Univ Washington
Seattle, Washington
Dear Dr. Cady:

Dr. E. T. McBee
Head, Dept Chemistry
Purdue Univ
Lafayette, Indiana
Dear Dr. McBee:

Dr. V. J. Shiner, Jr.
Chairman, Dept Chemistry
Indiana Univ
Bloomington, Indiana
Dear Dr. Shiner:

Dr. D. M. Grant
Chairman, Dept Chemistry
Univ Utah
Salt Lake City, Utah
Dear Dr. Grant:

~~Dr. E. T. McBee~~
~~Head, Dept Chemistry~~
~~Purdue Univ~~

May 27, 1964

Dear Professor Johnson:

Thank you very much for your letter of May 15, 1964, inviting me to participate in your course "The United States in a Changing World Environment." My difficulty is that there is some possibility that I will be out of the country on October 13, in addition to the usual problem that my schedule is not always predictable in any case. Perhaps the best suggestion I can make is that either I, Dr. Colin MacLeod (Deputy Director of OST), or Mr. Irwin Tobin, a Foreign Service Officer on my staff, would be willing to give the lecture, and that we crystallize decision at a later date. I am sure the topic would be generally satisfactory, but it is doubtful whether we can outline it in more detail until some of the other things to which I must attend immediately are taken care of.

Sincerely yours,

Donald F. Hernig

Professor E. A. J. Johnson
Professor of Economic History
School of Advanced International Studies
The Johns Hopkins University
1740 Massachusetts Avenue, N. W.
Washington, D. C. 20036

DFH/eac

May 28, 1964

MEMORANDUM FOR

Ralph Dungan

I have asked Dr. Tobin and Mr. Ackermann of my staff to review the Fishbein paper and to give me their own thoughts on the Mexican water quality problem. Both have been acquainted with the problem in detail, having participated in the Wolman study, and Mr. Ackermann is outstanding in the general field of water resources.

They both conclude (and I agree) that the proposal for the use of the main channel for the discharge of highly saline water is impracticable, undesirable and very unlikely to be accepted by the Mexicans so that the second proposal, a diversion channel, would be better. However, they both feel that because of 1) the Wellton-Mohawk water table has been lowered, 2) the initial leeching of the soil has taken place, 3) the probable approach to uniformity of the salinity of well water from the various wells, and 4) the decrease in well water salinity, it would be wise to defer any action until the effect of the tile drains can be examined next fall.

I have attached copies of their reports so that you can have their arguments in detail. I will be happy to discuss this further with you.

Donald F. Hornig

DFH:mts

cc: DFH subj. & chron ✓

Dr. Tobin

Mr. Ackermann

S&T file and chron

KL J T h 718

20506

May 28, 1964

Dear Dr. Riecken:

I am glad to welcome you as the
Foundation's representative on the Panel
on Educational Research and Development,
replacing Dr. Bowen C. Dees.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Dr. Henry W. Riecken
Associate Director
(Scientific Personnel and Education)
National Science Foundation
Washington, D. C. 20550

JTurner/ekb
OST file - chron
JT file (PERD Members) - chron

✓cc:Dr. Hornig (chron)
cc:MLChatrnick (info)

S&T Control No. 0770

28
May 19, 1966

Dear Mr. Chairman:

In response to your request of March 19, legislation that has been proposed through H. R. 10461, "to exempt oceanographic research vessels from the application of certain vessel inspection laws, and for other purposes," has been reviewed by my office and by the Interagency Committee on Oceanography of the Federal Council for Science and Technology.

The purpose of H. R. 10461, as we understand it, would be to facilitate the conduct of oceanographic research surveys and exploration by exempting vessels explicitly engaged in this endeavor from the applicability of certain vessel inspection laws. These laws were developed for other classes of seagoing activity, and recent experience indicates that they have become an impediment to advancement of the marine sciences.

Under existing laws, scientific personnel carried on board a ship used in oceanographic research surveys and exploration must be classified either as passengers or as members of the crew. Neither classification is satisfactory. If such personnel are classified as passengers, then the vessel may be subject to higher requirements for safety than are appropriate to this category of research activity. On the other hand, if such personnel are classified as members of the crew, they become subject to laws applicable to seamen, a situation that is similarly inappropriate.

