

Originally Processed With FOIA(s):
2005-0336-F

FOIA Number:
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FOIA MARKER

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Record Group/Collection: George H.W. Bush Presidential Records
Collection/Office of Origin: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: Presidential Priorities Files

OA/ID Number: 62087
Folder ID Number: 62087-003

Folder Title:
Executive Office of the President: Presidential Priorities [3 of 4] [1991]

Stack:	Row:	Section:	Shelf:	Position:
	0	0	0	0

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9123655
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: GOOD, Mary: NSF

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 07/01/91

SUBJECT: REQUESTS MEETING WITH THE ENTIRE NATIONAL SCIENCE
BOARD TO DISCUSS RESEARCH AND EDUCATION PROGRAMS.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED:

ACTION STAFF
REQUIRED: FOR DAB'S SIGNATURE ACTION:

SENDER'S DUE DATE: 07/11/91
OSTP DUE DATE: 07/05/91 STAFF DUE DATE
DATE COMPLETED: 07/24/91 DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
Damar Hawkins

WHITE HOUSE TRACKING #: 250877 CONTACT PERSON:
PHONE: EXT:
REMARKS:

OSTP RECEIVED: 07/02/91 FILE: P-EOP-PRESIDENTIAL PRIORITY
DEPT RECEIVED:

THE WHITE HOUSE

WASHINGTON

July 24, 1991

Dear Mary:

Reflecting his extraordinarily busy schedule for the next several months, the President has asked me to respond to your letter of June 27 in which you invite him to meet with a few Board members to discuss a number of concerns in greater detail.

He has asked me to convey to you his regret that he will be unable to join you for such a discussion and has asked me to meet with you as his representative. I should, of course, be most happy to do so, both because I know that the discussion would be extremely useful both to me and through me to the President and, because as an alumnus of the National Science Board, I would look forward to the opportunity of meeting with many old and some new friends.

If this arrangement is acceptable to you, perhaps we can have our secretaries work out a mutually convenient time.

With warmest best wishes,

Sincerely yours,



D. Allan Bromley
The Assistant to the President
for
Science and Technology

Dr. Mary L. Good
National Science Board
1800 G Street, Northwest
Washington, D.C. 20550

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

INCOMING

DATE RECEIVED: JULY 01, 1991

NAME OF CORRESPONDENT: THE HONORABLE MARY L. GOOD

SUBJECT: REQUESTS MEETING WITH THE ENTIRE NATIONAL
SCIENCE BOARD TO DISCUSS RESEARCH AND
EDUCATION PROGRAMS

RECEIVED
JUL 02 REC'D
SCHEDULING
OFFICE

ROUTE TO: OFFICE/AGENCY	(STAFF NAME)	ACTION		DISPOSITION	
		ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED D YY/MM/DD
KATHY SUPER		ORG	91/07/01		C 91/07/17
<i>Dr. Bromley</i>	REFERRAL NOTE:	A	91/07/17		/ /
	REFERRAL NOTE:		/ /		/ /
	REFERRAL NOTE:		/ /		/ /
	REFERRAL NOTE:		/ /		/ /
	REFERRAL NOTE:		/ /		/ /

COMMENTS: *Dr. Bromley's office to request on behalf of the President and meet w/ Science Board members*

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: _____

MI MAIL USER CODES: (A) _____ (B) _____ (C) _____


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*****
*ACTION CODES:          *DISPOSITION          *OUTGOING          *
*                        *                        *CORRESPONDENCE:  *
*A-APPROPRIATE ACTION  *A-ANSWERED          *TYPE RESP=INITIALS *
*C-COMMENT/RECOM       *B-NON-SPEC-REFERRAL *          OF SIGNER      *
*D-DRAFT RESPONSE     *C-COMPLETED        *          CODE = A    *
*F-FURNISH FACT SHEET *S-SUSPENDED         *COMPLETED = DATE OF *
*I-INFO COPY/NO ACT NEC*                        *          OUTGOING  *
*R-DIRECT REPLY W/COPY *                        *                        *
*S-FOR-SIGNATURE       *                        *                        *
*X-INTERIM REPLY       *                        *                        *
*****

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REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

550877

Scheduling
over


NATIONAL SCIENCE BOARD
1800 G Street, NW
WASHINGTON, D.C. 20550

June 27, 1991

The President
The White House
Washington, DC 20500

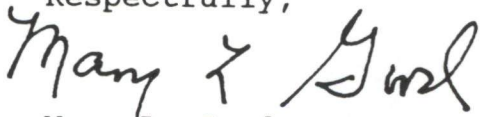
Dear Mr. President:

On behalf of the Members of the National Science Board, the policy making body of the National Science Foundation, I want to express our appreciation for the strong and consistent support you have provided for the Nation's scientific and engineering research and education enterprise. The Administration's continuing commitment to double the budget of the National Science Foundation is but one example of that strong support. We applaud your efforts to invest adequately in our research and education enterprise so that we can improve the nation's economic competitiveness in today's global marketplace.

The Board is concerned that the Foundation's research and education programs are caught in the middle of the debate on conflicting priorities in the FY 1992 budget process. The high priority accorded basic science and engineering research and education activities must be sustained as the debate continues in Congress.

For this reason, on behalf of the entire National Science Board, I am requesting an opportunity for a few Board Members to meet with you so that we might discuss these concerns in greater detail.

I appreciate very much your consideration of this request.

Respectfully,

Mary L. Good
Chairman

THE WHITE HOUSE

WASHINGTON

APPOINTMENT

SCHEDULE

RESPONSE DUE DATE: July 9, 1991

REQUEST FOR SCHEDULING RECOMMENDATION

MEMORANDUM FOR:

<input type="checkbox"/> GOVERNOR SUNUNU	<input type="checkbox"/> PHILLIP BRADY
<input checked="" type="checkbox"/> ANDREW CARD, JR. ✓	<input checked="" type="checkbox"/> DAVID DEMAREST
<input type="checkbox"/> ROGER PORTER	<input type="checkbox"/> MARLIN FITZWATER
<input type="checkbox"/> SIG ROHICH	<input type="checkbox"/> FREDERICK MCCLURE
<input type="checkbox"/> SUSAN PORTER ROSE	<input type="checkbox"/> J. BONNIE NEWMAN
<input checked="" type="checkbox"/> EDE HOLIDAY	<input type="checkbox"/> BRENT SCOWCROFT
<input type="checkbox"/> CHASE UNTERMAYER	<input type="checkbox"/> C. BOYDEN GRAY
<input type="checkbox"/> GREGG PETERSMEYER	<input type="checkbox"/> ED ROGERS
<input type="checkbox"/> DORRANCE SMITH	<input checked="" type="checkbox"/> <u>Dr. Bromley</u>

FROM: KATHY L. SUPER
PRESIDENTIAL APPOINTMENTS AND SCHEDULING

Please provide your recommendation the following scheduling request:

EVENT: Meet with members of the National Science Board

DATE: Open

LOCATION: The White House

Additional information concerning this event is attached.

YOUR RECOMMENDATION:

Accept _____

Regret

Surrogate

Message

Priority _____

Video _____

Routine _____

Satellite

Teleconference _____

Written _____

If your commendation is to accept, please cite reasons below

PLEASE RETURN TO WINDY WHITE, ROOM 182. OEOB, BY THE RESPONSE DUE DATE ABOVE SO THAT YOUR COMMENTS MAY BE CONSIDERED AS WE PROCEED WITH IS REQUEST.
THANK YOU

Sony

THE WHITE HOUSE
WASHINGTON

July 10, 1991

RECEIVED
JUL 17 1991
SCHEDULING
OFFICE

MEMORANDUM FOR KATHY SUPER

FROM: EDE HOLIDAY *EAH*

SUBJECT: Meeting with Members of the National Science Board

The Office of Science and Technology Policy recommends that the NSB meet with Dr. Bromley instead of the President.

THE WHITE HOUSE
WASHINGTON

APPOINTMENT

SCHEDULE

RESPONSE DUE DATE: July 9, 1991

REQUEST FOR SCHEDULING RECOMMENDATION

MEMORANDUM FOR:

<input type="checkbox"/> GOVERNOR SUNUNU	<input type="checkbox"/> PHILLIP BRADY
<input checked="" type="checkbox"/> ANDREW CARD, JR	<input checked="" type="checkbox"/> DAVID DEMAREST
<input type="checkbox"/> ROGER PORTER	<input type="checkbox"/> MARLIN FITZWATER
<input type="checkbox"/> SIG ROHICH	<input type="checkbox"/> FREDERICK MCCLURE
<input type="checkbox"/> SUSAN PORTER ROSE	<input type="checkbox"/> J. BONNIE NEWMAN
<input checked="" type="checkbox"/> EDE HOLIDAY	<input type="checkbox"/> BRENT SCOWCROFT
<input type="checkbox"/> CHASE UNTERMAYER	<input type="checkbox"/> C. BOYDEN GRAY
<input type="checkbox"/> GREGG PETERSMEYER	<input type="checkbox"/> ED ROGERS
<input type="checkbox"/> DORRANCE SMITH	<input checked="" type="checkbox"/> <u>Dr. Bromley</u>

FROM: KATHY L. SUPER
PRESIDENTIAL APPOINTMENTS AND SCHEDULING

Please provide your recommendation the following scheduling request:

EVENT: Meet with members of the National Science Board

DATE: Open

LOCATION: The White House

Additional information concerning this event is attached.


YOUR RECOMMENDATION:

Accept _____	Regret _____	Surrogate _____	Message _____
		Priority _____	Video _____
		Routine _____	Satellite _____
			Teleconference _____
			Written _____

If your commendation is to accept, please cite reasons below

PLEASE RETURN TO WINDY WHITE, ROOM 182. OEOB, BY THE RESPONSE DUE DATE ABOVE SO THAT YOUR COMMENTS MAY BE CONSIDERED AS WE PROCEED WITH IS REQUEST.
THANK YOU

250877

Scheduling
open


NATIONAL SCIENCE BOARD
1800 G Street, NW
WASHINGTON, D.C. 20550

June 27, 1991

The President
The White House
Washington, DC 20500

Dear Mr. President:

On behalf of the Members of the National Science Board, the policy making body of the National Science Foundation, I want to express our appreciation for the strong and consistent support you have provided for the Nation's scientific and engineering research and education enterprise. The Administration's continuing commitment to double the budget of the National Science Foundation is but one example of that strong support. We applaud your efforts to invest adequately in our research and education enterprise so that we can improve the nation's economic competitiveness in today's global marketplace.

The Board is concerned that the Foundation's research and education programs are caught in the middle of the debate on conflicting priorities in the FY 1992 budget process. The high priority accorded basic science and engineering research and education activities must be sustained as the debate continues in Congress.

For this reason, on behalf of the entire National Science Board, I am requesting an opportunity for a few Board Members to meet with you so that we might discuss these concerns in greater detail.

I appreciate very much your consideration of this request.

Respectfully,
Mary L. Good
Mary L. Good
Chairman

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9121926
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: BALLING, Robert: ARIZONA STATE UNIVERSITY

TO: JOHN SUNUNU

DATE OF
CORRESPONDENCE: 06/27/91

SUBJECT: FOLLOW-UP TO HIS JUNE 5, 1991 MEETING WITH GOVERNOR
SUNUNU.

DIRECTORATE STAFF
ASSIGNED: ENVIRONMENT ASSIGNED:

ACTION STAFF
REQUIRED: NO ACTION NECESSARY/ ACTION:
INFORMATION COPY

SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO:

WHITE HOUSE TRACKING #: CONTACT PERSON: SALLY KELLEY
REMARKS: PHONE: EXT:

CLOSED

OSTP RECEIVED: 06/28/91 FILE: EOP- PRESIDENTIAL PRIORITY
DEPT RECEIVED:

RECEIVED

RECEIVED

91 JUN 28 P 4: 17 THE WHITE HOUSE OFFICE

91 JUN 28 P12: 44

REFERRAL

OFFICE OF THE
DIRECTOR

OFFICE OF THE
JUNE 27, 1991 DIRECTOR

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY
ATTN: NANCY MAYNARD

ACTION REQUESTED:

INFORMATION COPY - NO ACTION NECESSARY

DESCRIPTION OF INCOMING:

ID: 249515

MEDIA: LETTER, DATED JUNE 19, 1991

TO: JOHN SUNUNU

FROM: MR. ROBERT BALLING
ARIZONA STATE UNIVERSITY
THE OFFICE OF CLIMATOLOGY

TEMPE AZ 85287

SUBJECT: FOLLOW-UP TO HIS JUN 5 91 MEETING WITH
GOVERNOR SUNUNU

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

INCOMING

DATE RECEIVED: JUNE 25, 1991

NAME OF CORRESPONDENT: MR. ROBERT BALLING

SUBJECT: FOLLOW-UP TO HIS JUN 5 91 MEETING WITH
GOVERNOR SUNUNU

ROUTE TO: OFFICE/AGENCY	(STAFF NAME)	ACTION		DISPOSITION	
		ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED D YY/MM/DD
JOHN SUNUNU		ORG	91/06/25	NAN C 91/06/26	TC
99 05TP Nancy Maynard	REFERRAL NOTE:	I	91/06/27	C 1 1	TC
	REFERRAL NOTE:				
	REFERRAL NOTE:				
	REFERRAL NOTE:				
	REFERRAL NOTE:				

COMMENTS: _____

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: _____

CS MAIL USER CODES: (A) _____ (B) _____ (C) _____

- *****
- | | | | |
|--------------------------|----------------------|----------------------|---|
| *ACTION CODES: | *DISPOSITION | *OUTGOING | * |
| * | * | *CORRESPONDENCE: | * |
| *A-APPROPRIATE ACTION | *A-ANSWERED | *TYPE RESP=INITIALS | * |
| *C-COMMENT/RECOM | *B-NON-SPEC-REFERRAL | OF SIGNER | * |
| *D-DRAFT RESPONSE | *C-COMPLETED | CODE = A | * |
| *F-FURNISH FACT SHEET | *S-SUSPENDED | *COMPLETED = DATE OF | * |
| *I-INFO COPY/NO ACT NEC* | | OUTGOING | * |
| *R-DIRECT REPLY W/COPY * | | | * |
| *S-FOR-SIGNATURE | | | * |
| *X-INTERIM REPLY | | | * |
- *****

REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

ARIZONA STATE
UNIVERSITY

TEMPE, ARIZONA 85287-1508

THE OFFICE OF CLIMATOLOGY (602) 965-6265

THE CHIEF OF STAFF
has seen June 19, 1991

Governor John Sununu
Chief of Staff
The White House
Washington, D.C. 20500

Dear Governor Sununu:

I am writing to thank you for spending time with me during our afternoon meeting on June 5th. The greenhouse issue is obviously very complex and given sufficient research, I am certain that the public perception can be changed.

During the meeting, you asked for materials that may be of interest in developing various policies. Over the next few months, I intend to send along pertinent information that I come across while combing through the library and/or conducting my own research. However, in the meantime, you may be aware that on June 30th, the Discovery Channel is showing the documentary entitled "The Greenhouse Conspiracy" to be followed by a one-hour panel discussion on the issue (Pat Michaels and I are on the panel).

Thanks again for your genuine interest on the greenhouse effect.

Sincerely,



Robert Balling

cc: Nancy Maynard
Roger Porter

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9121971
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: MOORE, W. Henson: DEPUTY SECRETARY OF ENERGY

TO: JOHN SUNUNU

DATE OF
CORRESPONDENCE: 06/25/91

SUBJECT: WRITES REGARDING THE EXPRESSED CONCERN OF THE COAL
INDUSTRY THAT THE PRESIDENT MIGHT BE FORCED INTO
SIGNING AN AGREEMENT ON GLOBAL CLIMATE CHANGE.

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE:

OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley Tom Ratchford
Ken Yale Dr. Phillips
Carl Bretscher Vickie Sutton
Nancy Maynard

WHITE HOUSE TRACKING #: 249975 CONTACT PERSON:
PHONE: EXT:
REMARKS: NO RESPONSE OR ACTION REQUIRED.

CLOSED

OSTP RECEIVED: 07/05/91 FILE: PRESIDENTIAL PRIORITY
DEPT RECEIVED:

T H E W H I T E H O U S E O F F I C E

REFERRAL

JULY 5, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY
ATTN: DR. BROMLEY

ACTION REQUESTED:

INFORMATION COPY - NO ACTION NECESSARY

DESCRIPTION OF INCOMING:

ID: 249975

MEDIA: LETTER, DATED JUNE 25, 1991

TO: JOHN SUNUNU

FROM: THE HONORABLE W. HENSON MOORE
DEPUTY SECRETARY OF ENERGY
U.S. DEPARTMENT OF ENERGY

WASHINGTON DC 20585

SUBJECT: WRITES REGARDING THE EXPRESSED CONCERN OF THE
COAL INDUSTRY THAT THE PRESIDENT MIGHT BE
FORCED INTO SIGNING AN AGREEMENT ON GLOBAL
CLIMATE CHANGE

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

FO 009

INCOMING

DATE RECEIVED: JUNE 26, 1991

NAME OF CORRESPONDENT: THE HONORABLE W. HENSON MOORE

SUBJECT: WRITES REGARDING THE EXPRESSED CONCERN OF THE
COAL INDUSTRY THAT THE PRESIDENT MIGHT BE
FORCED INTO SIGNING AN AGREEMENT ON GLOBAL
CLIMATE CHANGE

ROUTE TO: OFFICE/AGENCY (STAFF NAME)	ACTION		DISPOSITION	
	ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED D YY/MM/DD
JOHN SUNUNU	ORG	91/06/26	<i>NAN C</i>	<i>91/07/04 J</i>
<i>OSTP</i> <i>Dr. Bromley</i>		<i>I 910705</i>	<i>C</i>	<i>I</i>
REFERRAL NOTE: _____				
REFERRAL NOTE: _____				
REFERRAL NOTE: _____				
REFERRAL NOTE: _____				
REFERRAL NOTE: _____				

