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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: International Files - Country Files

OA/ID Number: 62067
Folder ID Number: 62067-008

Folder Title:
International: USSR [1 of 2] [1992]

Stack:	Row:	Section:	Shelf:	Position:
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TYPE: ACTION
ORIGINATOR: 02

DOCUMENT NUMBER: 9202930 *logged*
DIRECTORATE STATUS

STATUS I

FROM: SALTYKOV, Boris G.: MINISTER FOR SCIENCE, HIGHER EDUCATION AND
TECHNOLOGY, RUSSIAN FEDERATION.

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/31/92

SUBJECT: HE IS WRITING TO ACCEPT DR. BROMLEY'S INVITATION TO
HOLD THE THIRD SESSION OF THE JOINT AMERICAN-RUSSIAN
COMMISSION WASHINGTON. HE ALSO OFFERS TO MEET WITH
DR. RATCHFORD IN MOSCOW.

DIRECTORATE
ASSIGNED: INTERNATIONAL/POLICY

STAFF
ASSIGNED: *JO*
JS

ACTION
REQUIRED: AS NECESSARY

STAFF
ACTION: *as necessary*

SENDER'S DUE DATE:

OSTP DUE DATE: 10/03/92

STAFF DUE DATE *10/3/92*

DATE COMPLETED:

DATE COMPLETED/DEPT: *9/22/92 - National Security*

COPIES TO: D. Allan Bromley
NATIONAL SECURITY

WHITE HOUSE TRACKING #:

CONTACT PERSON:
PHONE:

EXT:

REMARKS:

Copy of reply is attached.

OSTP RECEIVED: 09/29/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-FORMER SOVIET UNION

CENTRAL FILES:

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
01a. Letter	To: Boris Saltykov From: Allan Bromley Re: Joint Commission Meeting (1 pp.)	9/22/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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]
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(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

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
01b. Letter	To: Allan Bromley From: Boris Saltykov Re: Joint American-Russian Commission meeting [English translation] (1 pp.)	8/31/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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

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Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
01c. Letter	To: Allan Bromley From: Boris Saltykov Re: Joint American-Russian Commission meeting [Russian] (1 pp.)	8/31/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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

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(b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
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REGISTERED		DEPARTMENT OF STATE REGISTERED MAIL INVOICE		DATE STAMP OF	
INSURED		TO:		INVOICE NO	
NUMBER		OFFICE OF ORIGIN		ADDRESS	
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"Document Control"

DOCUMENT NUMBER: 9202584

TYPE: ACTION

ORIGINATOR: 02

STATUS I

DIRECTORATE STATUS

FROM: CHENG, Ping: UNIVERSITY OF HAWAII AT MANOA

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 07/17/92

SUBJECT: HE IS WRITING TO INQUIRE ABOUT THE USSR/USA
COOPERATIVE RESEARCH PROGRAM.

DIRECTORATE
ASSIGNED: INTERNATIONAL/POLICY

STAFF
ASSIGNED:

ACTION
REQUIRED: FOR DAB'S SIGNATURE

STAFF
ACTION:

OSTP DUE DATE: 08/07/92
DATE COMPLETED:

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

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #:

CONTACT PERSON:
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EXT:

REMARKS:

OSTP RECEIVED: 07/27/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

2584



University of Hawaii at Manoa

Department of Mechanical Engineering
Holmes Hall 302 • 2540 Dole Street • Honolulu, Hawaii 96822

OSTP
MAIL ROOM

92 JUL 27 AM 11:27

RECEIVED

July 17, 1992

Dr. D. Allan Bromley
Assistant to the President for Science
and Technology
Director, Office of Science & Technology Policy
Old Executive Office Building
Washington, D.C. 20506

Dear Dr. Bromley:

Enclosed is a letter from Professor V. Y. Nakoryakov, a well-known academician in the Siberian Branch of the USSR Academy of Science, expressing an interest in performing cooperative research work with me. He suggested that I write to you to inquire about the USSR/USA cooperative research program.

I am writing this letter to you for information about the program and to inquire whether funds are indeed available for US/USSR cooperative research.

Sincerely yours,

Ping Cheng
Professor and Chair

PC:ik
Enc.

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
02. Letter	To: P. Cheng From: Vladimir Nakoryakov Re: USSR/USA Joint Research Programs (2 pp.)	2/17/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-F	Appeal Case #:	
Re-review Case #:		Appeal Disposition:	
P-2/P-5 Review Case #:		Disposition Date:	
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AR Disposition:		MR Disposition:	
AR Disposition Date:		MR Disposition Date:	

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(b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
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"Document Control"

TYPE: INFORMATION

DOCUMENT NUMBER: 9207869

ORIGINATOR: 02

STATUS C

DIRECTORATE STATUS

FROM: BALZER, Harvey

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 07/15/92

SUBJECT: HE IS FORWARDING A COPY OF HIS REPORT ON HIS TRAVELS
TO MOSCOW.

DIRECTORATE
ASSIGNED:

STAFF
ASSIGNED:

ACTION
REQUIRED:

STAFF
ACTION:

SENDER'S DUE DATE:

OSTP DUE DATE:
DATE COMPLETED:

STAFF DUE DATE
DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
Tom Ratchford
John O'Neil

WHITE HOUSE TRACKING #:

CONTACT PERSON:

PHONE:

EXT:

REMARKS:

OSTP RECEIVED: 06/15/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

Info
cc: DAB
Ratchford
O'Neil

Document Originally
Attached to
Following Page

TRIP REPORT, JUNE 1992

Harley Balzer

This is a report of my trip to Moscow and St. Petersburg, undertaken partly to continue work on an NSF-sponsored project on Russian science policy and science indicators, and also to aid in an effort by the Carnegie Corporation to arrange an expert study of telecommunications for the Russian/CIS scholarly community.

June 10, 1992. ANALYTICAL CENTER FOR PROBLEMS OF SCIENCE-TECHNOLOGY AND SOCIO-ECONOMIC DEVELOPMENT.

Dmitri Piskunov had arranged a series of meetings for me in the morning. First he and I talked. He showed me a list of equipment that he needs, and agreed to give me a "prioritized" version of the list before I leave on Monday. Also promised me the reports from our Conference that he has on diskette.

He would like to have the next one of Loren's MacArthur seminars focus on "Russian science policy and potential in a time of transition," and use it to showcase some of the people from his Center. A number of them will be participants in the MacArthur conference. He wants to explore adding a few more people, and doing the same show in DC as well. I think it is a good idea, and promised to try to help generate support for the project. The focus will be science potential, science policy and the relationship between science and commercial activity. Could also include conversion.

We also discussed possible ways to arrange "contract" work. The two options at the moment seem to be either paying in cash or inviting people to the states and giving them extra money in their living allowance. We may try some of both.

Then met with Tatiana Kuznetsova, Galina Kitova and Valentina Kiseleva--the three women who previously worked at Yaremenko's Institute for Forecasting who this year have been working for Mindeli. Piskunov had told me Mindeli has only 10-12 people working with him. They say there are three labs with about 50 people. Seems they are about to switch to Piskunov. They talked about personality conflicts at Mindeli's place, and promised a full story. [But when I asked them to talk more on Monday, they really did not add much detail. May need to wait for private sessions.]

This time there was no one to interrupt our conversation (last summer when I first met with them, Mindeli walked in and pretty much took over the session.) They are bright, articulate and know their stuff. They have been working on science policy issues, and particularly focusing on the regional aspect of science potential in Russia. Galina Kitova is doing a study of 35 urban centers in Russia, and is looking for other ways to do "sampling."

They were frankly critical of Goskomstat, describing it as the most monopolistic organization now existing in Russia. Its data on the year 1991 will be ready in about a month, but they will be "in the usual boring form." These people are trying to get better data by going to the source. One of them has been appointed "ambassador" to the various ministries, and is meeting with them to try to get data. Part of this process, of course, involves convincing the Ministries that it is not only in their interest to collect such data, but also that they should help finance the data collection process. Not an easy task, but they are beginning to have some success.

Also met with Natalia Ivanova (NOT the one from IMEMO, but rather a young woman who worked at Goskomstat.) She has been focusing on studying the role of Russia in the international scientific community. This includes the potential for export, the potential for foreign investment, and demand for Russian products. She has also been looking at the brain drain. She thinks it would be realistic to save 1/3 of the current "scientific workers." The Ministry of Science has stated that it will have to be selective in its financing, but the principles on which that selectivity is to be based are still not clear.

Spoke with Victor Sergeev, who has been studying the Supreme Soviet. He is interested in the possibility of doing something on the fractions. There are currently 15 that meet the criterion of having at least 50 Deputies as members. He agreed that these groups could form the basis for "real" parties, but also stated his opinion that no real parties will exist until privatization and economic development create the possibility for representation of economic interests.

In politics, there is movement visible, but it is not rapid and the processes are incomplete. They do not have what he would call a real parliament. If one looks at the debates, they differ from the formal structure.

The sole "genuine" political group, in his opinion, is the directors of state factories, who are uniting in opposition to private business.

The Center now has E-Mail, but it is not their preferred means of communication. Piskunov's assistant, Olga, is the person who handles it, and she distributes hard copy of messages to those who receive them. This means it can take a few days even after she pulls down the message. She does not log on every day, since it can take a while to reach Kurchatov. For anything urgent or important, they rely on a fax.

MEETING WITH ILIA LOMAKHIN-RUMIANTSEV, DIRECTOR OF THE OFFICE OF GOVERNMENT ADMINISTRATION SUPERVISING COMMUNICATION, SCIENCE AND EDUCATION.

I had met Lomakhin a year ago at the NSF seminar, where he impressed me as one of the more knowledgeable young scholars. We had several good conversations during breaks, and I also saw him again at the Analytical Center on my two visits in the autumn. He is now a member of the "government apparatus." His office is one of several whose task it is to seek accord/compromise so that different ministries working in related areas can function together. The apparat has about 20 departments (as of today there are 18). The idea is that this is an organization that has no organizational interests (*sobstvennykh interesov net*). When I pushed him on this from a "phenomenological" viewpoint, he agreed that of course there are institutional interests, but that they would differ from those of the individual Ministries. That, of course, is the point.

His department is responsible for all organizations involved in S&T. He has a staff of 18, covering the Ministry of Science, VAK, intellectual property, communications and R&D. He said their task is analogous to what was done by the TsK and also by SovMin. Previously both were involved in coordinating activity, but now it is just the apparat.

I asked him to indicate what he perceives as "bright spots" in the current situation. Instead of talking about R&D, conversion, or privatization, he said they expected a very good harvest. They sowed more this spring than last year, and the fuel supplies needed for the harvest have already been stockpiled. Now everyone is hostage to the weather, and lots of people are concerned that there has not been enough rain.

He also says that they have prepared a package of documents concerning foreign investment in science, and these should be approved by the legislature and government soon. IBM and DEC were both in Moscow last month. IBM is working on a project to put computers in the schools. DEC is working on a network for VUZy. [I did not hear about this again.]

There is a "Bureau for Information Services" for the government that is under his Department.

We talked about the differences he had previously noted in the different Russian administrative systems of science: a year ago he said that the Academy was just getting to the state of crisis that branch science had reached in 1988 or 1989. He drew a rough chart suggesting that the rates of decline in the three sectors (Academy, VUZ and industrial science) were not the same, but that all three were now meeting at a point of general crisis. I suggested that just because they have all reached the same nadir, this does not necessarily mean that the solutions in all three sectors will be identical. He took this in.

He expressed the concern that many people still do not understand that what they are experiencing is not a temporary crisis--instead of adapting, they are waiting for things to return to "normal." [This is why I found Lomakhin so worth talking to last year--he has an ability to size up the overall situation as well as to deal with details. This judgement comes very close to my own sense, both before I arrived and even more since I have been here.]

The Fund for Basic Science will be formally established in 1 1/2 months (August 1). This is seven years after they began to discuss the need for such an institution. It will be headed by Gonchar. Initially, it will distribute about three percent of the funds for basic science in the Russian Federation budget.

The Academy is in serious financial difficulty, and is getting ready to close "many" social science institutes.

One idea they have discussed is giving the salary of workers who are laid off to an entrepreneur who promises to hire those individuals. [Intriguing, but unwieldy.]

He also talked somewhat more expansively about the economy. In 1986, Andrei Blokhin did a 10-year projection of economic activity suggesting that there would be an upswing only in 1996. He does not expect things to improve quickly.

Another version he noted was that Perestroika was due to the inability to find a new source of oil in the 1980s. At the beginning of the century oil was discovered in the Caucasus. In the 1930s it was Bashkiria. In the 1960s West Siberia. But in the 1990s there was no new major discovery, breaking the cycle of 30-year "finds." [Dubious, but interesting.]

He also recounted the recent visit of the President of IBM to the Kvant enterprise in Petersburg. He supposedly said that one would have to go to virtually all the microelectronics enterprises in the U.S and Japan to encompass the full range of what is being done at Kvant. This is not necessarily a good thing, but it is the reality they must cope with.

We talked about the direction of government policy. He does not think there will be a sharp change. Chernomyrdin within two to three weeks is likely to alter some of his views, as he shifts from the perspective of a "gas man" to someone responsible for the entire energy complex.

I thought the conversation went well, and we spent a good 90 minutes together. He promised to try to get to some of our sessions at the September symposium--especially as the 5th is his birthday.

