

Originally Processed With FOIA(s):
1999-0093-F; 2005-0336-F

FOIA Number:
2005-0336-F

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: Organization Files - NASA

OA/ID Number: 62074
Folder ID Number: 62074-002

Folder Title:
Physical Sciences - NASA [1992]

Stack:

Row:

Section:

Shelf:

Position:

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THE WHITE HOUSE

Sept 30, 92

Dear Dan:

Many thanks for the report on the NIEI. It is a truly impressive program and the fact that you have structured the data following the FCCSET/CEHR pattern makes them particularly useful to us. Congratulations!

Best regards. Allan



National Aeronautics and
Space Administration

Washington, D.C.
20546

Office of the Administrator

2471
August 19, 1992

The Honorable D. Allan Bromley
Assistant to the President
for Science and Technology and
Director, Office of Science and
Technology Policy
Executive Office of the President
Washington, DC 20506

Dear Dr. Bromley:

Enclosed you will find a copy of the NASA-Industry Education Initiative--*Education Programs Report 1991*. This report is a product of a unique effort on the part of NASA and a number of its contractors to pool knowledge and efforts directed toward improving education in America. The NASA-Industry Education Initiative responds to the *National Education Goals* and to the President's *AMERICA 2000* strategy.

The enclosed report presents an initial inventory of education programs supported by the NASA-Industry Education Initiative participants. To make it more useful, the inventory was patterned after that used by the FCCSET Committee on Education and Human Resources. The report provides a foundation for the next critical step of the Initiative--enhancing government-industry cooperation, sharing information and resources, and coordinating programs and reform efforts to improve our Nation's education system. Each of the participants is committed to continuing this process in the belief that cooperative contributions to American education will be greater than the sum of the individual efforts.

I welcome your comments on the report and the Initiative.

Sincerely,

Daniel S. Goldin
Administrator

Enclosure

THE WHITE HOUSE
WASHINGTON

August 13, 1992

Dear Dan:

A note of congratulations on the launch! I had very much been looking forward to attending but at the last minute my schedule changed and made it impossible for me to do so. This launch was especially important and I would have liked being involved in the activities related to this auspicious occasion.

I appreciate your thinking of me and look forward to seeing you soon.

Sincerely yours,



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

The Honorable Daniel S. Goldin
Administrator
National Aeronautics and Space Administration
Room 7137
400 Maryland Avenue, Southwest
Washington, D.C. 20546

TYPE: INVITATION

DOCUMENT NUMBER: 9202220

ORIGINATOR: 02

SPEECH: YES NO

FROM: GOLDIN, Daniel S.: NASA

DATE OF EVENT: 08/10/92 THRU:
TENTATIVE DATES:

LOCATION OF EVENT: FRENCH GUIANA

TIME OF EVENT:

SUBJECT: AN INVITATION TO ATTEND A LAUNCH OF TOPEX/POSEIDON.

RSVP: 07/13/92

CONTACT PERSON: WEATHERSPOON, Mary E.

CONTACT NUMBER: 202-453-8316

INVITATION ACCEPTED?

YES

NO

COPIES TO: PHYSICAL SCIENCES

REMARKS: 6.30.92 accepted to
Joanna Adamson.
mn

Curien might be
present. French Embassy
notified
by
PPB.
Could be interesting.
Your schedule is open
that day.

(FYI - I completed NASA's
negotiations on this project
with the French
and was
a rep. on
the joint
program
team)

DATE OF LETTER: 06/19/92

DATE RECEIVED: 06/22/92

FILE: INVITATION



National Aeronautics and
Space Administration

Washington, D C.
20546

Office of the Administrator

2200
JUN 19 1992
MAIL ROOM

Dr. D. Allan Bromley
Director
Office of Science & Technology Policy
Old Executive Office Building
Room 360
Washington, DC 20506

Dear Dr. Bromley:

It is with pleasure that I invite you to be our guest at the launch of TOPEX/POSEIDON which is currently scheduled for Monday, August 10, 1992, at 7 p.m. (EDT). TOPEX/POSEIDON will be launched on an Ariane IV launch vehicle from the Centre Spatial Guyanais, Kourou, French Guiana.

The launch will initiate the 3- to 5-year operational phase of a joint project begun nearly a decade ago by NASA and the Centre Nationale d'Etudes Spatiales (CNES), the French space agency. TOPEX/POSEIDON will provide long-term observations of ocean circulation that are crucial to an understanding of climate change. This will be a major flight in the Mission to Planet Earth series and is also a key component of International Space Year.