COMMENTS: _____

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: _____
CS MAIL USER CODES: (A) _____ (B) _____ (C) _____

- ```

*ACTION CODES: *DISPOSITION *OUTGOING *
* * *CORRESPONDENCE: *
*A-APPROPRIATE ACTION *A-ANSWERED *TYPE RESP=INITIALS *
*C-COMMENT/RECOM *B-NON-SPEC-REFERRAL * OF SIGNER *
*D-DRAFT RESPONSE *C-COMPLETED * CODE = A *
*F-FURNISH FACT SHEET *S-SUSPENDED *COMPLETED = DATE OF *
I-INFO COPY/NO ACT NEC * OUTGOING *
*R-DIRECT REPLY W/COPY * * *
*S-FOR-SIGNATURE * * *
*X-INTERIM REPLY * * *

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REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE  
(ROOM 75, OEOB) EXT-2590  
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING  
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS  
MANAGEMENT.

249975



The Deputy Secretary of Energy

Washington, DC 20585

June 25, 1991

AC/ER

MEMORANDUM FOR: JOHN SUNUNU  
CHIEF OF STAFF

THE CHIEF of STAFF  
has seen

FROM: W. HENSON MOORE *W. Henson Moore*

SUBJECT: NATIONAL COAL ASSOCIATION

I spoke to the annual convention of the National Coal Association this past weekend. I also spent some quality time with the top CEO's of the coal industry.

As you might imagine, the number one issue on their agenda is global climate change. In fact, they're almost paranoid about it as they consider it clearly the most serious threat to their continued existence. In that regard, I got the impression that none of them felt particularly close to this Administration. That is one reason why I spent the weekend with them. They are very appreciative and respectful of the President's stance on global climate change, but they are very suspicious and concerned that he might be forced into signing some sort of international agreement on the subject. I assured them that I did not think that would be the case, that our Department clearly felt that the Administration's stance was absolutely correct, and that you were personally following this matter for the President.

I thought I would pass this on to you as it is rare when you see a segment of the energy industry totally united on a particular political concern.

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9121796  
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS 1  
\*\*\*\*\*

FROM: FOLEY, Thomas: U.S. HOUSE OF REPRESENTATIVES

TO: FRED MCCLURE

DATE OF  
CORRESPONDENCE: 06/19/91

SUBJECT: FORWARDS A COPY OF A LETTER FROM DR. K.W. HIPPS  
REGARDING HIS CONCERN OVER POLICIES RELATING TO THE  
FUNDING OF SCIENCE PROGRAMS.

\*\*\*\*\*  
DIRECTORATE STAFF  
ASSIGNED: PHYSICAL SCIENCES ASSIGNED:

ACTION STAFF  
REQUIRED: FOR DAB SIGNATURE ACTION:  
AS APPROPRIATE

\*\*\*\*\*  
SENDER'S DUE DATE: 07/01/91  
OSTP DUE DATE: 06/25/91 STAFF DUE DATE  
DATE COMPLETED: 7/8/91 by KAE DATE COMPLETED/DEPT:

\*\*\*\*\*  
COPIES TO: D. Allan Bromley  
Damar Hawkins

\*\*\*\*\*  
WHITE HOUSE TRACKING #: CONTACT PERSON: SALLY KELLEY  
PHONE: 456-7486 EXT:  
REMARKS: Re-assigned to Physical Sciences and Engineering 06/20/91.

**CLOSED**

OSTP RECEIVED: 06/19/91 FILE: P- PRESIDENTIAL PRIORITY  
DEPT RECEIVED: 06/20/91

9127916

RECEIVED

THE WHITE HOUSE OFFICE JUN 19 P 3:14

REFERRAL

JUNE 19, 1991 OFFICE OF THE DIRECTOR

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:  
APPROPRIATE ACTION

DESCRIPTION OF INCOMING:

ID: 244576

MEDIA: LETTER, DATED JUNE 6, 1991

TO: FRED MCCLURE

FROM: THE HONORABLE THOMAS S. FOLEY  
U.S. HOUSE OF REPRESENTATIVES

WASHINGTON DC 20515

SUBJECT: FORWARDS A COPY LETTER FROM DR. K. W. HIPPS  
REGARDING HIS CONCERN OVER POLICIES RELATING  
TO THE FUNDING OF SCIENCE PROGRAMS

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN  
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE  
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE  
(OR DRAFT) TO:  
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY  
DIRECTOR OF AGENCY LIAISON  
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE  
CORRESPONDENCE TRACKING WORKSHEET

ID# 244576

INCOMING

DATE RECEIVED: JUNE 10, 1991

NAME OF CORRESPONDENT: THE HONORABLE THOMAS S. FOLEY

SUBJECT: FORWARDS A COPY LETTER FROM DR. K. W. HIPPS  
REGARDING HIS CONCERN OVER POLICIES RELATING  
TO THE FUNDING OF SCIENCE PROGRAMS

| ROUTE TO:<br>OFFICE/AGENCY | (STAFF NAME)   | ACTION      |                  | DISPOSITION  |                           |
|----------------------------|----------------|-------------|------------------|--------------|---------------------------|
|                            |                | ACT<br>CODE | DATE<br>YY/MM/DD | TYPE<br>RESP | C COMPLETED<br>D YY/MM/DD |
| FREDERICK MCCLURE          |                | ORG         | 91/06/10         | FM           | 91/06/10                  |
|                            | REFERRAL NOTE: |             |                  |              |                           |
|                            | REFERRAL NOTE: |             |                  |              |                           |
|                            | REFERRAL NOTE: |             |                  |              |                           |
|                            | REFERRAL NOTE: |             |                  |              |                           |
|                            | REFERRAL NOTE: |             |                  |              |                           |

COMMENTS:

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ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: 1230  
MAIL USER CODES: (A) (B) (C)

- ```

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*ACTION CODES:          *DISPOSITION          *OUTGOING          *
*                      *                      *CORRESPONDENCE:  *
*A-APPROPRIATE ACTION  *A-ANSWERED          *TYPE RESP=INITIALS *
*C-COMMENT/RECOM      *B-NON-SPEC-REFERRAL *          OF SIGNER   *
*D-DRAFT RESPONSE     *C-COMPLETED        *          CODE = A   *
*F-FURNISH FACT SHEET *S-SUSPENDED        *COMPLETED = DATE OF *
*I-INFO COPY/NO ACT NEC*                      *          OUTGOING  *
*R-DIRECT REPLY W/COPY *                      *                      *
*S-FOR-SIGNATURE      *                      *                      *
*X-INTERIM REPLY      *                      *                      *
*****
    
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REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

June 11, 1991

Dear Mr. Speaker:

Thank you for your recent letter with which you enclosed a copy of correspondence you received from your constituent, Dr. K.W. Hipps of Pullman, Washington, regarding the funding of science programs.

We appreciate being apprised of Dr. Hipps concerns. Please know that I have shared your letter with the appropriate Administration officials so that they, too, are aware of Dr. Hipps' concerns.

Thank you again for your interest in writing.

With best regards,

Sincerely,

Frederick D. McClure
Assistant to the President
for Legislative Affairs

The Honorable Thomas S. Foley :
Speaker of the :
House of Representatives
Washington, D.C. 20515

FDM:TBA:

bcc: w/ copy of inc to Office of Science and
Technology Policy - for Appropriate Action

THOMAS S. FOLEY
5TH DISTRICT, WASHINGTON

THE SPEAKER

CONGRESSIONAL OFFICE:
201 LONGWORTH HOB
WASHINGTON, DC 20515-4705
AREA CODE (202) 225-2006

Congress of the United States
House of Representatives
Washington, DC 20515

204576
DISTRICT OFFICES:
WEST 601 FIRST AVENUE
SECOND FLOOR WEST
SPOKANE, WA 99204
AREA CODE (509) 353-2155

E. 12929 SPRAGUE
SPOKANE, WA 99216-0736
AREA CODE (509) 926-4434

28 W. MAIN
WALLA WALLA, WA 99362-2816
AREA CODE (509) 522-6370

June 6, 1991

Mr. Fred D. McClure
Assistant to the President of Legislative Affairs
Office of Legislative Affairs
1600 Pennsylvania Avenue
Washington, D.C. 20500

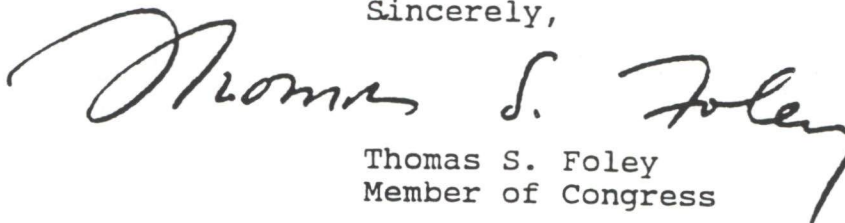
Dear Mr. McClure:

Enclosed is a copy of a letter I received from Dr. Hipps, of Pullman, Washington, regarding his concern over policies relating to the funding of science programs.

I will appreciate your comments on the issues raised by my constituent.

With best wishes.

Sincerely,


Thomas S. Foley
Member of Congress

TSF:njv



Washington State University

Department of Chemistry

Congressman Thomas Foley
1201 Longworth House Office Bldg.
Washington, DC
20515

Dear Congressman Foley,

This is a longish letter with several pages of supporting material. I hope you will find time in your very busy schedule to consider it despite its length. The subject is of extreme national importance, our science policy as it affects University level teaching and research. Because I have won both teaching and research awards during my 10 years as a faculty member at Washington State University, I feel that I am qualified to discuss this topic. One element of the supporting material, the enclosed NSF peer reviews, is confidential.

Beginning with the Reagan administration, basic science (excluding medical research) support by the federal government began turning from funding individual investigators (usually a faculty member who then supported graduate students and postdoctorals) towards support of industrial style research. By industrial style research, I mean a group of principal investigators, generally from different disciplines, who were supported with very large grants. These principal investigators (PI's) in turn supported graduate students and postdoctorals. During the intervening years, NSF and DOD have continued to put more and more of their resources into industrial style and therefore BIG- research. The basic concept, apparently, was that by making University research more like industrial research and development (R&D) the general technological state of the country could be improved. Improved technology, in turn, was expected to improve the nations financial condition by reversing trade imbalances. Unfortunately, the concept is flawed and the execution of this policy is killing the hard sciences in America.

First, consider the concept. Eight years ago the US was awakening to the fact that both European and Japanese industries were rapidly dominating, and in many cases destroying, their American counterparts. During this same period, scientists and students from all over the world were flocking to the US to learn basic science and technology. Virtually all the 'high tech' in imported goods was first produced in American laboratories by scientists trained by American universities. The US had the position of prominence in all the hard sciences. I submit, therefore, that what was needed was more academic-style research in industry -- not industry-style research in academe.

Self-reliance, creativity, and an appreciation for the key elements in a large problem are necessities for successful problem solving. The graduate students in the US learned and honed these skills by being required to work on, and solve, a significant scientific problem. For many, it was their only opportunity to face all the diverse aspects of scientific problem solving. A typical student in my discipline might have learned to apply cryogenics, electronics, computer interfacing and programming, machining, spectroscopy, and theory -- all towards the end of solving his Ph.D. problem. He was expected to be the expert in that area when he graduated.

This kind of training can only take place in 'small' science. When the research involves several principal investigators (PI's) each of whom addresses a single part of a complex problem, the graduate student often works on only a part of that PI's segment. Thus 'big' and 'industrial' model science (distributed science) tends to produce Ph.D.s who are cogs - not those that can act as engines.

There is most certainly a place for big and industrial style science, but it belongs at the postdoctoral level. Creativity must be experienced early and often if it is to grow. Giving students a very narrowly defined problem stifles creativity.

In years gone by this drive towards larger more distributed groups was not too damaging because some funding of basic 'bench top' science was continued. Today, the combination of directed and distributed research is consuming too large a fraction of the federal science dollar. Many young faculty receive good to excellent reviews and yet cannot be funded because funds are not available. Many established researchers are receiving the best reviews of their careers and yet their funding is declined because their work does not fall within a target program. As evidence for this latter statement, I have enclosed the verbatim reviews on my latest, declined, NSF proposal.

Because of these funding failures, many faculty no longer have the resources to train graduate students. Further, their disappointment is perceived by undergraduate students who move away from the hard sciences to fields with greater perceived rewards (medicine and engineering, for example).

To further exacerbate the problem, there is a strong 'rich get richer' tendency. Those who have been involved in distributed science for several years have benefited from the enhanced funding and have produced a number of Ph.D.'s. These students, and past collaborators and their students, receive somewhat more favorable proposal reviews. During fat times this is not too large a problem. During lean times however, when the difference between a 4.5 and a 4.6 score can mean success or failure, the 'old boy network' can, and does, dominate funding.

One more point. The two most exciting hard science discoveries of the last 25 years - high temperature superconductivity and tunneling microscopy - came from bench-top science. They were made by people working in areas which were considered dead ends. Curiously enough, they both occurred in European industrial research labs in which small research groups were allowed and even encouraged -- academic style research.

I deeply believe that a much larger share of federal research support should be given to bench-top basic (exploratory) science. The level of support should depend on both the research productivity and also, in part, on the teaching activities of the PI. This country needs scientists who share their excitement and creativity at all levels of the University experience - not just within the narrow confines of the research award. Subsistence awards, say \$25,000.00 per year with no overhead paid to the institution, should be fairly easy to obtain on the basis of past and continuing accomplishments. Larger, or supplemental, awards should be based on careful peer review of the scientific merit and, in some cases, the relevance to an agencies mission. This type of research support has been used extensively in Canada and in Europe. It balances the need for faculty commitment to teaching and creativity against the need for progress in politically significant research.

Currently, more than 40% of Chemistry and Physics Ph.D. students are not American citizens. And that percentage is growing! We must provide an environment wherein our citizens and their children can control their destiny. We must provide a learning environment which sparks the excitement of creativity within the minds of our students. I believe this

requires that we re-commit ourselves to academic research at the undergraduate and graduate level. Further, we must include a new element of commitment to teaching (undergraduate and graduate) as a valid component of the support decision process.

In my attempts to keep this as short as possible, I hope I have retained sufficient coherence to convince you that bench top science needs strengthened (renewed?) support. I would certainly be pleased to communicate further with you on this topic if you desire.

Sincerely yours,

K.W. Hipps
Professor of Chemistry
and Chemical Physics

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20506

July 9, 1991

Dear Dr. Hipps:

The Honorable Thomas S. Foley forwarded to the White House your letter concerning the importance of individual investigators and bench-top basic science.

I agree entirely that individual and small group research constitutes the backbone of our science enterprise. In my opinion, this is the essential ingredient supporting the worldwide preeminence of American university basic research. My colleagues in the Bush Administration also share that view and, as a result, we have placed extra emphasis on these activities in our budget proposal for FY 1992. The House of Representatives has responded favorably, and we hope the Senate will do likewise.

At the same time, we are mindful of the multiple roles of science in our society, as well as of the multiplicity of styles of doing good science, and we have tried to strike a careful balance among these activities. To set the stage for future decisions, I have initiated a study which I expect will elucidate any shifts in this balance that may have taken place over the last decade.

Thank you for your thoughtful letter.

Sincerely yours,



D. Allan Bromley
The Assistant to the President
for
Science and Technology

Professor K.W. Hipps
Professor of Chemistry and Chemical Physics
Washington State University
Pullman, Washington 99164-4630

BC: The Honorable Thomas S. Foley
Speaker of the House

THE WHITE HOUSE
WASHINGTON

July 8, 1991

Dear Dr. Hipps:

The Honorable Thomas S. Foley forwarded to the White House your letter concerning the importance of individual investigators and bench-top basic science.

I agree entirely that individual and small group science constitute the backbone of our science enterprise. In my opinion, ~~they are the essential ingredient that in the~~ ^{the key is the} worldwide preeminence of American university basic research. My colleagues in the Bush Administration also share that view and, as a result, we have placed extra emphasis on these activities in our budget proposal for FY 1992. The House of Representatives has responded favorably, and we hope the Senate will do likewise. ^{supporting}

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} are we going to publish this study?

Thank you for your thoughtful letter.

Sincerely yours,

KY: per KAE, "maybe."

D. Allan Bromley
The Assistant to the President
for
Science and Technology

Professor K.W. Hipps
Professor of Chemistry and Chemical Physics
Washington State University
Pullman, Washington 99164-4630

~~Handwritten scribble~~

end bec
to speaker
Foley

"CORRESPONDENCE TRACKING"

TYPE: INFORMATION DOCUMENT NUMBER: 9121737
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: WEISMILLER, Frances Power

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 06/06/91

SUBJECT: LETTER TO PRESIDENT BUSH REQUESTING THAT HE MODIFY
WHITE HOUSE FAMILY PLANNING POLICIES SO THAT MUCH
MORE CONTRACEPTION REACHES THE POOR OF
LESS-DEVELOPED NATIONS.

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
LIFE SCIENCES

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: PHONE: EXT:

OSTP RECEIVED: 06/14/91 FILE: PRESIDENTIAL*LIFE SCIENCES
DEPT RECEIVED:

Copy to Dr. D. Allan Bromley

815 ROMERO CANYON ROAD
SANTA BARBARA, CALIFORNIA 93108
(805) 969-3612

RECEIVED

91 JUN 14 A10: 25

OFFICE OF THE
DIRECTOR

June 6, 1991

President George Bush
The White House
Washington, D.C. 20500

Dear Mr. President:

This is a request. What I'm asking -- begging -- you to do would swing many environmentalist votes to you and the Republicans which would otherwise go elsewhere in the 1992 elections. It would offend very few anti-abortionists; that is, only those who believe that all sexuality is offensive to God, who views it as a distasteful necessary step toward the creation of souls for Heaven. The vast majority of anti-abortionists approve of contraception and many use it themselves. They know it reduces abortions.

The request: Please find a way to modify White House Family Planning policies so that much, much more contraception reaches the poor of the less-developed nations -- as much as the agencies that know how to distribute it can take, now and from now on.

Regardless of theories to the contrary, in real life famines, epidemics, rebellions and probably also warfare are now increasing at least in proportion to population growth and perhaps exponentially. The loss of fisheries, fertile lands and forests is clearly exponential. It also seems irreversible, for a good free-enterprise reason: the scarcer a valuable food or product gets, the higher its price goes and the stronger the incentive to exhaust its source becomes.

In your lifetime -- really since 1950 -- the human race has become the cancer of the planet. There is nothing in sight that might prevent its becoming terminal except saturation birth control.

Respectfully,

Frances Power Weismiller

Frances Power Weismiller

logged



"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY

DOCUMENT NUMBER: 9121491

FROM: BROWN, Robert A.: SPACE TELESCOPE SCIENCE INSTITUTE

TO: JOHN SUNUNU

DATE OF CORRESPONDENCE: 05/22/91

SUBJECT: SEEKS GOVERNOR SUNUNU'S COMMENTS/SUGGESTIONS ON THE EDUCATION INITIATIVE IN ASTRONOMY.

ASSIGNED TO: INTERNATIONAL/POLICY *CD*
JH

ACTION REQUIRED: FOR DAB SIGNATURE

SENDER'S DUE DATE: 06/05/91

OSTP DUE DATE: 05/29/91

DATE COMPLETED: 6/13/91

COPIES TO: D. Allan Bromley
Damar Hawkins

WHITE HOUSE TRACKING #: 237684

CONTACT PERSON: SALLY KELLY

REMARKS:

DATE RECEIVED: 05/23/91

FILE: ~~WHITE HOUSE MEMOS~~
PRESIDENTIAL PRIORITY

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY

DOCUMENT NUMBER: 9121491

FROM: BROWN, Robert A.: SPACE TELESCOPE SCIENCE INSTITUTE

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SUBJECT: SEEKS GOVERNOR SUNUNU'S COMMENTS/SUGGESTIONS ON THE EDUCATION INITIATIVE IN ASTRONOMY.

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SENDER'S DUE DATE: 06/05/91

OST DUE DATE: 05/29/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley
Damar Hawkins

WHITE HOUSE TRACKING #: 237684

CONTACT PERSON: SALLY KELLY

REMARKS:

DATE RECEIVED: 05/23/91

FILE: PRESIDENTIAL PRIORITY

contact John Bahcall at Inst for Advanced Study. look like a very good drawing letter to me. DAB

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20508

May 31, 1991

Dear Dr. Brown:

I am writing in response to your letter of May 10, 1991, to Governor Sununu, requesting suggestions on an education initiative in astronomy. Thank you for the copy of your workshop report, An Education Initiative in Astronomy, included with your letter.