MEETING WITH BORIS G. SALTYSKOV, MINISTER OF SCIENCE, HIGHER EDUCATION AND TECHNOLOGY POLICY, AND NOW VICE PREMIER

Then went to the Ministry of Science to see Saltykov. On the way in I ran into Mindeli, who was very warm and ordered me to call him. We arranged a meeting for Monday.

Boris had an hour for me. He looked tired, and spoke in his usual deliberate manner. It is correct that he is now a Vice Premier--one of seven. He has been given responsibility for the "block" of responsibilities previously assigned to Shokhin. This includes education, science, labor and social welfare--basically all the constituencies that desperately need resources and have no ability to protect themselves.

He, like Lomakhin, rejected the idea that policy is changing markedly or that they are retreating from reform. At the same time, he said that they simply cannot raise prices for energy now--the social fabric cannot absorb another major round of price increases without tearing.

He attributed Lopukhin's dismissal to personality and personal reasons. Eltsin has never particularly liked him. He last year divorced his second wife, and married a French woman of Russian background. This third wife evidently was believed to be having some influence on the granting of licenses for oil and gas exploration, raising serious questions of corruption. Chernomyrdin's appointment is explained not so much as an attempt to bring back Communists, as by the fact that during his tenure the gas industry did not collapse. Throughout the economy, there is a need to have people who know how a factory is run.

The Academy will make a decision on the 23rd regarding the fate of the social science institutes.

BGS says they really have promised to free research grants from extra taxes. (The representatives of the American Physical Society were here yesterday, and this was explained to them.)

He had almost nothing to say about higher education--suggested that I talk with Kinelev. I assured him I would try, and that he did not need to order a formal meeting.

We ended the session with a discussion of what he was going to say in his next meeting--with leaders of the student movement, who want to strike for higher stipends. He will ask them to wait. I pointed out that a student strike in summer would be infinitely preferable to one in September.

THURSDAY, JUNE 11. VISIT TO SASHA BELAEVA'S VEGA LAB AT INSTITUTE OF PSYCHOLOGY.

Sasha was delayed, and I began by meeting some of her staff. They obviously are comfortable, and know what they are doing with the technology.

When Sasha arrived, we began with some brief discussion of the expert group. She sees the current "expertise" as consisting of herself, Spartak, Michael and Dima. This could be the core of any group formed to carry out a study of telecom. capabilities and needs.

Vega is involved in three major projects. The first is a study of psychology of children using computers. Their Moscow lab is available to anyone who wants to use the electronic mail, and this is a major way they spread the technology. They also are going in to two new sites. One is the new humanities university at Obninsk, formerly a closed facility. The other is a Seventh Day Adventist community in the Zaokskii area. I half jokingly suggested that either of these groups of people might find it easier to talk with Americans than with each other, and she immediately picked up on the idea and agreed.

They have detailed records on the computer activity and E-Mail efforts at 36 institutes, plus four special facilities like VINITI. Basically, there are three states of computer communications at Moscow institutes: there are the ones Vega has organized, which are mostly operating; there are the institutes that organized their activity independently, but have received some assistance from Vega; and there are the places doing it entirely on their own, where virtually nothing is happening. (Sasha noted that it is important "to make good use of these objective data.")

The really scandalous story--which came as no surprise to me after my own efforts to use computer facilities there--is the total disaster at INION. No one has genuine electronic communications contact with INION.

RELCOM is now earning serious money from its commercial activity in electronic communications, but it is being done in an anarchic way. No one in the organization has any sense of what a real network should be. And there is virtually no competition in the ruble market, so nothing is forcing them to think about what they are doing or the consequences.

The people at RELCOM are not unaware of the situation. They have discussed organizing a non-commercial network within or affiliated with RELCOM--something for research institutes. Soldatov, Guriev and Spartak have been active in this effort.

One of Saltykov's Assistant Ministers has suggested that Sasha help the Ministry of Science survey all the social science institutes and produce a proposal that they can include in the State Plan. At this point, RELCOM revealed its own interests, leading the Ministry personnel to begin to doubt its credibility [I am not sure I got all the nuances here. Some of the reification of institutional/organization actors makes it hard to distinguish precisely whose interests are involved in specific cases.] Now RELCOM is considering establishing a substructure that would provide services for scientific and educational users.

(In her opinion) Sprint and Sov-Am are services interested only in the wealthy customers who can pay, preferably in hard currency.

About 1 1/2 years ago the Institute of Chemistry was named as the national center for computer networking. Il'minskii, the head of the computer center at TsEMI, was screaming about the poor service and paper achievements of RELCOM. So Andrei Semenovitch Mendkovich became a key player. He tends to tell the Americans that the Russians are fully behind him, and to tell the Russians that he has massive support from the Americans. His network is called SUEARN (Soviet Union EARN).

SUEARN has been characterized by so much silliness, that it now is difficult to accept them as a major player. Mendkovich got support from IREX, claimed the resources involved were much greater than they actually were, and at the same time asserted that America is "not relevant" to Russia's telecom. plans. They always advertise that SUEARN is "bezplatno" (free). In December of 1991 there was a big scandal over an assertion that the network had 200 nodes--it turned out that this was just a list of 200 places that wished to become subscribers.

Sergei drove us to the Belaevs' apartment, where Sasha and I continued our discussion. She showed me a letter Saltykov had signed, at Guriev's prompting, addressed to Massey and Bromley. It confirmed Mendkovich and SUEARN as the official telecom net, and asked for \$1 million to help finance their work.

Sasha set up her computer for me to send some E-Mail home to inquire as to whether there is ANY basis for Mendkovich's assertions about U.S. financial support. It was interesting to note that for anything important, she insisted that we use the Sprint network she and Spartak have at home, not the RELCOM link from Vega. Sprint, of course, charges hard currency (paid for by her Carnegie grant with Michael), but it is much more reliable. Ran into this several more times. Everyone complains about difficulty reaching the RELCOM nodes, and the long delays in transmission.

We went over the chaos that is being perpetrated by competing efforts to establish systems. It seems that Mendkovich sought to convince everyone that everyone is backing him. He visited the states and presented himself as plenipotentiary of the Russian government and academic communities in computer communications. Then he went back to Moscow and told people that he had promises of \$1 million from the Americans, if Saltykov would just write a letter requesting the funds and naming him, Mendkovich, as the key individual. Guriev forwarded a letter drafted by Mendkovich to Saltykov, suggesting that he sign it. Saltykov did so, but told Guriev to show it to Sasha before giving it to Mendkovich. Sasha was appalled, and Guriev immediately told her to keep the letter and do with it as she thought best. Basically, everyone understood the sort of game being played, but no one was willing to pull the plug on it except Sasha. Crazy world.

I can not imagine that anyone in the U.S. Government has actually promised a million dollars for telecomm here. If they have, I wouldn't want to do anything to spoil it, even if it is going to the wrong people. But if these shenanigans get in the way of real assistance, it will be very sad.

Sasha talked about it in terms of how Velikhov behaves: everything is to be dealt with in one of two ways, either by preventing it or by running it. It usually takes less energy to kill something than to administer it.

Also talked about the social sciences in the academy. It seems Kudravnsev is still in charge, and he does not really understand how the western system works. Sasha suggested having Dan write to him, explaining our system--that he could be the source of information about grants, but that he could not try to make himself the selection committee choosing candidates for the American funders. It would not hurt to send a similar letter to Kinelev and Gonchar. Basically, the two ways of doing things are on a collision course.

FRIDAY, JUNE 12. MEETING WITH MURAT ALIKOVICH GURIEV, VICE CHAIRMAN OF THE COMMITTEE FOR HIGHER EDUCATION.

Guriev's office is now in the old USSR Education Ministry building on Shabolovskaia, near the Akademicheskaya hotel. He greeted me warmly, and said they had liked my article on the RSFSR Higher Education Program. He said Kinelev had also read it, and might have some more specific comments about it (but I never got to see him).

Guriev's interest in Electronic mail is driven partly by the fact that he is responsible for technology in higher education, and partly by his genuine missionary zeal for the medium. He sees it as the sole means of maintaining contact between Russian and foreign scholars. The price of airfare has become prohibitive, making it impossible to keep personal exchanges going at the levels needed. They have explored trying to get one flight each month on Aeroflot declared an "educational flight," reserved for free or subsidized travel for exchangees (imagine the knives that would come out to get seats on that). They have also looked into relying more on train travel to Germany--but "real" exchanges are with America, and he is still hipped on his idea of everyone learning to speak English.

E-Mail is particularly attractive given certain "peculiarities" of the Russian situation: the telephone system is backward; fax transmission works badly; and there are not enough telephone lines to meet demand for voice communication, much less electronic.

These specific features of the Russian communication system help explain why RELCOM developed as rapidly as it did--it now has about 70,000 subscribers. At least in the short term, RELCOM will be absolutely necessary. They are providing a critically needed service to people who want it very much and are willing to pay for it, despite its deficiencies [remember that most people have never seen anything else, and do not know what our systems can do].

The VUZy have been somewhat slow to get on board. The Ministry gave each of them the funds to connect to E-Mail last year, but only about 1/3 did so. Some of the pedagogical institutes do not have even a single capable programmer, and the picture there is truly bleak. This year, there is not any money at all in the budget for computers.

One of the options they are considering is offering diplomas by long distance--a sort of computer correspondence school [I noted that this could lead to abuses, but he seemed less worried on this score.]

The major problem people are experiencing with RELCOM is that it has been very difficult to connect to the Kurchatov node to use it. It is particularly hard during the day, and people need to stay late to put through their transmissions. I ran into this problem repeatedly in my discussions at various institutes.

Re SUEARN, he noted that Mendkovich is a Chemist, and would not be able to properly use \$1 million for computing if it were given to him. He is "a bluff." [I restrained myself from asking why Guriev passed along his letter for Saltykov's signature if this is the case: the response would probably have been more depressing than enlightening. Near as I can understand it, it was easier to give the letter to Saltykov and let the decision rest with him than to refuse--ruble-passing, I suppose. So where does the ruble stop? Either with Sasha or with me, or perhaps with whoever has the hard currency.]

Guriev also talked about someone named Eberhardt with a system called Unicom. Will need to inquire further about this.

As to the practical use of E-Mail, even Guriev has trouble connecting to RELCOM on the phone system. There are not enough nodes or lines to Kurchatov, and the system is notoriously unreliable. But he did say that he has received papers from people that are as long as 40 pages, so the ability to exchange scientific articles is not as limited as I thought.

I managed to get him to talk a little bit about the program for Higher Education. Unfortunately, I did not get to see Kinelev--he said that if I was meeting the Minister and Guriev, he didn't really know what he might add. I think this reflected some ruffled feathers, and also the bureaucratic mess they have created.

Guriev says the question of supporting all 500 VUZy or just the 100 "elite" ones is "in a fog." No one can take a decisive decision.

He complained that many of their problems stem from the botched administrative structure. Kinelev is NOT a Minister--he is Chair of a Committee under Saltykov. This makes him distinctly junior to Dneprov, who sits in meetings of the government. (Strongly implied here is that Saltykov did not pay enough attention to higher education before, and with his new duties this is likely to be even worse.)

He drew a chart of the administrative structure, showing the division between Ministry of Science and Ministry of Education. The Committee for Higher Schools is a sub-division of the Ministry of Science. At the same time, the Committee for Professional and Technical Education is a subdivision of the Ministry of Education. And Teacher's institutes are also under the Ministry of Education. [It was not clear how much this generates real difficulties and how much it is bureaucratic turf wars, but the result in either case is similar--wheel spinning.]

In the past year, since we last met, he believes they have gained valuable experience and a sense of realism. But now the available resources are minimal, and the issue is basic survival. With no resources, VUZy are losing faculty--particularly the young are leaving. The Academy always had more prestige and attracted more attention, so they are making more noise, whereas the VUZy are dying quietly.

The general outline of the Russian Republic education program will remain the same. The have introduced some changes in tactics/approach (but he did not give me any specifics, referring me to Kinelev, whom I did not get to see).

Guriev is still convinced that everyone should learn English. He also talked about the phenomenon of young faculty striving to establish business schools.

SATURDAY, JUNE 13th. MEETING WITH ALEKSANDR VIKTOROVICH MITROSHENKOV, GENERAL EDITOR OF *POISK*, AND DMITRII LEONIDOVICH GVOZDEV, EDITOR OF THE INTERNATIONAL SECTION.

They had called and requested this meeting after Piskunov asked them to give me copies of the most recent issues that had not yet reached me in the States. They said they wanted to interview me about my work, and about the projects in which I am involved. I got the impression they also had an agenda related to making themselves the "partners" of the *Bulletin of Atomic Scientists*.

They met me at the hotel, and we got in Mitroshenkov's car, whereupon he drove like a total maniac to their offices. I thought we must be late for a session with someone else, but in fact the three of us were the whole shooting match--could have just sat in the hotel, except for his "assistant" who made coffee for us. (Dmitri later told me he is famous for his crazy driving. Will make sure to have my own car if I ever need to see him again.)

They were interested in me, my work, and especially (surprise) anything I could do to help them with financing. I launched into a discussion of how the American and Russian systems differ, with Russians always trying to establish administrative control over programs, while Americans tend to favor funding specific projects without creating lots of extra administrative structures. Also talked about the strongest universities having strong faculties and relatively less strong administrations. I don't think it really got through.