Hotel arrangements will be made for you at l'Hotel des Roches in Kourou. Guests will be responsible for their own hotel expenses, approximately 416FF or \$74.00 per day.

On the day of launch, NASA/CNES guest activities have been scheduled from early morning through the launch event. A late evening reception follows. On the following day, NASA/CNES will host a luncheon on Devil's Island. An updated itinerary and information package will be provided to you at the hotel upon arrival in French Guiana.

To RSVP, please call NASA's Senior Protocol Officer, Mrs. Mary E. Weatherspoon, on 202/453-8316 no later than July 13, 1992. Please pay particular attention to the enclosed guest information sheet which addresses pertinent information regarding health precautions and requirements traveling to French Guiana.

Sincerely,

Daniel S. Goldin
Administrator

Enclosure

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
01. Memo with Attachment	From D. Allan Bromley to Connie Horner Re: NASA Management (2 pp.)	2/20/92	(b)(6)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan
Subseries: Organization Files - NASA
WHORM Cat.:
File Location: Physical Sciences - NASA [1992]

Date Closed:	3/29/2000	OA/ID Number:	62074-002
FOIA/SYS Case #:	1999-0093-F	Appeal Case #:	
Re-review Case #:		Appeal Disposition:	
P-2/P-5 Review Case #:		Disposition Date:	
AR Case #:		MR Case #:	
AR Disposition:		MR Disposition:	
AR Disposition Date:		MR Disposition Date:	

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P-1 National Security Classified Information [(a)(1) of the PRA]
P-2 Relating to the appointment to Federal office [(a)(2) of the PRA]
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P-5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
P-6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Removed as a personal record misfile.

Freedom of Information Act - [5 U.S.C. 552(b)]

(b)(1) National security classified information [(b)(1) of the FOIA]
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Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
02. Memo	From D. Allan Bromley to Admiral Richard Truly Re: Basic Research (2 pp.)	7/11/90	P-5	

Collection:

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Open on Expiration of PRA
 (Document Follows)
 By MB (NLGB) on 4/5/05

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THE WHITE HOUSE
WASHINGTON

July 11, 1990

MEMORANDUM FOR ADMIRAL RICHARD H. TRULY *Dick*

FROM: D. ALLAN BROMLEY *Alan*

SUBJECT: BASIC RESEARCH

You perhaps will recall from a decade or so ago when a group at MIT, under the auspices of the Club of Rome, carried out a major computer-base study that culminated in a publication entitled The Limits of Growth. In many ways it was the ultimate illustration of the famous garbage-in-garbage-out rule of computer usage. The first group that really pointed this out in detail and published a book in response entitled The Limits of Doom was the science policy research unit at the University of Sussex in England.

Recently under a grant from the National Science Foundation, John Irvine, Ben Martin, and Phoebe Isard, who are members of this research unit, have undertaken a study of how the U.S. Government supports academic research and in particular, how competitive from an international point of view that support is at the present time.

Erich Bloch recently sent me a copy of the paper that the group has produced and points out that there are two very important conclusions. They are the following:

1. In relation to its size and wealth, the United States invests less overall in academic and related research than leading scientific nations in Western Europe with the apparent shortfall being largest in the physical sciences.
2. While the U.S. is still the predominant world player in academic research, if life science is excluded, however, or if expenditure is normalized for difference in population, then the U.S. compares less favorably with the European countries.

I believe that both of these conclusions are matters of serious concern for us in the United States. We have long recognized that by any of the usual measures, such as fraction of gross national product and the like, our support of research and development overall is substantially less than that in Germany or Japan. What we have not recognized prior to this report was that the situation is more broadly based in Europe when we focus on academic research in comparison with the United States. It is also the case that once we face the European community in 1992, where there is substantial discussion and consensus building internal to the EC, I expect us to find ourselves crunched evermore effectively between Japan on the one side with the other Pacific Rim nations accelerating rapidly, and the European Community on the other.

This document from the University of Sussex simply underscores the conviction that I think we share that we, as a nation, are under-investing in research and development generally and in the support of academic research, particularly in the physical sciences.

I thought that you would find this report interesting.

Enclosure

THE WHITE HOUSE
WASHINGTON

12-8-89

Admiral Richard Truly

Jean Dick:

The enclosed letters from Richard
Hilson at Harvard are thoughtful
and merit our attention. He
was one of the outside experts I
called in to advise us prior to
The Galileo launch.

Perhaps you would be good
enough to pass it to the appropriate
person in NASA. I would much
appreciate that individual's response
to the points that Hilson raises.

