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# WITHDRAWAL SHEET

## Ronald Reagan Library

**Collection Name** MATLOCK, JACK: FILES

**Withdrawer**

JET 5/9/2005

**File Folder** FREDKIN COMPUTER EXPORTS TO THE USSR

**FOIA**

F06-114/7

**Box Number** 26

YARHI-MILO

2601

ID	Doc Type	Document Description	No of Pages	Doc Date	Restrictions
9835	CABLE	083209Z SEP 81 <b>R 7/7/2008 NLRRF06-114/7</b>	2	9/8/1984	B1
9836	MEMO	MATLOCK TO MCFARLANE RE SAKHAROV, FREDKIN, AND PC'S TO USSR	2	9/6/1984	B1
9838	LETTER	MATLOCK TO FREDKIN	1	ND	B1
9837	MEMO	MATLOCK TO MCFARLANE RE SAKHAROV AND FREDKIN	2	9/24/1984	B1
9840	MEMO	SIMONS TO MATLOCK RE REPLY FROM FREDKIN <b>R 7/7/2008 NLRRF06-114/7</b>	1	9/11/1984	B1
9839	PAPER	USSR-COMPUTERS <b>PAR 5/7/2013 F2006-114/7</b>	5	ND	B1 B3

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 concerning wells [(b)(9) of the FOIA]

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

File! (New File)

Fredkin / Sahharov

**National Security Council  
The White House**

2

System # \_\_\_\_\_

Package # \_\_\_\_\_

	SEQUENCE TO	HAS SEEN	DISPOSITION
Paul Thompson	_____	_____	_____
Bob Kimmitt	1	K	_____
John Poindexter	_____	_____	_____
Tom Shull	_____	_____	_____
Wilma Hall	_____	_____	_____
Bud McFarlane	_____	_____	_____
Bob Kimmitt	_____	_____	_____
NSC Secretariat	_____	_____	_____
Situation Room	_____	_____	_____
Matlock	2	_____	A

I = Information	A = Action	R = Retain	D = Dispatch	N = No further Action
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cc: VP Meese Baker Deaver Other \_\_\_\_\_

COMMENTS

Should be seen by: \_\_\_\_\_  
(Date/Time)



WHSR  
ROUTE SLIP



Time Stamp

3

STAFF	C/O
McFarlane	C
Poindexter	C
Kimmitt	C
Shull	
MURPHY	C
GREGG	C
MATLOCK	C
Thompson	
Merchant	
NSC S/S	

BUD M

Matlock  
followed  
up ops

LDX

Approval: \_\_\_\_\_

C : Copy

O : Original

August 25, 1984  
Kennebunkport, ME

4

## MEMORANDUM FOR RECORD

FROM: Bill Eckert *WDE*

SUBJECT: Telephone Call, 0920 EDT, Sat 25 Aug 84  
Vice President George Bush to Mrs. Tanya Yankeleyevich (sp?),  
daughter of Elaina Bonner. Her phone # in Mass. is (617) 964-8528.

AUG 25 AID: 57

At the request of Gordon Zacks (by phone Aug 25), the Vice President called Tanya to receive a request from her. After noting that there is a letter coming to the Vice President from the family, she asked for advice on the following situation.

A Dr. Fradkin will depart the US today or tomorrow for Moscow at the invitation of the Soviet Academy of Sciences. He is a Ph.D. in computer science, a professor at MIT, and owner of a flourishing computer business. He would like to know if the Administration would like for him to ask if the Soviets are interested in obtaining anything from the US in exchange for Sakharov.

The Vice President told Tanya that the Administration has, through other channels, tried to determine what it would take for the Soviets to free Sakharov. Noting that President Reagan and he are very concerned, the Vice President said he would get on the phone and see what kind of Administration reply might be appropriate for Tanya and Dr. Fradkin.

Tanya said, "I do not think it would be wise to give the Soviets a definite impression of what would be available to them, but just to tell Dr. Fradkin that it would be all right for him to ask the Soviets what they might want in return."

Tanya said Fradkin lives in Massachusetts near her. His home phone is (617) 277-4444. "If he has left for Moscow already, surely the US Embassy there could contact him if necessary."

Tanya said she would appreciate knowing what is done. The Vice President thanked her for her suggestion and said an appropriate person would let her know.

The Vice President then asked her what she thought of the recent release of photos of the Sakharovs. She replied that this indicates the Soviets are susceptible to pressure, which is good.

The Vice President called Bud McFarlane at 0940 to pass along this information, asking that a knowledgeable person call Tanya back this morning. The Vice President wants me to tell him how it worked out, but does not wish to make follow-up calls himself.

Copy to: Bud McFarlane  
Admiral Murphy  
Don Gregg



DECLASSIFIED

6677

NLRR 606-714/7 #9835

~~CONFIDENTIAL~~

~~File 5~~  
~~OUTGOING~~

BY CW NARA DATE 7/7/08 WHITE HOUSE SITUATION ROOM

PAGE 01 OF 02 THE WHITE HOUSE 6966  
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TOR: 252/2036Z

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TO AMEMBASSY MOSCOW

INFO SECSTATE

~~CONFIDENTIAL~~ WH06966

TO CHARGE KAMMAN FROM AMBASSADOR JACK MATLOCK

PLEASE CONVEY FOLLOWING MESSAGE TO EDWARD FREDKIN FROM ME:

QUOTE  
DEAR EDWARD:

THANK YOU FOR THE MESSAGE REGARDING YOUR TALKS IN MOSCOW.

YOUR REPORT ON YOUR CONVERSATIONS WITH THE ACADEMY OF SCIENCES WAS MOST INTERESTING, AND I THINK YOUR COMMENTS ON THE FUTURE IMPLICATIONS OF THE INTRODUCTION OF LARGE NUMBERS OF MICROCOMPUTERS INTO SOVIET SOCIETY ARE QUITE PERSUASIVE. THE QUESTION OF EXPORT LICENSING OF MANUFACTURING FACILITIES, SHOULD IT ARISE IN THE FUTURE, WOULD OF COURSE REQUIRE DETAILED EXAMINATION IN THE U. S. GOVERNMENT. HOWEVER, ULTIMATE APPROVAL IS CERTAINLY NOT BEYOND THE REALM OF THE POSSIBLE. OBVIOUSLY, ANY DECISION ON A MAJOR QUESTION OF THIS SORT WOULD BE INFLUENCED BY THE OVERALL POLITICAL RELATIONSHIP AT THE TIME. WHILE I DO NOT WISH TO IMPLY ANY SORT OF DIRECT LINKAGE, IT IS CLEAR THAT THE SAKHAROV SITUATION DOES HAVE A BEARING ON THE POLITICAL CLIMATE, AND A HUMANITARIAN RESOLUTION OF THAT TRAGIC SITUATION WOULD CONTRIBUTE TO ITS IMPROVEMENT. I WOULD HOPE THAT THIS POINT IS UNDERSTOOD BY YOUR SOVIET INTERLOCUTORS.

AS FOR YOUR SPECIFIC REQUEST, WE WOULD LIKE TO BE HELPFUL IF WE COULD, GIVEN OUR SHARED INTEREST IN RESOLVING THE SAKHAROV TRAGEDY. HOWEVER, IT SEEMS CLEAR THAT ANY EXPLICIT OR IMPLICIT COMMITMENT TO GIVE SPECIAL TREATMENT TO AN EXPORT LICENSE APPLICATION WOULD RAISE SERIOUS LEGAL QUESTIONS. WHETHER OR NOT A PROFIT IS INVOLVED IN THE TRANSACTION, IT COULD BE DEEMED IMPROPER FOR ANY USG OFFICIAL TO GIVE ASSURANCES OF PREFERENTIAL TREATMENT, AND FOR THIS REASON NEITHER I NOR ANYONE ELSE CAN DO SO.

MY UNDERSTANDING OF THE STATUS OF REVISION OF EXPORT LICENSE REGULATIONS IS AS FOLLOWS. THE JULY DECISION OF COCOM STILL MUST BE FORMULATED IN REGULATIONS, AND THERE WILL BE A MEETING OF COCOM COUNTRY REPRESENTATIVES SHORTLY TO COORDINATE DRAFTING LANGUAGE. SUBSEQUENTLY, IT WILL BE THE RESPONSIBILITY OF EACH COUNTRY TO REVISE ITS OWN REGULATIONS. THIS ENTIRE PROCESS IS EXPECTED TO BE COMPLETE BEFORE THE END OF THE YEAR. THE SPECIALISTS WORKING ON THE MATTER ANTICIPATE THAT, WHEN THE REGULATIONS ARE REVISED, LICENSES FOR EXPORT OF THE IBM PC-XT TO THE SOVIET UNION WOULD BE AVAILABLE TO VENDORS BY PROMPT AND ROUTINE APPROVAL.