They had a proposal for the *Bulletin of Atomic Scientists*, but did not want to send it to them without accompanying support letters from Osipov and Saltykov. I tried to explain that they were welcome to include such letters, but that it would be the quality of the proposal itself that would be decisive, not a letter from a big shot supporting it. Their somewhat defensive reply was that having Academy support would make the project more important and welcome in Russia. When I tried this out on some friends later, they said it was unlikely. More plausible is that they are stuck in old-think. [We had a basic cognitive disconnect. In their world, anyone who has the support of the President of

the Academy and the Minister *must* therefore be the best.] They want to be able to send several people for shorter stints, and also to enter into "cooperative work" with the *Bulletin*. Of course, they want to select the people they will send. Talked about all the doors they could open for visitors--travel, formerly closed facilities, etc. They did not manage to get the package ready by the time I departed Monday--this did not surprise me. I think they may look for a more "favorable" candidate to transmit the material to Chicago.

I don't think they were happy with my frankness. I didn't care. They were somewhat surprised at my suggestion that they publish the BAS Fellowship Program announcement, saying it would engender a great many proposals, some of which would not be serious. I said we were used to this, and that it was a learning process for everyone. Will be interested to see if they actually produce an ad in one of the next issues.

They also showed me the large RELCOM spreads in two recent issues, and gave me copies of the three or four numbers that I had not yet received.

The Zelenograd technological park will be opened this summer. The Western partner is the "Cambridge Innovation Center."

These folks also think that the government personnel are quite likely to change, but that policy will probably not shift all that much.

SUNDAY, JUNE 14. MEETING WITH SPARTAK BELAEV TO WORK ON PROPOSAL TO CARNEGIE CORPORATION FOR AN EXPERT STUDY OF TELECOMMUNICATIONS FOR SCIENCE

Had a long session at Belaev apartment with Spartak to go over his proposal for the expert study. Spartak began by outlining his view of the situation, and it quickly became apparent that he has a very good grasp of the situation and what is needed. After perhaps half an hour, I simply told him to put down on paper what he had already said to me, in pretty much the same way he had said it. He had even taken out a piece of paper and begun to number his main points as he spoke to me. A very well-organized mind. So I just pushed him to actually write the proposal for Carnegie. We agreed that I would take whatever he produced (in Russian) and translate and edit it for Fritz. In the event, what he produced is pretty close to what is needed. Only question is the budget.

Had a good, long session with both of them. Sasha is more and more impressive each time we talk. She knows and sees a lot, and is intensely moral, but also is realistic about the society in which she is living.

The physicists have long been involved in telecom, and many of them have their own post boxes at CERN. They have a reasonably well-developed professional network. So do some other specialized scientific groups, for example the earth scientists.

But there is a glaring need for a general usage network. There are two existing possibilities, and the positive and negative aspects of both are pretty well known. The question now is how to proceed. A horde of commercial operators also are offering their services--by now there might be as many as 30.

Since the existing telephone lines are not capable of handling 64k communication, there is a real need to find alternatives. So any study must include an analysis of the technical means. There is also a need to determine who will provide the services, and to determine just what is needed for scientific purposes.

The two existing options are SUEARN and RELCOM. Neither is really an answer. No one is dealing with the issue of creating an internal network. Users in Moscow and Petersburg are using Sprint or SF-M Teleport. RELCOM has a connection through Finland, but it has been shut down three times, and when working is open only for a few brief periods each day.

Spartak sees the need for a small group to review what has been done thus far, bringing an international group of expert colleagues to discuss the situation. The "team" should include people from

the U.S. and Europe. They should begin with a meeting in Moscow and site visits to key locations, followed by working out their ideas via E-Mail and then holding a session in Europe to finalize recommendations. We agreed that it would be desirable to have the final report before the end of October.

Mendkovich and his "kollektive" are not particularly knowledgeable, and they have not done very much in the past 2-3 years. Mendkovich seems to see his task as focusing all energy and attention on one line through Copenhagen. However, there is a real question of what to do with/about Mendkovich. (In general, Velikhov seems to have difficulty working with normal, honest people, and has lent his support to a lot of rather questionable types. He is not dishonest himself, but his style of work leads him to rely on people who are. He comes from the old school--anything that could be a competitor must either be destroyed or subordinated.)

One other name Spartak mentioned as a possible participant is Iurii Guliaev, a specialist in radio physics and electronics.

[I did not try to meet Mendkovich, and in retrospect this may have been a mistake. It will be necessary to hear/see his side. At the same time, it will be hard to keep a straight face after having seen the letters generated by him. Very much an old style approach.]

MONDAY, JUNE 15. MEETINGS AT INSTITUTE OF USA AND CANADA WITH GENNADY KOCHETKOV AND ANDREI KORTUNOV.

Short discussion with Kochetkov was impromptu. I was a few minutes early for Kortunov, and stopped in to say hello. He talked about a joint project he is involved in on conversion with the "Institute for Policy Analysis"--the renamed Center for Naval Analysis. Also let me in on the off-color joke they had for years made about the Center's name.

He spoke very sharply about the Academy election. Spartak had been emphasizing the rejection of the government Minister, as a sign the Academy refused to knuckle under to political pressure. Gennady pointed out that the General Meeting rejected all the economists, almost all the social scientists, all the nuclear physicists, and in doing this managed to vote down almost all the Jewish candidates. "That's the sort of Academy we have now." Interesting that his take is so different from Spartak's. He is a complex individual--hard to categorize. Every time I think he is merely a Russian version of a Beltway Bandit, he comes out with something more substantive.

Andrei Kortunov was preparing for a trip to Canada, but carved out some time for me. I got my three questions answered, tho not in any particularly new way.

The Russian Scientific Fund they have created is designed as an "umbrella" organization for scholars and institutions that are seeking to go their own way, independent of the Academy. They have no belief that the Academy will be able to provide funding, and they are totally turned off by the bureaucratic structures and personnel.

As we were winding up, Susan Linz called. Andrei passed her back to his assistant, but I took her phone number to check in later. (Called her in the evening. She is on her way to visit a number of enterprises in the South of Russia. May produce some interesting data.)

Andrei tried several times to reach the person in his shop who is working on science policy, but he was at lunch--there was something funny about it, since the guy came to the door at one point, but was still officially "at lunch." I did not push the issue--simply said that it would be good for us to talk in the future.

JUNE 15, 1992. MEETING AT CENTER FOR SCIENCE RESEARCH AND STATISTICS OF MINISTRY OF SCIENCE, HIGHER EDUCATION AND TECHNOLOGY POLICY. LIVAN MINDELI, VALDIMIR MASLENNIKOV AND LEONID GOKHBERG.

Mindeli began by admonishing me for failing to keep in touch with them or to call him at home. Mindeli explained that they are now fully entrenched, have all the computer technology, copiers, fax machines, etc. that they could want--they are in no way behind the Japanese, in his opinion--and that everything is wonderful. He gave me a pamphlet of statistics on scientific personnel and financing that they published in December, and talked about putting out a major volume of "indicators" before the end of the year. I asked about the 500-page book he had bragged about 18 months ago, and he made a face and said that was "useless, nonsense," and that this volume would be much better. I did not lecture him, but he has made a lot of promises without delivering much. As usual, he sought to give the impression of confidence, affluence, and stability. He claims to have 80 people working for him--other people say 20-50. (He did say that it might even be necessary to reduce their staff in a few cases, but that this was a natural and inevitable process. I assume he was referring to Kitova, Kuznetsova and Kiseleva.)

He is about to defend his Doctoral dissertation. He says that he personally feels no need for this, but that his associates convinced him that it would strengthen their position and the status of the Institute if he defended. He made a big show of asking Gokhberg what the current title of the dissertation is.

Spoke a lot about how they are working with OECD, and now putting all of their data into a form compatible with OECD formats. Will need to check on this.

Claims to have plenty of money and equipment, including funds for foreign travel. Piskunov, in his assessment, is in a tough spot, but "he will do what he can to help him."

We met in a conference room, and I did not see any of their offices or equipment, so it is not possible to judge the veracity of his claims. The pamphlet he gave me is nicely done, with some moderately sophisticated graphics, but does not really break any new ground in what it presents--just the same Goskomstat data for 1990.

Mindeli stressed that the Institute is growing, and is now the major source of statistical materials on Russian science. They are the base Institute for the Ministry of Science. They are active in working with OECD, and he "sees Jenny Bond all the time." They had what amounted to a war with Goskomstat, but they won. Now they have all the statistics on personnel and financing.

Leonid Gokhberg noted that they have a lot of plans, but lately have been concerned mostly with organizational issues. The Center is the chief source of methodology for indicators. They have drafted an entire set of plans for surveys on the key issues, and are doing surveys of graduate students and the process of job assignments. They are also involved in several joint projects, including a large study of S&T with a social survey component.

Maslennikov noted his recent chapter on "*Itogi russkoi nauki*". He says that basically, the backwardness of science is causing serious problems. There is now a new focus on the quality of personnel. Goskomstat was never objective. But now they are really ready to develop a meaningful FTE. At this point, Mindeli added that the difficult situation in science has demonstrated the importance of the work they are doing.

Basically, they did a lot of advertising and self-promotion, but not much divulging of content or specifics. And I did not see any of the computer hardware they bragged about. In fairness, however, Mindeli spoke about the possibility that they would move to another location, and noted that it would make it easier to have visitors if they do so. He stressed that at last we have "the beginning of normal human relations." He also mentioned that they could earn serious money with what they are capable of doing, but do not want to let science go. Besides, he claims they "get all the money they need." They are planning to establish their own international expert commission (implication that they will have

travel money and perhaps consulting fees.) And they have a reserve that will finance them for two years. Unlike Piskunov's shop, which works purely on a contract basis, he has "base funding."

They need travel funds for junior personnel; modems and equipment to get E-Mail; and some software. They would prefer that we send any materials, hardware, etc. through the Embassy.

They are interested in "one or two" joint projects with NSF, and also in help with travel costs. (This was ambiguous--at times, he said they can pay for travel, at other times, that they need help.) They are particularly interested in joint work on surveys, the brain drain, and a project on "who is who in science."

Mindeli sees NSF as too concerned with providing assistance, and not involved enough in science itself. "OECD understands us better." For example, there is no problem in their translating OECD materials, but they have not been permitted to translate NSF materials. They would like to have ALL NSF publications sent to them through the Embassy.

I departed after about two hours, and what kept going through my head was Mindeli's comment to me a year ago that his goal was to create his own Institute for science statistics and become "a monopolist." He is creating a genuine old style Institute, with a powerful director, stable Ministerial financing, and permanent staff.

Piskunov, by contrast, is trying to make the Analytical Center a flexible, contract-research-oriented institution. It feels much more like a new phenomenon. It will be ironic if the old style approach triumphs in midst of the current economic chaos.

JUNE 15, 1992. FINAL MEETINGS AT ANALYTICAL CENTER.

Finished up the business day back at the Analytical Center. Managed to cover most of what was on our agendas. Talked with Nina Dobretsova. She is focusing on a more detailed analysis of Russian and CIS science potential. Given the difficulties involved in dealing with many of the former republics, the major focus of their work will have to be Russia. They are especially interested in financial data, including material on the structure of expenditures. They are also very interested in education statistics. The CIS overall is shifting to "international classifications" for its data.

Kitova, Kuznetsova and Kiseleva were more forthcoming. They brought me a report on salary changes and employment that looks first rate. They also talked about recent changes in personnel patterns. The science workforce has lost 600,000 people between the beginning of 1991 and April 1992. Most of this decline took place since October 1991.

There are regional statistics at least through the end of 1991, and possibly for the first two quarters of 1992. For non-Russian areas, it will be impossible to get the old style data. The best approach might be to do several case studies--we talked about Uzbekistan, Kazakstan and Belarus as possible candidates. We need to be very careful to indicate which "regional" aspect we mean--within the CIS, or within Russia. I made it clear I am interested in both.

Dmitry was also anxious that I meet with Alexei Kara-Murza, the younger cousin of Sergei. He has been doing some very good work on conversion. He said he dabbled with private business, but found it boring and would prefer a career in scholarship. We should see the recent issues of *Problemy prognozirovaniye*. They include data that will go into five volumes the Center hopes to publish, including science statistics, commercialization, conversion, and the international potential of Russian science.

In discussing possible visitors to the U.S. with Piskunov, we focused first on Natalia Genadiyevna Ivanova, possibly as early as September. Kuznetsova and either Kiseleva or Kitova might come later in the autumn, and Alexei Kara-Murza in the winter. I also pointed out that we might try to have one or more of these visits coincide with any group trip that takes place in the spring.

Ended up with Victor Sergeev. We talked more about his study of the Supreme Soviet. He has data on the committees, leaders of fractions. He wants to focus on parliamentary activity of deputies, analysis of the stenographic records, analysis of voting behavior to see the influence of fractions, and

also study the support individuals and groups have outside parliament. This would be a pretty big effort, and would probably cost \$50,000 to \$75,000. [He faxed me a proposal for this shortly after I returned home.]

Sergeev gave me a disk with his book manuscript on the SupSov, and Piskunov gave me a disk with his conference paper and the manuscript of a book called "Political Mosaic." The only failure was that they did not have the paper I had promised to bring back for Loren's conference. Not exactly clear what happened with this, but it did not get to them. (I have a hunch Piskunov is so involved in defending his rear and taking care of his own, that he did not devote much effort to aiding someone at another institution.)