The proposed Bill would recognize that scientific personnel on board these oceanographic vessels who are engaged in research type activities are neither truly passengers in the accepted sense nor seamen. The Bill would thus resolve the status of these personnel and eliminate a growing source of difficulty in operation of these ships.

Finally, H. R. 10441 would give the Treasury Department authority to tailor the vessel inspection, manning, and other associated requirements of marine safety laws to the particular characteristics of vessels employed in marine research. While recognizing that these vessels may not be required to conform in all cases to the same requirements applicable to other merchant ships, because of their specialized mission and experimental nature of the equipment, the regulations issued under the proposed authority would nevertheless insure safe operation.

As you know, the President has been endeavoring to advance our national program in oceanography to comprehend the world ocean and to utilize this understanding in the interest of national defense, development of marine resources, safeguarding public health, and protection of life and property. Enactment of H. R. 10441 would facilitate advancement of this program.

I am pleased to recommend immediate enactment.

Sincerely,

(Signed) Donald F. Hornig

Donald F. Hornig

Honorable Herbert C. Bonner
Chairman
Committee on Merchant Marine and Fisheries
U. S. House of Representatives
Washington, D. C.

bcc: Jean Lewis
White House Records (2)

DFH; S&T Chron; S&T Files (W/incoming correspondence);
EW Chron; EW Files (FCST-oceanography-legislation)

Action on S&T Cont 459 and 327

Mr. Sam Hughes (BOB)

May 18, 1964

Donald F. Hornig (OST)

H. R. 10441 "to exempt oceanographic research vessels from the application of certain vessel inspection laws"

Both Bureau of the Budget and the House Merchant Marine and Fisheries Committee requested views of our office on the subject bill.

Based on study within OST and communication with technical personnel in the agencies, through the Interagency Committee on Oceanography, the bill appears to deserve support of the Administration, and I therefore recommend immediate enactment.

BOB clearance of the attached letter is thus requested.

**Encl
copy of proposed
letter to Chairman Bonner**

Re: S&T Cont. 459 and Cont. 327

**cc: DFH/ S&T Chron; S&T Files; EW Chron; EW Files (oceanography-
legislation)**

20506

May 28, 1964

Dear Congressman Elliott:

I have received your letter to President Johnson proposing a White House conference on scientific and technical information. The President has requested me to contact you in order to exchange views on this important area.

As you know, scientific and technical information is a subject to which the Office of Science and Technology is giving especial attention. Through the various machinery at our disposal, such as the Federal Council for Science and Technology, the President's Science Advisory Committee, and outside panels and consultants, we are taking steps to: (1) improve the scientific and technical communication for the better management of the R&D projects of the Federal Government; (2) coordinate scientific and technical information activities of the science-oriented departments and agencies; and (3) insure that the results of research and development are preserved and made accessible to the scientists and engineers.

The idea of a conference of the type you are proposing clearly deserves consideration. I would suggest that we arrange to meet with Lt. Gen. William J. Ely, USA, Chairman of the Federal Council's Committee on Scientific and Technical Information, to explore the possibilities here. It is conceivable that the effectiveness of such a conference might better be achieved if it were sponsored by some other agent than the White House. Conceivably, such a conference could be sponsored by the National Science Foundation, the Office of Science and Technology, or the quasi-government organization, the National Academy of Sciences.

Sincerely,

(signed) Donald F. Hornig

Donald F. Hornig

Honorable Carl Elliott
House of Representatives
Washington, D. C. 20515

cc: L/G Wm J Ely, USA, Chmn, Cosatl

JHKelley/las

S&T 0729

OST file-chron; JHK file-chron; Hornig, Wank.
WH files: 3

CARL ELLIOTT, ALABAMA, CHAIRMAN

JOHN E. FOGARTY, R.I. CLARENCE J. BROWN, OHIO
GEORGE P. MILLER, CALIF. JOHN S. ANDERSON, ILL.
MELVIN PRICE, ILL. JAMES C. CLEVELAND, N.H.
PHIL M. LANDRUM, GA. PATRICK MINOR MARTIN, CALIF.