Best regards,

Sincerely
Alan

HARVARD UNIVERSITY

DEPARTMENT OF PHYSICS

LYMAN LABORATORY OF PHYSICS
CAMBRIDGE, MASSACHUSETTS 02138

November 22, 1989

Dr. Allan Bromley
Assistant to the President
for Science & Technology
The White House
Washington DC

Dear Allan,

Now that GALILEO is up, and only the risk of the VEEGA manoeuvre remains, my retrospective comments on the risk analysis procedure may be helpful to guide the future.

In my letter to Tom Rona (enclosed) recommending launch approval, I outlined the 3 separate issues that I felt should be addressed - the risk to the public, the cost of cleanup of contaminated land and international acceptance. Both NASA and INSERP tended to concentrate on the first, and were not clear on the others, I hope that for ULYSSES these could be more clearly addressed.

There were many ways in which the procedure, in particular that of INSERP, left a lot to be desired. There seemed to be no proper attempt to adhere to a time schedule. It is always strange when a full committee report is available when a subcommittee report on which it is supposedly based is not yet available. When your consultants reviewed the work, I naturally assumed that all subcommittee members had read the full report and concurred. I was shocked and horrified to find that one did not concur.

It is hard to overrate the importance of carefully examining dissent in the whole procedure. A dissenter must not be outvoted and then ignored; a careful and detailed response to the dissent must be passed up along the decision chain and brought to the attention of the ultimate decision maker. Dissent can be used as a focus for careful explanation. Even after a dissent to GALILEO, became apparent, the response to it was too general, "We already addressed that" rather than "this was addressed in vol 2, section 4, page 13, 2nd paragraph and in addition ..."

The communication to the international community left a lot to be desired. NASA representatives only talked about the formal notifications. Internationally, the President is careful to notify but not ask for approval. But strict adherence to this important principle might prevent international approval. In the early days of space research, the President's Scientific Advisory Committee (PSAC) agreed that there must be widespread international discussions of space research. To accomplish this, NASA must do more than the mere formal procedure. Presentation of a paper discussing the mission and its risks at international scientific meetings would be useful. A little thought will suggest other mechanisms.

There is onemore fundamental problem with these risk assessments. They have the appearance of being made to justify a decision already made, rather than to aid the decision making itself. For example, there were two important changes from VOYAGER to GALILEO (and ULYSSES). The probe is launched from a shuttle and there is a VEEGA manoeuvre. As far as I can tell, each of these changes increases the risk. At what stage was the decision made, and was there a risk assesmant at that stage? I suspect there was not. I suggest that in considering space probes beyond ULYSSES, the desireability of returning to the older system of launching from a rocket be explicitly considered and widely discussed. A special risk assessment for this purpose would be a good idea.

Yours Sincerely,

Dick.

Richard Wilson
Mallinckrodt Professor of Physics

enc: letter to T. Rona

HARVARD UNIVERSITY

DEPARTMENT OF PHYSICS

LYMAN LABORATORY OF PHYSICS
CAMBRIDGE, MASSACHUSETTS 02138

September 21, 1989

Dr. Thomas Rona
Deputy Director
Office of Science and Technology Policy
The White House
1600 Pennsylvania Ave
Washington D.C.

Dear Tom,

This is my final (I hope) letter about the GALILEO space probe and the risks it poses. It puts in writing the conclusions of our oral discussions of September 14, 1989.

I believe that there are basically three items that must be separately brought to The President's attention, and each of these needs a slightly different treatment.

1. What is the risk to health of individuals and of the world population?
2. What is the expectation value of the clean up cost?
3. Has all been done to ensure that other countries have been both properly and adequately informed about the mission and its risks?

I address each of these in turn.

As a consultant to OSTP I have had the opportunity of reading the following documents:

The Environmental Impact Statement issued by NASA in early 1989, and public comments thereon.

The Final Safety Analysis Report (FSAR) issued by NASA in early 1989.

The Safety Evaluation Report (SER) issued by INSERP including the draft of the report of the Subcommittee on Health Effects.

A memorandum by Dr. Richard Cuddihy, a member of the Subcommittee on Health Effects dated September 5th, 1989.

I have attended briefings by NASA and INSERP representatives, and a discussion with Dr. Richard Cuddihy on Tuesday September 5, 1989.

The power source (RTG) is in two capsules containing a total of 268,000 Curies of Plutonium 238. However, I am satisfied the capsules are strong, and have been well tested. They would survive the vast majority of shuttle failures intact, including an event similar to the CHALLENGER disaster.