TUESDAY, JUNE 16. MEETING WITH MAXIM LEONIDOVICH ALEKSANDROV AT HIS DEKA A/O in PETERSBURG (FORMERLY NPO FOR SCIENTIFIC INSTRUMENTS).

Had a good session with Aleksandrov. He began by noting that it was a good thing they divided the enterprise into smaller firms. That is the only way they can have entities that will be able to function and compete. There has been a lot of resistance from the trade unions--particularly the leadership structure, who realize that they will lose their perks in a real world.

Thus far, most privatization has been "*dikii*,"--chaotic, unorganized, and basically reminiscent of the processes of collectivization or nationalization in the 20s and 30s. However, the firm is now beginning to get some long-term orders. On the other hand, they came close to losing their manufacturing plant in Belarus, and this issue may not be finally settled even now.

Viewing the Petersburg scene, he frankly states that his operation is an exception--*edinita*--thus far. (Would have to do a lot more exploring and interviewing to know if this is really the case, but my impression, unfortunately, is that it well might be true.) He says that in StP in general, the large factories are dying. They are old, dirty, unhealthy, and not adapting to the new situation. Even natural resources are a problem. Gold production is likely to decline 30% in 1992 and will probably drop a similar amount in 1993. They are not paying their workers, and are not investing (no capital to invest). The picture is far from bright.

He talked about the history of IBM's involvement in the USSR. He says that they were close to Gorbachev and depended on Gosproekty for their agreements. Now they are not very active. (Americans, too, got comfortable with the old style monopolies, and are not overly eager to test the new waters of competition.)

JUNE 19, 1992. MEETING WITH COMPUTER/COMMUNICATION SPECIALISTS FROM ALEKSANDROV'S INSTITUTE (DEKA Information Center).

Andrei Pranitskii arrived with Nikolai P. Likhodedov, their "Technical Director," and Kirill N. Zavialov, Commercial Director. Likhodedov did most of the talking. They are proceeding along three lines: database for on line work; business intelligence for Western and Russian firms; and commercial use of export-import information. Likhodedov recently visited Israel and checked out available computer networks. They examined all of them, and found Sprintnet the most promising, since it provides a full range of services.

The advantages of E-Mail are obvious--they still must order a fax 48 hours in advance. For communicating within Russia, it is still pretty easy to send a telex. Other forms of communication are much tougher.

RELCOM "is a weak system." It provides poor security and low reliability, and offers no access to Western databanks. And it does not allow on line or real time work.

Likhodedov spent 15 years in Academy institute of metallurgy. Has a strong interest in databanks for scientific communication. He sees this as the way to find research partners, maintain ties

across republics, and also replace the increasingly costly and difficult foreign travel. During a recent visit to Israel, he spent two hours working with Dialog and "everything was clear." Here, he has been using the available systems for years, and he still cannot figure them out.

Andrei added his opinion that any telecom initiative should not be a State Program. This would only slow things down and drain the energy. A firm would be a much better locus.

Likhodedov added that there is no need to involve the Ministry of Communications. Sprint will put in lines to increase service as usage grows. And Sprint should be in a position to offer discounts to those who cannot pay. [At this point, I was not sure which of us was losing touch with reality, and brought the session to a close.]

[Shortly after my return to DC, I received a fax from them with a proposal to arrange an expert study of the telecom issues, with a request to send them any forms required by Carnegie. Aleksandrov had said that when I visited institutes everyone would try to save themselves by seeing what largesse I might be in a position to dispense. Guess he was right.]

CONCLUSIONS:

I returned even more convinced that the telecommunications issue is crucial, not only to the ability of scholars to communicate, but to their chances for survival. Many of the individuals I spoke with echoed the theme of declining opportunities for travel and "normal" forms of contact with Western colleagues. In this environment, E-Mail can provide not only a critically needed source of contact, but can help them to find suitable partners for collaborative work. The task of "saving" the scientific community is too vast and too expensive for any Western government to be able to take it on in full, and just to create the mechanisms to determine who should be saved would be a gargantuan task. But if the international scholarly community is better able to identify and work with partners, this will be the most promising path to assisting scholars who have a genuine contribution to make. It will not be a perfect or foolproof system, but it will be preferable to what we are doing now.

I am also convinced that the "expert study" is an important activity. The basic character of the existing systems is now pretty clear, but no one has systematically examined all the options. And no one here has either a sense of what "world" capabilities are or the direction they should be going.

My own conclusion, based on a brief visit and less than full information, is that the development of multiple networks is not necessarily bad, *provided they also manage parallel development of something like Internet*. If RELCOM is like Compu-Serve and SUEARN is like BITNET, this would not be bad, provided users in the two systems have a way to communicate with each other and with the rest of the world. (Whether SUEARN is viable/salvageable is another matter, and one more reason why the expert study is so crucial.)

The most disturbing note, if I end with a cautionary tone, was that except for a few individuals with access to Sprint, most people are not making much use of their E-Mail. The system is too cumbersome and unreliable. And very few people have computers at all, much less at home. So there is almost zero interactive use. Rather, people get hard copy pulled down by someone else, and it can take several days for transmissions to reach their "addressee." Cost factors will make this a serious problem for a long time to come.

THE WHITE HOUSE
WASHINGTON

July 29, 1992

Dear Harvey:

Many thanks for sending me a copy of your excellent trip report to Moscow and St. Petersburg. It is filled with interesting and useful information. Your conclusions regarding communication are discouraging but not surprising.

With all best wishes,

Sincerely yours,

A handwritten signature in black ink, appearing to read "D. Allan Bromley", with a long horizontal flourish extending to the right.

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

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DIRECTORATE STATUS

FROM: PANACYUK, Michail I. et al: NUCLEAR PHYSICS INSTITUTE, MOSCOW
STATE UNIVERSITY

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 06/30/92

SUBJECT: HE IS WRITING EXPRESSING THEIR VIEWS ON THE FUNDING
CRISIS FOR THE SSC.

DIRECTORATE
ASSIGNED:

STAFF
ASSIGNED:

ACTION
REQUIRED:

STAFF
ACTION:

SENDER'S DUE DATE:

OSTP DUE DATE:
DATE COMPLETED:

STAFF DUE DATE
DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
John O'Neil
PHYSICAL SCIENCES

WHITE HOUSE TRACKING #:

CONTACT PERSON:

PHONE:

EXT:

REMARKS:

OSTP RECEIVED: 06/30/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

15

**NUCLEAR PHYSICS INSTITUTE
MOSCOW STATE UNIVERSITY**

119899 Moscow RUSSIA
Tel.: (007-095) 939 18 18
Telex: 411 483 MGU SU
Fax: (007-095) 939 08 97

to

Moscow, June 30, 1992

Dr. D. Allan Bromley
Science Advisor to the President
Old Executive Office Building, Room 360
17th and Pennsylvania Avenue, NW
Washington, DC 20506
USA
Fax: (202)-456-2461

Dear Doctor D. Allan Bromley,

The scientists of the Nuclear Physics Institute of the Moscow State University are worried about the situation with the SSC project. We would like to ask you to appeal to the Congress, the Senate and to the President of the United States to demonstrate understanding and responsibility facing the future of the physical science not only in the United States, but also all over the world and to support funding of the Superconducting Super Collider project.

The fulfillment of the SSC project will make it possible to create new technologies, stimulating development of highly intellectual industry and raise the prestige of the American Science. Finally it will lead to a new world outlook.

Nowadays, when the nuclear threatening is over, the main aim of the mankind - cognition of the world - should receive the highest priority.

Sincerely,

Director

Panacyuk

Michail I. Panacyuk

Vice Director

V. Savrin

Victor I. Savrin

Professors

Er

Pavel F. Ermolov

V. Murzin

Vladimir S. Murzin

L. Sarycheva

Ludmila I. Sarycheva

E. Leikin

Evgenii M. Leikin

Info

cc: DAB

O'Neil

Erb

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202536
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: KADYSHEVSKY, V.: JINR

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 07/09/92

SUBJECT: HE IS WRITING URGING DR. BROMLEY TO DO EVERYTHING HE
CAN TO REVERSE THE DECISION OF THE U.S. HOUSE OF
REPRESENTATIVES TO CUT THE FUNDING FOR THE SSC.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED:

ACTION STAFF
REQUIRED: FOR DAB'S SIGNATURE ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 08/04/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

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

OSTP RECEIVED: 07/20/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ



101000 Москва, Главпочтамт, п/я 79. Тел. 926-22-29
Telex MSK Dubna 412621. Телекс: Дубна 412621. Телетайп 205903

ОБЕДИНЕН ИНСТИТУТ ЗА ЯДРЕНИ ИЗСЛЕДВАНИЯ
AZ EGYESITETT ATOMKUTATÓ INTÉZET
VIỆN LIÊN HIỆP NGHIÊN CỨU NGUYÊN TỬ
VEREINIGTES INSTITUT FÜR KERNFORSCHUNG
연합원자핵연구소
INSTITUTO UNIFICADO DE INVESTIGACIONES NUCLEARES
ЦЕМИЙН ШИНЖИЛГЭЭНИЙ НЭГДСЭН ИНСТИТУТ
ZJEDNOCZONY INSTYTUT BADAN JĄDROWYCH
INSTITUTUL UNIFICAT DE CERCETĂRI NUCLEARE
ОБЪЕДИНЕННЫЙ ИНСТИТУТ ЯДЕРНЫХ ИССЛЕДОВАНИЙ
SPOJENÝ ÚSTAV JADERNÝCH VÝZKUMŮ

08.07.1992

№ 010-27/1422

на № _____ от _____

DR. D. ALLAN BROMLEY
SCIENCES ADVISOR TO THE
PRESIDENT
SCIENCE
OLD EXECUTIVE OFFICE
BUILDING, ROOM 360
17 th and PENNSYLVANIA
AVENUE, NW
WASHINGTON, DC 20506
FAX 202-456-2461
TEL. 202-456-7116.

DR. FRANK PRESS
PRESIDENT
NATIONAL ACADEMI OF
SCIENCES
2101 CONSTITUTION AVE.
NW
WASHINGTON, DC 20418
FAX 202-334-1684

Roy Schwitters
SSC Laboratory
2550 Beckleymeade Ave.
Dallas, TX 75237

The members of the Joint Institute for Nuclear Research in Dubna, (Russia), as well as thousands of scientists and engineers in Russia and other republics of the former USSR are prepared to take part in the many stages of the work of creating the Superconducting Super Collider in the USA, and in conducting physics research on it, in collaboration with the world scientific community.

The SSC is the outstanding project of our time. We are hoping that it would not only help resolve the presently inaccessible secrets of the microcosm, but would also facilitate the achievement of one of the most difficult and wonderful objectives, - the consolidation of the International high energy and nuclear physics community into a unique mission. This would undoubtedly bring great benefits and international recognition to the USA as well as the world community.

We understood, and understand now, that mankind's technical progress always goes hand-in-hand with the outstanding achievements in fundamental sciences, and in fact depends on them.

However, a blow was struck recently against the future not only of United States science but against the future of science of the entire world. The consequences of this blow -the decision of the United States' House of Representatives- if sustained, will unfortunately become evident only to the future generations, and will be extremely difficult to rectify.

For this reason we, the scientists of the Joint Institute of Nuclear Research appeal to you to apply all your efforts, utilize all your influence on the American society, to save the SSC project, one of the grandest projects of our time, and the foundation of the science and civilization of the twenty first century!

V. Kadyshevsky

Professor V. Kadyshevsky
JINR Director

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202532
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: BATSKIKH, Guennady: RUSSIAN ACADEMY OF SCIENCES

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 07/08/92

SUBJECT: HE IS WRITING EXPRESSING HIS CONCERN OVER THE
FUNDING FOR THE SSC PROJECT.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED:

ACTION STAFF
REQUIRED: AS NECESSARY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 08/04/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

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

OSTP RECEIVED: 07/20/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)
CENTRAL FILES:

2592
АКАДЕМИЯ НАУК РОССИИ

МОСКОВСКИЙ РАДИОТЕХНИЧЕСКИЙ ИНСТИТУТ

113519 МОСКВА

Dr. D.Allan Bromley
Science Advisor to the President
Old Executive Office Building , Room 360
Washington , DC 20516
Phone : 202-456-7116
Fax : 202-456-2461

July 8 , 1992

Dear Dr. Bromley :

Our participation in several meetings of the Intergovernmental Russian - American Committee on the Superconducting Super Collider along with corresponding contacts with our colleagues from American accelerator technology community had convinced us that international cooperation intended for the research , design and construction work on SSC had taken a very good start . The realization of the SSC project which is likely to become an outstanding project of the next century machine seems to present at the same time a very spectacular example of international collaboration in solution of a scientific problem of universal importance .

Under the circumstances we are very much surprised and worried by the recent decision of the House of Representatives of the USA Congress to cut funding for the SSC .

We want to express our sincere hope that the Congress of the USA will certainly consider the funding problem with due allowance for the important role of the success in the SSC project realization for further progress in the both fields of accelerator technology and fundamental science research as well as for further progress of international cooperation .

We want to express unanimous support of scientists and engineers of our Institute for the SSC project realization . We are going to do our best to contribute to the project with all our efforts and experience . We also hope that governments of various countries all over the world (including our country) will certainly contribute to the SSC project realization .