As you know, for the past year, the interagency Committee on Education and Human Resources, of the Federal Coordinating Council for Science, Engineering, and Technology, has been working quite intensely to rationalize and coordinate the Federal government's approach to mathematics and science education. The Committee released a report, "By the Year 2000: First in the World," that supplements the President's 1992 budget submission. It outlines a strategy to maximize the effectiveness of the Federal contribution to American mathematics and science education. The Committee is now reviewing agency programs for the support of mathematics or science activities. Certainly, astronomy is an appropriate component of these agency programs.

I am aware that both the NSF and NASA are making plans to factor astronomy into their science education programs in the near future. I would urge you to communicate your concerns and questions directly to these agencies for their consideration during the planning stages. You may wish to contact Dr. Morris Aizenman in the Division of Astronomical Sciences at the NSF or Dr. Lennard Fisk, Associate Administrator for the Office of Space Science and Applications at NASA.

Sincerely,



D. Allan Bromley
Director

Dr. Robert A. Brown
Chairman
Space Telescope Science Institute
3700 San Martin Drive
Baltimore, MD 21218

THE WHITE HOUSE OFFICE

REFERRAL

MAY 22, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:

DIRECT REPLY, FURNISH INFO COPY

DESCRIPTION OF INCOMING:

ID: 237684

MEDIA: LETTER, DATED MAY 10, 1991

TO: JOHN SUNUNU

FROM: MR. ROBERT A. BROWN
SPACE TELESCOPE SCIENCE INSTITUTE
3700 SAN MARTIN DRIVE
BALTIMORE MD 21218

SUBJECT: SEEKS GOVERNOR SUNUNU'S COMMENTS/SUGGESTIONS
ON THE EDUCATION INITIATIVE IN ASTRONOMY

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

FG006-03

INCOMING

DATE RECEIVED: MAY 13, 1991

NAME OF CORRESPONDENT: MR. ROBERT A. BROWN

SUBJECT: SEEKS GOVERNOR SUNUNU'S COMMENTS/SUGGESTIONS
ON THE EDUCATION INITIATIVE IN ASTRONOMY

ROUTE TO: OFFICE/AGENCY (STAFF NAME)	ACTION		DISPOSITION	
	ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED YY/MM/DD
JOHN SUNUNU <i>OSTP</i> <i>Dr. Bromley</i>	ORG	91/05/13		<i>91/05/28</i>
REFERRAL NOTE:		<i>91/5/22</i>		<i>1/1</i>
REFERRAL NOTE:		<i>1/1</i>		<i>1/1</i>
REFERRAL NOTE:		<i>1/1</i>		<i>1/1</i>
REFERRAL NOTE:		<i>1/1</i>		<i>1/1</i>
REFERRAL NOTE:		<i>1/1</i>		<i>1/1</i>

COMMENTS:

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES:

CS MAIL USER CODES: (A) (B) (C)

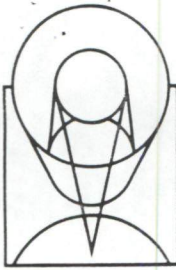
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*ACTION CODES:          *DISPOSITION          *OUTGOING          *
*                       *                       *CORRESPONDENCE:  *
*A-APPROPRIATE ACTION  *A-ANSWERED          *TYPE RESP=INITIALS *
*C-COMMENT/RECOM       *B-NON-SPEC-REFERRAL *           OF SIGNER *
*D-DRAFT RESPONSE      *C-COMPLETED        *           CODE = A  *
*F-FURNISH FACT SHEET  *S-SUSPENDED        *COMPLETED = DATE OF *
*I-INFO COPY/NO ACT NEC*                       *           OUTGOING *
*R-DIRECT REPLY W/COPY *                       *                       *
*S-FOR-SIGNATURE       *                       *                       *
*X-INTERIM REPLY       *                       *                       *
*****

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REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

231604



SPACE
TELESCOPE
SCIENCE
INSTITUTE

3700 San Martin Drive
Baltimore, MD 21218
(301) 338-4700
Telex 6849101

Friday, May 10, 1991

The Honorable John H. Sununu
Chief of Staff
The White House
Washington, D.C. 20500

Dear Governor Sununu:

I write to ask your advice on one of American education's Gordian knots. The federal R&D agencies have been called upon to address the nation's education crisis. Based on your knowledge of education and public administration, my question to you is this: How can the national astronomy program respond to this challenge? If you could take a few moments to engage the issue—and communicate your reactions to me—you would be helping to put America's schoolchildren closer to an exciting scientific enterprise.

Each year the American taxpayer invests about \$1 billion in astronomical exploration, which operates telescopes and supports astronomers. On behalf of the public, American astronomers pursue fundamental questions about space, time, and matter. Undoubtedly, recent progress toward understanding the cosmos will remain one of the outstanding achievements in the history of the human mind.

Last year, I was asked by the astronomical community to convene a workshop to consider how better to translate the ideas and excitement of astronomy research into general educational benefit. I was asked to approach the problem from a perspective inside the astronomy program, to assess the opportunities to improve the situation, and to formulate recommendations. The result is the enclosed report, *An Education Initiative in Astronomy*.

Our panel found that, today, education is coupled only loosely with research at the agencies sponsoring astronomy. Thus, the panel report recommends that the NSF and NASA astronomy offices revise their programs in ways that will encourage astronomers and observatories to adopt education goals focussed particularly at the pre-college level. Our advice has been favorably received, and we are now looking to implement it as an "education initiative." Our intent is to create an alliance of the federal offices sponsoring astronomy, associations and institutions involved with astronomy or education, the private sector, and state governments.

Page 2

The Honorable John H. Sununu

May 10, 1991

My questions to you: How would you assess the value of this initiative? How might it be accomplished with minimal disturbance to the research enterprise? How can the connections between astronomy research and education be made most effective and efficient? What are the appropriate roles for the various levels of government, the private sector, and the professional communities involved? How should current education philosophies and policies influence the implementation of this initiative? And, because astronomy produces glorious pictures for computer exploration, what is the appropriate relationship between our initiative and the increasing use of information technologies in the schools? These are the issues I ask for your help to frame and address.

The astronomical community is ready to support an education initiative in astronomy. The objective having been stated, however, we lack a good "map" showing the mine-fields, the bridges and roads, the routes of least resistance and greatest opportunity, who can be counted as allies—and where the gold is. That's where you might help. We would be most grateful for any pointers you could provide.

Thanking you in advance for your response,

Sincerely,



Robert A. Brown

Enclosure

May 28, 1991

MEMORANDUM TO TOM RATCHFORD

FROM: JANICE HOWELL

SUBJECT: RESPONSE TO BROWN LETTER

good work!

In an effort to prepare the attached response to the letter from Dr. Robert Brown, chairman of the Space Telescope Science Institute, Baltimore, MD, regarding an education initiative in astronomy, it was suggested by Karl Erb and Charles Dickens that I contact both NSF and NASA.

At NSF, I was informed by Morris Aizenman that Dr. Brown had nothing to do with the "Bahcall" report, i.e., "The Decade of Discovery in Astronomy and Astrophysics," a NRC report released this year. In this report, there is a chapter entitled "Policy Opportunities" wherein the Committee emphasizes programs related to precollege education, and notes the existence of the document by Brown but without endorsing the Brown initiative (pages attached, note p. 114). Aizenman insisted that the NSF position is that "they're looking favorably at the recommendations in the 'NRC Decade of Discovery Report' and hoping to initiate something soon." Aizenman believes Brown may have requested and received the funding for his report from NASA.

At NASA, I contacted Bob Brown (of the CEHR working Group), who said, for obvious reasons, he is often confused with Dr. Robert Brown of the Space Telescope Science Institute. Brown-CEHR also indicated that the confusion is compounded by the fact that Dr. Brown works from time to time at NASA for Leonard Fisk, the Associate Administrator for the Office of Space Science and Applications. Although Brown-CEHR knew of the Brown initiative, his comments were focussed on NASA plans to "factor astronomy into their 10-year education plan."

Given the comments above, we decided to refer Dr. Brown to NSF and/or NASA to obtain specific answers to his questions.

Attachments

cc: Charles Dickens



DIVISION OF ASTRONOMICAL SCIENCES
NATIONAL SCIENCE FOUNDATION
1800 G STREET NORTHWEST, ROOM 615
WASHINGTON, DC 20550

FACSIMILE COVER SHEET

TELEFAX NUMBER: 202-357-9770

TO: *JANICE HOWELL*

FROM: *MORRIS AIZENMAN*

SUBJECT: *NRC DECADE REPORT*

NUMBER OF PAGES INCLUDING COVER SHEET:

4

MESSAGE: *JANICE: HERE ARE THE PAGES
CONCERNING EDUCATION.*

MORRIS.

THE DECADE OF DISCOVERY

committee is to provide an budget for Explorer satellites lorer missions were launched missions, and a continuing and aircraft, made possible ASA's Astrophysics Division on European, Japanese, and iversity infrastructure necessary program during the 1980s onomers (Appendix B) and port the research activities of

for ground-based and space s worked together effectively understanding the universe. ata obtained from space and of many important scientific atories of NASA-developed mple of this cooperation.

he decade was also a period nation. Only 2 American 80s, compared to 10 in the ssion has stretched to more ductivity of missions. These he early 1980s, on the Space ons, a policy that has since Shuttle launches was about lish all that the Shuttle was

onomers, and to the nation, he flaw in the HST mirror tee discussed, in the brief f the mirror's imperfection, milar disasters in the future. ction below, the committee ical risks and make NASA's

ergy (DOE) at universities or ncering theoretical research more than 25 years. With stronomy was founded, and ch area. DOE scientists at oratories have been leaders

POLICY OPPORTUNITIES

113

in calculations of gravitational collapse, supernova explosions, stellar pulsations, nucleosynthesis, equations of state of dense matter, and stellar opacity, as well as in observing x-ray and gamma-ray sources.

The DOE appreciates the interaction between different areas of fundamental research and the impossibility of knowing a priori the directions in which pure research will lead. As a response to a number of scientific developments in the 1980s, the Directorate of High-Energy and Nuclear Physics has informed this committee that in the 1990s it will consider supporting astrophysical research that is related to its mission of seeking a deeper understanding of the nature of matter and energy and the basic forces that exist between the fundamental constituents of matter.

Some of the basic research and technology programs at the Department of Defense (DOD) make essential contributions to astronomical research. Examples include astrometry and optical interferometry at the U.S. Naval Observatory, development of space instrumentation by the Naval Research Laboratory, innovations in infrared detector technology by the Air Force Office of Scientific Research, and cryogenic and adaptive optics technologies developed as a result of the Strategic Defense Initiative. New opportunities exist for synergism between astronomical research and the nation's defense needs. The committee believes that these opportunities should be exploited.

EDUCATIONAL INITIATIVE

The education of young people is the foundation for future scientific and technical advances. Thus the committee begins its discussion of policy issues with a discussion of an educational initiative in astronomy.

The nation's colleges and universities are training too few Americans in science, engineering, and mathematics (*A Nation at Risk*; NCEE, 1983). In a world in which technical skills and quantitative reasoning are increasingly important, the nation needs more individuals with scientific knowledge in order to improve the quality of daily life and to help secure our economic competitiveness. Too few American students enter college with an adequate background in science and mathematics and with the intention of pursuing scientific careers. Of those entering college with an initial interest in science, too many ultimately obtain degrees in other areas, exacerbating the problem. Unless current trends are reversed, our nation will soon suffer a critical shortage of trained individuals who can take advantage of opportunities for scientific discovery or for technical innovation. As astronomers, the committee is committed to helping solve this national problem.

Television and the popular press expose young people to many challenges in business, law, and medicine but usually fail to present the exciting opportunities in science and technology. As discussed in Chapter 8, astronomy has a special

appeal to young people and is particularly effective in stimulating interest in science and engineering at an early age.

The committee emphasizes below programs relating to precollege education. Several additional proposals have been described in the document *An Educational Initiative in Astronomy* (Brown, 1990) and in the study by the Policy Panel in the *Working Papers* (NRC, 1991) of this report.

- The committee recommends that NSF establish, at one or more of the major U.S. observatories, an office for astronomical education with responsibility for involving professional research astronomers in educational activities, for making available material about astronomy, for assisting with teacher workshops, for promoting student involvement in research, and for providing guidance on curriculum matters.

The education offices at NASA centers are doing an excellent job with limited resources and should be strengthened.

- The committee recommends the expansion of summer programs and workshops at universities and national research centers for paid in-service training of science teachers.

Such workshops provide excellent opportunities for science teachers to gain direct experience with modern astronomical research and to make contacts with astronomers who are committed to improving science education. Workshops are particularly effective when they attract master teachers who are developing curriculum materials and training other teachers.

- The committee recommends that NSF establish a national Astronomy Fellowship program that will allow each state to select an outstanding high school student as a state fellow in astronomy.

The state fellows would serve as paid science interns during the summer months at one of the major national or private observatories, where they would participate as assistants in the research of the professional staff. The program would show young people that a career in science is feasible and exciting. The committee suggests that one of the national astronomy research centers act, in cooperation with the appropriate agencies and other major astronomical institutions, as the organizer and coordinator of the Astronomy Fellowship program.

- The committee recommends that the American Astronomical Society establish an annual prize in recognition of outstanding contributions to secondary or college science education.

The educational programs in astronomy should be a joint effort involving both the educational and the research branches of the relevant agencies. The

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The

educational directorates, which would supply the primary funding for these activities, can help researchers bring the excitement of modern astronomy into the nation's classrooms.

Adequate public education at all grade levels from kindergarten to college, starting with basic numeracy and literacy and ending with a solid grounding in humanistic and scientific concepts, is a long-term solution to the numerical imbalances in racial, ethnic, and sexual representation in different fields of science, including astronomy (Appendix B). In addition to the recommendations made above, the committee urges astronomers to take personal action to improve science education in their communities through presentations at local schools and by visits of students to nearby astronomical facilities.

As noted in Appendix B, there are many more active astronomers than there are faculty positions. Establishing additional faculty positions would bring more of the excitement of astronomy directly to students. The committee commends NASA's attempts to work with universities to provide additional tenure-track positions in astronomy for those young astronomers interested in teaching.

REVIVING GROUND-BASED ASTRONOMY

Ground-based astronomy is imperiled by inadequate funding and the consequent deterioration of major facilities and loss of key personnel. Without adequate support for ground-based work, the United States will lose many of the fruits of both the space and the ground astronomy programs.

The current crisis in the U.S. ground-based program is due to the long-term funding history of the NSF, which has held astronomy to essentially the same base budget (in Consumer Price Index-adjusted dollars) for the past 20 years. In response to the explosive growth in scientific opportunities, new facilities have been constructed and the number of astronomers using ground-based facilities has doubled since 1970, but funding to operate and maintain these facilities and to conduct basic research has been constant. The National Optical Astronomy Observatories (NOAO) has opened two new 4-m optical telescopes and has absorbed the operation of Sacramento Peak Solar Observatory. The National Radio Astronomy Observatory (NRAO) has opened the Very Large Array (VLA) and has begun to operate the VLBA network. At the same time, improvements in astronomical instrumentation have greatly increased the capabilities of optical and radio telescopes, and the total number of visiting observers at all national observatory sites has tripled. Despite these increased responsibilities, staffs at the national observatories have been cut. Because of funding constraints, available instrumentation and computing systems lag behind the state of the art, precious data have been inadequately analyzed, and expensive equipment has been poorly maintained.

The lack of adequate NSF funding for grants and for the infrastructure has

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY

DOCUMENT NUMBER: 9121304

FROM: MURDOCK, Wilbert: MOTIONTRONICS FOR SCIENCE, INC.

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 05/02/91

SUBJECT: DISTURBED THAT AS A MINORITY, HE IS NOT AFFORDED A FINACIAL OPPORTUNITY FOR AFRICAN-AMERICANS IN TECHNOLOGY

ASSIGNED TO: INDUSTRIAL

*MS
Pls return to Sally Kelly
saying OSTP believes this ltr
w'd be better answered by
DOC - Doc has minority CEO
D/C.
D 5/7*

ACTION REQUIRED: * SEE REMARKS

SENDER'S DUE DATE: 05/14/91

OSTP DUE DATE: 05/07/91

DATE COMPLETED: 5/6/91

COPIES TO: D. Allan Bromley
Damar Hawkins

WHITE HOUSE TRACKING #: 234381

CONTACT PERSON: SALLY KELLEY

REMARKS: Please address the question as to whether OSTP would address this issue, and note that this was also referred to DOC. If yes, please notify Sally Kelly and draft reply for DAB's signature. If no, please notify Mary Suit with explanation. Thank you.

DATE RECEIVED: 05/02/91

FILE: PRESIDENTIAL PRIORITY

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY

DOCUMENT NUMBER: 9121304

FROM: MURDOCK, Wilbert: MOTIONTRONICS FOR SCIENCE, INC.

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 05/02/91

SUBJECT: DISTURBED THAT AS A MINORITY, HE IS NOT AFFORDED A FINACIAL OPPORTUNITY FOR AFRICAN-AMERICANS IN TECHNOLOGY

ASSIGNED TO: INTERNATIONAL/POLICY

Reassigned to Industrial per D. Hawkins 5/6.

ACTION REQUIRED: * SEE REMARKS

SENDER'S DUE DATE: 05/14/91

OSTP DUE DATE: 05/07/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley
Damar Hawkins

WHITE HOUSE TRACKING #: 234381

CONTACT PERSON: SALLY KELLEY

REMARKS: Please address the question as to whether OSTP would address this issue, and note that this was also referred to DOC. If yes, please notify Sally Kelly and draft reply for DAB's signature. If no, please notify Sally as such.

DATE RECEIVED: 05/02/91

FILE: PRESIDENTIAL PRIORITY

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9121304

FROM: MURDOCK, Wilbert: MOTIONTRONICS FOR SCIENCE, INC.

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 05/02/91

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ASSIGNED TO: ~~INTERNATIONAL/POLICY~~ INDUSTRIAL

ACTION REQUIRED: * SEE REMARKS

SENDER'S DUE DATE: 05/14/91

OSTP DUE DATE: 05/07/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley
Damar Hawkins

WHITE HOUSE TRACKING #: 234381

CONTACT PERSON: SALLY KELLEY

REMARKS: Please address the question as to whether OSTP would address this issue, and note that this was also referred to DOC. If yes, please notify Sally Kelly and draft reply for DAB's signature. If no, please notify Sally as such.

DATE RECEIVED: 05/02/91

FILE: PRESIDENTIAL PRIORITY

Really more appropriate for DOC. Reply should mention Watters Massey at HQ.

ID # 234381

AF

WHITE HOUSE CORRESPONDENCE TRACKING WORKSHEET

- O - OUTGOING
 - H - INTERNAL
 - I - INCOMING
- Date Correspondence Received (YY/MM/DD) 91103128

Name of Correspondent: Mr. Mrs. Miss Ms. Wilbert Murdock

MI Mail Report User Codes: (A) _____ (B) _____ (C) _____

Subject: Disturbed that as a minority he is not afforded a financial opportunity for African-Americans in technology.