1. I am satisfied that the risk to health of individuals of the public calculated by NASA and INSERP is a reasonable representation of that risk. Typically such calculations have an uncertainty of two orders of magnitude in either direction. The value of the risk at the upper end of the calculation is still low compared with other risks of society or, for example, the NRC safety goals, and is in my professional view "worthy of acceptance". I am satisfied that adequate emergency preparations exist to protect the public in the unlikely event of a launch failure.
2. Because it is likely that in any accident the capsules containing Plutonium would remain intact, the probability of large land contamination is low. The cost of cleaning up per unit area is approximately independent of the degree of contamination. It is not possible to tell in advance the area of clean up that might be demanded, but the total contingent cost is very unlikely to exceed the cost of the mission, and the probability is low, leading to a low expected cost. In my professional opinion this cost seems reasonable since the cost expectation is small compared to the cost of the mission and even the contingent cost is not dissimilar to what one often sees as a "cost overrun" for other reasons.

Although it is not clear how NASA or DOE will, in the event of an accident, search for plutonium contamination so that it may be removed, there is no compelling need for advance preparation for this, longer term action.

In particular I feel that recent clarifications have resolved adequately the issues raised by Dr. Richard Cuddihy.

3. I am satisfied NASA has carried out their statutory duties in informing (i) the governments of Spain and Morocco about the possible emergency landing of the shuttle with plutonium on board (ii) The UN Committee on Peaceful Uses of Outer Space.

I note also, with approval, the agreement that the US, as originator of the mission, accepts the responsibility for payment of any clean up costs in the unlikely event that they are needed.

I am also satisfied that implicit approval has been given to the GALILEO space probe by the widespread, worldwide acceptance and approval of the Voyager space probe, and previous satellites and space probes.

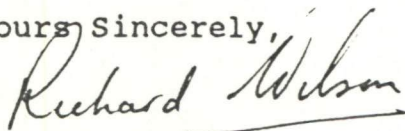
However there are two differences from the Voyage probe: 1) The GALILEO probe is on a space shuttle in a rocket nose cone. 2) The GALILEO probe needs the Earth Gravity Assist (VEEGA) whereas the Voyager did.

International acceptance, and hopefully approval, for the launch is so important that I applaud the agreement of NASA to go beyond the formally necessary notification to extensive informal international notification and discussion. I have also been discussing it widely among friends and colleagues. I hope that this process can start earlier for the ULYSSES space probe.

Although I have seen INSERP documents in draft form, it is possible, although unlikely, that the final versions will have enough changes to alter this view. With this minute proviso; I see and saw no reason why approval for the launch of the GALILEO space probe should not be given, and am satisfied with President's approval of September 16, 1989.

I am gratified by your assurance that if I see, at the last moment, any reason to change this recommendation in any way, you and Allan Bromley will receive my telephone call and take it seriously.

Yours Sincerely,

A handwritten signature in cursive script that reads "Richard Wilson". The signature is written in dark ink and is positioned below the typed name.

Richard Wilson
Mallinckrodt Professor of Physics

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

ATTORNEYS AT LAW

FOURTH FLOOR

1755 JEFFERSON DAVIS HIGHWAY

ARLINGTON, VIRGINIA 22202 U. S. A.

TELEPHONE (703) 521-5940

November 16, 1989

NORMAN F. OBLON
MARVIN J. SPIVAK
C. IRVIN McCLELLAND
GREGORY J. MAIER
ARTHUR I. NEUSTADT
ROBERT C. MILLER
RICHARD D. KELLY
JAMES D. HAMILTON
ECKHARD H. KUESTERS
ROBERT T. POUS
DAVID J. KERA
CHARLES L. GHOLZ
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OF COUNSEL
MILTON STERMAN*
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JOHN H. WEBER*

STANLEY P. FISHER
COUNSEL TO THE FIRM

IRVING MARCUS
1919-1982

PATENT, TRADEMARK AND COPYRIGHT LAW
AND RELATED FEDERAL AND ITC LITIGATION

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*BAR MEMBERSHIP OTHER THAN VIRGINIA
*REGISTERED PATENT AGENT

Dr. D. Allan Bromley
Science Advisor to the
President
Director, Office of Science
and Technology Policy
The White House
Washington, D.C. 20231

Dear Dr. Bromley:

I was one of those at the MIT Club program that you addressed on Monday, and I am writing in response to your request that we write you concerning anything in the scientific/technical sphere concerning which we think you should take action.

The Court of Appeals for the Federal Circuit is, for most purposes, the court of last resort in patent matters, since the Supreme Court very seldom grants certiorari to the Federal Circuit. Accordingly, it is the most important court in patent law, and patent law in turn is extremely important to the scientific and technical community in this country.