COMMITTEE OFFICES: 200 INDEPENDENCE AVE. SW. (STOP 201)
TELEPHONE: WORTH 2-7261

ROBERT L. KOPFER, STAFF DIRECTOR

Select Committee on Government Research
House of Representatives of the United States

Eighty-Eighth Congress

Washington, D.C.

May 7, 1964

MAY 12 1964
RECEIVED
The President
The White House
Washington, D. C.

My dear Mr. President:

The Select Committee on Government Research is concerned with the documentation, dissemination, and use of research and development results as part of its current studies. With the explosion of scientific and technical knowledge, scientists and engineers are dependent upon the quality of scientific information in order to enable them to continue their research efforts. Similarly, administrators depend upon such information as a management tool in setting criteria and priorities. Many people and organizations, including the Federal Council for Science and Technology, have been instrumental in identifying problems and active in the search for new directions and goals in this area.

I should like to propose for your consideration a meeting which might be called the "White House Conference on Scientific and Technical Information." Such a Conference would bring together the men and women who direct the current scientific and technical information efforts for the purpose of identifying goals and developing ways to attain them.

At this time, the Select Committee is making an inventory of all scientific and technical information centers operated by our Government in order to submit its recommendations to the House in December. (A copy of the survey is attached.) Although estimates vary as to the number of information centers being supported by the Government, there are at least 600 such centers. The Bureau of the Budget estimates that expenditures for the Federal scientific and technical information program will approximate over \$200 million during fiscal year 1965. However, the Bureau also indicates that it is developing more meaningful guidelines for application to the forthcoming budget cycle which may well increase this total expenditure figure. I would be pleased to make available the results of our study for use by the Conference.

0709

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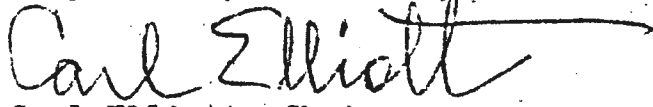
The President

Page Two

May 7, 1964

Great strides have been made in the development of electronic and optical devices to facilitate the flow of information. Through such a Conference, we should be able to mobilize the leadership of our country to accelerate procedures and policies to enhance our national research and development endeavors. Your reaction as to the feasibility of such a Conference will be greatly appreciated.

Respectfully submitted,

A handwritten signature in cursive script, reading "Carl Elliott". The signature is written in dark ink and is positioned above the printed name.

Carl Elliott, Chairman

CE:rgl
Enclosure

XEROX FROM QUICK COPY

May 28, 1964

Dear Mr. Hughes:

In reply to the request of your staff for Office of Science and Technology comments on the proposed Federal-State Technical Service Act of 1964, I wish to express my support for the overall objectives and approach of the Commerce Department's draft legislation.

Studies by the President's Science Advisory Committee and by the OST point to the importance of achieving wider utilization of the results of research and development in the non-defense sector of the economy. The proposed bill would be useful, if modest, step toward meeting this need, particularly for new and smaller industry, by increasing the availability of existing technology throughout the country. Its consideration by the Congress could stimulate greater public appreciation of the need to improve the civilian use of technology and to encourage greater participation by universities in regional economic growth.

Consequently, I hope that the bill would be transmitted to the Congress by the Secretary of Commerce in this session even though its passage appears unlikely this year.

Sincerely,

(Signed) Donald F. Hornig

Donald F. Hornig

Mr. Philip S. Hughes
Assistant Director for Legislative Reference
Bureau of the Budget, Room 259 BOB
Washington 25, D.C.

SRIVKIN:dfn
Cys: S&T Chron and Files
Rivkin Chron and Files

20506

May 28, 1964

Dear Lee:

We are glad to have Dr. Henry W. Riecken serve as the Foundation's representative on the Panel on Educational Research and Development, replacing Dr. Bowen C. Dees.

Sincerely,

(signed) Don

Donald F. Hornig

Dr. Leland J. Haworth
Director
National Science Foundation
Washington, D. C. 20550

JTurner/ekb

OST file - chron

JT file (PERD Members) - chron

✓ cc:Dr. Hornig (chron)

cc:MLChatrnick (info)

Sk T Control No. 0770

May 28, 1964

Dear Bob:

This is in response to your invitation to comment on the proposed ARPA salary policy for university research contracts forwarded with your letter of May 20th.