Sincerely yours,



Guennady Batskikh, Director
Moscow Radiotechnical Institute
Russian Academy of Sciences

исполнено

в дело №

"Document Control"

TYPE: INFORMATION

DOCUMENT NUMBER: 9207919

ORIGINATOR: 02

STATUS C

DIRECTORATE STATUS

FROM: BALZER, Harley: GEORGETOWN UNIVERSITY

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 06/25/92

SUBJECT: HE IS THANKING DR. BROMLEY FOR PARTICIPATING IN
THEIR SYMPOSIUM ON SCIENCE AND TECHNOLOGY IN THE
FORMER SOVIET UNION. HE WILL FORWARD A COPY OF THE
FINAL PROCEEDINGS.

DIRECTORATE
ASSIGNED:

STAFF
ASSIGNED:

ACTION
REQUIRED:

STAFF
ACTION:

SENDER'S DUE DATE:

OSTP DUE DATE:
DATE COMPLETED:

STAFF DUE DATE
DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
John O'Neil

WHITE HOUSE TRACKING #:

CONTACT PERSON:
PHONE:

EXT:

REMARKS:

OSTP RECEIVED: 06/27/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:



GEORGETOWN UNIVERSITY

Russian Area Studies Program
Graduate School

25 June 1992

Dr. Allen Bromley
Director
Office of Science and Technology Policy
Executive Office of the President
Washington, DC 20506

Dear Dr. Bromley:

Thank you for your participation in the April 27-28 conference on "Science, Technology and Industrial Policy in the Former Soviet Union" held at Georgetown University. The meeting was a great success, as evidenced by all panels representing a spectrum of clear, substantive scholarly analysis and opinion. It is always refreshing to moderate an interchange such as this one between American scholars and policymakers and their Russian counterparts.

I am currently compiling and editing the final conference proceedings, which will be distributed sometime in early July.

Thank you once again, and I look forward to working with you in the future.

Sincerely,

Harley Balzer
Director

HDB/wla

Washington DC 20057-0886

Tel: 202-687-6080

FAX: 202-687-5858

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202216
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: CHALK, O. Roy: INTERNATIONAL COUNSELOR AT LAW TO THE REPUBLIC
OF RUSSIA

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 06/16/92

SUBJECT: HE IS FORWARDING A PROPOSAL REGARDING THE
ESTABLISHMENT OF AN INSITITUTE FOR EXPERIMENTAL
EVALUATION OF INTELLECTUAL PROPERTY AND RESEARCH
PROPOSALS.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED:

ACTION STAFF
REQUIRED: AS NECESSARY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 07/02/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

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

OSTP RECEIVED: 06/18/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

2216

LAW OFFICES

O. ROY CHALK

INTERNATIONAL COUNSELOR AT LAW TO

The Republic of Russia

FOR FINANCE AND INDUSTRY

CO-CHAIRMAN, PRIVATIZATION FUND

2 MICHURINSKIY PROSPEKT
MOSCOW
TEL: 7095-143-16-34

3600 M STREET, N.W.
WASHINGTON, D.C. 20007
TEL: 202-298-5600
FAX: 202-333-3493

June 16, 1992

RECEIVED
JUN 18 12:55
MAIL ROOM

BY HAND

The Honorable D. Allen Bromley
Assistant to the President for Science and Technology
Old Executive Office Building, Room 358
17th and Pennsylvania Avenue, N.W.
Washington, D.C. 20506

Dear Mr. Bromley:

I know that you are in complete agreement with the urgency and importance of maintaining the capabilities and productivity of CIS science centers during this historic but difficult political transition. I also know that you and your staff are actively seeking innovative new means of facilitating this process.

Georgetown University, in collaboration with researchers from other universities, has developed a very creative concept for a Washington D.C. based Institute for Experimental Evaluation of Intellectual Property and Research Proposals. I have discussed this concept in some detail with members of the Georgetown group and conclude that it has more than sufficient merit to justify your support in expediting its creation.

The Institute will draw heavily on existing Russian to English machine translation, artificial intelligence behavioral neuroscience, adaptive processing technology and advanced computational capabilities of ten universities, as well as collaborations from government and private industry. The organization of the Institute has been designed from advanced artificial intelligence and behavioral neuroscience principles and will use a US based e-mail peer review and support staff to perform processing tasks associated with the evaluation of research proposals from CIS countries. Some of these tasks will be turned over to machine intelligence subprocesses as the automated parts of this system come on line.

The Institute has two well defined missions, which are to

- 1) safeguard the intellectual property of CIS scientific groups and
- 2) automate the process of evaluating a large number of research proposals.

Both of these missions depend on the Institute creating a map of the ecosystem of ideas that currently exist within the CIS scientific community. The Georgetown group has assured me that this can be done with existing technology and theory derived from artificial intelligence and artificial neural network research. Once proven in this arena, the same system would be useful in a variety of other tasks - including evaluating the outcomes of environmental programs and the acquisition of information about privatization efforts in the former Soviet Union and Eastern Europe.

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

June 16, 1992

The proposals will collectively form a data base from which advanced techniques will extract information about existing intellectual property.

I am prepared to support the Institute by quick provision of operating space and high level contacts in the CIS as necessary. At least three highly capable government, university and research administrators have already indicated a willingness to take a leave of absence from their current positions to help direct the activities of this institute when it is funded. A distributed research network of US researchers are available to assist in the work of the Institute. What we need is determined leadership from the White House in moving forward the rapid creation of the Institute. The Georgetown group believes that this initiative should be credited to the White House.

Considerably more detail than I am able to summarize in this letter exist. (See Attachment.) However, the Georgetown group as well as their selected experts, are available to meet with you or your designated staff to provide additional detail at any time.

Sincerely yours,



O. Roy Chalk

Attachment

Attachment 1: On the Rapid Creation of the Georgetown University Institute for Experimental Evaluation of Intellectual Property and Research Proposals

Summary brief

The proposed Georgetown Institute's mission is to identify, protect, support and disseminate the best, unique and/or novel science and technology, in selected areas, that presently exist within the Commonwealth of Independent States (CIS). The Institute's organizational principles reflect elements of the following 'Global Architecture.'

Central to the organizational architecture of the Institute will be an electronic blackboard assisted telecommunication hub located in a building adjacent to Georgetown University. The theory and design of electronic blackboards are products of recent artificial intelligence research such as employed in NASA research on mission planning processes. The telecommunications hub will receive technical proposals in Russian from researchers working in the CIS. These researchers will have responded to outgoing solicitations/requests from the Institute, ideally sent by 1 August 1992. The knowledge domains of most concern are those that support Behavioral and Computational Neuroscience (BCN) and the Environmental Sciences (ES).

A small group of program managers will be assisted by various other US and international sources via a Distributed Research Network (DRN). The DRN concept has been under development since January 1990. The DRN will evaluate the proposals for scientific merit and for the existence of novel intellectual property. This evaluation will be further assisted by artificial intelligence methods acting within the blackboard framework. The DRN will include researchers from United States universities, other governmental agencies, and economic enterprises.

The offices of the project directors, a telecommunications hub, a machine translation center, and monitoring hardware supporting the DRN node at the Institute will be located in the Car Barn Building, on M Street, NW in Washington D.C. Importantly, the Car Barn Building will also house experimental research centers whose missions are to automate process evaluation of intellectual property and grant proposals. The measurement of these two processes are crucial to demonstrating the Institute's success in

carrying out its mission.

Assignment of legal rights for personal intellectual property is a key factor in establishing value, protecting intellectual property, and in providing incentives to individuals to share important knowledge. The protection of CIS intellectual property is the first objective of the Institute. The second objective of the Institute is to deliver a total of 25M U.S. dollars in grants, in increments of less than \$30K, to individual CIS scientists before 1 December 1992. This will require a focused determination by the White House, State Department and DARPA to get things done.

One indicator of success of the Institute would be the number of joint-venture or off-shore companies that would be formed to capitalize on promising areas of research discovered by the Institute. Another area of measurement is the number of papers, and/or conferences stimulated via the DRN and the Institute. Perhaps the most determinate factor of success would be the amount of US and international industrial participation and funding investment in the Institute. In essence, the Institute would become a not-for-profit CIS to US global technology brokering establishment to help industry and science solve special problems or achieve special goals.

It is imperative that the proposal establishing the Institute get briefed to the White House prior to the summit between Presidents Bush and Yeltsin, and to place the Institute on the June 16th summit agenda. The details can be discussed by the staffs of Dr. Osipov of the Russian Academy and by Dr. Bromley at the Office of Science and Technology Policy. An oversight role for DARPA is requested by the Institute's advocates. The point of contact at DARPA is Dr. Trent dePersia.

The Institute can accelerate the privatization of ex-Soviet defense science and technology, assist in the democratization of the CIS, and provide the world with rapid insight on how to solve important problems, address important issues, and organize to achieve great societal goals. It will also help American economic competitiveness and the needed upgrade of both United States' and CIS member states' educational systems.

June 5th, 1992

bcngroup@nnrf.georgetown.edu

"Document Control"

TYPE: ACTION
ORIGINATOR: 02

DOCUMENT NUMBER: 9202249
DIRECTORATE STATUS

STATUS I

FROM: KRAPIVIN, Vladimir F.: RUSSIAN ACADEMY OF SCIENCES

TO: OSTP

DATE OF
CORRESPONDENCE: 06/11/92

SUBJECT: HE IS WRITING TO SEEK ASSISTANCE WITH FUNDING FOR
THEIR FLYING LABORATORY PROGRAM.

DIRECTORATE
ASSIGNED: INTERNATIONAL/POLICY

STAFF
ASSIGNED:

ACTION
REQUIRED: AS APPROPRIATE

STAFF
ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 07/07/92
DATE COMPLETED:

STAFF DUE DATE
DATE COMPLETED/DEPT:

COPIES TO:

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CONTACT PERSON:

PHONE:

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REMARKS:

OSTP RECEIVED: 06/23/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
03a. Proposal	Proposal, Institute of Radioengineering and Electronics (2 pp.)		(b)(4)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
03b. Proposal	Proposal, Institute of Ecoinformatics Problems (5 pp.)		(b)(4)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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]
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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

USSR ACADEMY OF SCIENCES
INSTITUTE OF RADIO ENGINEERING AND ELECTRONICS

PREPRINT

Yu.V.Gulyaev, V.I.Rogalsky, V.F.Krapivin,
E.P.Novichikhin, V.P.Yushkov

MATHEMATICAL SIMULATION OF NATURE
OBJECTS IN GLOBAL SPACE SYSTEM
OF ECOLOGICAL SUPERVISION
FOR THE ENVIRONMENT STATE

MOSCOW, 1991

"Document Control"

TYPE: INFORMATION

DOCUMENT NUMBER: 9202189

ORIGINATOR: 02

STATUS C

DIRECTORATE STATUS

FROM: MASSEY, Walter E.: NATIONAL SCIENCE FOUNDATION

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 06/10/92

SUBJECT: SUPPORTS THE IDEA OF A SCIENCE AND TECHNOLOGY
COUNTRY STUDY FOR RUSSIA

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
INTERNATIONAL/POLICY

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

OSTP RECEIVED: 06/17/92
FILE: INTERNATIONAL-RUSSIA

DEPT RECEIVED:

CENTRAL FILES:

2189

NATIONAL SCIENCE FOUNDATION
WASHINGTON, D.C. 20550



OFFICE OF THE
DIRECTOR

June 10, 1992

RECEIVED
92 JUN 17 P 3:18
OSTP
MAIL ROOM

The Honorable D. Allan Bromley
Assistant to the President for
Science and Technology
Old Executive Office Building
Washington, D.C. 20506

Dear Allan:

I share with you the belief that it would be in our national interest to have an expanded OECD interaction with Russia, as you wrote in your letter of March 3, and that it would, therefore, be appropriate for the OECD Committee on Scientific and Technological Policy to perform an S&T country study for Russia.

I understand that the U.S. contribution to the costs of such a study would be \$150,000. The NSF will share this cost to the amount of \$75,000 as you requested.

Sincerely,

Walter E. Massey
Director

logged

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202056
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: RIESENHUBER, Heinz: MINISTER FOR SCIENCE AND TECHNOLOGY,
GERMANY.

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 05/15/92

SUBJECT: HE IS WRITING REGARDING HIS PROPOSAL FOR AN
INTERNATIONAL PROGRAM OF ASSISTANCE TO SCIENCE IN
THE CIS.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED: JS
JFO

ACTION STAFF
REQUIRED: AS NECESSARY ACTION: as necessary

SENDER'S DUE DATE:
OSTP DUE DATE: 06/22/92 STAFF DUE DATE 6/22/92
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

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

JB 

OSTP RECEIVED: 06/08/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202056
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: RIESENHUBER, Heinz: MINISTER FOR SCIENCE AND TECHNOLOGY,
GERMANY.