The Federal Circuit is authorized 12 judges, but it currently has only 8 active judges. Moreover, the oldest vacancy is something like four years old. Consequently, although the court used to have a proud record of currency in disposing of appeals to it, it is now falling far behind on its docket.

Additionally, there is some suspicion that the quality of its work is suffering from its understaffing.

I believe that one of the major reasons that the four vacancies have been allowed to go unfilled for so long is the difficulty in getting qualified patent attorneys to apply for judgeships. Patent law is a very lucrative specialty, and it is simply not realistic to expect a successful patent attorney at the peak of his or her career to leave private practice for what a judgeship on that court pays.

Under the circumstances, there are only three realistic sources of qualified judges for the court: patent lawyers who have been so successful that they are independently wealthy and who are at the twilight of their careers; young lawyers for whom serving a few years on the bench would "look good on their resumes," and senior employees of the Patent and Trademark Office, for whom an appointment to the court would actually entail a raise in salary.

The first category of potential appointees is, unfortunately, small. Moreover, appointment of elderly lawyers, no matter how well qualified, is apparently contrary to the general policy of this administration.

The second category of potential appointees I personally think might work very well. Many other countries treat judgeships as a stepping stone to a career at the bar rather than as a capstone to a career at the bar, and the old Court of Claims had considerable success with such appointments at the trial level. However, I think my view is not shared by most members of the patent bar.

That leaves people such as Fred E. McKelvey, the Solicitor of the Patent and Trademark Office (who argues many important cases before the Federal Circuit) and the members of the Board of Patent Appeals and Interferences (particularly the chairman, Sol Serrota, and the vice-chairman, Ian Calvert). I think any one of these three individuals would make an exceptionally well qualified nominee for the court. Moreover, I think that any one of these three would probably take the job -- which is not true of most other logical candidates!

In any event, the current situation is a shame and an embarrassment. Moreover, the appointment of political functionaries to whom the administration owes a favor is bound to make the current situation worse. Patent law is a highly specialized, somewhat arcane area of the law, and the Federal Circuit desperately needs the appointment of some more good patent attorneys to join Judge Rich (who is 85!), Chief Judge Markey (who is eligible for retirement), and Judge Newman. Anything you can do to help would, I think, be a significant contribution to scientific and technical affairs in this country.

Very truly yours,



Charles L. Gholz

CLG:pam

Withdrawal/Redaction Sheet

(George Bush Library)

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THE WHITE HOUSE
WASHINGTON

July 11, 1990

MEMORANDUM FOR ADMIRAL RICHARD H. TRULY *Dick*

FROM: D. ALLAN BROMLEY *Alan*

SUBJECT: BASIC RESEARCH

You perhaps will recall from a decade or so ago when a group at MIT, under the auspices of the Club of Rome, carried out a major computer-base study that culminated in a publication entitled The Limits of Growth. In many ways it was the ultimate illustration of the famous garbage-in-garbage-out rule of computer usage. The first group that really pointed this out in detail and published a book in response entitled The Limits of Doom was the science policy research unit at the University of Sussex in England.

Recently under a grant from the National Science Foundation, John Irvine, Ben Martin, and Phoebe Isard, who are members of this research unit, have undertaken a study of how the U.S. Government supports academic research and in particular, how competitive from an international point of view that support is at the present time.

Erich Bloch recently sent me a copy of the paper that the group has produced and points out that there are two very important conclusions. They are the following:

1. In relation to its size and wealth, the United States invests less overall in academic and related research than leading scientific nations in Western Europe with the apparent shortfall being largest in the physical sciences.
2. While the U.S. is still the predominant world player in academic research, if life science is excluded, however, or if expenditure is normalized for difference in population, then the U.S. compares less favorably with the European countries.

I believe that both of these conclusions are matters of serious concern for us in the United States. We have long recognized that by any of the usual measures, such as fraction of gross national product and the like, our support of research and development overall is substantially less than that in Germany or Japan. What we have not recognized prior to this report was that the situation is more broadly based in Europe when we focus on academic research in comparison with the United States. It is also the case that once we face the European community in 1992, where there is substantial discussion and consensus building internal to the EC, I expect us to find ourselves crunched evermore effectively between Japan on the one side with the other Pacific Rim nations accelerating rapidly, and the European Community on the other.

This document from the University of Sussex simply underscores the conviction that I think we share that we, as a nation, are under-investing in research and development generally and in the support of academic research, particularly in the physical sciences.

I thought that you would find this report interesting.