The matter of government-wide policy for payment of faculty salaries in connection with federally supported research at the universities has been intensively considered during the past year by the Science Advisory Committee and, in particular, by its Basic Research Panel under the chairmanship of Harvey Brooks. Although complete agreement was not reached, the attached policy statement drafted by Dr. Brooks was considered by the Federal Council for Science and Technology and referred by it to the Bureau of the Budget for consideration in revising BOB Circular A-21. The attached draft revision of A-21 covering summer salaries was agreed to by an interagency task group and has been submitted to the agencies for comment by July 15, 1964. Through the route of A-21, it should be possible to achieve government-wide agreement. Policy on academic year reimbursement policies is not covered by A-21. This matter deserves interagency discussion, and could appropriately be raised by Harold Brown at a meeting of the Government/University Relationships Discussion Group that has been meeting informally to take up a number of policy issues bearing on government support of research at the universities.

I assume that the purpose of your meeting on June 11 or 12 is to have the benefit of reactions of other agencies to the policies proposed by ARPA. Dr. David Robinson of my staff is prepared to participate, preferably on the 12th. Of course, I will be happy to discuss these matters with you should you desire.

Sincerely yours,

(signed) Donald F. Hornig

Donald F. Hornig

Dr. R. L. Sproull
Director
Advanced Research Projects Agency
Washington, D. C. 20301

DZBeckler:kbb

CC: DFH

Mr. Beckler

Dr. Robinson w/incoming ltr.

S&T Files

S&T Chron

~~SECRET~~

SANITIZED

E.O. 13292, Sec. 3.5

NLJ/KAC 04-109

By ics, NARA, Date 10-20-04

May 29, 1964

Dear Harold:

3.3
(b)(2) This is a summary of the principal arguments presented by the President's Science Advisory Committee regarding the proposed Pacific Field Test of [REDACTED] tentatively scheduled for this summer. PSAC has had a panel following this program for several years, and it has looked at the proposed tests in some detail. PSAC has discussed the question during a two-day meeting; however, PSAC as a whole cannot be said to have thought it through in complete detail.

A. Safety of the Experiments.

3.3
(b)(2) 1. Reasonable assurance is available for the safety of personnel and environment for [REDACTED] even though the susceptibility to these [REDACTED] is not known.

2. Safety of environment is not assured for [REDACTED] since it is not [REDACTED] in which they do not now exist. It has been pointed out that [REDACTED] to this country. Nevertheless, it is suggested that [REDACTED]

3.3
(b)(2) Under the proposed test conditions, however, one would be dealing with [REDACTED] in an area where they would not possess [REDACTED]. We are not aware of experimental studies of the [REDACTED] who have not been previously exposed. Further data and experience with other [REDACTED] might later modify this conclusion.

3.3
(b)(2) 1. Although the test plan requests it, it does not require [REDACTED] and PSAC recommends against their inclusion. It was felt that [REDACTED] should be used only when absolutely necessary and then only under conditions where adequate [REDACTED] could be exercised.

This document consists of 3 pages

No. 5 of 9 Copies, Series A

~~SECRET~~

PSAT Cont. No. 8002

3.3
(b)(2) There is no obvious need to test [REDACTED] have been tested in the laboratory. If [REDACTED] there is every reason to expect the laboratory ratio to hold.

B. Utility of the Experiments.

3.3
(b)(2) 1. The main technical justification for the tests appears to arise from a belief that a large scale proof test is needed to substantiate extrapolations of incomplete laboratory and limited field test data. There is always the question of whether large unknown factors influencing the [REDACTED] might have been overlooked. One also seeks better guidance to the [REDACTED] program. In particular, the questions of the effect of [REDACTED] have been raised.

3.3
(b)(2) 2. PSAC is not convinced that the many variables in the test will be well enough identified and measured, including their interaction, so that together with laboratory data the results obtained under [REDACTED] conditions could be transferred to other dissimilar conditions. For the same reason it doubts that the variables will be well enough characterized to make possible a realistic interpretation of departures from predicted behavior in the [REDACTED] test itself. In particular, the [REDACTED] will not be determined. Neither will accurate measurements of the [REDACTED]. Consequently, we question the utility of the test and ask whether large scale field tests are appropriate at this stage of the research and development program.