WE APPRECIATE YOUR EFFORTS TO MAKE REPRESENTATIONS ON BEHALF OF SAKHAROV AND TRUST YOU WILL UNDERSTAND THE CONSTRAINTS WHICH MAKE IT IMPOSSIBLE TO GIVE THE SORT OF SPECIFIC ASSURANCE YOU HAVE REQUESTED. NEVERTHELESS, THE PROGNOSIS IS THAT THE TRANSACTION YOU CONTEMPLATE SHOULD BE POSSIBLE WITHOUT UNDUE DELAY IF NORMAL PROCEDURES ARE FOLLOWED.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~  
WHITE HOUSE SITUATION ROOM

6  
OUTGOING

PAGE 02 OF 02 THE WHITE HOUSE 6966 DTG: 082109Z SEP 84 PSN: 075845

SINCERELY,

JACK

END QUOTE  
DECL. OADR

BT

~~CONFIDENTIAL~~



Dear Jack:

I have had many fruitful meetings with Velikhov and I am making very good progress in general. Velikhov heard my message with regard to the Sakharov situation and he seemed sympathetic to the ideas that I brought from Washington. He agreed immediately to bring these ideas to the attention of those persons in the government who could act on such problems. He has been hampered by two problems. First, as a simple practical matter, at the end of August, most of the people he would have liked to have contacted were away on vacation, but they will be back early in September. Second, with those he did get to, he encountered "pessimism". It seems that there is an "after you Alfonse" problem. Who is it that takes the first step? In my opinion, your call to me might be called a first step, but I am afraid that it may not be concrete enough for them. I am leaving today for Bratislava and Budapest and then back to Moscow on the 7th of September. I hope that when I get back to Moscow, people will be back from vacation, and that a meeting will be arranged for me to speak to some very senior person about the Sakharov situation.

I have made progress on the PC (Personal Computer) question. They seem to be actively proceeding on a path that would lead them to want to acquire several billions of dollars of non-strategic equipment in the PC area. Most of this business could go to the USA. As I explained to you on the phone, the introduction of millions of PC systems into the USSR, each with the ability to easily copy documents from one floppy disk to another and each with a printer, will result in changes in the USSR with regard to official attitudes about allowing citizens to print and make copies. Today, everything that prints or that makes copies (like a xerox machine) must be registered and controlled. As you know, the result is a dearth of copying machines in the USSR. The program being envisioned by the Academy of Sciences would absolutely bring the freedom of printing and copying to millions of Russians, to an extent that would be impossible to control. It is my considered opinion that a Soviet program to distribute millions of PCs should be in line with the long range strategic goals of the U.S. vis-a-vis the USSR.

In order to better evaluate the PC concept, they have asked me to request permission from the U.S. government for the immediate acquisition of 100 IBM-PC-XT systems. My company, Fredkin Enterprises, would buy these systems, along with accessories and software, and resell them to an agency of the USSR Ministry of Trade. These systems would be used in a project aimed at helping them to gain a better understanding of



the value of spending a few billion dollars for PCs. The IBM-PC-XT is the model currently in use in the USSR, in such places as the Academy of Sciences Moscow computation center. That institute has about 10 PCs now, most of which are IBM-PC-XT models, and they are planning to acquire another 20 XT's in the near future. Velikhov has an XT at home, and others have them. I have shown Kamman, at the U.S. Embassy, photos I have taken of IBM-PC-XT systems in use. These systems are easily obtained. Someone goes into a European computer store, buys them, and brings them back to the USSR. The point is, if there are any secrets in the XT, they already know them. In addition, IBM has already announced the IBM-AT which is a new and advanced personal computer that replaces the XT. Customer delivery of the IBM-PC-AT systems starts this month. At this time, the IBM-XT does not represent the forefront of PC technology.

I have a request. Instead of having the USSR purchase the models of the IBM-XT by clandestine methods, why not throw them a bone, and let them obtain them on a legitimate basis? If the U.S. could react very quickly, with a positive response to this small Soviet desire, I think that that gesture would break the ice and allow me to have a constructive meeting on the Sakharov situation. The Ministry of Trade has before it a business proposal from me covering the steps involved in moving towards the acquisition from the West of a great many computers and a factory to make personal computers, and the total value of this deal would be several billions of dollars.

While it has been proposed that my firm make a substantial profit on the sale of these 100 sample PC systems, it may make sense for me to forego that profit. I do not want to be viewed as using the Sakharov situation as way to make a profit. If the U.S. can react quickly, and allow me to use that quick reaction as a gesture that allows for progress on the Sakharov situation, then I will propose to the USSR that the deal be done with no profit or fee, or that the profit be used for some constructive purposes with regard to East-West problems.

My specific proposal is as follows. When I return to Moscow on the 7th, I would like to be able to obtain a piece of paper from the U.S. Embassy that enables me to report that there is an excellent chance that the U.S. may grant very rapid (within days or weeks) approval for the sale of the 100 sample systems. This information could come from you or some other appropriate person in Washington. This possibility should not be contingent on the immediate political situation. I will then emphasize that this rapid and positive step by the highest levels of the U.S. administration warrants giving me a serious

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hearing with regard to the Sakharov situation. I believe that the result would be a meeting with the possibility that they may listen and react positively to the information that you gave to me.

My family and I will be in Bratislava starting this evening, until the 4th, then we will go to Budapest, returning to Moscow on the 7th. In Bratislava, I can be reached through the the Academy of Sciences, care of Prof. Ivan Plander. In Budapest, we will be staying at the Hyatt Atrium Hotel, and I will contact the U.S. Embassy there. In Budapest I will be visiting with Prof. Tibor Vamos, of the Academy of Sciences.

I realize that I am making an unusual request, and asking that something be done rapidly that would normally take time. Because of the July COCOM decision, it seems clear that the USSR will be able to buy such PC systems from various vendors in many different countries. They currently are taking deliveries of an even more sophisticated PC system that is made in Australia. Therefore the cost to the U.S. of a quick, positive reaction would be very small; the benefit could be large. I don't think it would be wise to haggle over the details of these 100 systems, we should either decide to do it now, or to not react and to let the order wend its way through the normal Department of Commerce procedures. I believe that the only favour they are asking is to accomplish the acquisition of these systems quickly and in a legitimate way, instead of slowly or in an illegitimate way. Why shouldn't we grant them this simple request, and see if that step leads to another?

Best Regards,

Edward Fredkin



A Concerned Citizen  
Planet Earth

13 September, 1984

To whom it may concern  
USSR, Moscow

To whom it may concern  
Washington, USA

The world is rapidly plunging towards a terrible fate, which may involve the destruction of a majority of mankind, and the fruits of thousands of years of civilization. Why? That is a question that deserves an answer.

Every creature that lives on this planet has a will to survive. Yet, no creature survives beyond its normal life span because all creatures are mortal. While we may want to live forever, it is certain that we will all die someday. Under the best and most peaceful of circumstances, we can expect that every one now alive on this planet will be dead by the year 2150.

Every species of creature on this planet has survived for thousands of years and also has the ability to survive for thousands of years into the future. Yet no species has the will to survive, because a species cannot have a will of its own. If mankind manages to continue surviving on this planet, it will not be a matter of the will of our species, but because of the will of the individuals who wish to have mankind survive. I and others like me, who want to survive, to have others survive, to have our species survive must express our will against all forces that threaten that survival. We need not care if one man so wants to win that he puts winning ahead of his own survival. We all must care when some want to win, to have their nation win, and they put that goal ahead of the survival of all mankind.

The fear of annihilation knows no national boundaries. The will to survive knows no national boundaries. Those who wish to go on living, whoever and wherever they may be, must express their will in terms of actions that are effective. Throughout history, governments have proven themselves unable to avoid war. Such wars are usually preceded by an increase in tensions and an increase in hostility. In fact, situations similar to those developing today, between the USSR and the USA are very much like those that have led to war in the past. The difference is that today, everyone in the world is threatened by this USA-USSR confrontation. It is those who are threatened who must work to save themselves and their descendants by finding ways to reduce the chance of war. Since everyone is threatened, we all must work on this problem. There is no aspect that is too small to be worthy of careful and considerate effort. It is not a time for us to be patient, rather it is a time for us to be purposeful and persistent.

The most important step is to move away from positions of conflict and hostility, and towards positions of cooperation and rapproachment. As hostility increases, tensions increase, communication decreases, suspicions increase and in general, the world moves towards war. War has happened in the past, and many have suffered. We must understand that there have been no new discoveries that now make war less likely; the new discoveries only make war more terrible.

A case in point are situations like those that surround Leonard Peltier and Andrei Sakharov. In the USSR and USA, the situation of these individuals, and the reaction on the other side, has as a consequence the fact that there is an increase in hostility and suspicion. There are steps, however, that can be taken in concert between the USA and the USSR that will serve to reduce the confrontational nature of these situations, while respecting each countries right to solely determine its own internal affairs.

We must all realize, that if the US and the USSR go to war, they will have determined the internal affairs of all sovereign countries. Surely killing most if not all of the population of a country, without consulting with its government for permission to do so could be considered an infringement on its internal affairs! A war between the USA and the USSR could have such a result for most countries. In today's world, the USSR and the USA both have military establishments that have plans in place that will result in infringing upon the sovereign rights of every country on the planet. It should be possible to consider small requests that one country might make about the affairs inside another, if that request is honestly made as part of a series of concrete actions that can lead to a reduction in tensions.

Consider the Peltier and the Sakharov situations. Everyone in the world might benefit if ways could be found to stop the destructive effects of these situations. What are the destructive effects? Within each country, public opinion is being influenced in the direction of hostility and confrontation. The USA claims that the USSR is bad, because of its treatment of Sakharov, and the USSR claims that the USA is bad because of its treatment of Peltier.

Those who believe that having a way to turn public opinion against the "enemy" is a step towards winning, revel in and enjoy such confrontational situations. What they do not realize is that they do not win when the other side loses. This is a situation where most events lead to consequences where mankind wins, or mankind loses. It doesn't matter if all Russians die three minutes before all Americans die, and thus enjoy three minutes as the "winner".