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 05/15/92

SUBJECT: HE IS WRITING REGARDING HIS PROPOSAL FOR AN
INTERNATIONAL PROGRAM OF ASSISTANCE TO SCIENCE IN
THE CIS.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED:

ACTION STAFF
REQUIRED: AS NECESSARY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 06/22/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

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

OSTP RECEIVED: 06/08/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)
CENTRAL FILES:

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
04a. Letter	To: Allan Bromley From: Heinz Riesenhuber Re: Proposal for International Program of Assistance to Science in the CIS [English translation] (2 pp.)	5/15/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
04b. Letter	To: Allan Bromley From: Heinz Riesenhuber Re: Proposal for International Program of Assistance to Science in the CIS [German] (3 pp.)	5/15/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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

"Document Control"

TYPE: ACTION

DOCUMENT NUMBER: 9201639

ORIGINATOR: 02

STATUS I

DIRECTORATE STATUS

FROM: SINGER, I.M.: MIT

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 05/04/92

SUBJECT: HE IS WRITING REGARDING HIS SUGGESTION FOR AN
INTERNATIONAL ADVISORY COUNCIL ON EDUCATION,
SCIENCE, AND TECHNOLOGY TO HELP THE RUSSIAN MINISTER
FOR SCIENCE AND ADVANCED EDUCATION RECONSTITUTE
MOSCOW UNIVERSITY.

DIRECTORATE

STAFF

ASSIGNED: INTERNATIONAL/POLICY

ASSIGNED:

ACTION
REQUIRED: AS NECESSARY

STAFF
ACTION:

SENDER'S DUE DATE:

OSTP DUE DATE: 05/14/92

STAFF DUE DATE

DATE COMPLETED:

DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #:

CONTACT PERSON:

REMARKS:

PHONE:

EXT:

OSTP RECEIVED: 05/06/92

DEPT RECEIVED:

FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS 02139

DEPARTMENT OF MATHEMATICS

FAX. (617) 253-4358
TEL. (617) 253-5601
TEL. (617) 253-2685

I. M. SINGER

INSTITUTE PROFESSOR

92 MAY 6 P 5: 07

OSTP
MAIL ROOM

May 4, 1992

The Honorable Allan D. Bromley
Assistant to the President for Science and Technology
Executive Office of the President
The White House
Washington, D. C. 20500

Dear Allan,

In this letter I put in writing my suggestion for an international advisory council on education, science, and technology to help the Russian Minister for Science and Advanced Education reconstitute Moscow University.

During the Breznev years, many bureaucrats towing the party line were appointed as professors in the school of science, instead of first rate scientists. They remain a large negative force. It is highly unlikely that Moscow University can flourish without external pressure. The same can be said of many Russian institutes. But the university is particularly important because the education of a whole generation depends on it.

A council could have critical influence, if it had funds to back recommendations for changes and for new appointments. Since the Western countries are marshalling considerable financial aid for Russia, it should be possible to give such an advisory body a very small portion of these funds. I don't have to argue the importance of well trained scientists and engineers for economic well-being. I would hope that you and European ministers of science can prevail upon those dispensing these moneys to set aside some funds to establish an international advisory council with clout.

I shall be glad to help where I can.

Warm personal regards,



I. M. Singer

"Document Control"

TYPE: ACTION

DOCUMENT NUMBER: 9201128

ORIGINATOR: 02

STATUS I

DIRECTORATE STATUS

FROM: LOCKER, George S.: TECHTRADE CORPORATION

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 04/30/92

SUBJECT: HE IS FORWARDING A COPY OF HIS ARTICLE WHICH
SUGGESTS A WAY TO IMPLEMENT THE REPORT OF THE NAS
ENTITLED "REORIENTATION OF THE RESEARCH CAPABILITY
OF THER FORMER SOVIET UNION". THEY OFFER THEIR
SERVICES TO HELP WITH THE IMPLEMENTATION.

DIRECTORATE

STAFF

ASSIGNED: INTERNATIONAL/POLICY

ASSIGNED:

ACTION
REQUIRED: AS NECESSARY

STAFF
ACTION:

SENDER'S DUE DATE:

OSTP DUE DATE: 04/20/92

STAFF DUE DATE

DATE COMPLETED:

DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #:

CONTACT PERSON:

PHONE:

EXT:

REMARKS:

OSTP RECEIVED: 04/06/92

DEPT RECEIVED:

FILE: P-INTERNATIONAL-USSR

CENTRAL FILES:

1128 A

TECHTRADE CORPORATION
670 WEST END AVENUE
NEW YORK, NY 10025

-
tel: 212 496 0593
fax: 212 496 9857
telex: 6732097

RECEIVED

92 APR 6 A10:03

USTP
MAIL ROOM

March 30, 1992

D. Allan Bromley, Ph.D.
Assistant to the President for
Science and Technology
Executive Office of the President
Office of Science and Technology Policy
Washington, D.C. 20506

Dear Dr. Bromley:

The enclosed article suggests a way to implement the report of the National Academy of Sciences entitled: "Reorientation of the Research Capability of the Former Soviet Union".

We propose that a joint committee of scientists, businessmen and political leaders from the United States and the former Soviet Union be organized on an urgent basis to formulate a systematic approach to evaluating and acquiring advanced civilian technologies for commercialization in the U.S.

At the same time, such U.S./((Soviet)) cooperation would present an unprecedented opportunity to remedy significant deficiencies in U.S. critical technologies research and development at great savings of time and money.

In our own experience, this program will not succeed unless it has the support and backing of leaders in government and industry.

We are prepared to contribute our experience implementing technology transfer from the former Soviet Union to the creation of such a joint committee.

Very truly yours,

George S. Locker

George S. Locker
President

enc. 8 pages

TECHNOLOGY TRANSFER: MUTUAL AID FOR THE U.S. AND RUSSIA

By George Locker, Arthur Castle, and Lyudmila Alexandrova

Collapse of Soviet Civilian Science

In a startling break with a tradition of cautious deliberation, the National Academy of Sciences has issued an emergency report urging massive assistance to prevent the breakup of the scientific community in the former Soviet Union (FSU). While highlighting the need to prevent the dispersal of FSU weapons experts to technology-hungry dictatorships, the report predicts that the only way to avert catastrophe is to immediately provide hundreds of millions of dollars for support to the larger community of scientists and engineers engaged in non-defense research and development.

Faced with the prospect of a scientific melt-down in the FSU, most policy experts up to now have limited their focus to short-term concerns: How much will it cost to keep the nuclear experts at home? Which piece of exotic aerospace hardware should the Federal government buy while still encouraging the FSU military producers to go out of business?

The National Academy of Science is justifiably more concerned with the long-term implications of an irretrievable loss of Soviet scientific capability. But unfortunately, their proposal for massive funding is unlikely to generate much

enthusiasm in Washington given budget cutbacks and the American electorate's perception that money given to the FSU is money better spent on domestic needs.

Tech Transfer: Good For Both Countries

Economic incentive is the missing ingredient in the program envisioned by the National Academy. The licensing of advanced Soviet technologies for development and production in the U.S. would provide that incentive. A vigorous technology transfer initiative from the private sector, with appropriate support from the governments of the U.S. and the FSU, would yield economic benefits to all parties, solidify long-term U.S.-FSU market integration, and help reverse America's declining technological leadership.

Conceived in these terms, a large-scale technology transfer program would spawn a multitude of profitable large and small transactions. As a bona fide mutual business activity, technology transfer is preferable to the alternatives of ruble support of local groups of scientific researchers, sub-contracting discrete areas of manufacturing, and making high-risk direct investments in FSU plants and equipment.

Technology transfer offers American industry the unprecedented opportunity to secure at bargain prices some of the most original but never-commercialized technologies and designs from the vast reservoir of Soviet R & D.

One reason for the near total lack of U.S. involvement in FSU technology transfer is the prevailing myth that Soviet technical excellence is limited to aerospace and weaponry. Outside of the United States, however, it is well-known that basic discoveries in such fields as telluride technology, diamond film deposition, laser annealing of ion-implanted silicon chips and parallel processing were pioneered in the Soviet Union and then successfully commercialized abroad.

As a nation we have been slow to recognize the enormous business potential for capitalizing on the accumulated intellectual assets of the FSU. Meanwhile, German, Dutch, Italian, Korean and Japanese companies and governmental groups have been aggressively licensing and patenting advanced Soviet R&D ever since the advent of perestroika. Today they are accelerating their efforts in response to the breakdown of the Soviet science sector.

Benefits for the U.S.

A concerted technology transfer effort by the private sector would result in hefty political and commercial dividends to the U.S.:

- Through direct licensing for manufacture and sale in the U.S., profits would be realized in dollars and not rubles.
- Royalties and fees paid to FSU scientific enterprises would enable them to pay for high-quality American-made products such as telecommunications, machine tools and electronics, thereby creating a market for U.S. goods and services where currently none exists.
- The infusion of original FSU R&D offers a fast-track to technological innovation for the U.S. At least half of the generic critical technologies required for the 21st century, technologies in which the U.S. has fallen dangerously behind, could be sourced in the FSU at a fraction of the cost and time required to conduct comparable R&D in the West. High value-added commercial activity could have a measurable impact on the health of the U.S. economy.

- The technological boost to U.S. industry would begin to restore America's competitiveness and market dominance vis a vis Western Europe and Japan, and reduce vulnerability to countries that have organized to attain a monopoly on specialized technologies. Re-expansion of the U.S. market share in leading-edge manufacturing would create new jobs and reduce the trade deficit.

- The Development of innovative commercial technologies would also enhance the U.S. defense technology base which has become increasingly dependent on R&D derived from the civilian sector.

- The FSU military-industrial complex will be defused by profitable alternatives to the role of weapons supplier to the world.

- The Business relationships created by technology transfer could provide a basis for direct investment in FSU joint ventures as economic and legal conditions improve.

Benefits for the FSU

Significant advantages will also accrue to the FSU:

- The most productive scientific centers will remain intact, pressures to emigrate will lessen, and the political and technological basis for stabilizing and rebuilding will be strengthened.
- Technology transfer would yield immediate hard currency earnings without dependence on direct investment into the FSU, foreign credits or restrictive loans.
- Western high-quality hardware and components that are desperately needed for continued R&D could be purchased.
- Enterprises and institutes will gain much-needed experience in commercial transactions, thereby fostering the emergence of a skilled business and managerial community capable of functioning without interference from traditional layers of government and scientific functionaries.
- Decades of investment in scientific excellence and priceless technical resources will be preserved. The sale of advanced technologies and materials is a profitable alternative to

downgrading sophisticated manufacturing facilities to low-technology centers for turning out video recorders, construction bricks and umbrellas.

- Long overdue redirection of technologies into pollution control, nuclear decontamination, industrial modernization and land-use reclamation could result in new processes and technologies that could be sold abroad.

- The return of commercialized products, technologies and Western know-how to the FSU will accelerate the level of industrial capability significantly faster than any attempt to bootstrap development internally.

Conclusion

The chance for U.S. companies to acquire technical advances in areas of their own activity and expertise, in willing and eager partnership with FSU entities in the U.S. is fast disappearing.

The NAS warns that the window of opportunity for business alliances with the FSU may be closing rapidly. Firms in other countries are scrambling to acquire rights to the most attractive technologies before existing capabilities in the FSU erode to the point that they are no longer viable.

Only timely intervention by a bipartisan alliance of U.S. industry and government can transform the collapse of Soviet science into a catalyst for mutual growth.

March 19, 1992

George Locker and Arthur Castle are president and vice president of Techtrade Corporation, a N.Y. firm engaged in technology transfer. Lyudmila Alexandrova is the manager of the international department of Credobank in St. Petersburg.

670 West End Avenue
New York, New York 10025

212-496-0593

212-496-9857 fax

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9201428
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: MAGLICH, Bogdan C.: SYSTEM FOR ANEUTRONIC FUSION ENERGY

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 04/20/92

SUBJECT: HE IS FORWARDING A LETTER FROM DR. MALISHEV, SCIENCE
ADVISOR TO PRESIDENT YELTSIN, ASKING FOR DR.
BROMLEY'S SUPPORT FOR A U.S. RUSSIAN FUSION PROGRAM.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED:

ACTION STAFF
REQUIRED: AS NECESSARY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 05/04/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

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

OSTP RECEIVED: 04/22/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)
CENTRAL FILES:

1428

S.A.F.E. System for Aneutronic Fusion Energy

University-Industry Research Consortium

Advanced Physics Corporation - Corporate Lead Member

1050 University Tower • 4199 Campus Drive • Irvine, California 92715
Telephone: 714-854-6919 • Fax #: 714-854-3065

OSTP
MAIL ROOM April 20, 1992

Dr. Allan Bromley
Assistant to U.S. President
for Science and Technology Policy
The White House
Washington, DC 20500

Dear Allan:

During my stay in Moscow last week, Dr. N.G. Malishev, Advisor to President Yeltsin for Science and Higher Education, asked me to give you his warmest regards and the enclosed letter.

A group of Russian-American fusion physicists visited him on April 15, after a technical meeting with the Russian physicists from five institutes which, it seems, resulted in a major change in the Russian fusion research policy: abandoning the one-track approach to fusion.

Five Russian Institutes have formally joined S.A.F.E.: the Kurchatov Atomic Energy Institute, Moscow; The Budker Nuclear Physics Institute, Novosibirsk; High Current Electronics Institute, Tomsk; Institute of Electrophysics, Ekaterinburg; and Institute for Theoretical and Experiment Physics, Moscow.

The American delegation consisted of Norman Rostoker, Professor of Physics, University of California at Irvine, who you met; Lawrence Lidsky, Professor of Nuclear Engineering at MIT; Charles Powell, Principal Investigator for Plasma Physics, Stevens Institute of Technology; and myself.