3.3
(b)(2) 3. We further note that the various [REDACTED] are highly specific in their behavior so the results obtained would apply only to the [REDACTED] tested. Insofar as general conclusions result, they can largely be derived from tracer experiments with [REDACTED]. Consequently, it does not seem likely to us that these tests will provide a significant addition to our knowledge for defensive planning.

~~SECRET~~

- 3 -

4. Furthermore, it appears to us that knowledge of the simple factors affecting [REDACTED] can be improved through further laboratory research. For example, it appears that the effects of [REDACTED] could be determined in chambers under a variety of conditions, thus making the interpretation of field tests encompassing these variables more significant, or eliminating the need entirely. Prior to chamber tests, of course, [REDACTED] variables should be studied in the field with adequate instrumentation and related to the laboratory effects of each variable in order to facilitate generalization. Prior to large scale field testing, it is desirable that contained development test data on any particular [REDACTED] be brought to a level of reliability which will permit acceptable prediction over suitable short range field tests possible on U. S. continental test sites.

3.3
(b)(2)

C. Conclusions

- a) There is no strong technical justification for these tests.
- b) If and when a test of this type becomes an essential step in a logical development program, the direct question of military usefulness should be evaluated since such a test will take us into a new phase of program development which will again raise serious questions in military planning and national policy.
- c) When the predictability of the behavior of [REDACTED] in the laboratory and in limited field tests appears high enough, an examination of possible test sites, conditions and military circumstances under which it might actually be used should be made before a specific test proposal is brought forward.

3.3
(b)(2)

Sincerely yours,

Donald F. Hornig

The Honorable Harold Brown
Director, Defense Research and Engineering
The Pentagon
Washington, D. C.

DFH/eac

1, H. Brown, 2, 3 & 4 extra copies
5- DFH Chron.; 6-VV McRae;
7-VV McRae; 8-S&T Files, 9-S&T
Chron.

~~SECRET~~

THE WHITE HOUSE
WASHINGTON

May 29, 1964

MEMORANDUM FOR

Bill Moyers

This is in response to your memo seeking proposals for a legislative program.

My office has been constantly engaged in long-range planning in which we have sought both legislative and administrative issues. The following are matters which I believe should be a part of the President's program and which, after further study, could lead to legislative proposals.

1. Control of pollution of the environment--air, water, food and man himself--by domestic and industrial wastes, pesticides, smog, radiation, etc.

The variety of pollutants and their pervasiveness, coupled with the inherent toxicity of many of them, makes this one of the "big problems" of our times. Our ability to understand and control has not kept pace with our ability to measure, which in turn has not kept pace with our capacity to pollute.

The problem of pollution has been and is under study in OST with a view to delineating sources and effects, stimulating the research necessary for its understanding, and effectively coordinating the work of the agencies of the government which are concerned with pollution, with the aim of assuring control of pollution at acceptable levels and minimizing its effect.

Last year we published a report, "The Use of Pesticides," some of whose recommendations may form the basis for legislation. We are just in the process of organizing a panel on "Environmental Contamination" with a distinguished membership to look at the entire problem, including its management in the government. This panel could either be the task

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force you mention, be broadened in some fashion you might suggest, or assist a differently constituted task force.

2. Improvement in Scientific and Technical Communications.

The tremendous growth in science and technology has outrun our ability to transmit the results effectively to the potential users, whether they are in government, in the civilian economy or in the Universities. This is true for research and development (including medicine) conducted both in the United States and abroad. The "information explosion" is not just a figure of speech.

Within a number of government agencies steps have been taken to handle portions of the problem, but these piecemeal solutions, important as they are, take us only a small way toward solution of the larger problem. At the present time the government spends over \$250 million on science information activities and over \$2 billion in handling the very detailed technical data associated with military development.