To truly understand what makes sense, every issue must be first examined in terms of its consequences for all mankind, secondly in terms of its consequences for one's own country. Otherwise we are led to results that seem better for one country



than for another, but where everyone is dead or dying. Why not try to answer questions first in mankind's interests, and secondly in national interests? True, it goes against simple human nature, but the same logic that causes patriots to place the concerns of their country ahead of their own personal concerns, can lead countries to put the concerns of the world ahead of their own national concerns.

In this light, there must be solutions to the Peltier and Sakharov situations that, by putting the needs of the world first, benefit all mankind. Of course, in finding such solutions, there is no reason not to proceed fairly, evenly, respectfully, with compassion not just for the two men, but compassion for everyone.

I, as an inhabitant of the world, do hereby make the following private proposal to the Governments of the USA and the USSR. I suggest that a representative of the USSR and of the USA get together to hold private discussions to arrive at a series of steps along the following lines.

1. The US and the USSR establish private communications, one person from each side.
2. Washington, (certainly government press releases and VOA) becomes noticeably quiet on the Sakharov situation.
3. Moscow, (certainly government press releases and Radio Moscow) becomes noticeably quiet on the Peltier situation.
4. X, a person described below, will meet with a Soviet official who answers questions X will ask about Sakharov's situation. They promise that all such discussions will be completely private.
5. Y, a person described below, will meet with an American official who answers questions Y will ask about Peltier's situation. They promise that all such discussions will be completely private.
6. X and Y will work out with a Soviet and an American official the contents of two projected press conferences, including press releases and general responses to questions.
7. X and Y will then communicate with, respectively, the American and Soviet official and then if, in their judgement conditions are suitable, they will proceed with the following steps. If conditions are not suitable, all matters discussed will be kept confidential, and we will not proceed with the following steps.
8. X will meet with Sakharov. X will speak to him to verify to his complete satisfaction that the information X received in step 4 above is accurate. X will take photos of Sakharov with a Polaroid camera.



9. Y will meet with Peltier. Y will speak to him to verify to his complete satisfaction that the information Y received in step 5 above is accurate. Y will take photos of Peltier with a Polaroid camera.

10. In Moscow, X will hold a press conference, giving a simple and neutral statement of the pertinent facts that X personally observed. X will give the photos to the press. X will not, however, grant any subsequent press interviews as X will be unwilling to become a public personality.

10. In Washington, Y will hold a press conference, giving a simple and neutral statement of the pertinent facts that Y personally observed. Y will give the photos to the press. Y will not, however, grant any subsequent press interviews as Y will be unwilling to become a public personality.

11. The US State Department's first response will be to issue a press release that they are now satisfied with Moscow's official position on the state of Sakharov's condition.

12. The USSR Foreign Ministry's first response will be to issue a press release that they are now satisfied with Washington's official position on the state of Peltier's condition.

13. Washington and Moscow will then remain "noticeably" quieter about the Sakharov and Peltier situations, awaiting further private discussions. A request will be made to the Sakharov family and private groups in the USA and USSR to do the same, so long as progress is made in private talks. This facts about this US-USSR understanding, however, will remain private.

14. Private discussions will then take place that respect the mutual sovereignty of the USSR and the US, but which are aimed at finding innovative ways to solve this dilemma. Each side will take into consideration the fact that by making fair and contemporaneous concessions to the perceived needs of the other side, that they will not lose, rather it is all mankind that will win.

15. So long as such discussions make progress, the US and USSR will continue to show restraint in their public statements about these issues.

16. X and Y must be persons capable of complete neutrality with regard to these issues. Each must be a person that understands both sides of each issue. They must each be a person trusted by both sides.

This proposal attempts to take into account certain Soviet and American realities about this situation, but gaining approval will require a spirit of goodwill, where the interests of all of mankind can be put above national interests.

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One can ask "Why tackle such small issues with such an elaborate procedure? Why not solve questions about arms in space or strategic weapons in Europe?" The answer is that these small issues loom large in the minds of many and they contribute in a disproportionate way to world tensions, hostility and distrust. We can and must make progress on such issues.

I am willing to be X or Y or both. There are others who can fill such roles. Our problem is to solve this problem, for the sake of mankind, and not to quibble over details. Nevertheless this little problem is worthy of great attention. Its solution needs the thought of our best thinkers, later they can pay attention to harder problems.

I would be pleased if, having modified this proposal to take into account the reactions of the appropriate persons in the US and USSR, if it could be considered at an early date. Perhaps it could be a matter of discussion in New York, when Gromyko may meet with Reagan.

Respectfully submitted,

Edward Fredkin  
Moscow, USSR

File - ~~Sahharov~~ / Fredlin <sup>20</sup>



filed 7/24/84  
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Dear Jack,

Today I had a good meeting on the Sakharov situation with Georgi Arbatov, and I will have further meetings tomorrow and in the next few days with other senior persons. The following is a brief outline of a possible proposal that I would like to make. This would require Moscow and Washington to accept the following private and confidential approach.

- (1) The U.S. and the USSR will communicate privately through you and an appropriate Soviet counterpart.
- (2) Washington, (certainly the State Dept.) becomes noticeably quite on the Sakharov situation.
- (3) I meet with a Soviet official who answers questions. I will ask about Sakharov's condition. We promise that all such discussions will be completely private.
- (4) I will then communicate with you, and then if, in your judgement conditions are suitable, we will proceed with the following steps. If conditions are not suitable, all matters discussed will be kept confidential, and we will not proceed with the following steps.
- (5) I will meet with Sakharov. I will speak to him to verify to my complete satisfaction that the information I received in step 3 above is accurate. I will take photos of Sakharov with my polaroid camera.
- (6) In Moscow, I will hold a press conference, giving a simple and neutral statement of the pertinent facts that I personally observed. I will give the photos to the press. I will not, however, grant any subsequent press interviews as I am unwilling to be a public personality.
- (7) The State Department's first response will be to issue a press release that they are now satisfied with the evidence on Sakharov's condition.
- (8) Washington will then remain "noticeably" quieter about the Sakharov situation, awaiting further developments. A request will be made to the Sakharov family to do the same, without revealing this agreement.
- (9) Private discussions will then take place that respect the mutual sovereignty of the USSR and the U.S., but which are aimed at finding innovative ways to solve this dilemma.
- (10) So long as such discussions make progress, the U.S. will show restraint in its public statements about this issue.

- 2 -

This proposal attempts to take into account certain Soviet realities about this situation, but gaining their approval is clearly an uphill battle.

It would be useful, at some stage, if it became possible for us to communicate by phone in some private way. Curt has explained to me that this would require your advance concurrence.

Best regards,

Ed Fredkin



Dear Jack,

Today I had a good meeting on the Sakharov situation with Georgi Arbatov, and I will have further meetings tomorrow and in the next few days with other senior persons. The following is a brief outline of a possible proposal that I would like to make. This would require Moscow and Washington to accept the following private and confidential approach.

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Best regards,

Ed Fredkin





25  
United States Department of State

Washington, D.C. 20520

~~CONFIDENTIAL~~

September 11, 1984

TO: NSC - Jack Matlock  
FROM: EUR/SOV - Tom ~~Simons~~  
SUBJECT: Reply from Edward Fredkin

Curt Kamman passed to Edward Fredkin your response to Fredkin's September 1 message. Fredkin still wishes to pursue the Sakharov problem and he has asked that we transmit to you the attached reply outlining his proposals on this issue. We will also need to respond to Fredkin's inquiry concerning contact with you from Moscow via the secure telephone.

Attachment:  
As stated.

DECLASSIFIED

NLRR FOI-114/7 #9840

✓ Cw NARA DATE 7/7/08

~~CONFIDENTIAL~~  
DECL:OADR

File:

USSR - Computers

**FREDKIN ENTERPRISES, S.A.**

7/22  
Sent to J. F. Matlock  
12/30  
Computers 21

July 19, 1985

The Honorable Jack F. Matlock  
National Security Council  
Old Executive Office Building  
Washington, DC 20506

Dear Jack:

Enclosed is a proposal authored by Velikhov and I, which you may not have seen yet. It sets forth one of many possibilities we foresee in East/West Microcomputer trade.

Sincerely,

Ed

Ed



Moscow  
May 22, 1985

The following proposal was conceived by Academician E. P. Velikhov, Vice President of the Academy of Science of the USSR, and further developed by Academician Velikhov and Professor Edward Fredkin of MIT.

Today there are millions of personal computers in the world, and the number is growing rapidly. Within a decade, personal computers will be able to revolutionize all aspects of intellectual work. The situation is similar to the industrial revolution when science and engineering allowed for the development of machinery and engines that revolutionized all aspects of manual labor. The industrial revolution lasted for more than a century.

The computerized informational revolution is happening now, at an extraordinary pace. This has several important implications for education. By using personal computers students will learn the ability to communicate better, by written and graphical means. Since, in the future, so many people will be encountering computers in the workplace, students must have the opportunity to become familiar with computers, competent in their use, and unafraid when they find that they must use computers in their professional careers. Education is itself an intellectual activity that can be greatly enhanced through the use of imaginative educational software.

The computer is an outstanding writing tool. Word processing systems are becoming both easier to use, and more sophisticated in what they can do. More children will learn to write better papers through the use of such systems. In the teaching of mathematics, science and engineering, the ability of the computer to display informative graphics pictures on the screen, and to make the pictures come alive in response to inputs, questions and decisions made by the students, will be an important part of learning the deep meaning of difficult concepts. The most marvelous feature of computer teaching systems is that modern computers can hold in their memory more information than is in a typical textbook, and in addition, the student can interact with the computer as he or she would interact with an attentive and knowledgeable teacher who is always highly motivated to help the student.