Enclosure

"CORRESPONDENCE TRACKING"

TYPE: Action Item

DOCUMENT NUMBER: 8920506

FROM: Harvard University
Richard Wilson

TO: Bromley

DATE OF
CORRESPONDENCE: 11/22/89

SUBJECT: Gallileo and risk analysis procedure

ASSIGNED TO: Judy Bostock

ACTION REQUIRED: Response for
DAB signature

SENDER'S DUE DATE:

OSTP DUE DATE: 12/20/89

DATE COMPLETED:

COPIES TO: D. Allan Bromley

REMARKS: Received for tracking 12/2/89...jj

DATE RECEIVED: 11/28/89

FILE: NEOB

*Send copies of
both letters
letters to Judy,
Don't reply to
Wilson.*

THE WHITE HOUSE

January 9, 91

Jan Dick:

Many thanks for the copy of the MIT
Space Grant Program report. This does
sound like a very good activity.

And thanks again for lending us
Sarah Keegan. She will be a Godsend!

Best regards

Alan

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
04. Letter	From D. Allan Bromley, President Crecine, Georgia Tech Re: Recommendation of Richard Truly (2 pp.)	8/10/92	(b)(6)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan
Subseries: Organization Files - NASA
WHORM Cat.:
File Location: Physical Sciences - NASA [1992]

Date Closed: 3/29/2000	OA/ID Number: 62074-002
FOIA/SYS Case #: 1999-0093-F	Appeal Case #:
Re-review Case #:	Appeal Disposition:
P-2/P-5 Review Case #:	Disposition Date:
AR Case #:	MR Case #:
AR Disposition:	MR Disposition:
AR Disposition Date:	MR Disposition Date:

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P-1 National Security Classified Information [(a)(1) of the PRA]
P-2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P-3 Release would violate a Federal statute [(a)(3) of the PRA]
P-4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P-5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
P-6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Removed as a personal record misfile.

Freedom of Information Act - [5 U.S.C. 552(b)]

(b)(1) National security classified information [(b)(1) of the FOIA]
(b)(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
(b)(3) Release would violate a Federal statute [(b)(3) of the FOIA]
(b)(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
(b)(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
(b)(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
(b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
(b)(9) Release would disclose geological or geophysical information

January 21, 1992

Sam Dick: (Truly)

Many thanks for your letter of
Dec 26 with its enclosure re the
restructured EOS. I asked Major
Doug Beason Army Staff to read
it carefully and thought you

might be interested in his views
to me. I enclose a copy herewith.

I will be talking to Bob
Rosen tomorrow

Many thanks

Sincerely
Athen

DRAFT TALKING PAPER ON THE RESTRUCTURED EOS

(prepared by Doug Beason)

January 13, 1992

Overview

- o Compared this version (dated 26 Dec 91) with version dated 8 Nov 91
 - No substantial differences
 - This version clearer, explains more (and better)
(However, still too many acronyms, easy to get bogged down in detail)
- o Restructured EOS evolved from Frieman recommendations
 - Purpose is to satisfy EOS goals
 - with obtain optimal payloads
 - for intermediate-size and small-size spacecraft
 - Changes initiated by Frieman Committee recommendations
 - Modified by Seattle Investigator Working Group
 - Further modified by NASA & endorsed by the Payload Advisory Committee
 - Finally modified again by NASA
 - Major difference in this version & Frieman recommendation is STIKSCAT (scatterometer)
 - Frieman assumed STIKSCAT could be deleted in favor of European C-band measurements
 - Payload Advisory Committee did not agree and recommended STIKSCAT fly on a third intermediate-sized satellite (Atlas II class)
 - Possibility of Japanese flying STIKSCAT
 - This would require discussions with Japanese
 - and more funding early on, since this could mean an earlier launch
- o Simultaneity requirements
 - Achieved by duplicating some instruments, or by using "similar orbits"
 - Formation flying was considered less desirable than permitting each payload to have it's own optimum crossing time
- o DOE/DOD contributions
 - DOE may be able to provide additional spacecraft during phase 1 of EOS
 - DOE's contribution needed by 1995 and can fill a niche
 - NASA acknowledges that DOE/DOD can assist in developing new technologies for subsequent generations of EOS
 - DOD/DOE are not expected to develop technology for 1st generation EOS

Conclusions

- o Restructured EOS looks "on track"
 - NASA being up front
 - Spirit of Frieman being followed
- o Admiral Truly offers OSTP (you & staff) a briefing on the current status of EOS
- o Recommend that since this paper is substantially unchanged, and since we have already had a briefing, that we not receive this briefing at this time

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
05. Memo	From D. Allan Bromley to Connie Horner Re: NASA Management (1 pp.)	2/20/92	(b)(6)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan
Subseries: Organization Files - NASA
WHORM Cat.:
File Location: Physical Sciences - NASA [1992]