The President's Science Advisory Committee, the Federal Council for Science and Technology and the Office of Science and Technology have been deeply concerned with this problem for several years. It has conducted studies by expert panels which led to a series of important reports in 1958, 1961 and 1962 (available if you want them) containing guides for action. However, the time has come to take much more vigorous action in exploring approaches to its solution. These might include other National libraries, akin to the experimental, partly automatized National Library for Medicine, for example.

We have an interagency "Committee on Scientific and Technical Information" in being which is working on new proposals. I have also appointed a special consultant, Dr. William Knox, with a strong background in these problems, to help me get after this more vigorously. However, it would be timely to appoint an outside panel or task force to formulate concrete proposals.

3. Innovation and Experiment in Education.

Education is a \$33 billion enterprise on which we do very little systematic research and development and yet innovation and experiment are needed to produce a better education for a better society in such matters as instructional materials, learning processes and methods, reading, testing, school organization, etc.

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Because the results of experimentation are available to all of our schools, public, parochial and private, in all parts of the country, it seems appropriate as a field for federal action and support. It need not get involved in any of the usual hassles over education and yet could have a most extraordinary impact.

The President's Science Advisory Committee has had a panel on Educational Research and Development for several years. Its report, "Experiment and Innovation in Education" (attached) was published in March under the joint auspices of PSAC, the Office of Education and the National Science Foundation. It makes a series of recommendations which could form the basis for legislation. Some of them are being assimilated into the Poverty Program but are equally applicable to the total educational system.

Our panel (listed in the report) is broadly representative and would be willing to serve as a task force. Alternatively, it could serve to assist a differently constituted task force.

4. Elevation of the Status of the Office of Education.

Education is such a large enterprise and so very important to the future of the country, that the place of the Office of Education might well be examined to consider whether it ought not to be made an Independent Agency like the National Science Foundation. It has almost no functional relationship to the Health and Welfare components of HEW. It should properly be much strengthened and take over such matters as the previous proposal. An Executive Order strengthening its position is presently in preparation but a further enlargement of its role could be considered.

5. Strengthening and Integrating the Health and Welfare Functions of the Department of Health, Education and Welfare.

The coordination of the many diverse activities has been handicapped by the limited authority of the Secretary, the lack of a strong, broadly based staff in the Secretary's office, and the disproportionate strength of the administrators of subordinate elements of the Department. Close relationships between these administrators and the Congress have made it difficult to develop appropriate authority in the hands of the Secretary.

The problem is important because of the close relationship between health research, public health, the establishment of suitable safeguards for the public as regards drugs and foods and other problems related to the health of our nation. The presently semi-autonomous parts could be expected to contribute much more to each other.

In the next few months a task group representing the Executive Offices and the Office of the Secretary of HEW might consider the question. It might recommend legislation or it might recommend the appointment of a Presidential Commission in the spring of 1965 to consider both my proposals 4 and 5.

6. Better Utilization of Medical Knowledge.

Since 1957 the expenditures for biomedical research within the National Institutes of Health alone have risen from 50 to 700 million dollars. This research has been essentially basic in nature and has provided theoretical understanding of a wide range of disease processes. During this same period, however, downward trends in the incidence and prevalence of most major diseases have started to level off, and in the cases of some such as respiratory, venereal, and certain viral diseases, marked increases have been observed in the past three years. Infant mortality rate, traditionally used by the World Health Organization as a measure of over-all levels of health, has decreased only slightly in this country for the past ten years, while other countries whose infant mortality rates were already lower than our own, have had larger decreases from their already low base. Application to our own population of age and sex specific death rates of the Scandinavian countries indicates an average of nearly half a million deaths per annum which could be avoided were this country to achieve the crude death rates which these countries have accomplished.

In many cases, the prevention and cure of the major diseases are well known. The discrepancy, however, between the sophistication of our basic research and the antiquation of medical practices outside teaching institutions is large. In many fields of scientific endeavor, the proportion of monies spent for development is from three to ten times that spent for basic research. In the health field, by comparison, the proportion is reversed. While transformation of biomedical research expenditures to as high a proportion of development as is found in the physical sciences would not necessarily be desirable, there is nonetheless

great opportunity for the realization in practice of much of the research accumulated during the post war biosciences boom. The goal of a healthier nation does not have to wait for further miraculous discoveries. It can be achieved by dissemination and application of knowledge and techniques already available.