On April 16, in a surprise move, Eugenyi Velikhov, the main proponent of the worldwide "tokamak only" research policy, agreed to the change in a meeting held with us and the Russian group led by Dr. Gennady Mesyats, Director of Institute of Electrophysics, Ekaterinburg (former Sverdlovsk) in the Urals, who visited your office with Sagdeyev, Rostoker and myself on February 7. Mesyats, too, is Vice-President of the Russian Academy of Science.

At the end of a confrontational exchange in Russian, between himself and the fusion physicists from his own Kurchatov Institute (while the Americans were silent), Dr. Velikhov stated that, while the broad international fusion program between Russia, USA, Western Europe and Japan should continue solely with the tokamak approach, the "national programs can have alternate methods." He was apparently referring to our program S.A.F.E. as a national program; it is a bilateral USA-Russian venture.

We believe that we can get the services of Russian scientists and technicians at an average annual cost of \$6,000 per person, including all overheads, i.e. we will need \$600,000/year.

We appreciate your interest in this revolutionary energy science and technology.

With best regards,
Sincerely yours,

A handwritten signature in blue ink, appearing to read "Bogdan C. Maglich". The signature is fluid and cursive, with the first name being the most prominent.

Bogdan C. Maglich

BOGDAN C. MAGLICH
PRESIDENT AND CHIEF SCIENTIST

ADVANCED PHYSICS CORP.
1050 UNIVERSITY TOWER
4199 CAMPUS DRIVE
IRVINE, CALIFORNIA 92715

*home before 7
12 noon ET* → **(714) 854-6919**
(714) 494-1705
FAX (714) 854-3065



**Государственный советник РСФСР
по делам науки и высшей школы**

Москва 103274
Краснопресненская наб., 2
Тел. (095) 205-53-96
Факс. (095) 205-53-96

State adviser on science and higher education
of Russian Federation

« 16 » April 1992 г.

№ _____

Dr. D. Allan Bromley
Assistant to U.S. President
For Science and Technology
The White House
Washington, DC
USA

Dear Professor Bromley,

A high level technical conference, organized by the Russian Academy of Science, between American and Russian fusion physicists, discussing the feasibility of a modern alternative approach to fusion power, just ended here in Moscow. The American group from the newly formed University-Industry research consortium S.A.F.E. (System for Aneutronic Fusion Energy) presented their 5 year program which is promising to lead to a compact, nonradioactive fusion energy technology.

Fusion experts from several leading Russian and USA institutes have concluded that while not without risk, the aneutronic concepts are scientifically sound.

These concepts involve modestly sized devices and short experimental time scales, and should therefore be tested in the laboratories of both countries, more or less along the lines of the program proposed by the University of California at Irvine and Advanced Physics Corporation.

High Current Electronics Institute at Tomsk and the Institute of the Electrophysics at Ekaterinburg are members of S.A.F.E. Subsequent to the technical conference the Kurchatov Institute, Moscow, the Budker Institute, Novosibirsk and Institute for Theoretical and Experimental Physics, Moscow, expressed their intention to participate in the consortium.

The American proposal is to have about 100 Russian scientists work on the program in Russia with the exchange of 5 scientists between the two countries.

I wish to emphasize that the Government of Russian Federation supports the pursuit of an alternative approach to fusion and this project, that originated from working scientists, in particular.

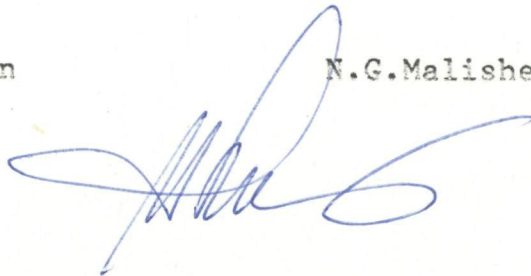
Such a program would also help in the transfer of defense oriented pulsed power technology to civilian application.

We would appreciate very much your help in its realization.
With thanks and best wishes.

Sincerely yours

Academician

N.G. Malishev



MALISHEV
SENT A SIMILAR
LETTER TO
REP. GEORGE
BROWN

Charlie B.

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9201402
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: HEAD, James W. III: BROWN UNIVERSITY

TO: DR. D.A. BROMLEY

John D'Neil

DATE OF
CORRESPONDENCE: 04/10/92

SUBJECT: HE IS WRITING REQUESTING INFORMATION ON AID TO
SCIENTISTS IN THE FORMER SOVIET UNION.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED: *National Security*

ACTION STAFF
REQUIRED: DOR DAB'S SIGNATURE ACTION:

SENDER'S DUE DATE: 05/04/92 STAFF DUE DATE *Action Complete*
DATE COMPLETED: DATE COMPLETED/DEPT: *6/22*

COPIES TO: D. Allan Bromley

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

Copy of letter signed by DAB is attached.

OSTP RECEIVED: 04/20/92 DEPT RECEIVED:
FILE: *p* INTERNATIONAL-USSR (FORMER)
CENTRAL FILES:





BROWN UNIVERSITY

Providence, Rhode Island • 02912

DEPARTMENT OF GEOLOGICAL SCIENCES
401 863-2526, 2417, 3338

RECEIVED
APR 20 P 2 50

OSTP
MAIL ROOM

April 10, 1992

Dr. D. Allan Bromley
Assistant to the President for Science & Technology/Director
Old Executive Office Building
Washington, DC 20506

Dear Dr. Bromley:

For the past decade we have been working closely with space scientists from the former Soviet Union under institution-to-institution agreements between Brown University and the Institute for Space Research, and the Vernadsky Institute, the two major space science institutes of the former Soviet Academy of Sciences. These interactions have been successful, highly productive, and mutually beneficial.

I have been following with interest the reports of the workshop of March 3rd on possible mechanisms to aid scientists in the former Soviet Union and I would appreciate any information that your office could provide on the recommendations of the panel and opportunities to be of help.

Sincerely,

James W. Head, III

James W. Head, III
James Manning Professor of
Geological Sciences

JWH/mem

Chrono

THE WHITE HOUSE
WASHINGTON

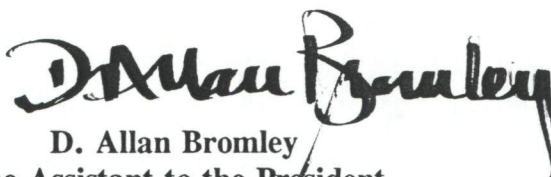
June 22, 1992

Dear Professor Head:

Thank you for your recent letter on institution-to-institution linkages between Brown University and the Institutes for Space Research, and the Vernadsky Institute in Russia. I am heartened to learn of the success and benefits of these linkages and would be interested in a short description of the program.

I am also pleased to hear of your interest in the workshop on "Reorientation of the Research Capability of the Former Soviet Union." Enclosed is a copy of the report on that meeting. I hope you will find it interesting and useful.

Sincerely yours,



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

Professor James W. Head, III
Department of Geological Sciences
Brown University
Providence, Rhode Island 02912

Enclosure

Logged
Charlie B.

"Document Control"

TYPE: ACTION
ORIGINATOR: 02 STATUS I DOCUMENT NUMBER: 9201135
DIRECTORATE STATUS

FROM: BERRY, R. Stephen: UNIVERSITY OF CHICAGO

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 03/31/92

SUBJECT: HE IS FORWARDING HIS IDEAS ON NUCLEAR POWER PLANTS
IN THE FSU, AND ASKS FOR DR. BROMLEY'S ADVICE.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED: JFO

ACTION STAFF
REQUIRED: FOR DAB'S SIGNATURE ACTION: For DAB's Signature

SENDER'S DUE DATE:
OSTP DUE DATE: 04/20/92 STAFF DUE DATE 4/20
DATE COMPLETED: DATE COMPLETED/DEPT: 6/25/92

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

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

*Copy of reply prepared by John O'Neil
is attached.*

OSTP RECEIVED: 04/06/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR
CENTRAL FILES:

1135 A

R. Stephen Berry
Department of Chemistry and the James Franck Institute
The University of Chicago
5735 South Ellis Avenue
Chicago, Illinois 60637
Electronic Mail: BERRY@RAINBOW.UCHICAGO.EDU

92 APR 6 4 42

31 March 1992

Dr. D. Allan Bromley
Assistant to the President for Science and Technology
Executive Office of the President
The White House
Washington, D. C. 20500

OSTP
MAIL ROOM

Dear Allan:

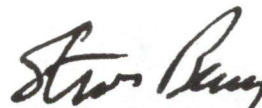
After the meeting at the National Academy concerning the future of the science enterprise in the "FSU" (which I hope was helpful to you), I had some thoughts that I've raised with some of the people here and would now like to pass on to you. These notions go well outside the sphere of the science and technology community. I am coming to you for your judgment and, if the ideas merit further exploration, for advice about where and to whom to go next.

The issue is the former Soviet Union's electrical generation system. We have been impressed—or depressed—about the number of Chernobyl-type power stations whose owners can afford neither to repair nor replace them. Yet we also know what a potential danger every one of them is. Would it not be to everyone's benefit if those power stations were replaced by safe, modern generating stations? The notion that I've been discussing with people such as Alan Schriesheim and Stuart Rice, and have written about to Senator Simon and a couple of people at the NAS, is this: would it be conceivable that the United States and other nations, particularly those threatened by any future Chernobyl-like accident and with technology to build modern power plants, and possibly institutions such as the World Bank, make loans to the former Soviet States for the specific purpose of replacing the Chernobyl-type plants as rapidly as feasible? I envision long-term loans, perhaps loans whose repayment would not begin until after 20 or 25 years. Furthermore, a suggestion Stuart Rice made was that the contracts for the new plants might divide the work between the recipient country and the lending country, so that employment would be stimulated in both. In my view, it would not make much difference whether the new plants use gas or nuclear energy, and I'd think of starting with the supposition that the people whose plants they would be are the people who should make the choice. But this gets into second-level details that should probably be examined only after the idea is considered for its overall worth.

Perhaps the notion is so obvious that it is already being discussed in Washington. If so, I'd be pleased and relieved. If not, and if it is flawed in a way I have missed, I would like to know. But if it might have merit and be worth exploring, I would be delighted to do what I can to help it along. Alan Schriesheim suggested that Henry Linden might be helpful in discussing it, and I'll try to reach him. People from Bechtel, Fluor, Mitsubishi and other power plant builders would clearly be interested, but wouldn't the idea be much more acceptable and plausible if it comes from those with only a diffuse, long-term self-interest, rather than those who would profit most directly? Hence I would, perhaps naively, avoid those firms until others have thought the idea through.

In any event, if you wish to carry this forward, please do. If you think I should take it to specific people, I'd appreciate that advice. It seems to me that "if it were done, 'tis best that it be done quickly."

Hoping to see you at the NAS garden party,


R. Stephen Berry

THE WHITE HOUSE

WASHINGTON

June 22, 1992

Steve
Dear Professor Berry:

Thank you for your letter on replacing Chernobyl-type power plants in the former Soviet Union. I agree with your sense of priority for this issue. The problem, as you note, is funding. I fear at this point that the Former Soviet Union countries are preoccupied with a very broad spectrum of pressing problems, all of which require large infusions of capital for their solution. I would repeat, though, that I share your concern regarding the safety of the Chernobyl-type reactors.

I have forwarded a copy of your letter to Ambassador Robert Gallucci at the Department of State. In late April 1992, Deputy Secretary of State Eagleburger appointed Ambassador Gallucci to be Coordinator for U.S. activities aimed at improving the safety of civilian nuclear power plants in the former Soviet Union. Ambassador Gallucci had been the Senior Coordinator on Soviet Scientists, a position he retains, and has led U.S. efforts to establish the International Science and Technology Centers in Moscow and Ukraine. At this time, I believe Bob Gallucci's office is the proper place in Government to consider your proposal.

As you mentioned, the meeting at the National Academy of Sciences on March 3, 1992, has been immensely helpful. The report of that meeting, entitled "Reorientation of the Research Capability of the Former Soviet Union," is a best seller. I trust that you have received a copy through your position on the Scientific Advisory Committee on the U.S.S.R. and Central Europe. This report will serve as the basis of our future efforts to assist our colleagues in Russia and the other newly independent states.

Thank you again for your letter. I hope you have an enjoyable summer.

Sincerely yours,



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

Professor R. Stephen Berry
Department of Chemistry
The University of Chicago
Chicago, Illinois 60637

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9201338
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: ILYUSHCHENKO, V.I.: JOINT INSTITUTE FOR NUCLEAR RESEARCH

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 03/30/92

SUBJECT: HE IS WRITING TO SEEK ASSISTANCE WITH THE
DEVELOPMENT OF HIS INVENTION.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED:

ACTION STAFF
REQUIRED: DIRECT REPLY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 04/27/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES
LIFE SCIENCES

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

OSTP RECEIVED: 04/13/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

RECEIVED

SIR:

92 APR 13 PM 2:00

You know that any experiment can be described by
a standard integral equation like

OSTP
MAIL ROOM

$\int a(x,s)t(s)ds = f(x) + n(x)$, where $a(x,s)$ - the
apparatus function, $t(s)$ - a true spectrum,
 $f(x)$ - a measured spectrum and $n(x)$ - an additive
noise (error) component. Almost 99.9% of all past
and present experiments result only in a smeared
output, i.e. $f(x) + n(x)$. This is mainly due to
the well-known fact that any inverse problem for
the above fundamental equation is mathematically
unstable, i.e. it cannot be solved at all. On the
other hand, the vast majority of the existing solution
techniques are valid only for a relative r.h.s error
 $E(x) = n(x)/f(x) \leq 1.0\%$.