Date Closed:	3/29/2000	OA/ID Number:	62074-002
FOIA/SYS Case #:	1999-0093-F	Appeal Case #:	
Re-review Case #:		Appeal Disposition:	
P-2/P-5 Review Case #:		Disposition Date:	
AR Case #:		MR Case #:	
AR Disposition:		MR Disposition:	
AR Disposition Date:		MR Disposition Date:	

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National Aeronautics and
Space Administration

Washington, D.C.
20546

Office of the Administrator

February 10, 1992

The President
The White House
Washington, DC 20500

Dear Mr. President:

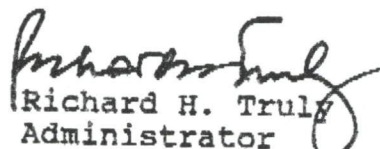
It is with the deepest regret that I submit this letter of resignation as the Administrator of NASA. As we discussed when we met today, and because NASA is without a Deputy, I will remain until April 1.

This action will conclude almost 37 years of continuous military and government service for me. I have been unbelievably privileged to have had so many challenging assignments in aviation, space flight, military command and public administration over these years. In our nation's space business, I have enjoyed jobs in every corner of it; civilian and military, highly classified and open, flight and management.

In the last six years since I arrived to join the NASA leadership just after the Challenger tragedy, I have watched the talented men and women of this elite agency turn heartbreak and disarray into the impressive achievements and superb organization of today. With 20 safe and successful Shuttle flights in the last 40 months, scientific discoveries pouring in, Space Station Freedom on track, and our wind tunnels testing the airframes and spacecraft of tomorrow, they deserve to be very, very proud. With your support, their opportunities to inspire America's people and drive our country's competitiveness are boundless. Their achievements result from working daily in a fishbowl world of difficult and exacting tasks, tough judgments and carefully balanced risks; not an endeavor which some would have you think has quick, brilliant and easy solutions.

I think that the job of leading these people is the best one in Washington, and I am proud to have had that privilege. Cody and I particularly want to thank you and Barbara for the personal times you have shared with us over the years.

Sincerely,



Richard H. Truly
Administrator

Vice Admiral, U.S. Navy (Ret.)

THE WHITE HOUSE

WASHINGTON

February 12, 1992

Dear Dick:

It is with deep regret that I accept your resignation from the position of Administrator of the National Aeronautics and Space Administration.

Almost three years ago, I nominated you to become Administrator of NASA. As a result of your leadership, NASA is better prepared for the 1990s and beyond. You have established a balanced NASA program including aeronautics, space science, manned Space Shuttle operations -- including the upcoming addition of the Endeavour -- and robotic space exploration. Working with the Vice President, you developed our Space Exploration Initiative that begins with Space Station Freedom.

Some of the significant and historic milestones in your career include piloting the second flight of the Space Shuttle in 1981 and commanding the first night launch and landing of the Shuttle in 1983. But one of the most notable was the way you took over NASA's Office of Space Flight soon after the Challenger tragedy. Under your leadership, NASA was able to rebuild the Space Shuttle program and return it to safe operation in 1988.

You have served in many important positions throughout your career and have received numerous awards. The Nation owes you a great debt of gratitude for your 37 years of dedicated public service and the significant contributions you have made to America's flight and aerospace achievements.

Barbara joins me in extending to you and your family our heartfelt thanks and the admiration and appreciation of our Nation.

Best wishes.

Sincerely,



The Honorable Richard Harrrison Truly
Administrator
National Aeronautics and
Space Administration
Washington, D.C. 20546

THE WHITE HOUSE

WASHINGTON

SCIENCE AND THE SPACE STATION

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

Since he became President, George Bush has sought to cast the annual budget negotiations with Congress in a new light. He has emphasized investments in the future -- in education, preventive health care, the transportation infrastructure, environmental protection, the exploration of space, and scientific research. In fact, George Bush has given stronger support to science and space than has any President during the past two decades.

Congress also recognizes the importance of investing in science, technology, and space, and it has taken a number of steps to increase those investments. But the tight fiscal climate created by the need to reduce the deficit has presented both the Congress and the Administration with difficult choices. The whole point of last fall's budget agreement was to encourage priority-setting. As the budget season progresses, we must keep in mind the consequences of the choices Congress makes in setting its priorities for the nation's future.

One difficult choice for the Congress involves Space Station Freedom. Earlier this month a House Appropriations Subcommittee voted to eliminate funding for the space station. The full House later reversed the subcommittee's decision on space station, but chose to offset station by freezing all of NASA. Although space science funding would continue to constitute about 20 percent of NASA's activities -- as recommended by the Augustine Commission -- needed growth in NASA programs requested by the Administration would be lost.