The Soviet Union has approved plans to embark upon a program to place millions of personal computers in schools. In the United States, while there is currently no national program for computers in schools, it is still clear that many millions of personal computers will be installed in schools during the next few years. Eventually, every student will use personal computers as part of the educational process. This situation can represent an unparalleled opportunity for fruitful cooperation between the United States and the Soviet Union.

Before long, more than 100,000,000 students will be able to benefit when a single new piece of outstanding educational software is developed. As a consequence, it makes good economic sense to decide on international standards and to invest very large sums in the development of the very best possible software. What is most interesting is that much of the educational software needed in the Soviet Union is identical to what is needed in the United States, and vice versa. This allows for the possibility of joint projects, common use of independently developed software, and so on. The possibilities for the mutually beneficial sharing of developments in the educational field will be greatly enhanced by agreeing upon certain standards for hardware architecture and systems software. This will allow programs to be easily adapted between the US and the USSR, despite the fact that Soviet Students are most likely to be using Soviet made computers while American students are most likely to be using computers made in the USA.

The need for the United States and the Soviet Union to find important and constructive areas for cooperative efforts is paramount. The whole world can benefit from the obvious result: educational software developed to international standards. Audio cassettes are a small example of the benefits of an international standard. One can travel anywhere in the world, and buy audio cassettes that fit and work in any ordinary cassette player. By exercising sufficient foresight, educational software on floppy disks can be easily made to work in countries all around the world. The entire world can benefit even more from the lessening of tensions implicit in such a massive joint cooperative project.

As a concrete first step, we propose that a meeting be held at the earliest convenient time. This meeting should last for 7 to 10 days, and should be attended by no more than 12 participants and two observer-moderators. From the United States, the 6 participants should be selected to represent industry, education, and government. From the Soviet side, the 6 participants should also be selected using similar criteria.

Through the experience of learning a subject while using software from another country, schoolchildren will gain understanding and appreciation of the peoples of foreign countries. Those from different countries, who work together to create better software, will learn from each other, and along the way, bonds of friendship and cooperative spirit will be forged. It is hard to imagine a more constructive or less controversial project that can capture the imagination and enthusiasm of peoples from both the United States and the Soviet Union.

Sincerely,

Academician E. P. Velikhov  
Academy of Sciences  
Moscow  
USSR

Professor Edward Fredkin  
Massachusetts Institute of Technology  
Cambridge, Massachusetts  
USA



File:  
USSR -  
Computers 30

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**The Soviet Computer Literacy Program: Industrial Constraints**

31

In March 1985, the Politburo endorsed a program to provide up to 10 million personal computers to secondary and vocational schools over the next decade. The decision is part of an overall plan to increase computer literacy and thereby accelerate scientific and technical progress and spur development of high-technology industries. Although technical and political problems are likely to frustrate the program for the first few years, the long-term promise for the development and modernization of Soviet industry is considerable.

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**Stalin's Ghost in Contemporary Soviet Politics**

35

After 30 years, the assessment of Joseph Stalin's historical role remains a controversial and highly charged political issue with the Soviet leadership and other elites attempting to manipulate the Stalin symbol for their own purposes. Gorbachev has adopted a differentiated approach to the matter—praising Stalin's highly centralized and disciplined economic system while resisting any broader rehabilitation. There are some signs he may favor a limited relaxation of Stalinist strictures on cultural life and on intraparty policy discussions while tightening the screws on overt dissidents.

---

**Viewpoint****What Constitutes Soviet Economic Reform?**

41

Any analysis of changes in the Soviet economy must distinguish between genuine economic reform and mere tinkering that does not involve fundamental systemic change. In the author's view, true economic reform would require abandoning or drastically modifying the three basic elements of the economic system—administrative pricing, central planning, and large-scale party intervention.

DECLASSIFIED IN PART

NLRR F06-114/7 #9839

BY KML NARA DATE 5/7/13

31

## The Soviet Computer Literacy Program: Industrial Constraints

In March 1985, the Politburo endorsed a program to provide up to 10 million personal computers (PCs) to secondary and vocational schools over the next decade. The decision is part of an overall plan to increase computer literacy and thereby accelerate scientific and technical progress and spur development of high-technology industries. Although technical and political problems are likely to frustrate the program for the first few years, the long-term promise for the development and modernization of Soviet industry is considerable. The Soviets will have to rely on Western computers in the early years of the program, but they hope to substantially increase the output of domestic PCs by the late 1980s. A deal for a Western turnkey PC plant is the favored solution, but COCOM restrictions are a major obstacle.

### Background

*They have some*  
The long leadtime for the program—the main part of the program is to be implemented in 1991-2000—reflects the current state of affairs in the Soviet computer industry. According to Intelligence Community estimates, computer hardware lags that of the West by four to 10 years. The software industry has virtually no experience in developing software for PCs, and a lack of technical services and spare parts continues to frustrate users.

The most serious obstacle to the computer literacy program remains the shortage of PC hardware and required peripherals such as disk drives, floppy disks, and printers. Domestic production of PCs did not begin until 1983, and technical problems probably will limit production runs and reliability for the next several years.

### Announced Objectives

In January 1985, the Politburo approved a program for the development, production, and use of computer technology and automated systems up to the year 2000. The goal of this program is to reequip the Soviet economy on the basis of computer technology and

microelectronics, thereby increasing labor productivity, raising product quality, and improving management and decisionmaking. The first area to be targeted is the machine-building sector, where Gorbachev has given a high priority to further automating the manufacture of such complex goods as automobiles, tanks, aircraft, and electronic systems.

The CPSU Central Committee and the USSR Council of Ministers also passed a resolution<sup>1</sup> in early 1985 to foster widespread use of computers in Soviet education. While envisioning improvements in the teaching process for many subjects, the resolution is aimed mainly at familiarizing students with computer technology, programing, and applications—thereby supporting the modernization program. According to a variety of Soviet statements, the program's overall objectives are to:

- Provide the domestic computer industry with a large, steady market for PCs and related equipment.
- Help ease the critical shortage of skilled programmers.
- Break down some of the resistance to computer use on the part of industrial workers and managers.

Soviet interest in computerization appears to stem from the belief that the USSR is forgoing many of the educational, industrial, and scientific advantages that are apparent in the Western "computer revolution." The literacy program will contribute to the computerization effort by fostering a greater acceptance and general knowledge of computers and their uses. It should also help alleviate the serious shortage of skilled programmers and computer users by creating a pool of people who can more readily benefit from advanced training and by identifying talented students for accelerated teaching programs.

<sup>1</sup> "On Further Improvements in General Secondary Education for Young People and Better Operation of General Education Schools."



~~Secret~~

### *Industrial Capabilities*

The biggest obstacle to the implementation of the computer literacy program is supplying and maintaining the necessary computer equipment. According to the Academy of Sciences' Andrey Yershov, more than 50,000 computer labs equipped with a million PCs will be needed just to implement the first, or preparatory, level of the program. To give an indication of the immensity of the task, a recent *Trud* article reported that the Soviet computer industry is scheduled to deliver about 1,300 PCs to schools this school year and that 200 classrooms equipped with foreign-made computers for ninth-grade students were to open in the fall. During PC purchase negotiations with the Japanese and Australians, the Soviets indicated that they plan to equip each school with a single module of 16 to 20 computers. According to this scenario, approximately 265 schools (or less than 1 percent of all secondary schools in the USSR) will have their own computers this school year. [ ]

[ ] an official of the USSR State Committee for Science and Technology estimated that the USSR is about eight years behind the West in the development of computer technology. The Soviets have particular difficulty producing personal computers. The primary Soviet-produced PC—a copy of the Apple—has been plagued with performance and production problems and is unlikely to meet the needs of the computer literacy program, either quantitatively or qualitatively, for at least the first phase. [ ]

[ ] the machine, known as the Agat, [ ] the printed circuit boards and other components had been connected by obsolete and unreliable point-to-point hard-wire methods. This construction technique is prohibitively labor intensive and not readily adaptable to mass production. [ ]

Yevgeniy P. Velikhov, vice president of the USSR Academy of Sciences and head of the Academy's recently formed Department of Information Sciences, Technology, and Automation, stated in a recent journal article that the Soviet Union produces only "dozens" of PCs per year. In addition, a recent Soviet newspaper article pointed out that the Soviet computer industry meets only 5 percent of the country's

small-computer needs. Although Soviet sources are now estimating that more than 1,000 PCs will be produced during this school year, this number is dwarfed in the West by IBM alone, which sold 1.5 million of its PCs and PCjrs in 1984. [ ]

The Soviet computer industry also has been unable to provide its customers with adequate maintenance support. According to recent articles in the Soviet open press, industrial and economic enterprises are having trouble obtaining reliable technical service for their computers. Problems cited included a lack of spare parts, a shortage of trained personnel, and an incentive system that actually encourages shoddy repairs. The head of the Soviet institute responsible for purchasing foreign-made PCs for the literacy program, academician Boris Naumov, admitted that servicing computers is currently beyond the power of most schools. He said that allocation decisions in the early stages of the program will be based on the ability of the schools to provide maintenance for the PCs. [ ]