A task force might well examine the question of how, perhaps through a new agency, the results of medical research can be made available in practice. In addition, it might undertake such development efforts as surgical tools, artificial kidneys, or other types of "medical engineering." The study might be undertaken in this office (the Deputy Director and an outstanding staff member are M. D.'s) or we can help another group.

7. Stimulation of Technical Innovation and Economic Growth.

This office has been concerned for some time with the question of how to stimulate innovation in industry which will increase productivity and generate new kinds of industry. The problem is important because, among other things, our position in the world market has been steadily eroding in high technology industries. Moreover, the rate of innovation is very low in some of our very basic industries and this hurts our ability to house and clothe our people as well as we ought to.

Possible steps include the use of federal procurement to stimulate development in a way similar to that employed for weapons procurement, i. e. the use of performance specifications rather than the usual detailed construction specifications. Others might include aid to state and local governments in stimulating applications of technology or efforts to get Universities more actively into the problems of technical change and economic development.

I have just appointed an extremely able man, Dr. Patrick Conley, formerly a Vice President in charge of Research and Development Planning at Westinghouse, to my staff to take the lead in this direction. We have also had a PSAC panel study problems in Civilian Technology. I am sure some forward looking steps can be generated.

This is the end of my first list. We also attach great importance to the following, but I would like to think them through a little further.

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8. Transportation -- perhaps an Institute of Transportation Research or an agency bringing together the many regulatory and non-regulatory agencies and commissions dealing with separate transportation problems. We have no means of adopting integrated policies or working on the whole transportation system.

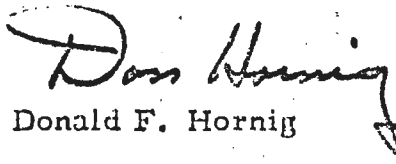
We have looked at this in the past but are not active at this moment.

9. Improving the quality of living--perhaps an Institute of Architectural Sciences.

Both 8 and 9 might be attacked through agencies which could fund research and planning in transportation and urban problems at Universities.

Finally, although I see no legislation involved, I think the President should stress the role basic research has played in developing both the intellectual content and the material prosperity of our current life. I hope he will emphasize our continuing need to continue to learn more and to support the development of our Universities.

I expect to develop further proposals in the near future. In the meantime, I will be glad to discuss any of those mentioned here.


Donald F. Hornig

Attachment

XEROX FROM QUICK COPY

May 29, 1964

Dear Mr. Knox:

Dr. Hornig asked that I send the attached copy of a letter from Dr. Stafford Warren to you. This letter has been sent by Dr. Warren to 25 leading librarians and professional people throughout the country.

Sincerely,

Eleanor A. Connors (Miss)
Secretary to Dr. Hornig

Encl.

Mr. William Knox

Manager, Corporate Planning
Esso Research and Engineering Company
P. O. Box 111
Linden, New Jersey

May 29, 1964

Dear Dr. Rosen:

I want to thank you and the California State Psychological Association for inviting me to serve as keynote speaker at your meetings next December. Although I am very much interested in the behavioral sciences and particularly anxious to learn more about them and to get to know more of the people involved in pursuing them, the unfortunate fact is that I have no plans to be in California at that time and, in fact, must give a speech in Washington on the evening of December 11th. I am afraid, therefore, that I must decline your invitation.

Best wishes for a successful meeting.

Sincerely yours,

Donald F. Hornig

Dr. Alexander C. Rosen
The Neuropsychiatric Institute
UCLA Center for the Health Sciences
Los Angeles, California 90024

DFH/eac

speech declines "P"

May 29, 1964

Dear Dr. Goldberg:

Thank you very much for your invitation to participate in your June Seminar on Technological Change and Human Values. The program looks very interesting indeed. Unfortunately, this comes at an extremely busy time for me here in Washington, so that it won't be possible for me to attend. Please accept my best wishes for a very successful meeting.

Sincerely yours,

Donald F. Hornig

Dr. Maxwell H. Goldberg
Center for Continuing Liberal Education
The Pennsylvania State University
100 Sparks Building
University Park, Pennsylvania 16802

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invitations regretted