The opponents of the space station have presented the tradeoff as being between space and science, but the Administration does not believe that the debate should be cast in these terms. The debate is not between science and the space station. Nor is it between big science and little science. It is between investments in the future and current consumption.

The Administration believes that its budget strikes a careful balance between our current needs -- including our commitments to veterans and the plight of the homeless -- and future investments. By funding the Veterans Administration and HUD at levels higher than the increases requested by the Administration, the House is tilting this balance and contributing to a long-term decline in future investments by the federal government.

Unfortunately, many scientists and engineers have accepted the mistaken premise that the tradeoff is between manned space flight and science. Space Station Freedom has never been primarily a science project, just as the Apollo program was not primarily a science mission. Rather, the space station is our initial permanent step into space, the critical next chapter in a grand story of exploration that will take humans away from the home planet into an endless frontier.

Indeed, there is one form of scientific research that can be done only with a permanent, manned outpost in space: the life sciences research essential for the next step in human exploration of space and beyond. We need to know how humans can adapt to the harsh and unforgiving environment of space and to prolonged weightlessness. A major scientific effort, involving substantial numbers of astronauts in space, will be needed to understand the physiological and behavioral changes that occur in space and to devise methods for coping with them. Much work needs to be done to carry out such a program. Scientists and engineers need to work constructively with NASA, the Administration, and Congress toward this end.

Like the scientific returns, the technological return from the station are impossible to predict but are certain to be rich. The Apollo program offers a good analogy. When the National Academy of Engineering recently picked the top ten engineering projects of the past quarter century, the Apollo program ranked first, ahead even of the microprocessor and communication satellites. The Apollo program also represented the first time in the history of our species where a quantum leap in both science and technology took place without the impetus of a global war.

Those who argue that money saved from the station will go to research and development overlook the pressures being exerted on Congress. The point missed is that the probability of funding both science and space is maximized when the two stick together as part of one, future-oriented coalition. As Budget Director Richard Darman said in testimony before the House Committee on Science, Space, and Technology, "The reality is that appropriators will tend to do exactly what the station-killing committee has proposed to do: give no more to science than in the President's budget; reduce station to zero; and reallocate every single dollar thus 'saved' to non-science."

Killing the space station would also threaten our ability to succeed in funding areas of science and technology far removed from space. The public supports scientific research and manned space exploration for two primary reasons: because it believes that these investments pay off, and because of the intellectual excitement and adventure that these activities provide. Space exploration has captured the imagination of much of the American public, especially our youth. In the 1960s the Apollo program inspired many young people to become scientists and engineers, even if they did not work directly in the space program. To attract the next generation of scientists and engineers, and to promote science and technology much more broadly in our society, a manned space program is essential as part of a balanced space exploration program.

The House's decision to save the space station has set the stage for more positive actions by the Senate. But the Congress now faces a choice: By expanding only one third of one percent of our GNP on NASA we can embrace a new age of exploration. Or we can choose to spend the money on the political system's insatiable consumption habits, thereby closing the door on space -- the next great frontier--and on America's leadership on it. The choice, to me, seems clear.

Space Station Freedom Funding History
and impact on Space Science activities

Since F.Y. 1985, when Congress provided the first discrete funding for the Space Station program, through the current fiscal year, a total of \$5.718 billion has been appropriated for design and engineering of the Space Station Freedom. This amount, however, is a net reduction of over \$1.3 billion from the \$7 billion requested by the Administration for the program during this period.

During this same period (F.Y. 85 through F.Y. 91), Administration budget requests for space science and applications have totalled \$12.293 billion. Of this amount, a total of \$12.260 billion was appropriated for a net **reduction** of \$33 million from the President's budget requests. It is therefore clear that reductions in funding for the Space Station were not used to augment the Administration's planned and budgeted space science program.

Space science and applications funding has been substantially **increased** during six-year period, however. Compared to the level of funding when the Space Station program began, Space science has enjoyed more than a doubling in the level of NASA support (110% increase since F.Y. 84). It is clear, therefore, that in the history of the Space Station program, growth in space science funding has not suffered, nor has it benefitted by reductions in funding in the Space Station program.

Current year funding for the Space Station totals \$1.9 billion, rather than the \$2.45 billion requested in the President's budget for F.Y. 1991. For F.Y. 1992, the Administration has requested \$2.028 to continue development of the program.

7/2 cc: Dick Danman
Allan Bromley
Joe Heizer

This is some important
perspective from Stephen Kohashi

BAG