ROUTE TO: Office/Agency (Staff Name)	ACTION Action Code	Tracking Date YY/MM/DD	DISPOSITION	
			Type of Response Code	Completion Date YY/MM/DD
<u>CoCoza</u>	<u>ORIGINATOR</u>	<u>91/04/25</u>		<u>91/0/1</u>
<u>OSTP *</u>	<u>R</u>	<u>91/05/07</u>		<u>91/0/1</u>
<u>DOC</u>	<u>R</u>	<u>91/05/07</u>		<u>1/1</u>
		<u>1/1</u>		<u>1/1</u>
		<u>1/1</u>		<u>1/1</u>

- ACTION CODES:**
- A - Appropriate Action
 - C - Comment/Recommendation
 - D - Draft Response
 - F - Furnish Fact Sheet to be used as Enclosure

- I - Info Copy Only/No Action Necessary
- R - Direct Reply w/Copy
- S - For Signature
- X - Interim Reply

- DISPOSITION CODES:**
- A - Answered
 - B - Non-Special Referral
 - C - Completed
 - S - Suspended

FOR OUTGOING CORRESPONDENCE:
 Type of Response = Initials of Signer
 Code = "A"
 Completion Date = Date of Outgoing

Comments: Would your agency address this issue

Keep this worksheet attached to the original incoming letter.
 Send all routing updates to Central Reference (Room 75, OEOP).
 Always return completed correspondence record to Central Files.
 Refer questions about the correspondence tracking system to Central Reference, ext. 2590.

RECORDS MANAGEMENT ONLY

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No. of Additional Correspondents: _____ Media: _____ Individual Codes: _____
 Prime Subject Code: _____ Secondary Subject Codes: _____

PRESIDENTIAL REPLY

Code	Date	Comment	Form
C	_____	_____	P.
DSP	_____	_____	Media:
	Time: _____	Time: _____	

SIGNATURE CODES:

- Cpn - Presidential Correspondence
- n - 0 - Unknown
- n - 1 - George Herbert Walker Bush
- n - 2 - George Bush
- n - 3 - George
- Cln - First Lady's Correspondence
- n - 1 - Barbara Bush
- n - 2 - Barbara
- n - 3 - Bar
- n - 4 - Mrs. Barbara Bush
- Cbn - Presidential & First Lady's Correspondence
- n - 1 - Barbara & George Bush
- n - 2 - Barbara & George

MEDIA CODES:

- B - Box/package
- C - Copy
- D - Official document
- G - Message
- H - Handcarried
- L - Letter
- M - Mailgram
- O - Memo
- P - Photo
- R - Report
- S - Sealed
- T - Telegram
- V - Telephone
- X - Miscellaneous
- Y - Study

MAY 2 9 51 02

THE WHITE HOUSE OFFICE

REFERRAL

DIRECTOR

MAY 2, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:

DIRECT REPLY, FURNISH INFO COPY

REMARKS: *****WOULD YOUR AGENCY ADDRESS THIS ISSUE*****
ATTN: ALSO REFERRED TO DCC

DESCRIPTION OF INCOMING:

ID: 234381

MEDIA: LETTER, DATED MARCH 5, 1991

TO: PRESIDENT BUSH

FROM: MR. WILBERT MURDOCK
CHAIRMAN
MOTIONTRONICS FOR SCIENCE, INC.
HITECH IN SPORTS & MEDICINE
3348 KINGSLAND AVENUE
BRONX NY 104 9

SUBJECT: DISTURBED THAT AS A MINORITY HE IS NOT
AFFORDED A FINANCIAL OPPORTUNITY FOR
AFRICAN - AMERICANS IN TECHNOLOGY

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

MOTIONTRONICS FOR SCIENCE, INC.

Hi Tech In Sports & Medicine
3348 Kingsland Avenue
Bronx, New York 10469

(212) 798-7497

Board of Directors

Mr. Earl Monroe
Pretty Pearl Productions

Prof. Joel B. Snyder
Polytechnic University

Dr. Joseph M. Waltz
Neurological Research Foundation

March 5, 1991

President George Bush
The White House
Washington, D.C. 20500

Dear President Bush,

After 7 years, I have decided to write directly to you because of the lack of true financial opportunity for African-Americans in technology.

By the year 2000, 30% to 50% of the American workforce will be made up of women and minorities.

Racism is a reality in our society. My company, Motiontronics For Science has produced some of the most innovative technologies in the country. Marketing Computers called it "one of nine companies that will make an impact in the next decade." The decade of the 90's.

We have the ability to save the country billions of dollars (1) by reducing athletic injuries and providing a better understanding of musculoskeletal injuries, (2) completely eliminating car theft, (3) a new methodology for innovation created to bring many into the technological mainstream, among thousands of other innovations.

The enclosed letter sums up my personal horror story of my treatment in my country.

Congress recently appropriated about \$240,000,000 for business development in Poland. My question is as a African-American where is capital available for me to develop a business or company.

I hope that you can see how the nation's national security is in jeopardy if women and minorities are not allowed in the technological mainstream.

We sincerely hope this letter warrants your direct attention.

Sincerely,

Wilbert Murdock

Wilbert Murdock, Chairman

COMPUTERS FOR SPORTS, INC.

752 WEST END AVENUE, SUITE 10-K

NEW YORK, NEW YORK 10025

(212) 678-0828

November 4, 1985

City Hall
Honorable Edward I. Koch
New York, New York 10007

Dear Mayor Koch,

After my recent nomination to the Who's Who in the Frontiers of Science and Technology, I felt that it was time to write you in reference to the ill treatment that my associates and I have received from the Office of Economic Development.

I am a 27 year old minority scientist, who is a former adjunct Prof. of Chemistry, Computer Science, and Electrical Engineering. I am writing this letter in the strictest of confidence. My associates and I have created some of the most relevant technologies ever developed to help fight the \$20 billion dollar muscular/skeletal problems our nation faces every year. We have developed these unique technologies to help many people who suffer from athletic injuries. But just as important our technology can be used in the fight against cerebral palsy, muscular dystrophy, scoliosis, and other motion debilitating diseases. These diseases could be better understood with new forms of treatment via our technology or perhaps a cure could be found.

Recently, there was a death threat against my life, which is directly attributable to your Office of Economic Development. I feel that there has to be some form of justice left where young scientists such as myself are not manipulated and abused, complain about it and then have a city agency tell us that it is not their responsibility that such a thing did occur after a complaint is filed. We were also advised to virtually give away our technology. In fact because of the advice we were given our technology is in the hands of a very unscrupulous character. We would not and cannot afford to make such accusations without a great deal of proof or evidence to substantiate it.

We ask you as our mayor, to please help us get to the bottom of this situation. Our goal then, as it is now, was to help people and create many new jobs in the City of New York via our major technological innovations.

Sincerely,



Hilbert Murdock, President

MOTIONTRONICS FOR SCIENCE, INC.

Hi Tech In Sports & Medicine
3348 Kingsland Avenue
Bronx, New York 10469

(212) 798-7497

Board of Directors

Mr. Earl Monroe
Pretty Pearl Productions

Prof. Joel B. Snyder
Polytechnic University

Dr. Joseph M. Waltz
Neurological Research Foundation

January 16, 1991

In our great mosaic many opportunities exist some real, some imaginary. Back in the 1970's as a teenager I became interested in technology, because of Bert Jordan an African-American Electrical Engineer. Technology was a long way from the Baruch Housing projects.

After becoming an Electrical Engineer and Bioengineer, my greatest desire was to contribute something positive to our country, after seeing so many of my childhood friends die of drugs, killed in the streets, jailed, or victims of the hopelessness of the ghetto.

After graduation I did two things. One, taught Electrical Engineering, Computer Science, and Chemistry at New York City Technical College, Baruch College and NYU respectively. The other was supposedly working as a Bio-Medical Engineer at the Manhattan V.A. Hospital. Both experiences changed my life tremendously. I'll never forget entering my classroom to the delight of some and the shock to others.

At the VA Hospital my desire was to design new types of innovative medical technology. My dream soon turned into a nightmare where I encountered my first direct racism. My biggest mistake was to complain to the hospital administrators about not being shown and taught medical design. Nine months after starting I was fired.

This set into motion my desire to start a company now called Motiontronics For Science which would judge an individual not by skin color, but by talent and desire.

The original funding for MPS came from family and friends.

When Computer For Sports, now called MPS went to the New York State Science & Technology Foundation, a Biomechanics expert evaluated our prototype. He called our technology interesting, but also said it would not make any money. Later I found out that this expert was formerly from South Africa, made an investment in a competing technology around the same time he gave us our evaluation. I complained to the above foundation, only to have an individual identify himself as an FBI agent in my apartment. He questioned me on all facets of the problem with this foundation. He left a telephone number. I called that number a couple of days later, since this individual said he would get back to me in a day or so. The number was none existent.

In going directly to New York City advertised economic assistance programs during the Koch administration his official put me into the hands of a negative individual. This person threatened to kill me if I did not turn over the companies technology and keep my mouth shut. When brought to the direct attent of Mayor Koch his official response at Gracie Manor, "it's the price that we should expect doing business with the city."

Brakes on my partners car was tampered with about the time we were dealing with the Koch administration. Another instance shortly after technology was stolen my car trunk.

In reading about Penn Southwest, another source of financing, they originally thought my technology was outstanding. All doors were open until they met me in person, My immediate impression was they wanted to finance the technology but did not want Wilbert Murdock to be involved.

We had meet with or talked to many investment banks & venture capital types. Also some companies. Any face to face meeting resulted in one of two things : (1) the abrupt end to the meeting, and (2) my companies information (business plan, future plans) was forwarded to my competitors in the same field.

I am willing to go to any state in the country which recognizes my major hi-tech innovations and support them. In New York City I have been denied the opportunity to pursue my livelihood.

The National Science Foundation called "Computerized Shadow Boxing" a "sports innovation." Joe Franklin of the JOE FRANKLIN SHOW called my work that of genius. Marketing Computers Computers (DEC'89) called Motiontronics For Science, one of nine companies whose technology will impact the next decade.

Note the motion technology, is considered a major innovation because of its impact on sports and medicine.

The company has one patent called Knee Alignment Device developed to prevent knee injuries while exercising. Pfizer has said the technology have "technical merit."

My ability and skill with technology is similar to George Washington Carver innovative skill with the peanut.

To separate myself from my peers. I've created a new methodology called the "Structured Analysis and Design For Innovation." The methodology is a step by step guide on developing technological innovations by technical or non-technical persons.

I am mentioned in the Who's Who in Technology Today, the Who's Who in Computer the Who's Who in the Frontiers of Science & Technology, Men of Achievement, and nominated recently for the Who's Who for American Business Leaders.

Recently we have appeared on MTV's (Awake On The Wildside), MTV's (Ha), Preview (Best of the New).

The primary motivation to continue after 7 years is to inspire other African-American youth to understand that they too have a future and important role in technology.

If I were a white male with my credentials, technology, and methodology for innovation, I would be on front page of every newspaper in the country along with major TV exposure.

Many have said given an educational opportunity children in the ghetto could develop a cure for cancer or develop a new technology. The reality is if you have the education, technical background, capital will not be available for African-Americans to realize the commercial success of the product or products.

I hope my story is of interest.

Sincerely,

Wilbert Murdock

Wilbert Murdock, Chairman

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20506

05/07/91

MEMORANDUM FOR PRESIDENTIAL CORRESPONDENCE

FROM: MARY B. SUIT *mbs*
ADMINISTRATIVE ASSISTANT FOR THE OFFICE OF
SCIENCE AND TECHNOLOGY POLICY

SUBJECT: White House Correspondence Tracking Sheet #234381

Upon review of this White House Office Referral, Dr. D. Allan Bromley, Director of the Office of Science and Technology Policy, believes that this issue would be better addressed by the Department of Commerce, ~~therefore~~ OSTP will do no further action on this. Please close this out.

Unless otherwise notified, ←
If I can be of further assistance please let me know. Thank you.

I can be reached at X3897.

THE WHITE HOUSE
WASHINGTON

May 6, 1991

Dear Mr. Murdock:

President Bush passed on your letter of March 5, 1991 for my response.

From the correspondence that was enclosed, you appear to be an innovator with ideas that could be put to good use. It is distressful to learn that you feel that commercialization of your inventions has been inhibited by elements of racism. As I hope that you are aware, President Bush and his entire Administration is unalterably opposed to racism in any form. We hope that you will persist in efforts to commercialize your inventions and suggest that you review your grievances with the present New York City Administration.

Sincerely,

D. Allan Bromley
The Assistant to the President
for
Science and Technology

Mr. Wilbert Murdock
Chairman
Motiontronics for Science, Inc.
Hitech in Sports & Medicine
3348 Kingsland Avenue
Bronx, NY 10469

"LIFE SCIENCES (CORRESPONDENCE TRACKING)"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9122805
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS C

FROM: FRIEDMAN, Herman: UNIVERSITY OF SOUTH FLORIDA

TO: PRESIDENT BUSH

DATE OF
CORRESPONDENCE: 04/24/91

SUBJECT: RE: THE SAD STATE OF AFFAIRS OF SCIENCE SUPPORT BY
THE U.S.; A REQUEST TO HELP AMERICAN SCIENCE AT THE
FOREFRONT, INCLUDING BIOMEDICAL SCIENCE.

DIRECTORATE STAFF
ASSIGNED: LIFE SCIENCES ASSIGNED: D.A. Henderson

ACTION STAFF
REQUIRED: FOR DAB'S SIGNATURE/ ACTION:
AS NECESSARY *See Remarks

SENDER'S DUE DATE:
OSTP DUE DATE: 07/31/91 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT: 07/29/91

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:

REMARKS: *Please note that the letter is dated 04/24/91, but OSTP did not
receive the letter until 07/25/91. On 07/29/91, Dr. Henderson
determined that a response was not necessary -- close record
out.

CLOSED

OSTP RECEIVED: 07/25/91
DEPT RECEIVED: 07/25/91

FILE: P-EOP-PRESIDENTIAL PRIORITY

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9122805
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DIRECTORATE STAFF
ASSIGNED: LIFE SCIENCES ASSIGNED:

ACTION STAFF
REQUIRED: FOR DAB'S SIGNATURE/ ACTION:
AS NECESSARY *See Remarks

SENDER'S DUE DATE:
OSTP DUE DATE: 07/31/91 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS: *Please note that the letter is dated 04/24/91, but OSTP did not
receive the letter until 07/25/91.

OSTP RECEIVED: 07/25/91
DEPT RECEIVED:

FILE: P-EOP-PRESIDENTIAL PRIORITY

16
OSTP

2805

COLLEGE OF MEDICINE
DEPARTMENT OF MEDICAL
MICROBIOLOGY AND IMMUNOLOGY



BOX 10
12901 BRUCE B. DOWNS BOULEVARD
TAMPA, FLORIDA 33612-4799
PHONE (813) 974-3281
FAX (813) 974-4930

April 24, 1991

[Handwritten signature]

President George Bush
United States
White House
Washington, D.C. 20500

Dear President Bush:

Enclosed is a copy of the report from the President-elect of the American Association of Science and a recent article in "The Sciences" outlining the sad state of affair of science support by the United States. I doubt very much if you will receive this letter personally, or these reprints, but I believe as President of the U.S.A. you should be not only concerned with this problem, but also be the leader to help American science at the forefront, including biomedical science.

Sincerely yours,

[Handwritten signature]

Herman Friedman, Ph.D.
Professor and Chairman

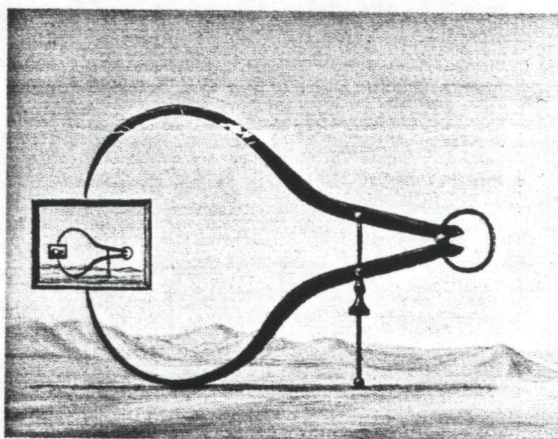
HF/igf
Enclosure

RECEIVED
31 JUL 25 A 7: 28
OFFICE OF THE DIRECTOR

THE MISMEASURE OF SCIENCE

The Funding Squeeze on Basic Research Threatens a Vital National Asset

by DANIEL KLEPPNER



Fanny Brennan, *Caliper-Caliper*, 1977

ONCE AGAIN, last year, the United States made a clean sweep of the Nobel prizes in science. The steady stream of those and other international awards doubtless reassures many Americans that no matter what misgivings they may have about how the country is doing generally, in science, at least, it is doing very well. American graduate schools of science, widely regarded as the best in the world, are besieged with applications from abroad. American scientific journals are hailed as the journals of choice in many fields. There is virtually no area of science in which the U.S. is not a major player.

On closer examination, however, the Nobel record in recent years offers a far less comforting picture. It is true that between 1980 and 1990 the U.S. won more Nobel prizes in physics than did all the other nations of the world combined: fifteen out of twenty-five. But the accomplishment dims if one compares the dates the prizes were awarded with the years in which the prizewinning work was done. Some discoveries, such as high-temperature superconductivity, are so breathtaking they win Nobel prizes in the year, or within a few years, of their achievement. But more often many years pass before scientific work is honored by the Nobel jurors. Of the twenty-five prizes in physics given from 1980 to 1990, eight went to work regarded as so "hot" the award was given promptly; of those eight prizes, seven went to Europeans and only one to an American. The other U.S. prizes were awarded for work done twenty years earlier, or more. In short, it appears American science is coasting on its reputation.

Of course, Nobel-prize counting is a small-numbers game—and hardly a reliable way of judging the scientific vitality of a nation. Nevertheless, recent history suggests that although the U.S. dominated science twenty years ago, it does so no longer. Today Europe is beginning to run away with the honors.

Scientific leadership by Europe is hardly a novelty; the Continent ruled science until the Second World War. By 1945, however, most European scientific institutions had been wrecked, and many of the best European scientists had fled to the United States. Rebuilding science demands decades of hard work: Europe needed roughly thirty years. But by the early 1980s European research was starting to flourish, and today, in many disciplines, it is fully competitive with research efforts in the U.S.

It is important, in this context, to remember that scientific knowledge ignores national boundaries, particularly these days, when the latest discoveries race around the globe by facsimile transmission and electronic mail. That European science is flourishing should be cause for celebration, not anxiety: what Europe learns, America learns, and vice versa. Science, in fact, is humanity's most successful collaboration. There is no compelling reason, under such a broad view of affairs, for the U.S. to dominate the scientific world.