### *Acquiring Western Computers*

The most attractive vehicle for meeting long-term program objectives, while simultaneously improving domestic production capabilities, probably is the purchase of a Western-built turnkey computer plant. Such a plant could be operational within two to three years of a signed agreement and would prove an effective mechanism to transfer Western production technology and know-how. The Soviets have already started negotiations with several Western companies to build a PC plant in the USSR. A British journal reported that, during Gorbachev's visit to England in December 1984, Soviet officials met with representatives of a British computer firm to discuss the construction of a turnkey PC plant that could cost up to \$10 million. [ ]

[ ] The feasibility of a turnkey plant purchase is questionable, however, because such a plant would include the capability to make high-speed

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microprocessors, which have weapons applications. The US Government has embargoed the sale of computer plants to the USSR since 1979, and COCOM requires the unanimous approval of all member nations. [redacted]

7 Soviet interest in a Western-built turnkey plant has centered primarily on a facility to manufacture sophisticated 16-bit machines of the IBM PCXT class. This is the area where the Soviets need the most help, and the acquisition of an entire plant would be an attractive method of quickly obtaining an indigenous capability. The Soviets also recognize the importance of the more powerful PCs for industrial and economic management applications and are eager to make them more widely available as part of the industrial modernization effort. They are probably less interested in a plant to build the smaller, eight-bit PCs—although they would probably settle for this if necessary—both because they can buy this type of computer more readily from the West and because their own industry is capable of producing eight-bit PCs in limited numbers and may be capable of mass-producing them in the near future with only limited Western assistance. [redacted]

To satisfy the immediate requirement for computers, the USSR, spurred by recently relaxed COCOM trade controls on certain PCs,<sup>2</sup> initiated negotiations with several Western and Japanese firms to buy PCs and related equipment. Several press reports indicated in July that a Japanese trading company had outbid 26 computer firms from around the world (including the US firm Apple) to win a contract to export 4,000 eight-bit personal computers and an undisclosed number of printers to the USSR. This is the first known contract that the Soviets have signed with a Western or Japanese firm for the purchase of PCs for their literacy program. [redacted]

<sup>2</sup> Under new rules set by COCOM, Western companies are allowed to sell low-powered, eight-bit microcomputers to the Soviets without a license. These machines process data eight bits at a time, rather than at the 16- or 32-bit rates of more powerful business computers. They have fairly small memories and would be sold in the West for \$100 to \$500 each as home computers. Sales of more sophisticated machines remain tightly controlled. [redacted]

The Soviets have also been actively seeking more powerful PCs to train advanced programmers in technical schools and universities and to take advantage of their data base and graphics capabilities to increase the productivity of research and design work. In December 1984 the Academy of Sciences placed an initial order for 50 IBM PCXT computers, declaring that it intended to purchase a total of 10,000 during the next year or so. [redacted]

We believe the Soviets will focus their PC purchases on a relatively small number of suppliers to ensure that the incoming computers are compatible, both with each other and with Soviet-produced models, and to reduce the complexity of the arrangements for maintenance and replacement. The Soviets will have to work closely with Western suppliers to establish a network for providing spare parts and installing and servicing these machines. The Soviet record in ensuring follow-on support to considerably less ambitious Western-supported projects—such as major industrial complexes—has been spotty at best. These support activities also could drain resources from indigenous Soviet development programs and could lead to a dependence on Western equipment. [redacted]

Despite the approaches being made to Western computer firms, the USSR probably will limit PC purchases to 4,000 to 5,000 machines for this school year. The scale of such imports will be limited by the need to preserve hard currency, the problem of providing service and spare parts for the PCs, and the desire to develop a domestic PC production capability as quickly as possible. [redacted]

NO!



### *Outlook for the Program*

The ultimate success, both of the literacy program and of the computerization effort in general, will depend on the Soviets' ability to manufacture and service at least hundreds of thousands of reliable PCs to overcome user resistance at the enterprise level. Also, the concerns of party and economic planning authorities over the impact of computerization must be allayed (see inset). [ ]

Upgrading the performance of the computer industry will require significant Western assistance, at least in the short term, in the form of a turnkey plant or the direct sale of computers and related equipment. We believe the Soviets will be able to mass-produce the less powerful eight-bit PCs needed for the school program in the near term, but the production of the more sophisticated 16-bit business computers, which will be needed for industrial applications, will continue to be a problem for the foreseeable future. Production difficulties in this area, unless the Soviets can obtain a turnkey plant, will hinder efforts to automate industrial facilities. [ ]

Hard currency limits and the concern that dependence on foreign sources of technology may stifle domestic development programs are likely to prevent imports of large numbers of PCs and peripherals from the West as a short-term solution. Moscow may put pressure on its suppliers in Eastern Europe to increase the quantity and improve the quality of peripherals exported to the Soviet Union. However, both the performance and availability of East European PC-related peripherals are likely to fall short of Soviet needs. [ ]

The most serious threat to US interests posed by the literacy program is the potential transfer of a turnkey plant that would provide the Soviet computer industry with much-needed Western production know-how and equipment. A turnkey facility for even eight-bit PCs could significantly enhance Soviet production capabilities. Since COCOM restrictions on eight-bit computers were relaxed in January 1985, the Soviets have intensified their efforts to acquire a vertically integrated plant capable of producing the entire range of microelectronic devices and peripheral units—such as microprocessors, disk drives, and printers—that make up a personal computer. Experience in producing these subsystems would benefit the computer industry

---

### *Roots of Domestic Opposition*

*There is some opposition to the current approach to the computer literacy program on political, economic, scientific, social, and ideological grounds:*

- *Soviet industrialists and scientists argue that the USSR can produce the needed high-quality circuits and PCs, and that plans to import Western PCs will stifle domestic development.*
- *Party and police officials probably view widespread use of computers as a threat to the traditional state monopoly of information in the USSR. In a society that tightly controls access to duplicating equipment, the prospect of millions of personal computers—each a printing press when coupled with a printer and word processing software—alarms the political leadership.*
- *Central authorities probably fear that, if computerization leads to replacing paper records with electronic recordkeeping, embezzlement or report padding by managers skilled in computer manipulation will become nearly impossible to detect. Falsification of data by factory managers is already a serious problem, and a major increase would further erode the integrity of statistical data upon which central authorities base their planning and management decisions.*
- *Party officials also evidently fear the social consequences of computerization. These include: formation of "utilitarian rational" values that would undermine party ideology, greater social inequality, computer-created unemployment, and development of "computer fetishism" among officials who view computerization as a cure-all for economic and organizational problems.* [ ]

---

generally. The transfer of an eight-bit PC plant could also provide an opening wedge for later acquisition of technology to produce the more sophisticated 16-bit PCs required for many military and industrial applications. [ ]



File:

Fredkin

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MILLER & CHEVALIER

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ALISON M. DUNCAN  
FRANCES J. HENDERSON

July 22, 1985

The Honorable Jack F. Matlock, Jr.  
Special Assistant to the President  
and Senior Director  
European and Soviet Affairs  
National Security Council  
Old Executive Office Building  
Washington, D. C. 20506

Re: Fredkin Computer Exports to the  
U.S.S.R.

Dear Mr. Ambassador:

I enclose for your information a copy of my formal response, on behalf of Fredkin Enterprises, to the Commerce Department's "negative considerations letter," which questions three of Fredkin's applications to ship PCs to the Soviet Union. Because policy as well as technical issues are involved, I shall also be arranging to talk with Bill Archey about this matter.

Ed Fredkin has also asked us to forward to you the following enclosed documents:

(1) The negative consideration letter from Dick Isadore to Ed Fredkin concerning three of Fredkin, S.A.'s USSR computer license applications;

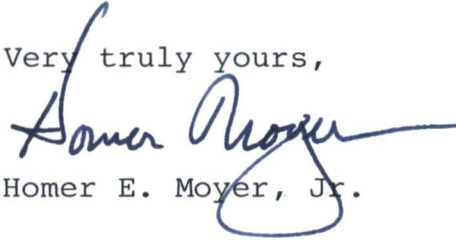
(2) A short memo to me from Gordon Starr of Fredkin, S.A. on the proposed denial;

(3) A copy of E. P. Velikhov's November 6, 1984 letter of intent to purchase 10,000 computer systems from Fredkin, S.A.;

(4) Copies of the three relevant end-user statements and accompanying certifications signed by E. P. Velikhov and included in Fredkin's license applications submitted last March.

As you know, we have already discussed this matter with Suzanne Lotarski.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Homer Moyer", with a long horizontal flourish extending to the right.

Homer E. Moyer, Jr.

Enclosures

cc: Mr. Edward Fredkin  
Mr. L. Gordon Starr



# MILLER & CHEVALIER

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ALISON M. DUNCAN  
FRANCES J. HENDERSON

July 18, 1985

Mr. Richard J. Isadore  
Director,  
Exporter Assistance Division  
Office of Export Administration  
Room 1099-D  
Department of Commerce  
14th St. & Constitution Avenue, N.W.  
Washington, D.C. 20230

Dear Mr. Isadore:

Pursuant to 15 C.F.R. §370.13(j), Fredkin Enterprises, S.A. files the following response to your letter of July 8, 1985 in which you indicate that the following proposed reexports could be detrimental to U.S. national security interests.

Case No.: A883250 - 6 IBM PC-XTs to the I. P. Pavlov  
Institute of Physiology, Soviet  
Academy of Sciences

Case No.: A883319 - 3 IBM PC-XTs to the Scientific  
Council for Cybernetics, Soviet  
Academy of Sciences

Case No.: A883321 - 4 IBM PC-XTs to Steklov's Institute  
of Mathematics, Soviet Academy of  
Sciences

These three reexport license applications are three of twelve applications originally submitted to the Commerce Department for the reexport of IBM PC-XTs to eleven institutes of the Soviet Academy of Sciences and to Pravda. Because these were the first such applications to be submitted in recent years, we consulted with both Commerce and Defense Department officials prior to filing the applications. In each case we were advised that the

applications did not require CoCom review and should not present problems. Consistent with this guidance, nine of the applications were granted within two months of their submission.