After many years of the concentrated research
efforts I succeeded in solving this unstable inverse
problem in general. The last tests were performed
for low Poisson statistics samples with $E(x) = 5-100\%$.
However, my approach retains much more powerful
possibilities. You can evaluate some potential
effects yourself.

However, the local economic and managerial chaos precludes any effective applications of my software.

I am working now at JINR (Dubna) in the domain of physical data processing, but I am sure that one of the most effective applications can be found in the computer tomography of brain (or any other cancerogenic) tumors, i.e. in reconstructing the relevant images.

I am ready to collaborate with any USA or UNO body interested in such a research.

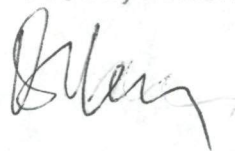
Please, help me to begin any practical implementation of my invention.

I am 52 years old, my first profession deals with experimental physics, my second one concerns translation and book reviewing (English, Japanese, French etc).

I met you many times here, in Dubna, during International Conferences on Heavy Ion Physics. Some years ago I translated a chapter for Heavy Ion Handbook under your editorship.

Sincerely yours, V.I.Ilyushchenko.

290392.2vii.



JOINT INSTITUTE FOR NUCLEAR RESEARCH

Head Post Office P.O.Box 79

Moscow U.S.S.R.

Dear Sir,

I would greatly appreciate receiving (pre) reprint of your article entitled.....

.....
*which appeared in and any other
papers of similar nature.*

I would consider it a favour to be placed on your mailing list for other papers.

Yours sincerely V.I. ILYUSHCHENKO, Ph.D.

→ Charlie B.
FYI

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9201425
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: MALYSHEV, N.: ADVISOR ON SCIENCE AND HIGHER EDUCATION, RUSSIA

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 03/29/92

SUBJECT: HE IS WRITING TO ASK DR. BROMLEY FOR INFORMATION ON
THE STRUCTURE, FUNCTIONING, AND POWERS OF THE OSTP
STAFF.

DIRECTORATE STAFF
ASSIGNED: INTERNATIONAL/POLICY ASSIGNED: *John O'Donnell*

ACTION STAFF
REQUIRED: FOR DAB'S SIGNATURE ACTION: *Letter sent - Copy attached*

SENDER'S DUE DATE:
OSTP DUE DATE: 05/06/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT: *9/4/92*

COPIES TO: D. Allan Bromley

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

OSTP RECEIVED: 04/22/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:



THE WHITE HOUSE
WASHINGTON

September 4, 1992

Dear Dr. Malyshev:

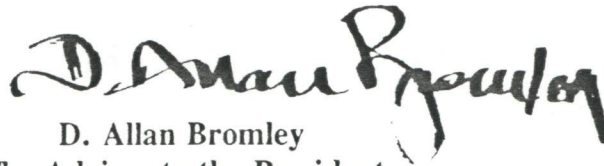
Congratulations on your appointment as an advisor on science and higher education to President Yeltsin. I am pleased to respond to your request for information on the structure and responsibilities of the Office of Science and Technology Policy (OSTP). Enclosed you will find copies of a descriptive brochure on OSTP as well as our latest biennial report. Beyond this written information, a meeting between members of our staffs could be useful. Perhaps I could suggest working through our Science Counsellor in Moscow, Mr. Bob Clarke, should additional information be desirable.

I was encouraged to learn of your successful interaction with the American Society of Engineering Education (ASEE). Dr. Thomas Ratchford participated in an important ASEE conference dealing with the former Soviet Union earlier this year, and I have recently met with members of the Society and learned in greater detail of their efforts. Since so many activities with Russian scientists, engineers, and educators are carried out by private sector organizations in America, such as the ASEE, I believe interactions such as this offer the best opportunity for beneficial interactions between our two countries.

In your letter, you also mentioned a proposal for a "Volga-Mississippi" program. I suspect that many colleagues in the private sector would find benefit in such a program. However, under our system, it would be inappropriate for government officials to participate.

I am entrusting this correspondence to Bob Clarke to carry it personally to Moscow, and personally deliver it to you. Please do not hesitate to avail yourself of the opportunity of his presence in Moscow in the future. I wish you every success in your new responsibilities.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "D. Allan Bromley". The signature is fluid and cursive, with the first name "D." and last name "Bromley" clearly distinguishable.

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

Dr. Nikolai Malyshev
Counsellor to the President
for Science and Technology
Russian Federation
The Kremlin
Moscow, Russia

Enclosures

1425

Mr.A.Bromley
Adviser to the President
of the United States of America,
White House, Washington,D.C.

Unofficial translation

RECEIVED

92 APR 22 49:59

OSTP
MAIL ROOM

Dear Mr. Bromley,

I would like to inform you that last November President of Russia B.Eltsin nominated me an adviser on science and higher education. Thus I happened to become your colleague in the sphere as well as in posting. I would be very gratefull if you would find the possibility to share your experience in the field and advise me on the structure, functioning and powers of your staff.

During meetings last year with members of American Society for Engineering Education visiting Russian Assosiation of technological institutes headed by prof.Boris Mitin we proposed to organize regular meetings/conferences of Russian and American heads of higher educational institutions to facilitate the exchange of views and experience in the field . From our point of view a special program could be devised which could be named "Volga-Missisipi". In 1993 we are ready to invite 50-60 heads of such institutions (together with wives) for a cruise down the Volga from Moscow to Volgograd. During the trip the participants would have a chance of visiting major scientific and educational centers of Russia (Nizhnii Novgorod, Kazan, Saratov, Samara, Volgograd) where seminars, public meetings and visits to Universities and research centers would organized. Expences for this project (except airfare to and from Moscow) would bear the Russian side. A similar trip down Missisipi could be organized in 1994. Our American friends were very enthusiastic about this idea.

I would request you, Mr.Bromley, to look into this proposal and render your valuable assistance towards fullfilment of this idea.

Yours Truly,

N.Malyshev

ГОСУДАРСТВЕННЫЙ СОВЕТНИК
РОССИЙСКОЙ ФЕДЕРАЦИИ
ПО ДЕЛАМ НАУКИ
И ВЫСШЕЙ ШКОЛЫ

«31» марта 1992г.

№ НМ-28-49

г. МОСКВА

Белый Дом, Вашингтон, Д.С.
Советнику Президента Соединенных
Штатов Америки
господину А.Бромли

Уважаемый господин Бромли!

Хочу поставить Вас в известность, что в ноябре месяце прошлого года Президент России Б.Ельцин назначил меня Государственным советником Российской Федерации по делам науки и высшей школы. Таким образом, сейчас я являюсь Вашим коллегой как по должности, так и по сфере деятельности. Был бы Вам весьма признателен, если бы Вы могли познакомить меня с опытом Вашей работы, включая структуру, функции и полномочия Вашего аппарата. Если это возможно, просил бы передать мне информационные материалы по этому поводу.

В прошлом году, встречаясь с членами американской ассоциации инженерных вузов, которые были гостями аналогичной ассоциации российских институтов, возглавляемой профессором Борисом Митиным, мы высказали идею проведения регулярных встреч американских и российских ректоров в форме конференций сотрудничества и обмена опытом. На наш взгляд, можно было бы разработать специальную программу, условно назвав ее "Волга-Миссисипи". Мы предлагаем в 1993 году пригласить по 50-60 ректоров американских и российских институтов и университетов (по их желанию с женами) и провести круиз на теплоходе по реке Волга от Москвы до Волгограда с остановками в крупных вузовских и научных центрах России (Нижнем Новгороде,

Казани, Саратове, Самаре и Волгограде). Во время этих остановок будут проводиться семинары, знакомство с вузами и научными центрами, встречи с общественностью. Вся программа рассчитана на 15-18 дней. Расходы по ее проведению (кроме оплаты авиационных билетов) возьмет на себя российская сторона. Аналогичная акция могла бы быть осуществлена в 1994 году в США на реке Миссисипи. Наши американские коллеги воспринимают этот проект с большим энтузиазмом.

Прошу Вас, уважаемый господин Бромли, поддержать идею проекта и, по возможности, помочь в его осуществлении.

Искренне Ваш,



Н. МАЛЫШЕВ

"Document Control"

TYPE: INFORMATION

DOCUMENT NUMBER: 9200961

ORIGINATOR: 02

STATUS C

DIRECTORATE STATUS

FROM: BACKUS, BERS, BOREL, DYNKIN, et al

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 03/20/92

SUBJECT: FINANCIAL SUPPORT TO SCIENTISTS IN THE FORMER USSR.

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
INTERNATIONAL/POLICY
John O'Neil

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

OSTP RECEIVED: 03/25/92 DEPT RECEIVED:
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CENTRAL FILES:

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Harvard University
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Mount Sinai School of Medicine

Affiliation for identification purposes only.
*Nobel Laureate

Committee of Concerned Scientists, Inc.

53-34 208th Street

Bayside, N.Y. 11364

Tel. (718) 229-2813

CO-CHAIRMEN
Joel L. Lebowitz
Rutgers University
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National Institutes of Health

Dorothy Hirsch
Executive Director

March 20, 1992

92 MAR 25 AM 11:25

Dr. D. Allan Bromley
Assistant to the President for Science & Technology
Office of Science & Technology Policy
Old Executive Office Building
Washington, D.C. 20500

Dear Dr. Bromley:

We are writing in connection with the ongoing discussion of providing financial support to scientists in the former USSR. We strongly favor extending such support to scientists in the CIS but we have grave concerns about its possible use to perpetuate discriminatory practices.

In particular, we would like to recommend close scrutiny of any proposed help to the V.A. Steklov Institute of Mathematics. Despite its denials of anti-Semitic discrimination, the Institute has a long record of such practices. For example, the proportion of Jewish members of the Institute is minuscule compared with the proportion of Jewish mathematicians and physicists throughout Russia and the Commonwealth.

Further evidence is provided by Academician Sergey Novikov in a recent memoir on Mikhail Leontovich. Novikov is a member of the Steklov inner circle and a mathematician who is highly regarded in the West. Here are two quotations from his memoir:

"Regrettably, we have to admit that it was mathematics itself that became a source of an odious climate later, thanks to Vinogradov and those scientific administrators and scientists on whom he had a significant corrupting influence."

"Even though Vinogradov helped in my election to become a Corresponding Member [of the Academy] in 1966, he could not reeducate me (but he did his best to provoke me to commit some anti-Semitic actions or other actions of an unscrupulous nature, to make a 'politically correct member of society' out of me and had pretty disgusting conversations with me)."

We believe that there is a danger that the discriminatory practices of the Steklov Institute will continue because its present administration holds deeply ingrained anti-Semitic views.

We therefore urge that before the United States provides funds it should insist that the Institute show good faith in both word and deed. Steklov should renounce its previous practice of discriminating against Jewish candidates and act decisively to reverse it.

Monitoring should be provided by our community of senior scientists (some of them originally from the USSR) who could be asked to oversee how our money is being spent, thus precluding future lapses.

We thank you for your kind consideration of our concerns.

Sincerely yours,

(signed)

John Backus
Lipman Bers
Armand Borel
Eugene Dynkin
Herbert Hauptman
Samuel Karlin
Harry Kesten
Peter Lax
Joel Lebowitz
John McCarthy
Barry Mazur
George Mostow
Louis Nirenberg
Lawrence Shepp
David Slepian
Shmuel Winograd

All of the above are members of the U.S. National Academy of Sciences, Sections of Pure or Applied Mathematics.

"Document Control"

TYPE: ACTION

DOCUMENT NUMBER: 9201254

ORIGINATOR: 02

STATUS I

DIRECTORATE STATUS

FROM: OSIPOV, Yuri: RUSSIAN ACADEMY OF SCIENCES

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 03/18/92

SUBJECT: HE IS WRITING OUTLINING SEVERAL PROBLEMS THE ACADEMY
IS FACING AND ASKS FOR DR. BROMLEY'S ASSISTANCE.

DIRECTORATE

STAFF

ASSIGNED: INTERNATIONAL/POLICY

ASSIGNED:

ACTION

STAFF

REQUIRED: AS NECESSARY

ACTION:

SENDER'S DUE DATE:

OSTP DUE DATE: 04/24/92

STAFF DUE DATE

DATE COMPLETED:

DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
NATIONAL SECURITY
PHYSICAL SCIENCES

WHITE HOUSE TRACKING #:

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REMARKS:

OSTP RECEIVED: 04/10/92

DEPT RECEIVED:

FILE: P-INTERNATIONAL-USSR (FORMER)

CENTRAL FILES:

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
05a. Letter	To: Allan Bromley From: Yuri Osipov Re: Russian Academy of Sciences [English translation] (2 pp.)	4/10/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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]
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(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

Withdrawal/Redaction Sheet

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Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
05b. Letter	To: Allan Bromley From: Yuri Osipov Re: Russian Academy of Sciences [Russian] (3 pp.)	4/10/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files - Country Files
WHORM Cat.:
File Location: International: USSR [1 of 2] [1992]

Date Closed:	5/10/2010	OA/ID Number:	62067-008
FOIA/SYS Case #:	2005-0336-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]

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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