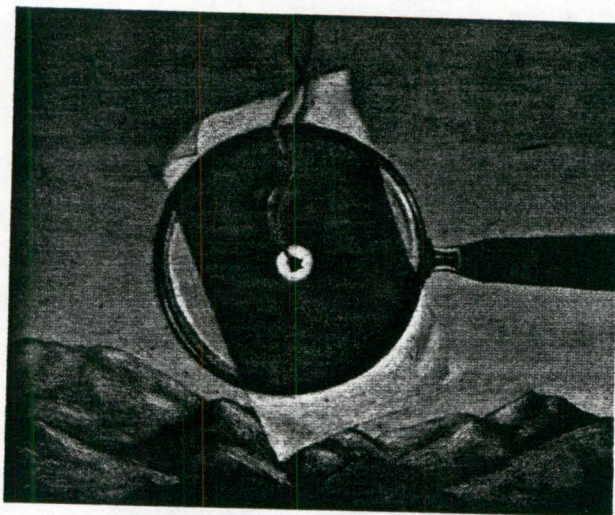
Yet unless this country intends to abandon science—to sit back and wait for the results to roll in from Europe and Japan—it must be able to compete in the most important areas. And remaining competitive requires that U.S. scientists have reasonable resources for pursuing new ideas.

Certainly they cannot be expected to lead productive careers while being harassed by funding problems, nor can they be expected to stand by passively while their concepts are brought to fruition abroad. Yet that is just what has begun to happen, which is why American science is on the verge of a long, downward slide.

IN THE U.S. most basic research in the physical sciences is carried out by small groups at universities. The groups are typically made up of a professor, four or five graduate students and perhaps a postdoctoral research assistant; their budgets are usually a few hundred thousand dollars, often pieced together from several grants. Such small research groups cannot compete in publicity value with the blockbuster projects—such as NASA's proposed space station. But they are free to move rapidly in new directions, and they have for some time been the mainstay of science in the U.S. Because the research is basic, the groups are guided by scientific curiosity and propelled by vision and imagination rather than the need to solve a practical problem. Yet practical application is often not far behind. Most of the great revolutions in technology can be traced to basic research. The electrical revolution, for example—electric power, radio and television, electronics and computers—has its foundations in the basic understanding of electricity and magnetism, formulated in the nineteenth century by the English physicist James Clerk Maxwell.

Whereas other countries often conduct basic research in specialized nonacademic institutes, set apart from the academic curriculum, Americans plunge graduate students into the front lines of research early in their careers. It is a superb method of training top-notch scientists. The students' vitality and fresh viewpoints on their disciplines have been major factors in the development of American universities as world-class research institutions. Because university professors are teachers as well as scientists, they are continually forced to renew their ideas as they discuss them with enthusiastic and critical students. To cite the Nobel prize list again, all the U.S. prizes in physics in the past decade were awarded to professors for work done with students at universities or at related accelerator facilities.

Aside from conducting most of the basic research in the U.S. and training most of the professional scientists, the small groups often help generate new technologies and industries. There are numerous examples of work that has found important application: work in solid-state science and mate-



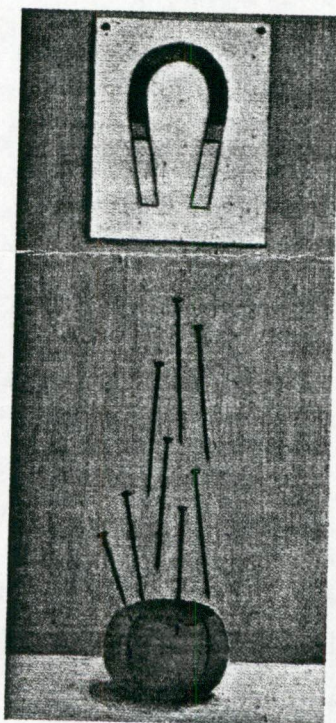
Fanny Brennan, *Burning Paper*, 1985

rials research; in superconductivity, biophysics and atmospheric science; in optics and lasers. In all those fields discoveries by small research groups have played important roles in the national economy. American research universities underwent a period of wild growth in the 1960s. Spurred by President Eisenhower's alarm over the first Sputnik satellite, launched by the U.S.S.R. in October 1957, the federal government set up massive programs for science and science education. In 1960 U.S. universities graduated 550 physicists with the Ph.D.; by 1970 the number had tripled. (I quote statistics for physics because that is my own field and I know its story best. The general trend is the same in all the physical sciences: mathematics, chemistry, astronomy and materials science.) In the same decade American physics faculties grew by a factor of two. Such growth was bound to slow down, but instead of tapering off, it abruptly collapsed at the start of the 1970s as the federal government yanked support from science under the pressure of the Vietnam War.

During the 1970s, Ph.D. production in physics in the U.S. plunged to about 900 a year. Faculty hiring dwindled to a trickle and remained at a low level. As a result American physics departments have grayed in the past two decades: in 1970 the median age among physics faculties in this country was thirty-nine; today it is fifty-two. In the next decade or two nearly all those professors will retire.

Replacing them would not have been a problem in the past, when university positions were coveted and excellent candidates waited in line for the few openings. Today, however, university research careers are no longer attractive to many young scientists, and academic institutions report that in some disciplines they are struggling to fill positions.

WHY HAS THE academic life lost its allure? Above all, the reason is economic: young scientists contemplating university careers understand that if current conditions persist, they will probably be forced to carry out their research on a shoestring. They will spend more and more time writing grant proposals and seeking financial support from agencies with less and less to provide. The situation was highlighted as long ago as 1985, in three studies: separate surveys of chemistry and of physics, conducted by the National Research Council, and a study of science in universities by the White House Science Council. Each report concluded that the ultimate strength



Fanny Brennan, *Magnet and Pins*, 1986

of science in the U.S. lies in the thousands of small research groups based in universities across the country, and that those groups are seriously underfunded.

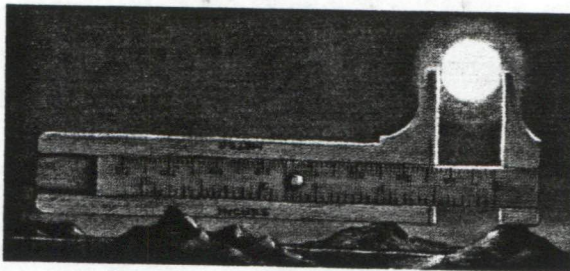
The warning was ignored. The National Science Foundation provides the major support for university research in the physical sciences, and though President Reagan announced that the NSF budget should be doubled, Congress thought otherwise. Since 1985 the overall NSF budget has grown an average of 7.1 percent a year, unadjusted for inflation. At the same time, however, Congress directed NSF to put more resources into precollege education, and the foundation decided to concentrate its remaining new resources on engineering and technology. As a result, for the past six years the budgets for individual investigator groups have grown 2 to 3 percent a year, before inflation. When inflation is taken into account, it becomes evident that university groups are significantly worse off now than they were six years ago—and six years ago the situation was poor.

In certain disciplines young scientists are finding it virtually impossible to obtain research grants. A recent survey of junior physics faculty members by the American Physical Society showed that to receive their first grants, the young physicists had to submit, on average, three proposals. Most of the physicists eventually won grants, but only 40 percent at the required budget. The rest, on average, were funded at about half the necessary level.

The situation for senior scientists is hardly more encouraging. Leading investigators, even Nobel prize winners, have had their budgets cut. A survey by the American Association for the Advancement of Science asked scientists nationwide for their outlook on the long-term climate of research. The responses, almost to a person, were bleak. Some professors went so far as to say that they could no longer recommend academic careers to their best students. If America's senior scientists cannot, in good conscience, persuade the next generation to follow in their own footsteps, the nation is finished scientifically.

WHY HAS American science been allowed to slip into such a precarious position? The standard government explanation cites pressures from the budget deficit, yet the federal government is lavishing some \$70 billion a year on research and development, and industry is spending roughly the same amount. In contrast, the NSF budget in 1990 was only \$2.1 billion; of that, just \$520 million was spent on mathematics, physics, chemistry, astronomy and materials science.

A small shift of R&D funds would have enormous bearing on the scientific future of the nation: it could reverse the



Fanny Brennan, Moon Measure, 1981

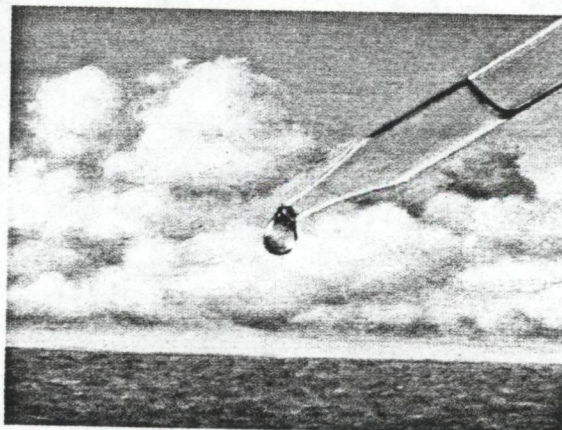
social needs, and NSF is too small to command an effective political constituency. Compare its clout, for example, with that of NASA: the space agency's vast budget funds multimillion- and multibillion-dollar projects, whereas NSF typically supports \$60,000 research grants.

Approximately two-thirds of the federal R&D expenditures this year is for defense. The long history of aborted or failed high-technology defense systems cannot but raise doubts about whether those funds are being invested sensibly: the list includes the B-1 bomber, ninety-six out of 100 of which are grounded; the B-2 bomber, which is about to be scuttled; and the Navy A-12 plane, which has been abandoned. More than \$25 billion has been spent on the Strategic Defense Initiative, whose goals have constantly shifted as one technology after another has had to be scrapped. Charged-particle beams, chemical lasers and X-ray lasers are among the more costly SDI failures. The Tomahawk cruise missile and the Patriot antimissile system, decisive weapons of the Persian Gulf war, were developed two decades ago. At best they reflect past technical accomplishments, and their costs and complexity are dwarfed by current defense projects.

Another sink for federal R&D funds is NASA. The agency's centerpiece, the space shuttle, has been a colossal disappointment. Instead of flying sixty shuttle flights a year, as originally proposed, NASA has made no more than nine flights a year, and the cost, initially estimated at a few dollars a pound, turned out to be several hundred. Industrial interest has been nil, and the *Challenger* disaster left the U.S. without any satellite-launching capability. One serious consequence was that military surveillance, which should have been a routine task for the shuttle, suddenly became a national emergency.

As a sequel to the space shuttle, NASA has been vigorously pushing its proposed space station, on which more

than \$4 billion has already been spent without convincing justification. The recent report of the Augustine Committee, which was chaired by Norman R. Augustine, head of Martin Marietta Corporation, eloquently confirms what most scientists already know: the space station has no serious scientific purpose aside from keeping people alive in it, and it is no more likely than the space shuttle to succeed technically. Nevertheless, \$1.9 billion will be spent on it this year, almost as much as the *total* NSF



Fanny Brennan, Sea Drop, 1987

budget. It seems incredible that the government can spend billions on such flawed projects while allowing the world's greatest scientific institutions to decline for lack of relatively modest funds.

IS IT ESSENTIAL for the U.S. to remain at the frontiers of science? The question is hardly trivial, for in a faltering, deficit-ridden economy it is by no means obvious that science is not a luxury the country should forgo. One argument in defense of science is that scientific discoveries lead to new technologies, new industries and new jobs. Although this line of thought sounds reasonable, one could counter with the example of Japan. The Japanese constructed a world-class economy based on advanced industry and high technology while making no systematic effort at basic research. Instead, Japan took the fruits of research from abroad and applied them to products and technologies that quickly dominated the world market—often spectacularly, as in the case of the videotape sette recorder. Why not do the same?

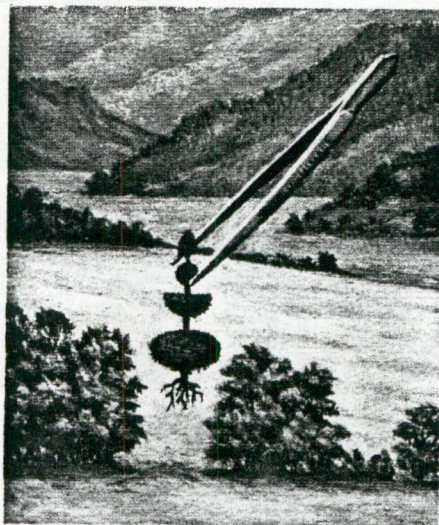
It should be noted, however, that the Japanese are dissatisfied with that posture. Although they placed little emphasis on basic research in the past, they are moving aggressively in that direction today. They have realized that fundamental research is an unmatched classroom for the scientific imagination, and they are no longer willing to rely on foreigners for creative ideas. Possibly, Japan is worried that in the years to come the U.S. may not be capable of providing the concepts needed to create new technologies. In any case, Japan is rapidly accelerating in basic research, while the U.S. is cutting back.

The trend is illustrated by the changing fortunes of AT&T Bell Laboratories in Murray Hill, New Jersey, and NT&T and KDD, which together make up the Japanese equivalent of AT&T. After the breakup of the Bell system in the early 1980s, the Bell directors decided to cut back basic research in the physical sciences to concentrate their resources on computer science and software. That move significantly diminished Bell's tradition of long-range basic research, a tradition that had led to Nobel prizes, created the transistor and brought about the electronics revolution. In Japan, meanwhile, NT&T and KDD are vigorously building research laboratories. Not far from Bell Labs in New Jersey is the site of an impressive new laboratory devoted to opto-electronics and neural networking—technologies of the future. Its owner, the Nippon Electric Corporation, is Japanese.

Nevertheless, with thousands of homeless people adrift in American cities, with schools faltering and bridges crumbling, one can still legitimately wonder whether science is not dispensable. There is no way of precisely calculating the return from investments in science, because basic research requires a sustained effort over many years and because its applications, if any, may not be realized for many more. Attempts to quantify the returns from science ulti-

mately fail because the rare discoveries that are truly revolutionary transcend the complexities of economics. For example, though it is not yet widely appreciated, we are living in a golden age of astrophysics and cosmology. The path to a new understanding of the universe lies before us. What value can be attached to a new view of Creation? One might just as well try to put a price on the Copernican revolution. Similarly, there is no way of foreseeing the impact of biologists' quest to understand the origins of life, or neuroscientists' quest to understand the functioning of the brain.

In many cases, however, the returns from science are quite tangible. Consider the laser. An accidental by-product of basic research on molecular structure, the laser propelled a revolution in modern optics. Out of that upheaval grew optical communications, a multibillion-dollar industry that will render telephone lines obsolete. Today lasers are ubiquitous: They are found in compact-disc players, printers and automated supermarket checkouts. Lasers are widely used in manufacturing and have become a vital medical tool. To cite just one example, a cervical cancer that previously required a hysterectomy can now be removed in a physician's office with a simple laser procedure. How can one assign a dollar value to that?



Fanny Brennan, *Out of Place*, 1990

FUNDAMENTALLY, the U.S. supports basic research because the discoveries and insights of science are essential for dealing with such perplexing problems as health, energy and the increasingly fragile environment, as well as for meeting the challenge of improving the quality of life in the countries of the third world. Science is needed to stimulate the technologies that generate new industries and to help old industries become more efficient. Above all, the U.S. must educate young scientists, who have the intelligence, imagination and energy to grapple with an increasingly complicated world and provide the astonishing discoveries that elevate the human spirit and help make a nation great.

If it had been realized twenty years ago that the U.S. was about to abdicate its preeminence in manufacturing and high technology, surely the country would not have stood by quietly. The steel industry would not have been permitted to slip through the national grip, nor would the automobile industry, nor the machine-tool and semiconductor-chip industries, nor television and all the rest of home electronics. There is every reason to believe that America is about to surrender its leadership in science. Whether the nation takes the fall will depend on what it learns from its recent humiliations—and on whether Americans will refuse to watch complacently while their country is threatened with the loss of one of the few areas in which its excellence is still unquestioned. ●

DANIEL KLEPPNER is Lester Wolfe professor of physics and associate director of the Research Laboratory of Electronics at the Massachusetts Institute of Technology.

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY

DOCUMENT NUMBER: 9121095

FROM: MONTEILH, Larry J.: BOARD OF SUPERVISORS, COUNTY OF LOS ANGELES

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 04/12/91

SUBJECT: ENCLOSURE A MOTION IN SUPPORT OF LOCATING THE LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY PROJECT AT THE CANDIDATE SITE NEAR THE COMMUNITY OF PEARBLOSSOM.

ASSIGNED TO: PHYSICAL SCIENCES

ACTION REQUIRED: FOR DAB SIGNATURE

SENDER'S DUE DATE: 04/24/91

OSTP DUE DATE: 04/17/91

DATE COMPLETED: 4/22/91 by EV/DAB

COPIES TO: D. Allan Bromley

copies
SS dispatched incoming corresp. to Bardon + Sanchez along w/ copy of outgroup.

WHITE HOUSE TRACKING #:

CONTACT PERSON: SALLY KELLEY

REMARKS:

DATE RECEIVED: 04/12/91

FILE: PRESIDENTIAL PRIORITY

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9121095

FROM: MONTEILH, Larry J.: BOARD OF SUPERVISORS, COUNTY OF LOS ANGELES

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DATE OF CORRESPONDENCE: 04/12/91

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ACTION REQUIRED: FOR DAB SIGNATURE

SENDER'S DUE DATE: 04/24/91 OSTP DUE DATE: 04/17/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON: SALLY KELLEY

REMARKS:

DATE RECEIVED: 04/12/91

FILE: PRESIDENTIAL PRIORITY

April 17, 1991

Dear Mr. Monteilh:

I am writing to you in response to your letter to President Bush in which you express the support of the county of Los Angeles for the Laser Interferometer Gravitational Wave Observatory (LIGO) project. Initial work on this project will begin in fiscal year 1992 providing Congress can be convinced to appropriate funds for this purpose.

Scientists on the design teams at the California Institute of Technology and the Massachusetts Institute of Technology have been hard at work for a number of years to develop this proposal. The National Science Foundation (NSF) conducted a thorough review of the proposal, selected it for consideration in the President's budget for fiscal year 1992, and will also conduct the site selection process.

In addition to testing Einstein's theory of gravitation, this project promises to open a fundamentally new observational window on the universe. As you know, two widely separated detectors are planned to be built in the United States. Two European collaborations are planning detectors of compatible design in order to provide the four sensors necessary to locate the source of a gravitational wave signal. I appreciate your support for LIGO, as does the NSF.