For the reasons indicated below, we respectfully submit that there is no justifiable basis for treating the three applications about which negative considerations have been raised differently from the nine applications already approved.

First, all 11 applications for which the end-users are institutes of the Soviet Academy of Sciences should be treated alike for licensing purposes. Since all of the end users are institutes of the National Academy of Sciences, functional control over the computer rests, in effect, with the National Academy in all 11 cases.

Second, the end-use certifications are identical for all 11 applications. At the recommendation of Defense Department officials, we obtained Statements of Ultimate Consignee, Form 629 certifications, from one of the most senior officials of the Academy, E. P. Velikhov, Vice President of the Soviet Academy of Sciences. Mr. Velikhov has certified in writing that all of the IBM PC-XTs reexported to these 11 institutes will be used solely for civilian, non-nuclear research. There is no basis for assuming that these certifications--all by the same senior official--are credible and reliable in some cases but not in others. To distinguish among identical certifications is to suggest that these representations--which are central elements of our export control system--have no real meaning.

Third, the U.S. exporter has expressly been granted a continuing right of access to these computers. Mr. Velikhov has certified that Fredkin, S.A. will:

"Have the right of access to the computer-using facility, and all equipment, wherever located, during normal working hours and at any other time the equipment is operating; (b) be furnished information demonstrating continued authorized application of the equipment; and (c) be notified of any significant change in the application or other facts on which the export license is based."

Fourth, these personal computers are of no strategic significance. They fall below the technology threshold that requires CoCom review. Specifically, the eight approved licenses for the Soviet Academy of Sciences were processed under Advisory Note 9 to ECCN 1565A, a procedure that does not require the multilateral CoCom review that is accorded strategically sensitive exports to the USSR. Moreover, Lionel H. Olmer, former



Undersecretary for International Trade, expressly stated in his letter of April 23, 1985 discussing these license applications that these microcomputers are strategically insignificant:

"IBM PC-XT microcomputers and their accessories embody low-level technology and present no strategic concern."

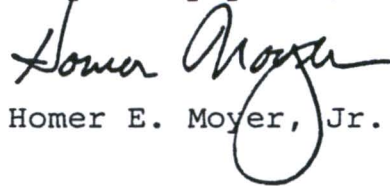
For your convenience, a copy of this letter is attached. Mr. Olmer's advice, incidentally, is consistent with oral advice given us by Department of Defense officials.

Fifth, the British Department of Trade and Industry has issued export licenses for these three proposed exports, as well as for the nine also approved by the U.S. Commerce Department. The British review process included approval by the British Ministry of Defense. Copies of these approved licenses are enclosed for your convenience.

For each of these reasons, we respectfully request that the Department of Commerce now approve the three license applications on which questions have been raised. As the first applications in recent years for the export of personal computers from the United States to the Soviet Union, these 12 applications are being closely followed in the Soviet Union. Because of the personal involvement of so senior a Soviet official, Mr. Velikhov, they are being followed in the most senior councils of the Soviet government. As you of course know, within the last several months there have been both extensive CoCom revisions designed to ease controls on nonstrategic goods and bilateral discussions between the United States and the Soviet Union designed to improve non-strategic trade between our two countries. To disapprove three of these 12 pilot license applications on the heels of these two important developments would, we submit, send a negative diplomatic message that would be wholly disproportionate to the low-level transactions here proposed.

We would be pleased to make ourselves available to discuss this matter further with you or with your staff should you have further questions or desire additional information.

Very truly yours,



Homer E. Moyer, Jr.

Enclosures





UNITED STATES DEPARTMENT OF COMMERCE  
International Trade Administration  
Washington, D.C. 20230

JUL - 8 1985

Mr. Edward Fredkin  
Fredkin Enterprises, S.A.  
1 Washington Street, Suite 410  
Wellesley, MA 02181

Case Nos.: A883250  
A883319  
A883321

Ref. Nos.: 55370  
55376  
55377

Dear Mr. Fredkin:

Pursuant to Section 10(f) of the Export Administration Act of 1979, this letter constitutes written notification that the following negative considerations have been raised with respect to the subject applications.

After review of your applications to export six (6), three (3) and four (4) IBM PC-XT personal computers and related equipment, respectively, to various consignees in the U.S.S.R., we have concluded that these exports would be detrimental to U.S. national security interests.

Our review of all available information leads us to conclude that in each case the recipient facility performs significant work in non-civilian research and development.

We will withhold further action on these applications for 15 days from the date of this letter pending receipt of any comments you might like to make on this matter. While we are awaiting your response, the processing schedule on these cases will be suspended. Should you wish to respond, address your letter to: Director, Exporter Assistance Division, Room 1099D, Office of Export Administration, P.O. Box 273, Washington, D.C. 20044. If no response is received by this office within the 15 day period, we shall resume processing these applications to a final determination, and you will be advised of the final action in writing.

Sincerely,

Richard D. Isadore  
Director, Exporter Assistance Division  
Office of Export Administration



(K11)  
File 42

**FREDKIN ENTERPRISES, S.A.**

July 11, 1985

Homer E. Moyer, Jr.  
Miller & Chevalier  
Metropolitan Square  
655 Fifteenth Street, N.W.  
Washington, D.C. 20005

Dear Homer:

Below are our arguments against the impending denial of the three outstanding export licenses. We categorically disagree with the assertion by the DOC that the exports would be detrimental to the US national security interests; in fact the opposite is true.

- (1) DOC may be correct that non-civilian research is being conducted in the referenced facilities; however, we contest that non-civilian research will be conducted by the end-users of the subject IBM XT's. Since the end-use certificate (see attached) is signed by Velikhov himself, guaranteeing no non-civilian use, to reject the licenses on the basis indicated is extremely insulting. Such rejection implies he is not a man of his word, and therefore this action will prejudice future possibilities. The fact that Velikhov is extremely close to Gorbachev means that this rejection may have significance far beyond what is thought to be the case in DOD or CIA. All for 13 IBM personal computers that can be purchased easily in any city in the Western world!
- (2) Velikhov, as the Vice President of the Academy of Sciences, is the person whom you told us the DOD designated as the ideal the Soviet signator of the end-use agreement. Velikhov has signed them.
- (3) We have been granted the right by the Soviets to examine the systems at work. That gives us the control we need to ensure compliance with the non-civilian use requirement.
- (4) The Academy of Sciences already has many IBM XT's and can get them easily through Western sources with out export licenses. Denial of the licenses will encourage them to procure more through those sources. Do we want proliferation without control, or with control? The control provided for and agreed to by the Soviets is far more favorable to our national security interests than continued expansion through unofficial and illegitimate sources.
- (5) This refusal sends a significant message to Moscow,



one of USA obstructionism and negativism.

- (6) We anticipate, should this order be completed quickly and successfully, that there will be significant follow on sales to the Soviet Union, thus enhancing our balance of trade.
- (7) To quote Lionel H. Olmer, Under Secretary for International Trade, in his letter to you of April 23, 1985, "IBM PC - XT microcomputers and their accessories embody low-level technology and present no strategic concern."

We are also sending a letter to Jack Matlock outlining these points, and will copy you.

Sincerely,

*Gordon Starr*

Gordon Starr, COO

cc: Ed Fredkin  
Chris Gould

PS The 629's signed by Velikhou  
will be sent under separate cover.





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АКАДЕМИЯ НАУК  
СОЮЗА СОВЕТСКИХ СОЦИАЛИСТИЧЕСКИХ РЕСПУБЛИК

ACADEMY OF SCIENCES OF THE USSR

Москва, В-71  
Ленинский проспект, 14  
Телефон: 232-29-10  
Телекс: 7564 ANS SU  
Для телеграмм: Москва В-71  
Наука

Moscow V-71  
Leninski prospect, 14  
Telephone: 232-29-10  
Telex: 7564 ANS SU  
Cable: Moscow V-71, Nauka

№ 573

6 November, 1984

Edward Fredkin  
Chairman  
Fredkin Enterprises  
Wellesley, Ma, 02181, USA


Dear Mr. Fredkin

This letter is to confirm our intention to purchase from you, during the coming year, a large quantity of personal computers, of the type IBM-XT or similar compatible systems such as the Corona or the Sperry PC compatible systems. In each case, we would also need an assortment of accessories, such as monitors, printers, and other such accessories as is sold in ordinary personal computer shops. In addition, we would require sufficient software packages, again selected from those readily available in computer shops. Finally, we would need to purchase various kinds of consumables, such as printer paper and printer ribbons.

While we have given your organization a first, firm order for an initial shipment of 100 such systems, we expect that during the coming year our orders will approximate 10,000 such systems. Please understand that this letter is not, itself, an actual purchase order, but it does indicate our current plans for future orders.

Sincerely yours,

E. P. Velikhov  
Vice-President  
Academy of Sciences of the USSR

  
06.11.84.