Sincerely,

D. Allan Bromley
Director

Mr. Larry J. Monteilh
Executive Officer
Board of Supervisors
County of Los Angeles
383 Hall of Administration
Los Angeles, California 90012

bcc D. Sanchez, NSF
M. Bardon, NSF

James - 4/17
Don Prior
drafted + KE ok'd.
Return for
dispatch, including
blind carbons.
JAB

9121095

RECEIVED

THE WHITE HOUSE OFFICE
APR 12 1991 4:51
REFERRAL

OFFICE OF THE
DIRECTOR
APR 12, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:
APPROPRIATE ACTION

DESCRIPTION OF INCOMING:

ID: 225607
MEDIA: LETTER, DATED MARCH 27, 1991
TO: PRESIDENT BUSH
FROM: MR. LARRY J. MONTEILH
EXECUTIVE OFFICER
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES
383 HALL OF ADMINISTRATION
LOS ANGELES CA 90012

SUBJECT: ENCLOSES A MOTION IN SUPPORT OF LOCATING THE
LASER INTERFEROMETER GRAVITATIONAL-WAVE
OBSERVATORY PROJECT AT THE CANDIDATE SITE
NEAR THE COMMUNITY OF PEARBLOSSOM

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

INCOMING

DATE RECEIVED: APRIL 02, 1991

NAME OF CORRESPONDENT: MR. LARRY J. MONTEILH

SUBJECT: ENCLOSURES A MOTION IN SUPPORT OF LOCATING THE
LASER INTERFEROMETER GRAVITATIONAL-WAVE
OBSERVATORY PROJECT AT THE CANDIDATE SITE
NEAR THE COMMUNITY OF PEARBLOSSOM

ROUTE TO: OFFICE/AGENCY	(STAFF NAME)	ACTION		DISPOSITION	
		ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED D YY/MM/DD
BILL CANARY		ORG	91/04/02		A 91/4/8
<i>CC Science + Technology</i>	REFERRAL NOTE: _____	A	91/4/8		/ /
	REFERRAL NOTE: _____		/ /		/ /
	REFERRAL NOTE: _____		/ /		/ /
	REFERRAL NOTE: _____		/ /		/ /

COMMENTS: _____

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: 2300 _____
IG MAIL USER CODES: (A) _____ (B) _____ (C) _____

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*****
*ACTION CODES:          *DISPOSITION          *OUTGOING          *
*                       *                       *CORRESPONDENCE:  *
*A-APPROPRIATE ACTION  *A-ANSWERED          *TYPE RESP=INITIALS *
*C-COMMENT/RECOM       *B-NON-SPEC-REFERRAL *           OF SIGNER  *
*D-DRAFT RESPONSE      *C-COMPLETED        *           CODE = A   *
*F-FURNISH FACT SHEET  *S-SUSPENDED        *COMPLETED = DATE OF *
*I-INFO COPY/NO ACT NEC*                       *           OUTGOING  *
*R-DIRECT REPLY W/COPY *                       *                       *
*S-FOR-SIGNATURE       *                       *                       *
*X-INTERIM REPLY       *                       *                       *
*****

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REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

225607

3 Canary



**BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES**

383 HALL OF ADMINISTRATION / LOS ANGELES, CALIFORNIA 90012

MEMBERS OF THE BOARD

GLORIA MOLINA
KENNETH HAHN
EDMUND D. EDELMAN
DEANE DANA
MICHAEL D. ANTONOVICH

LARRY J. MONTEILH, EXECUTIVE OFFICER
(213) 974-1411

March 27, 1991

The President
The White House
Washington, DC 20500

Dear Mr. President:

At its meeting held March 26, 1991, on motion of Supervisor Michael D. Antonovich, the Los Angeles County Board of Supervisors went on record in support of locating the Laser Interferometer Gravitational-Wave Observatory (LIGO) project at the candidate site near the community of Pearblossom. Further, the Board supported your Proposed Fiscal Year 1992 Budget request for the first \$23.5 million for the initial work on the LIGO \$211 million project.

Enclosed is a copy of the Minute Order detailing this action.

Sincerely yours,

LARRY J. MONTEILH
EXECUTIVE OFFICER

LJM-20.L3



MINUTES OF THE BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

Larry J. Monteilh, Executive Officer
Clerk of the Board of Supervisors
383 Hall of Administration
Los Angeles, California 90012

At its meeting held March 26, 1991, the Board took the following action:

64

Supervisor Antonovich made the following statement:

"The California Institute of Technology in Pasadena has announced that eighteen sites Nationwide are being considered as a possible location for its proposed Laser Interferometer Gravitational-Wave Observatory (LIGO). The proposed LIGO facility will observe gravity waves passing through the earth, and is expected to advance our knowledge of physics, answer a number of questions about the universe, and provide spin-off technology. Its location in the Los Angeles County's community of Pearblossom would contribute to the economic vitality of the area both during the construction phase, and as a base for the scientific community.

"The site selection process is expected to take several months with construction targeted to begin in 1992. The first \$23.5 million for the initial work on the \$211 million project is in President Bush's proposed Fiscal Year 1992 budget. The proposed plan will consist of a concrete encased vacuum pipe five miles long and four feet in diameter, and arranged in an "L" shape, with additional buildings to house scientists and their measuring equipment."

(Continued on Page 2)

Syn. 64 (Continued)

Therefore, on motion of Supervisor Antonovich, seconded by Supervisor Edelman, unanimously carried (Supervisor Hahn being absent), the Board took the following actions:

1. Supported locating the Laser Interferometer Gravitational-Wave Observatory (LIGO) project at the candidate site near the community of Pearblossom;
2. Supported President Bush's proposed Fiscal Year 1992 budget request for the initial work on LIGO; and
3. Instructed the Executive Officer of the Board to communicate this position to the President, the head of the National Science Foundation, the Los Angeles County Congressional Delegation, and the California Institute of Technology.

30326-3.com

Copies distributed:

Each Supervisor
Chief Administrative Officer
County Counsel
Auditor-Controller

Letters sent to:

The President
Executive Director, National Science Foundation
Each Member, Los Angeles County
Congressional Delegation
President, California Institute of Technology

THE WHITE HOUSE

WASHINGTON

April 5, 1991

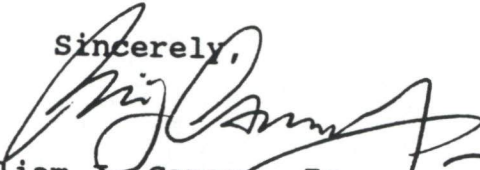
Dear Mr. Monteilh:

It was good of you to send President Bush the County of Los Angeles' motion supporting the location of the Laser Interferometer Gravitational-Wave Observatory project at the candidate site near Pearblossom. I appreciate your taking the time to bring this matter to the attention of the Administration.

I have taken the liberty of forwarding a copy of your letter, along with the motion, to the appropriate officials here at the White House for their further review and consideration. You should be hearing from them directly.

With best wishes to you and the Board of Supervisors,

Sincerely,



William J. Canary, Jr.
Special Assistant to the President
for Intergovernmental Affairs

Mr. Larry J. Monteilh
Executive Officer
Board of Supervisors
County of Los Angeles
383 Hall of Administration
Los Angeles, California 90012

Mary Sicut

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9121049

FROM: KELLY, Sharon

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 04/10/91

SUBJECT: WRITER CONCERNED ABOUT DECLINE IN AMERICAN SCIENTIFIC TECHNOLOGY.

ASSIGNED TO: Dr. Phillips

ACTION REQUIRED: FOR DAB SIGNATURE

SENDER'S DUE DATE: 04/22/91 OSTP DUE DATE: 04/15/91

DATE COMPLETED:

4/11/91

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON: SALLY KELLEY

REMARKS:

DATE RECEIVED: 04/10/91

FILE: P PRESIDENTIAL PRIORITY

9121049

RECEIVED

THE WHITE HOUSE OFFICE

91 APR 10 A10:00

REFERRAL

OFFICE OF THE
APRIL 10, 1991 DIRECTOR

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:

DIRECT REPLY, FURNISH INFO COPY

DESCRIPTION OF INCOMING:

ID: 227601

MEDIA: LETTER, DATED JANUARY 29, 1991

TO: PRESIDENT BUSH

FROM: MS. SHARON KELLY
72 ELWOOD AVENUE
Selden NY 11784

SUBJECT: WRITER CONCERNED ABOUT DECLINE IN AMERICAN
SCIENTIFIC TECHNOLOGY

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

ID # 227601
df

**WHITE HOUSE
 CORRESPONDENCE TRACKING WORKSHEET**

O - OUTGOING

H - INTERNAL

I - INCOMING

Date Correspondence Received (YY/MM/DD) 91102102

Name of Correspondent: Mr./Mrs./Miss/Ms. Sharon Kelly

MI Mail Report User Codes: (A) _____ (B) _____ (C) _____

Subject: Writer concerned about decline in American scientific technology.

ROUTE TO:

ACTION

DISPOSITION

Office/Agency (Staff Name)	Action Code	Tracking Date YY/MM/DD	Type of Response	Code	Completion Date YY/MM/DD
CoWins	ORIGINATOR <i>Q</i>	91/04/08			91/10/1
<i>OSTP</i>	R <i>Q</i>	91/04/10			91/10/1
		1/1			1/1
		1/1			1/1
		1/1			1/1

ACTION CODES:

- A - Appropriate Action
- C - Comment/Recommendation
- D - Draft Response
- F - Furnish Fact Sheet to be used as Enclosure

- I - Info Copy Only/No Action Necessary
- R - Direct Reply w/Copy
- S - For Signature
- X - Interim Reply

DISPOSITION CODES:

- A - Answered
- B - Non-Special Referral
- C - Completed
- S - Suspended

FOR OUTGOING CORRESPONDENCE:

- Type of Response = Initials of Signer
- Code = "A"
- Completion Date = Date of Outgoing

Comments: _____

Keep this worksheet attached to the original incoming letter.
 Send all routing updates to Central Reference (Room 75, OEOb).
 Always return completed correspondence record to Central Files.
 Refer questions about the correspondence tracking system to Central Reference, ext. 2590.

RECORDS MANAGEMENT ONLY

CLASSIFICATION SECTION

No. of Additional Correspondents: _____ Media: _____ Individual Codes: _____

Prime Subject Code: _____ Subject Codes: _____

Secondary Subject Codes: _____

PRESIDENTIAL REPLY

Code	Date	Comment	Form
C	_____	_____	P.
DSP	_____	_____	Media: _____
	Time: _____	Time: _____	

SIGNATURE CODES:

- Cpn - Presidential Correspondence
- n - 0 - Unknown
- n - 1 - George Herbert Walker Bush
- n - 2 - George Bush
- n - 3 - George
- Clu - First Lady's Correspondence
- n - 1 - Barbara Bush
- n - 2 - Barbara
- n - 3 - Bar
- n - 4 - Mrs. Barbara Bush
- Cbn - Presidential & First Lady's Correspondence
- n - 1 - Barbara & George Bush
- n - 2 - Barbara & George

MEDIA CODES:

- B - Box/package
- C - Copy
- D - Official document
- G - Message
- H - Handcarried
- L - Letter
- M - Mailgram
- O - Memo
- P - Photo
- R - Report
- S - Sealed
- T - Telegram
- V - Telephone
- X - Miscellaneous
- Y - Study

THE WHITE HOUSE
WASHINGTON

April 11, 1991

Dear Ms. Kelly:

Your comments on the performance of U.S. engineering as exemplified by the success of our armed forces in the Persian Gulf were highly appreciated. As you pointed out, engineering and engineering technologies are at the core of modern military superiority, as they are key to U.S. success or failure in the equally important area of international economic competitiveness. Like you, we are concerned that the engineering technologist and trade school training not be neglected in our efforts to improve the technological literacy of our workforce.

As a matter of possible interest to you, I recently spoke at the Wentworth Institute of Technology. Wentworth, in my view, is doing a magnificent job in training practical engineers and technologists, and I was anxious to demonstrate Administration support and encouragement for this effort.

Sincerely,



D. Allan Bromley
Assistant to the President
for Science and Technology

Ms. Sharon Kelly
72 Elwood Avenue
Selden, NY 11784

Re: Creation of a new
cabinet department --

1-29-91

MAR

Department of Engineering,
Applied Sciences and Manufacturing.

22760/

3

1991

Dear Mrs. President:

The Persian Gulf campaign has underscored the importance of computer technology, engineering, and machining. Without the Pentagon and the military's extensive computer networks and their fleets of efficient jet fighters, the air campaign would have cost far more Iraqi civilians and American pilots their lives.

American engineering represents the best of our applied sciences -- imaginative, know-how, and discipline. American machining represents the precise translation of a blueprint into a material reality. Our hats are off to all the computer scientists, engineers, draftsmen, machinists, electricians, welders, assemblers, and others that are making this campaign a success.

In the past decade, one heard so much about the superiority of European and Asian engineering and workmanship. The American

people are very heartened to see American hardware leading the pack.

If our republic is to be a shining example for a new world order, this must always be so.

I believe a new cabinet department, a Department of Engineering, Applied Sciences, and Manufacturing should be created. At a time when our vocational schools are closing and enrollment in the applied sciences is declining, American young people need to know that the trades and the engineering fields are critical for our republic's financial future. These are renowned, honorable professions, each dependent on the other.

Sincerely
Sharon Kelly

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL

DOCUMENT NUMBER: 9121248

FROM: SHERMER, Russel D.: UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

TO: PRESIDENT BUSH



DATE OF CORRESPONDENCE: 04/08/91

SUBJECT: RE: THE PROBLEM OF THE SCIENTIST SHORTAGE, AND REQUESTS TO INCREASE SUPPORT OF THE NSF AND INVEST THE SCIENCE FUNDS MORE WISELY.

ASSIGNED TO: INTERNATIONAL/POLICY

ACTION REQUIRED: AS APPROPRIATE

SENDER'S DUE DATE:

OSTP DUE DATE:

05/03/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #:

CONTACT PERSON:

REMARKS:

CLOSED

DATE RECEIVED: 04/26/91

FILE: PRESIDENTIAL

P-

OSTR
University of Illinois
at Urbana-Champaign

91212-12
Beckman Institute -- Center for Complex Systems Research
and the Department of Physics

405 N. Mathews Street
Champaign
IL 61820 USA

Russel D. Shermer
(217) 244-5877
FAX: (217) 244-8371
rshermer@complex.ccsr.uiuc.edu

RECEIVED
91 APR 26 12:59

OFFICE OF THE
DIRECTOR

April 8, 1991

President Bush
1600 Pennsylvania Ave. NW
Washington, DC 20500

Dear Mr. President,

I am writing in hopes of making you aware of some serious problems in the scientific community of this country. For the last ten years we have heard about the scientist shortage. The truth of the matter is only now coming to light as I attempt to enter the job market.

Mr. President, I and others like myself realize that the scientific community is small and easy to ignore. Please let me remind you though that we are the backbone and strength of this country. It was men and women like myself who made this country a superpower, and yes brought you the Patriot missile. You must also remember that technology, like the Patriot, lags behind the scientific endeavors. You are seeing the fruits of scientific funding from the 70's and 80's.

I am asking you to do two things. First increase support of the National Science Foundation. Second and more importantly, invest the science funds more wisely. Spending billions on the Super-Conducting Super-Collider is not a wise investment and returns merely a little national pride. If you want to beat other countries, beat them where it counts—in marketable technology. If you took half of the money earmarked for the SSC and diverted it to the scientific groups that are more technology oriented, you would not be disappointed with the technological break throughs. I personally am developing a method for reducing the turbulent drag behind an airplane wing. Since it is very likely that I will have to take a job doing something other than continuing this research, it appears that you will have to wait and purchase the technology from either the Germans or the Japanese in a few years.

Several of my colleagues brought the employment problems to the attention of your science advisor, David Bromely. He has stated that our concerns will not effect the policies and decisions made within his office. Hence it has been necessary to contact you directly. Thank you for your time, Mr. President.

Sincerely,

Russel D. Shermer

University of Illinois
at Urbana-Champaign

Beckman Institute -- Center for Complex Systems Research
and the Department of Physics

405 N. Mathews Street
Champaign
IL 61820 USA

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9121248
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91 APR 26 12:59

OFFICE OF THE
DIRECTOR

April 8, 1991

OSTP
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Washington, DC 20500

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Sincerely,

Russel D. Shermer

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20506

May 8, 1991

Dear Dr. Shermer:

The President referred your letter of April 8 to my office, and I noted what you had to say with interest. Let me assure you that I am aware of the concerns that your colleagues have expressed about employment prospects for recent physics doctorates and their belief that the employment situation seems to be getting worse.

You should also know that I have never stated that the concerns expressed by you and your colleagues would have no effect on the policies and decisions made within the Office of Science and Technology Policy. I have discussed these matters personally with your colleagues, and those conversations were quite constructive.

I am certain that the President is glad to know of your support of the increased funding that he has proposed for the National Science Foundation. For several years, both President Reagan and President Bush have supported a doubling of the Foundation's budget. Unfortunately, the Congress has not funded all of the request.

As you know, the job market for doctoral physicists is linked to the economic health of the country, particularly those segments related to research and development and higher education. We are currently experiencing an economic downturn and many States have announced budget restrictions for public universities and colleges. These factors affect the number of positions available in academia, government laboratories, and industry. One bright spot in this picture is clearly Federal funding for research and development which has been increasing and which is slated for further increases in the President's FY 1992 budget that is now before the Congress.

As the economy improves, more positions will open up. However, I am not in a position to assess your personal prospects for employment related to your work on reducing the turbulent drag behind an airplane wing. I would note that the U.S. aircraft industry has been strong over the long term and should continue to be so, even in the face of strong foreign competition.

Now, as in the past, only some of the people receiving doctorates in physics can count on obtaining permanent positions in research universities or in basic research at industrial and government laboratories. Many more will eventually find positions at colleges and universities whose primary emphasis is on undergraduate teaching or in industrial fields that apply physics and engineering knowledge. I hasten to point out that these are crucial to America's future, and that individuals in these positions can make major contributions to improving science education and to strengthening the competitiveness of American industry.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Allan Bromley". The signature is written in a cursive style with a long, sweeping tail on the final letter.

D. Allan Bromley
Director

Dr. Russel D. Shermer
Department of Physics
405 North Mathews Street
University of Illinois at Urbana-Champaign
Champaign, IL 61820

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL-INFO

DOCUMENT NUMBER: 9121387

FROM: KALDON, Philip Edward

TO: PRESIDENT BUSH

DATE OF
CORRESPONDENCE: 04/05/91

SUBJECT: RE: THE SHORTAGE OF PhD's OR THE LACK THEREOF.

ASSIGNED TO:

ACTION REQUIRED:

SENDER'S DUE DATE:

OSTP DUE DATE:

DATE COMPLETED:

COPIES TO: D. Allan Bromley
INTERNATIONAL/POLICY

WHITE HOUSE TRACKING #:

CONTACT PERSON:

REMARKS:

DATE RECEIVED: 04/24/91

FILE: P PRESIDENTIAL

16
OST: P

9121387

117 Iroquois Street
Laurium, MI 49913
5 April 1991

RECEIVED

President George Bush
1600 Pennsylvania Avenue NW
Washington, DC 20500
91 APR 24 11 06

Dear Mr. President,

OFFICE
DIRECTOR

In May of 1989 I received my PhD in Applied Physics. Up until that time the conventional wisdom was that there would be a large number of Physics jobs. Imagine my surprise when employers began writing back that they each were wading through 200 to 400 qualified applicants! I have come as high as second place in at least seven searches but that doesn't pay my college loans. Your Science Advisor, Dr. Bromley, has told Physics Today that such stories are merely anecdotal and are not backed up by facts. Further, he claims that industry is looking for good people and isn't finding anyone applying. Sir, the truth is that there are hundreds of Physics PhD's who ARE looking, that there are no "facts" because no one keeps data on physicists and that industry is not advertising jobs where the physicists are.

I am lucky to have a wife with a good job, but because of her income, there has never been any point in applying for unemployed status. In other words, my status has never appeared in any Federal or Michigan unemployment statistics. This would be important to know, because the government is claiming a shortage of scientists and engineers and is working on efforts to build up the numbers. If there are not enough jobs for the current PhD's, then where will these new people work?

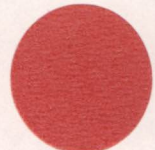
Why should there be a crisis? Federal policies on science funding, hiring freezes at national labs, the defense builddown, immigration policy on China, Eastern Europe and the Soviet Union, plus other budget pressures have all cut back the funding and number of jobs while increasing the number of applicants. In addition, state governments are undergoing financial crises as well, causing hiring freezes, cutbacks and layoffs at many State colleges and universities, as are industry giants, like AT&T Bell Labs. I believe that the Physics community could weather one or two of these situations individually, but not all of them.

It is not just me, it is not just Physics; we are beginning to find similar problems in other fields. Sir, the Federal government has responsibilities to the scientific community in this country and America's high tech future. It is imperative that you take this problem seriously and that efforts be made to find its extent and establish a coherent national policy. I thank you for your considerations.

Respectfully,

Dr. Philip Edward Kaldon
(906) 337-2040

Logged



"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9120925

FROM: LOCKWOOD, Ms. Rowan

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 03/29/91

SUBJECT: REQUESTS THE PRESIDENT'S PERSONAL SUPPORT FOR A VOLUNTEER SCIENCE AND MATH PROGRAM CALLED "SMART" WHICH SHE DEVELOPED WITH HER FATHER JOHN LOCKWOOD.

ASSIGNED TO: Thomas Ratchford CS JH

ACTION REQUIRED: FOR DAB SIGNATURE

***** SENDER'S DUE DATE: 04/10/91 OSTP DUE DATE: 04/03/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley Damar Hawkins

WHITE HOUSE TRACKING #: 224072 CONTACT PERSON: SALLY KELLEY

REMARKS:

DATE RECEIVED: 03/29/91 FILE: P PRESIDENTIAL PRIORITY

THE WHITE HOUSE

WASHINGTON

April 5, 1991

Dear Ms. Lockwood:

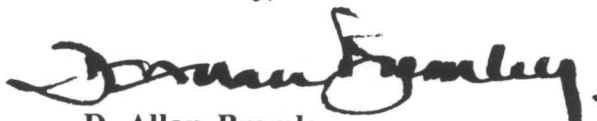
I am writing in response to your letter to President Bush about your volunteer science and mathematics program called "SMaRT." You and your father are to be congratulated on this initiative. Thank you for submitting copies of the information summary sheets and the newspaper article regarding your program.

One of my staff members, Ms. Janice Howell, did meet with your father when he was here in Washington, DC on March 21, 1991. He indicated that the program is currently reaching thirteen inner city students in New Haven, and presented our office with an updated version of the program guidelines. He highlighted the success of using student volunteers, one-on-one, with the students.

As you know, the problems this Nation faces in science and mathematics education are well documented. The state of science and mathematics learning is a serious concern at all levels among our children, youth, and college-age adults. The need to inspire children and young adults to pursue the study of science and mathematics is greater than ever before, because most children who do go on to become scientists or engineers first become interested in those subjects in elementary school or junior high. And, most often, the reason they do is because they come in contact with someone who can speak their language, communicate with them, spark their imagination, and evoke the sense of wonder at what is inherent in science and math.

The Administration places a high priority on programs designed to advance general scientific literacy and mathematics numeracy and to prepare the next generation of scientists, engineers, and technicians. Your efforts to motivate middle and high school students in the study of science and mathematics are to be highly commended.

Sincerely,



D. Allan Bromley
Assistant to the President
for
Science and Technology

Ms. Rowan Lockwood
1124 Post Drive
Rockwood, IL 61108

9126725

RECEIVED

MAR 29 11:58

CONFIDENTIAL
DIRECTOR

THE WHITE HOUSE OFFICE

REFERRAL

MARCH 29, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:
DIRECT REPLY, FURNISH INFO COPY

DESCRIPTION OF INCOMING:

ID: 224072
MEDIA: LETTER, DATED MARCH 19, 1991
TO: PRESIDENT BUSH
FROM: MS. ROWAN LOCKWOOD
1124 POST DRIVE
ROCKFORD IL 61108

SUBJECT: REQUESTS THE PRESIDENT'S PERSONAL SUPPORT FOR
A VOLUNTEER SCIENCE AND MATH PROGRAM CALLED
"SMART" WHICH SHE DEVELOPED WITH HER FATHER,
JOHN LOCKWOOD

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

INCOMING

DATE RECEIVED: MARCH 27, 1991

NAME OF CORRESPONDENT: MS. ROWAN LOCKWOOD

SUBJECT: REQUESTS THE PRESIDENT'S PERSONAL SUPPORT FOR
A VOLUNTEER SCIENCE AND MATH PROGRAM CALLED
"SMART" WHICH SHE DEVELOPED WITH HER FATHER,
JOHN LOCKWOOD

ROUTE TO: OFFICE/AGENCY	(STAFF NAME)	ACTION		DISPOSITION	
		ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED D YY/MM/DD
OFFICE OF SCIENCE AND TECHNOLOGY POLIC		RAR ORG	91/03/27		/ /
REFERRAL NOTE:					/ /
REFERRAL NOTE:					/ /
REFERRAL NOTE:					/ /
REFERRAL NOTE:					/ /
REFERRAL NOTE:					/ /

COMMENTS: INCOMING WAS GIVEN TO THE PREISDENT DURING
HIS TRIP TO BERMUDA PER ATTACHED NOTE;
WRITER IS A PAST WINNER OF THE WESTINGHOUSE
SCIENCE TALENT SEARCH

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: 4610
E MAIL USER CODES: (A) (B) (C)

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*****
ACTION CODES:          *DISPOSITION          *OUTGOING          *
                        *                      *CORRESPONDENCE:  *
A-APPROPRIATE ACTION  *A-ANSWERED        *TYPE RESP=INITIALS *
C-COMMENT/RECOM       *B-NON-SPEC-REFERRAL *          OF SIGNER *
D-DRAFT RESPONSE      *C-COMPLETED       *          CODE = A   *
F-FURNISH FACT SHEET  *S-SUSPENDED        *COMPLETED = DATE OF *
I-INFO COPY/NO ACT NEC*                      *          OUTGOING *
R-DIRECT REPLY W/COPY *                      *                      *
S-FOR-SIGNATURE        *                      *                      *
X-INTERIM REPLY        *                      *                      *
*****
    