## STATEMENT BY ULTIMATE CONSIGNEE AND PURCHASER

GENERAL INSTRUCTIONS - This form must be submitted by the importer (ultimate consignee shown in Item 1) and by the overseas buyer or purchaser, to the U.S. exporter or seller with whom the order for the commodities described in Item 3 is placed. This completed statement will be submitted in support of one or more export license applications to the U.S. Department of Commerce. All items on this form must be completed. Where the information required is unknown or the item does not apply, write in the appropriate words "UNKNOWN" or "NOT APPLICABLE." If more space is needed, attach an additional copy of this form or sheet of paper signed as in Item 8. Submit form within 180 days from latest date in Item 8. Information furnished herewith is subject to the provisions of Section 12(c) of the Export Administration Act of 1979, 50 USC app. 2411(c), and its unauthorized disclosure is prohibited by law.

1. Ultimate consignee name and address  
Name I.P. Pavlov Institute of Physiology Academy of Sciences  
Street and number 6 Macarova str.  
City and Country Leningrad. U.S.S.R.  
Reference (if desired)

## 2. Request (Check one)

- a. ☐ We request that this statement be considered a part of the application for export license filed by \_\_\_\_\_  
U.S. exporter or U.S. person with whom we have placed our order (order party)  
for export to us of the commodities described in item 3.
- b. ☒ We request that this statement be considered a part of every application for export license filed by  
Fredkin Enterptises, S.A.  
U.S. exporter or U.S. person with whom we have placed or may place our order (order party)  
for export to us of the type of commodities described in this statement, during the period ending June 30 of the  
second year after the signing of this form, or on \_\_\_\_\_

## 3. Commodities

We have placed or may place orders with the person or firm named in Item 2 for the commodities indicated below:

COMMODITY DESCRIPTION	(Fill in only if 2a is checked)	
	QUANTITY	VALUE
IBM PC-XT personal Computer Color Graphics Adapter Monitor Quadboard II multifunction board Epson FX80+Toshiba P1351 printers Consumables: diskettes, printer ribbons Documentation on PC DOS and IBM PC XT Software - application packages	6 sets by specifica- tion	

## 4. Disposition or use of commodities by ultimate consignee named in Item 1 (Check and complete the appropriate box(es))

We certify that the commodity(ies) listed in Item 3:

- a. ☒ Will be used by us (as capital equipment) in the form in which received in a manufacturing process in the country named in Item 1 and will not be reexported or incorporated into an end product.
- b. ☐ Will be processed or incorporated by us into the following product(s) \_\_\_\_\_  
(Specify)  
to be manufactured in the country named in Item 1 for distribution in \_\_\_\_\_  
(Name of country or countries)
- c. ☐ Will be resold by us in the form in which received in the country named in Item 1 for use or consumption therein.  
The specific end-use by my customer will be \_\_\_\_\_  
(Specify, if known)
- d. ☐ Will be reexported by us in the form in which received to \_\_\_\_\_  
(Name of country(ies))
- e. ☐ Other (Describe fully) \_\_\_\_\_

NOTE: If Item (d) is checked, acceptance of this form by the Office of Export Administration as a supporting document for license applications shall not be construed as an authorization to reexport the commodities to which the form applies unless specific approval has been obtained from the Office of Export Administration for such reexport.

(Reproduction of this form is permissible, providing that content, format, size and color of paper are the same)

Please continue form and sign certification on reverse side.



5. Nature of business of ultimate consignee named in Item 1 and his relationship with U.S. exporter named in Item 2.

a. The nature of our usual business is scientific research  
(Broker, distributor, fabricator, manufacturer, wholesaler, retailer, etc.)

b. Our business relationship with the U.S. exporter is contractual  
(Contractual, franchise, exclusive distributor, distributor, wholesaler, continuing and regular individual transaction business, etc.)  
and we have had this business relationship for \_\_\_\_\_ years.

6. Additional information (Any other material facts which will be of value in considering applications for licenses covered by this statement.)

The Institute reports directly to and is under the jurisdiction of the Academy of Sciences of the U.S.S.R. E.P. Velikhov is the vice president of the Academy with responsibility for the Institute of Physiology of Academy of Sciences

7. Assistance in preparing statement (Names of persons other than employees of consignee or purchaser who assisted in the preparation of this statement.)

Edward Fredkin, Chairman, Fredkin Enterprises, S.A.

8. CERTIFICATION OF ULTIMATE CONSIGNEE AND PURCHASER (This item is to be signed by the ultimate consignee shown in Item 1 and by the purchaser where the latter is not the same as the ultimate consignee. Where the ultimate consignee is unknown, this item should be signed by the purchaser.)

We certify that all of the facts contained in this statement are true and correct to the best of our knowledge and belief and we do not know of any additional facts which are inconsistent with the above statement. We shall promptly send a supplemental statement to the person named in Item 2, disclosing any change of facts or intentions set forth in this statement which occurs after the statement has been prepared and forwarded. Except as specifically authorized by the U.S. Export Administration Regulations, or by prior written approval of the U.S. Department of Commerce, we will not reexport, resell, or otherwise dispose of any commodities listed in Item 3 above: (1) to any country not approved for export as brought to our attention by means of a bill of lading, commercial invoice, or any other means; or (2) to any person if there is reason to believe that it will result directly or indirectly, in disposition of the commodities contrary to the representations made in this statement or contrary to U.S. Export Administration Regulations.

Signature in ink E.P. Velikhov  
(Signature of official of ultimate consignee)

E.P. Velikhov  
Vice President

Type or print Academy of Sciences of the U.S.S.R.  
(Name and title of official of ultimate consignee)

Date On Behalf of the Institute of Physiology of Academy of Sciences

Signature in ink Electronorgtechnica  
(Signature of official of purchaser firm)

Type or print Electronorgtechnica  
(Name and title of official of purchaser firm)

Type or print \_\_\_\_\_  
(Name of purchaser firm)

Date \_\_\_\_\_

9. CERTIFICATION FOR USE OF U.S. EXPORTER in certifying that any correction, addition, or alteration on this form was made prior to the signing by the ultimate consignee and purchaser in Item 8.

We certify that no corrections, additions, or alterations were made on this form by us after the form was signed by the (ultimate consignee) (purchaser).

Type or print \_\_\_\_\_  
(Name of exporter firm)

(Date signed) \_\_\_\_\_

Sign here in ink \_\_\_\_\_  
(Signature of person authorized to certify for exporter)

Type or print \_\_\_\_\_  
(Name and title of person signing this document)

The making of any false statement, the concealment of any material fact, or failure to file required information may result in denial of participation in U.S. exports. Notarial or governmental certification is not required.





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## АКАДЕМИЯ НАУК

СОЮЗА СОВЕТСКИХ СОЦИАЛИСТИЧЕСКИХ РЕСПУБЛИК

## ACADEMY OF SCIENCES OF THE USSR

Москва, В-71  
Ленинский проспект, 14  
Телефон: 232-29-10  
Телекс: 7564 ANS SU  
Для телеграмм: Москва В-71  
Наука

Moscow V-71  
Leninski prospect, 14  
Telephone: 232-29-10  
Telex: 7564 ANS SU  
Cable: Moscow V-71, Nauka

## № ADDENDUM TO FORM ITA - 629

The following end use information and certification is submitted in support of the Statement by Ultimate Consignee of the Institute of Physiology of the Academy of Sciences, dated March 1, 1985.

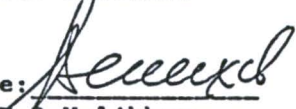
We hereby certify to the following:

1. The Institute of Physiology has placed orders through the Academy of Sciences of the U.S.S.R. and Electronorgtechnica, a government purchasing agency of the U.S.S.R., for the purchase of the microcomputer systems identified below from Fredkin Enterprises, S.A.
2. The microcomputer systems will only be used by the Institute of Physiology and for the purpose of bio-physical research and accounting. The microcomputer systems will only be used for civilian, non-nuclear purposes.
3. Fredkin Enterprises, S.A, will (a) have the right of access to the "computer using facility" and all equipment, wherever located, during normal working hours and at any other time the equipment is operating; (b) be furnished information demonstrating continued authorized application of the equipment; and (c) be notified of any significant change in the application or other facts on which the export license is based.

## Commodity and quantity

IBM PC-XT microcomputer systems - 6 units

PC-DOS software - 6 units

Signature:   
E.P. Velikhov  
Vice President  
Academy of Science  
of the U.S.S.R.  
On Behalf of the  
Institute of  
Physiology

Signature:   
Electronorgtechnica

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## STATEMENT BY ULTIMATE CONSIGNEE AND PURCHASER

GENERAL INSTRUCTIONS - This form must be submitted by the importer (ultimate consignee shown in Item 1) and by the overseas buyer or purchaser, to the U.S. exporter or seller with whom the order for the commodities described in Item 3 is placed. This completed statement will be submitted in support of one or more export license applications to the U.S. Department of Commerce. All items on this form must be completed. Where the information required is unknown or the item does not apply, write in the appropriate words "UNKNOWN" or "NOT APPLICABLE." If more space is needed, attach an additional copy of this form or sheet of paper signed as in Item 8. Submit form within 180 days from latest date in Item 8. Information furnished herewith is subject to the provisions of Section 12(c) of the Export Administration Act of 1979, 50 USC app. 2411(c), and its unauthorized disclosure is prohibited by law.

1. Ultimate consignee name and address  
Name Scientific Council on Cybernetics  
Academy of Sciences  
Street and number  
40 Vavilova str.  
City and Country  
Moscow U.S.S.R.  
Reference (if desired)

## 2. Request (Check one)

- a. ☐ We request that this statement be considered a part of the application for export license filed by

U.S. exporter or U.S. person with whom we have placed our order (order party)  
for export to us of the commodities described in item 3.