```

REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

OS/P
B. mee,
THE WHITE HOUSE
WASHINGTON

The enclosed letter is from a past winner of the Westinghouse Science Talent Search. POTUS spoke to the 70th Anniversary of the Westinghouse Science Talent Search 3/4/91 at the Washington Union. Mrs. Lockwood did not have a chance to meet POTUS but asked me to present this letter to him. If you need any further info please call me. Thank you for your assistance.

C. Ray

Lillie Bell,

This letter was given
to GB on his trip
to Bermuda. Please
send where it should
go. I am clueless!

Thanks for your help.

Barthelme
J.M. 19

1124 Post Drive
Rockford
IL 61108

March 19, 1991

1/5 TP
The President,
The White House,
Washington,
D.C. 20500

Dear Mr. President,

As a sophomore science student at Yale and a Westinghouse winner, I particularly appreciated your speech at the Science Talent Search 50th. Anniversary Banquet on the importance of science and math to America. Encouraged by your interest, I am writing to ask your personal support for a volunteer science and math program called SMARt which I have started. SMARt is the Science and Math Achiever Teaming program and I believe SMARtTeams can help greatly in fulfilling the pledge you made in your first State of the Union message to make the U.S. the world leader in math and science education by the year 2001.

I and my father, John Lockwood, developed this program last year because we felt challenged by your pledge. SMARt pairs junior high and high school pupils with college student volunteers, supported by industry, to motivate them in science and mathematics through achievement in long term projects. I am piloting SMARt with inner city youth in New Haven, working with other Yale students, the Yale Dean's office and the New Haven school system, with funding from a Hughes Foundation grant. Based on our success in New Haven, and a franchise formula my father has devised for expanding the program nationally that draws on the history of Junior Achievement, we believe that SMARt is an effective answer to your call for U.S. leadership in this area.

We are not alone in thinking along these lines. The week before your speech at the Science Talent Search, my father and I met with the publisher of 'Fortune' magazine, Mr. James B. Hayes, to discuss an article we have written on SMARt. It was Mr. Hayes who suggested that the White House might be interested in SMARt. As he saw it, SMARt meets the nation's three major needs for a volunteer science program: it motivates the youth who need to be reached, it taps into the best and largest pool of volunteers possible to reach those youth and it draws on a successful formula for national expansion.

A White House endorsement of our program would provide the catalyst for the national effort that must start now if it is to meet your challenge in the next decade. I have written to Dr. Bromley about SMaRT, and my father will be meeting with his staff this week when he is in Washington. Your personal support and the advice of your Council of Advisers on Science and Technology would give us an unequalled boost in recruiting the school and college participation and industry support we need for this effort.

I have enclosed for your information a summary sheet on SMaRT, an article in the 'Yale Daily News', and an information sheet I used on-campus and would very much welcome a call from your staff to discuss SMaRT further. I am presently at home over Spring break, but after the 25th. I can be reached either at Yale, at 203/436-0801, or through my father, at his office, 815/226-7913 or home, 815/397-0584.

Thank you very much for your time and your interest.

Yours sincerely,

Rowan Lockwood

Rowan Lockwood (Ms.)



THE WHATS, HOWS, WHOS, WHERE'S AND WHEN'S!

WHAT IS SMART?

SMART is the Science and Math Achiever Teaming program. It aims to motivate middle and high school pupils in science and math through early achievement in long-term, hands-on, original science projects supported by volunteers from industry and local colleges. New Haven is its first tryout and Yale students will be its first volunteers.

WHAT DIFFERENCE CAN SMART MAKE?

SMART concentrates on making school pupils feel secure with science and eager for discovery. It doesn't do it by making science easy, but by giving them control over the discovery process. They get to choose their projects and commit to complete them. They're not apprentices or passive bystanders - they're partners in their own projects and scientists in their own right. SMART wants to give them, early on, that sense of wonder and achievement most of us don't get from science or math until after a long hard grind, so that their achievement will sustain their interest through the rest of their schooling.

WHAT WOULD I DO ON A SMART TEAM?

You would first help pupils pick and plan their projects and search the literature. You would then partner pupils in working with industry and Yale resource staff on their specific projects.

WHAT WOULD I GET OUT OF IT?

As well as tackling some unique challenges and making friendships, you'll get to:

- Spark the excitement of discovery for the young - and yourself,
- Experience hands-on research you won't get on Science Hill,
- Try teaching, tutoring and mentoring - all at one time, and
- Make and maintain early contact with industry, valuable as work experience and for summer jobs and recruitment.

HOW IS SMART GETTING STARTED?

With 1 team in 1 New Haven school in the Fall, expanding to 2 or more teams according to demand in the Spring. A team will typically comprise 1 coordinator, 2 volunteers from industrial research facilities, 4 student volunteers and 8 school pupils and will manage an average of 4 individual or team projects.

HOW MUCH TIME WILL IT TAKE - AND FOR HOW LONG?

3 hours a week - for the academic year.

WHO IS SMART LOOKING FOR?

You, and anyone else who likes middle and high schoolers and science and math. No, you don't have to be a science or math major. Really!

WHERE CAN I FIND OUT MORE?

All interested are invited to a meeting introducing The SMART Program at the Common Room, Dwight Hall.

WHEN?

3 p.m., Thursday, October 4, 1990.

CONTACT:

Rowan Lockwood. Tel: 436-0801.



THE SCIENCE AND MATHEMATICS ACHIEVER TEAMING PROGRAM
(SMART)

Summary prepared by John G. and Rowan Lockwood, March 1991.
Contact: 1124 Post Dr., Rockford, Il 61108, Tel. 815/397-0584

SMART - the volunteer program helping satisfy the three prerequisites for U.S. world leadership in science and math by 2001: more pupil motivation, more individual involvement and more national outreach.

MISSION: SMART aims to motivate junior high and high schoolers in science and mathematics through early achievement in long-term, hands-on, projects that team them with college student volunteers, supported by cooperating industries, colleges and school authorities.

BACKGROUND: SMART is unique among science volunteer programs in drawing volunteers from both colleges and industries and in planning its expansion through national franchising by a national non-profit body called the SMART League. Formed and supported by business, the League will help local SMARTeams to organize and acquire resources and materials for volunteer and project management, and will research program improvements. It will provide a state and national awards structure and liaison with state and federal educational authorities.

SMART operates under the following guidelines:

- Projects are devised and managed by the pupils and seek to involve original or creative work in results or methodology.
- Projects will be not less than one school year in duration and require a pupil/parent written commitment to timely completion.
- Student volunteers will commit to provide hands-on help to, and pursue sources and technical resources for, their pupil partners.
- Industry and college staff volunteers will commit to provide, as required, project guidance and resources and logistics support.
- Cooperating industries will provide project resource, logistics support, and local incentive awards.
- Cooperating colleges will provide project source access, staff advisory services and incentives complementing the industry awards.
- A national center will provide project resource, organizing help, program research and a state and national awards structure.

Benefits SMART provides include:

- For the pupils, early achievement and consequent motivation for future studies in science or mathematics,
- For the students, hands-on experimentation, teaching and project management experience not otherwise readily available,
- For cooperating colleges and industries, encouragement of math and science and mutual opportunities in industrial liaison, research, technology searching, recruiting and job candidate identification.

THE NEW HAVEN/YALE SMART PILOT PROJECT

The New Haven/Yale Pilot Project has been established in New Haven with the support of Yale University and the New Haven school system, and with funding from the Hughes Foundation, as a prototype for future SMART programs. It is expected to lead to the formation of the SMART League to expand SMARTeams nation-wide.

Scientists Help Youngsters Get SMARt

By Bob Datta
YDN Staff Reporter

Rowan Lockwood '93 wants kids to get SMARt.

Lockwood's efforts don't involve Max and Agent 99, but the Science and Math Achiever Teaming program. SMARt, which will begin next semester, will allow students at Troup Middle School to research fundamental science with help from student mentors, Yale professors and New Haven industrial scientists.

Twice a week after school, the students will visit Troup to help the students design and research their own science projects. The Troup students will also receive guidance

from professors and scientists who will let the students visit their labs and workplaces.

The students will work in all sorts of fields, ranging from solar power to DNA research to dinosaurs and evolution, using the lab space at Troup.

"I want the kids to get a good view of what science really is, and know what it is all about," Lockwood said.

Students are frequently turned off from science by bad textbooks, or "a single lousy math or intro-science class," she said, adding that hands-on experience can teach students as much as can classroom time.

"There is this misconception that

in order to do real science you must have five years of study," she said. "I think that you learn the most as you go along, picking up skills along the way"

Bruce Guenin, a scientist at Olin and a volunteer for SMARt said the program will do much more than make the kids interested in science. "It enhances their self-esteem if people are interested in them," he said, adding that industry should play a role in New Haven education "to give kids an idea of the skills they have, and need, to succeed."

Lockwood said the idea for SMARt came from her experiences in high school. "I did research at a local college, published a paper, and I learned a lot from the experience,"

she said.

She spent most of her summer working closely with the New Haven school board and with Dwight Hall to get SMARt rolling, she added.

Jack Hasagawa, coordinator of Dwight Hall helped her to design SMARt this summer. "I know that unless someone does something about getting children interested in math and science, American society will go down the tubes," he said.

Kasagawa pointed to recent demographic surveys which indicate that American children get good science grades until the fifth grade, when a "bottleneck" occurs. "At the upper levels of education,

See SMARt, Page 4



AARON SANDLER — YDN

Marian Harris '93 and Rowan Lockwood '93, co-coordinators of the Science and Math Achiever Teaming program plan how to get middle school students interested in science.

Students, Scientists Work With City Youth

SMARt, from Page 1

there is a devaluation of math and science in our schools," he said.

The program will begin in January, when the second semester at Troup begins. For the first week, the SMARt student volunteers will present a "smorgasboard of science" to offer the kids the broadest possible picture of what they can do.

The students themselves, with a little guidance from their SMARt mentors, will then choose the sort of project they would like to do.

"This program is, and has to be, driven by the kids," Lockwood said.

Marian Harris, a co-coordinator

of SMARt, concurred. "The kids' attention span will determine how much work they do," she said. "The projects will, for the beginning, only last a semester. It will give the kids a feeling of getting something done," Harris said.

The Troup school already has pretty good science facilities, Lockwood said, because it is a math-science magnet school for the sixth grade, and because NASA gives it resources for its Young Astronaut program.

SMARt is partially funded by the Howard Hughes grant, which is given to advance mathematics and science at Yale and New Haven.

logged



"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY DOCUMENT NUMBER: 9120769

FROM: THE HONORABLE GARDE B. GARDOM

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 03/15/91

SUBJECT: FORWARDS MATERIAL ON THE CONSTRUCTION OF TRIUMF-KAON, THE SCIENCE PROJECT WITH COSTS TO BE SHARED EQUALLY BETWEEN CANADA, BRITISH COLUMBIA AND INTERNATIONAL PARTNERS.

ASSIGNED TO: Thomas Ratchford

ACTION REQUIRED: Please see "REMARKS".

SENDER'S DUE DATE: 03/28/91 OSTP DUE DATE: 03/21/91

our due date: 3/19/91

DATE COMPLETED: -----

COPIES TO: Ken Yale D. Allan Bromley

WHITE HOUSE TRACKING #: 198541 CONTACT PERSON:

REMARKS: The action requested is a direct reply, however, the REMARKS ask whether or not OSTP can answer this or whether it should go through state.

DATE RECEIVED: 03/18/91

FILE: P- PRESIDENTIAL PRIORITY

THE WHITE HOUSE
WASHINGTON

March 18, 1991

Dear Mr. Gardom:

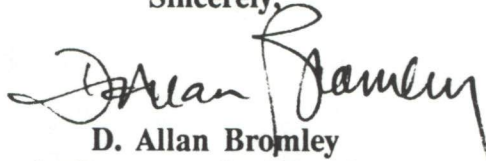
Thank you for writing to express your enthusiasm about the TRIUMF-KAON project. I have been asked to respond to your letter on behalf of the President.

Our government has been most interested in and supportive of the scientific benefits that result from research done with particle accelerators. As a major expansion of the TRIUMF accelerator, the KAON project will most certainly have a profound effect on many basic research projects. It appears to be a most unique opportunity for Canada and Canadian science.

Again, thank you for writing to express your interests. I have taken the liberty to share the information on the KAON project with other high level government officials in the White House. I trust that we will continue to communicate on this and other issues of particular importance to you and your government.

Best regards.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Allan Bromley". The signature is written in a cursive style with a large, prominent initial "D".

D. Allan Bromley
Assistant to the President
for Science and Technology

The Honorable Garde Gardom
Agent General for British Columbia
British Columbia House
1 Regent Street
London SW1Y 4NS England

9120769

RECEIVED

THE WHITE HOUSE

MAR 16 10:24

REFERRAL

CSTP
OFFICE OF THE
DIRECTOR

MARCH 15, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:
DIRECT REPLY, FURNISH INFO COPY

REMARKS: ** CAN YOU ANSWER THIS OR SHOULD IT GO THROUGH STATE ?? **

DESCRIPTION OF INCOMING:

ID: 198541
MEDIA: LETTER, DATED NOVEMBER 29, 1990
TO: PRESIDENT BUSH
FROM: THE HONORABLE GARDE B. GARDOM
AGENT GENERAL FOR BRITISH COLUMBIA
BRITISH COLUMBIA HOUSE
1 REGENT STREET
LONDON SW1Y 4NS ENGLAND
SUBJECT: FORWARDS MATERIAL ON THE CONSTRUCTION OF
TRIUMF-KAON, THE SCIENCE PROJECT WITH COSTS
TO BE SHARED EQUALLY BETWEEN CANADA, BRITISH
COLUMBIA AND INTERNATIONAL PARTNERS

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

SC

INCOMING

DATE RECEIVED: DECEMBER 14, 1990

NAME OF CORRESPONDENT: THE HONORABLE GARDE B. GARDOM

SUBJECT: FORWARDS MATERIAL ON THE CONSTRUCTION OF
TRIUMF-KAON, THE SCIENCE PROJECT WITH COSTS
TO BE SHARED EQUALLY BETWEEN CANADA, BRITISH
COLUMBIA AND INTERNATIONAL PARTNERS

ROUTE TO: OFFICE/AGENCY	(STAFF NAME)	ACTION		DISPOSITION	
		ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED D YY/MM/DD
OFFICE OF SCIENCE AND TECHNOLOGY POLIC		<i>BAR</i> <i>BAR</i>	90/12/18	<i>TC</i>	<i>fact sheet</i> 90/12/26
REFERRAL NOTE:					
<i>Go Home</i>		<i>H</i>	90/12/28		91/01/24
REFERRAL NOTE:					
<i>OSTP</i>		<i>R</i>	91/01/02		91/03/13
REFERRAL NOTE:					
<i>OSTP</i>		<i>R</i>	91/03/15		
REFERRAL NOTE:					
REFERRAL NOTE:					

COMMENTS: FOLDER ATTACHED
CC5, "GARDE"

*Can you answer this or should it go
through state ????*

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: 3300

MI MAIL USER CODES: (A) (B) (C)

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*ACTION CODES:          *DISPOSITION          *OUTGOING          *
*                        *                        *CORRESPONDENCE:  *
*A-APPROPRIATE ACTION  *A-ANSWERED          *TYPE RESP=INITIALS *
*C-COMMENT/RECOM       *B-NON-SPEC-REFERRAL *      OF SIGNER      *
*D-DRAFT RESPONSE      *C-COMPLETED        *      CODE = A      *
*F-FURNISH FACT SHEET  *S-SUSPENDED        *COMPLETED = DATE OF *
*I-INFO COPY/NO ACT NEC*                        *      OUTGOING     *
*R-DIRECT REPLY W/COPY *                        *                        *
*S-FOR-SIGNATURE       *                        *                        *
*X-INTERIM REPLY       *                        *                        *
*****

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REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

T H E W H I T E H O U S E O F F I C E

REFERRAL

DECEMBER 18, 1990

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:

DIRECT REPLY, FURNISH INFO COPY

DESCRIPTION OF INCOMING:

ID: 198541

MEDIA: LETTER, DATED NOVEMBER 29, 1990

TC: PRESIDENT BUSH

FROM: THE HONORABLE GARDE B. GARDOM
AGENT GENERAL FOR BRITISH COLUMBIA
BRITISH COLUMBIA HOUSE
1 REGENT STREET
LONDON SW1Y 4NS ENGLAND

SUBJECT: FORWARDS MATERIAL ON THE CONSTRUCTION OF
TRIUMF-KAON, THE SCIENCE PROJECT WITH COSTS
TO BE SHARED EQUALLY BETWEEN CANADA, BRITISH
COLUMBIA AND INTERNATIONAL PARTNERS

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RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500


SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE

WASHINGTON

December 20, 1990

MEMORANDUM FOR THE PRESIDENT

FROM: D. ALLAN BROMLEY 

SUBJECT: YOUR LETTER FROM GARDE B. GARDOM REGARDING
THE CANADIAN KAON PROJECT

The KAON project involves a major expansion of the so called TRIUMF (Tri-University Meson Facility) accelerator located at the University of British Columbia, and jointly managed by that University, the Simon Fraser University, and the University of Alberta. TRIUMF is Canada's largest single scientific facility both in terms of budget and of scientific support staffing.

The Director of this project, which will put Canada at world frontiers in fundamental science with the highest intensity beam of sub-nuclear particles available anywhere, is Professor Erich Vogt, a close and longtime friend and colleague. At his request I was a member of several advisory groups during the early stages of the project several years ago and I have subsequently maintained close contact with it.

Late in November, at the invitation of the Speaker of the Canadian House of Commons, The Honourable John Fraser, I spent a day in Ottawa during which I met with the Canadian Ministers of Justice, Finance, Planning and the Deputy Prime Minister as well as several other senior governmental officials who wished to discuss the KAON project and its relationship to world science. The Speaker then hosted a reception for me in his Chambers at which he asked me to give an informal talk on this general topic to a larger group.

The project will cost about 700 million dollars to be borne equally by the Province of British Columbia, the Canadian federal government and foreign collaborators. It has been thoroughly discussed both within the scientific community and interagency circles in this country and, in terms of its scientific potential and cost effectiveness, given enthusiastic support. I was able to reaffirm the Department of Energy commitment to provide roughly 100 million (Canadian) toward the international contribution to the construction.

As things now stand, to the best of my knowledge, the Canadian Minister of Science and Technology, William Winegard, is strongly opposed to moving forward because he fears that the magnitude of the project will distort the rest of Canadian science. A group of the ministers led by Ms. Kim Campbell, the Minister of Justice and the federal minister charged with special responsibilities for British Columbian affairs, strongly supports the project. Several ministers remain uncommitted but a decision will be reached soon. I have also talked at length with Winegard and emphasized

that both as an old Canadian and as a physicist long active in this field of science worldwide, I consider this KAON project to be a unique opportunity for Canada and for Canadian science.

Should you wish any further information on this activity I will be happy to provide it.



17854
AGENT GENERAL FOR BRITISH COLUMBIA
BRITISH COLUMBIA HOUSE
1 REGENT STREET
LONDON SW1Y 4NS
ENGLAND

November 29, 1990

The Honourable George Bush
President of the United States
of America
The White House
Washington, D. C. 20501
U.S.A.

Dear Mr. President:

Re: TRIUMF-KAON

As I am sure you are aware, the \$700 million construction cost of this world class science project is to be shared equally between Canada, British Columbia and our international partners.

I thought you would like to have copies of the most recent material and herewith the same.

There will be remarkable world-wide benefits and spin-offs from the project. Already, at least 50 potential commercial technologies have been developed at the existing TRIUMF facility ... these are listed at the back of the material and include such matters as cancer therapy, pharmaceutical isotopes and smoke stack emission control.

"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL

DOCUMENT NUMBER: 9120054

FROM: THE HONORABLE GARDE B. GARDOM

TO: DR. BROMLEY

DATE OF
CORRESPONDENCE: 01/07/91

SUBJECT: MATERIAL ON THE CONSTRUCTION OF TRIUMF-KAON

ASSIGNED TO: Thomas Ratchford

ACTION REQUIRED: DAB SIGN

SENDER'S DUE DATE: 01/22/91

OSTP DUE DATE: 01/17/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: 198541

CONTACT PERSON: SALLY KELLEY

REMARKS:

DATE RECEIVED: 01/08/91

FILE: BROMLEY

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20506

JAN 2 1991
DT

December 26, 1990

Sally Kelley:

Attached are our comments and recommendations on the letter from Garde Gardom, as requested in your tracking worksheet of December 18, 1990.

We have prepared a memo giving our reaction to the substance of the letter. As you originated the request for us to comment, we are sending this memo to you to forward to the President; or to route otherwise, as appropriate.

Please advise if there is anything else you need to respond to Mr. Gardom, or if there is any other action we need to take.

Thank you.

Kenneth P. Yale
Chief of Staff

6272

T H E W H I T E H O U S E O F F I C E

REFERRAL

JANUARY 7, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:

DIRECT REPLY, FURNISH INFO COPY

DESCRIPTION OF INCOMING:

ID: 198541

MEDIA: LETTER, DATED NOVEMBER 29, 1990

TO: PRESIDENT BUSH

FROM: THE HONORABLE GARDE B. GARDOM
AGENT GENERAL FOR BRITISH COLUMBIA
BRITISH COLUMBIA HOUSE
1 REGENT STREET
LONDON SW1Y 4NS ENGLAND

SUBJECT: FORWARDS MATERIAL ON THE CONSTRUCTION OF
TRIUMF-KAON, THE SCIENCE PROJECT WITH COSTS
TO BE SHARED EQUALLY BETWEEN CANADA, BRITISH
COLUMBIA AND INTERNATIONAL PARTNERS

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE

(OR DRAFT) TO:

AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

Logged



"CORRESPONDENCE TRACKING"

TYPE: PRESIDENTIAL PRIORITY

DOCUMENT NUMBER: 9120733

FROM: D'ANTONIO, William: THE AMERICAN SOCIOLOGICAL ASSOCIATION

TO: PRESIDENT BUSH

DATE OF CORRESPONDENCE: 03/13/91

SUBJECT: APPRECIATION FOR THE PRESIDENT'S REMARKS ON THE OCCASION OF THE 50th ANNUAL WESTINGHOUSE SCIENCE TALENT SEARCH.

ASSIGNED TO: Thomas Ratchford (for Pierre Berrolle)

ACTION REQUIRED: DRAFT REPLY FOR SIGNATURE OF WH STAFF MEMBER

SENDER'S DUE DATE: 03/25/91 3/16/91 OSTP DUE DATE: 03/18/91

DATE COMPLETED: -----

COPIES TO: D. Allan Bromley Damar Hawkins

WHITE HOUSE TRACKING #: CONTACT PERSON: SALLY KELLEY

REMARKS:

DATE RECEIVED: 03/13/91

FILE: P PRESIDENTIAL PRIORITY

9120733

RECEIVED

THE WHITE HOUSE

91 MAR 13 1991

REFERRAL

OSTP
OFFICE OF THE
DIRECTOR

MARCH 13, 1991

TO: OFFICE OF SCIENCE AND TECHNOLOGY POLICY

ACTION REQUESTED:

DRAFT REPLY FOR SIGNATURE OF:
WHITE HOUSE STAFF MEMBER

DESCRIPTION OF INCOMING:

ID: 218252
MEDIA: LETTER, DATED MARCH 5, 1991
TO: PRESIDENT BUSH
FROM: MR. WILLIAM V. D'ANTONIO
EXECUTIVE DIRECTOR
THE AMERICAN SOCIOLOGICAL
ASSOCIATION
1722 N STREET, NW.
WASHINGTON DC 20036

SUBJECT: APPRECIATION FOR THE PRESIDENT'S REMARKS ON
THE OCCASION OF THE 50TH ANNUAL WESTINGHOUSE
SCIENCE TALENT SEARCH

PROMPT ACTION IS ESSENTIAL -- IF REQUIRED ACTION HAS NOT BEEN
TAKEN WITHIN 9 WORKING DAYS OF RECEIPT, PLEASE TELEPHONE THE
UNDERSIGNED AT 456-7486.

RETURN CORRESPONDENCE, WORKSHEET AND COPY OF RESPONSE
(OR DRAFT) TO:
AGENCY LIAISON, ROOM 91, THE WHITE HOUSE, 20500

SALLY KELLEY
DIRECTOR OF AGENCY LIAISON
PRESIDENTIAL CORRESPONDENCE

THE WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

Jan SP

INCOMING

DATE RECEIVED: MARCH 06, 1991

NAME OF CORRESPONDENT: MR. WILLIAM V. D'ANTONIO

SUBJECT: APPRECIATION FOR THE PRESIDENT'S REMARKS ON
THE OCCASION OF THE 50TH ANNUAL WESTINGHOUSE
SCIENCE TALENT SEARCH

ROUTE TO: OFFICE/AGENCY	(STAFF NAME)	ACTION		DISPOSITION	
		ACT CODE	DATE YY/MM/DD	TYPE RESP	C COMPLETED D YY/MM/DD
HIRLEY GREEN		ORG	91/03/06		1/1
<i>OSTP</i>	REFERRAL NOTE:				
	REFERRAL NOTE:	D	91/03/13		91/03/15
	REFERRAL NOTE:				
	REFERRAL NOTE:				
	REFERRAL NOTE:				
	REFERRAL NOTE:				

COMMENTS: WRITER IS A MEMBER OF THE YALE CLASS OF '48

ADDITIONAL CORRESPONDENTS: MEDIA:L INDIVIDUAL CODES: 4690
E-MAIL USER CODES: (A) (B) (C)

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ACTION CODES:      *DISPOSITION          *OUTGOING          *
                   *                          *CORRESPONDENCE:  *
                   *                          *TYPE RESP=INITIALS *
A-APPROPRIATE ACTION *A-ANSWERED          *                *
C-COMMENT/RECOM      *B-NON-SPEC-REFERRAL *                *
D-DRAFT RESPONSE     *C-COMPLETED        *                *
F-FURNISH FACT SHEET *S-SUSPENDED         *                *
I-INFO COPY/NO ACT NEC*                *                *
R-DIRECT REPLY W/COPY *                *                *
S-FOR-SIGNATURE      *                *                *
X-INTERIM REPLY      *                *                *
*****

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REFER QUESTIONS AND ROUTING UPDATES TO CENTRAL REFERENCE
(ROOM 75, OEOB) EXT-2590
KEEP THIS WORKSHEET ATTACHED TO THE ORIGINAL INCOMING
LETTER AT ALL TIMES AND SEND COMPLETED RECORD TO RECORDS
MANAGEMENT.

THE WHITE HOUSE
WASHINGTON

March 15, 1991

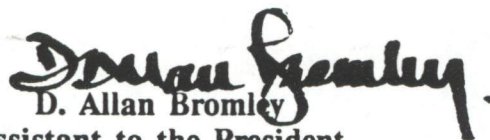
Dear Dr. D'Antonio:

I have been asked to respond to your letter of March 5, 1991 to the President concerning the relevance of social and behavioral science research to our nation.

Your points about opinion polling and the spread of AIDS are well taken. As you may know, I believe strongly that social science research can usefully inform the formulation of public policy. It is for that reason that I have recently appointed Dr. Pierre Perrolle Assistant Director of the Office of Science and Technology Policy (OSTP), responsible for the social sciences.

I understand that you have met with Dr. Perrolle and trust that you have found him responsive to your ideas and concerns. I welcome a continuing dialogue between OSTP and the American Sociological Association.

Sincerely,



D. Allan Bromley
Assistant to the President
for
Science and Technology

Mr. William V. D'Antonio
Executive Director
The American Sociological Association
1722 N Street, N.W.
Washington, D.C. 20036

THE WHITE HOUSE
WASHINGTON

3/11

Shirley-

We have no record of him as a personal friend. He did graduate from Yale the same year as the President but they have never corresponded.

Do you think this letter needs a substantive response?

Guidance? Thanks.

*Sally - who signed this
is to for draft?*

*I want it to
be a WH answer.*

WH Science Advisor?

sq

Lowrey

718252

Murby Green

the american sociological association

March 5, 1991

The Honorable George Bush
President
The White House
1600 Penn. Avenue
Washington, D.C. 20500

Dear President Bush:

I enjoyed your remarks on the occasion of the Fiftieth Annual Westinghouse Science Talent Search. I am sure all of us in attendance at this Gala Affair are hoping that circumstances will now permit you to become the "Education President" you obviously want to be.

As I reflected on your remarks, I realize the tendency to see science exclusively in natural and physical science terms is very pervasive. Of course, the immediacy of the Gulf War, with the effectiveness of our weaponry, both offensive and defensive, so clearly demonstrated, as you pointed out, only heightens the sense of the importance of physical science, math and engineering. But may I suggest that such a perspective does not tell the whole story. As we look to the year 2000, I would like to hope that our efforts in academe to become number 1 in the world will include a more central place for the social and behavioral sciences.

While Public Opinion polling is no substitute for the Patriot Missile, it behooves us to recognize its place in a democracy. For neither is technology a substitute for an informed and free citizenry. Opinion polling is a product of the social sciences, as much dependent on mathematics as the most advanced technology. And historians shall recount that opinion polling helped create and sustain the high level of solidarity and support for your Gulf Policy. It took a concerted, team effort both nationally and internationally to create and sustain the support you received, an impressive mark of leadership. Perhaps at some appropriate time in the future, you might use opinion polling as an example of the contributions of the social sciences to freedom and democracy.

In your October, 1989 interview in U.S. News and World Report, you stated that among the four most memorable undergraduate courses you took at Yale was Professor Raymond Kennedy's on Race Relations (which we took together, as I recall). I heartily agree with your assessment, as witness my career. As I recall, you stated that the course helped you to become more tolerant of others. So I would hope that you will find a future occasion to speak on the importance of education as a means for developing greater tolerance of others in a new world order.

May I offer one other bit of evidence of the importance of the social sciences in today's world? Since 1981 we have become increasingly aware of the AIDS epidemic. And in response, the federal government has committed ever larger sums to battling this dread disease. Very few people are aware that it was a sociologist, Dr. William Darrow of the Centers for Disease Control, who "provided some of the strongest early evidence that the etiologic agent of AIDS was sexually transmitted." This quotation is from a letter written by Drs. James Curran and Harold Jaffe, two of the key medical researchers on the CDC AIDS Program. In the letter they elaborated on Dr. Darrow's important contributions to AIDS research.

I am in the process of putting together a brochure listing some of the important contributions of sociology to a democratic society, public policy, and human well-being. I hope you will not think it presumptuous of me to send you a copy.

Sincerely,



William V. D'Antonio
Executive Officer
Yale '48

THE WHITE HOUSE

WASHINGTON

March 26, 1991

Dear Mr. D'Antonio:

President Bush has asked me to respond to your letter of March 5, 1991, and to tell you how much he appreciates your comments concerning his remarks on the occasion of the 50th Annual Westinghouse Science Talent Search, and on the recent activities in the Gulf.

As a 30-year veteran of the Yale faculty myself, and honorary member of the Class of '28, and a 1961 MA (honoris causa), I was pleased to note your good memories of your Yale education.

Finally, let me say that I agree with your paragraph concerning the importance of social sciences in today's world, and am happy to tell you that I have recently been able to follow through on a promise I made shortly after joining the Bush Administration, namely, the appointment of an Assistant Director of my office, the Office of Science and Technology Policy, responsible for the social sciences. This is the first time that such an appointment has been made in the office and I look forward to a new dimension being added to all our deliberations and discussions. I have been very fortunate in bringing Dr. Pierre Perrolle, formerly of the NSF in the National Academy of Sciences, to OSTP in this social science role. His formal background is in political science but he has had very broad experience spanning a wide range of the other social sciences as well in the period since his graduation.

I know that President Bush would much appreciate receiving the brochure that you mention listing some of the important contributions of sociology to a democratic society, and I too would much appreciate receiving a copy as soon as these become available.

Again, let me thank you on behalf of the President for your good letter.

Sincerely yours,



D. Allan Bromley
Assistant to the President
for
Science and Technology

Mr. William V. D'Antonio
The American Sociological Association
1722 N Street, Northwest
Washington, D.C. 20036