- b. ☒ We request that this statement be considered a part of every application for export license filed by

Fredkin Enterprises, S.A.

U.S. exporter or U.S. person with whom we have placed or may place our order (order party)  
for export to us of the type of commodities described in this statement, during the period ending June 30 of the  
second year after the signing of this form, or on

## 3. Commodities

We have placed or may place orders with the person or firm named in Item 2 for the commodities indicated below:

COMMODITY DESCRIPTION	(Fill in only if 2a is checked)	
	QUANTITY	VALUE
IBM PC-XT personal computer Color Graphics Adapter Monitor Quadboard II multifunction board Epson FX80+Toshiba P1351 printers Consumables: diskettes, printer ribbons Documentation on PC DOS and IBM PCXT Software - application packages	4 sets by specifica- tion	

## 4. Disposition or use of commodities by ultimate consignee named in Item 1 (Check and complete the appropriate box(es))

We certify that the commodity(ies) listed in Item 3:

- a. ☒ Will be used by us (as capital equipment) in the form in which received in a manufacturing process in the country named in Item 1 and will not be reexported or incorporated into an end product.

- b. ☐ Will be processed or incorporated by us into the following product(s) \_\_\_\_\_  
(Specify)  
to be manufactured in the country named in Item 1 for distribution in \_\_\_\_\_  
(Name  
of country or countries)

- c. ☐ Will be resold by us in the form in which received in the country named in Item 1 for use or consumption therein.

The specific end-use by my customer will be \_\_\_\_\_  
(Specify, if known)

- d. ☐ Will be reexported by us in the form in which received to \_\_\_\_\_  
(Name of country(ies))

- e. ☐ Other (Describe fully) \_\_\_\_\_

NOTE: If Item (d) is checked, acceptance of this form by the Office of Export Administration as a supporting document for license applications shall not be construed as an authorization to reexport the commodities to which the form applies unless specific approval has been obtained from the Office of Export Administration for such reexport.

(Reproduction of this form is permissible, providing that content, format, size and color of paper are the same)

Please continue form and sign certification on reverse side.



5. Nature of business of ultimate consignee named in Item 1 and his relationship with U.S. exporter named in Item 2.

a. The nature of our usual business is scientific research  
(Broker, distributor, fabricator, manufacturer, wholesaler, retailer, etc.)

b. Our business relationship with the U.S. exporter is contractual  
(Contractual, franchise, exclusive distributor, distributor, wholesaler, continuing and regular individual transaction business, etc.)

and we have had this business relationship for \_\_\_\_\_ years.

6. Additional information (Any other material facts which will be of value in considering applications for licenses covered by this statement.)

The Institute reports directly to and is under the jurisdiction of the Academy of Sciences of the U.S.S.R. E.P. Velikhov is the vice president of the Academy with responsibility for the Scientific Council for Cybernetics of Academy of Sciences

7. Assistance in preparing statement (Names of persons other than employees of consignee or purchaser who assisted in the preparation of this statement.)

Edward Fredkin, Chairman, Fredkin Enterprises, S.A.

8. CERTIFICATION OF ULTIMATE CONSIGNEE AND PURCHASER (This item is to be signed by the ultimate consignee shown in Item 1 and by the purchaser where the latter is not the same as the ultimate consignee. Where the ultimate consignee is unknown, this item should be signed by the purchaser.)

We certify that all of the facts contained in this statement are true and correct to the best of our knowledge and belief and we do not know of any additional facts which are inconsistent with the above statement. We shall promptly send a supplemental statement to the person named in Item 2, disclosing any change of facts or intentions set forth in this statement which occurs after the statement has been prepared and forwarded. Except as specifically authorized by the U.S. Export Administration Regulations, or by prior written approval of the U.S. Department of Commerce, we will not reexport, resell, or otherwise dispose of any commodities listed in Item 3 above: (1) to any country not approved for export as brought to our attention by means of a bill of lading, commercial invoice, or any other means; or (2) to any person if there is reason to believe that it will result directly or indirectly, in disposition of the commodities contrary to the representations made in this statement or contrary to U.S. Export Administration Regulations.

<p>Signature in ink <u>E.P. Velikhov</u> <small>(Signature of official of ultimate consignee)</small> E.P. Velikhov Vice President Type or print <u>Academy of Sciences of the U.S.S.R.</u> <small>(Name and title of official of ultimate consignee)</small> On Behalf of the <u>Scientific Council for Cybernetics</u> Date <u>of Academy of Sciences</u></p>	<p>Signature in ink <u>[Signature]</u> <small>(Signature of official of purchaser firm)</small> Type or print <u>Electronorgtechnica</u> <small>(Name and title of official of purchaser firm)</small> Type or print _____ <small>(Name of purchaser firm)</small> Date _____</p>
---	---

9. CERTIFICATION FOR USE OF U.S. EXPORTER in certifying that any correction, addition, or alteration on this form was made prior to the signing by the ultimate consignee and purchaser in Item 8.

We certify that no corrections, additions, or alterations were made on this form by us after the form was signed by the (ultimate consignee) (purchaser).

<p>Type or print _____ <small>(Name of exporter firm)</small> _____ <small>(Date signed)</small></p>	<p>Sign here in ink _____ <small>(Signature of person authorized to certify for exporter)</small> Type or print _____ <small>(Name and title of person signing this document)</small></p>
--	---

The making of any false statement, the concealment of any material fact, or failure to file required information may result in denial of participation in U.S. exports. Notarial or governmental certification is not required.





АКАДЕМИЯ НАУК  
СОЮЗА СОВЕТСКИХ СОЦИАЛИСТИЧЕСКИХ РЕСПУБЛИК  
ACADEMY OF SCIENCES OF THE USSR

Москва, В-71  
Ленинский проспект, 14  
Телефон: 232-29-10  
Телекс: 7564 ANS SU  
Для телеграмм: Москва В-71  
Наука

Moscow V-71  
Leninski prospect, 14  
Telephone: 232-29-10  
Telex: 7564 ANS SU  
Cable: Moscow V-71, Nauka

№ \_\_\_\_\_

ADDENDUM TO FORM ITA - 629

The following end use information and certification is submitted in support of the Statement by Ultimate Consignee of the Scientific Council on Cybernetics of the Academy of Sciences, dated March 1, 1985.


We hereby certify to the following:

1. The Scientific Council on Cybernetics has placed orders through the Academy of Sciences of the U.S.S.R. and Electronorgtechnica, a government purchasing agency of the U.S.S.R., for the purchase of the microcomputer systems identified below from Fredkin Enterprises, S.A.
2. The microcomputer systems will only be used by the Scientific Council on Cybernetics and for the purpose of evaluation of application packages for education, personal management, entertainment. The microcomputer systems will only be used for civilian, non-nuclear purposes.
3. Fredkin Enterprises, S.A, will (a) have the right of access to the "computer using facility" and all equipment, wherever located, during normal working hours and at any other time the equipment is operating; (b) be furnished information demonstrating continued authorized application of the equipment; and (c) be notified of any significant change in the application or other facts on which the export license is based.

Commodity and quantity

IBM PC-XT microcomputer systems - 3 units

PC-DOS software - 3 sets

Signature:   
E.P. Velikhov  
Vice President  
Academy of Science  
of the U.S.S.R.  
On Behalf of the  
Scientific Council  
on Cybernetics

Date: \_\_\_\_\_

Signature:   
Electronorgtechnica

Date: \_\_\_\_\_

STATEMENT BY ULTIMATE CONSIGNEE AND PURCHASER

**GENERAL INSTRUCTIONS** - This form must be submitted by the importer (ultimate consignee shown in Item 1) and by the overseas buyer or purchaser, to the U.S. exporter or seller with whom the order for the commodities described in Item 3 is placed. This completed statement will be submitted in support of one or more export license applications to the U.S. Department of Commerce. All items on this form must be completed. Where the information required is unknown or the item does not apply, write in the appropriate words "UNKNOWN" or "NOT APPLICABLE." If more space is needed, attach an additional copy of this form or sheet of paper signed as in Item 8. Submit form within 180 days from latest date in Item 8. Information furnished herewith is subject to the provisions of Section 12(c) of the Export Administration Act of 1979, 50 USC app. 2411(c), and its unauthorized disclosure is prohibited by law.

1. Ultimate consignee name and address	
Name <b>Steklov's Mathematical Institute Academy of Sciences</b>	
Street and number <b>42 Vavilova str.</b>	
City and Country <b>Moscow U.S.S.R.</b>	
Reference (if desired)	

2. Request (Check one)

- a. ☐ We request that this statement be considered a part of the application for export license filed by

\_\_\_\_\_ U.S. exporter or U.S. person with whom we have placed our order (order party)  
for export to us of the commodities described in item 3.

- b. ☒ We request that this statement be considered a part of every application for export license filed by

**Fredkin Enterprises, S.A.**

\_\_\_\_\_ U.S. exporter or U.S. person with whom we have placed or may place our order (order party)  
for export to us of the type of commodities described in this statement, during the period ending June 30 of the  
second year after the signing of this form, or on \_\_\_\_\_

3. Commodities

We have placed or may place orders with the person or firm named in Item 2 for the commodities indicated below:

COMMODITY DESCRIPTION	(Fill in only if 2a is checked)	
	QUANTITY	VALUE
IBM PC-XT personal computer Color Graphics Adapter Monitor Quadboard II multifunction board Epson FX80+Toshiba P1351 printers Consumables: diskettes, printer ribbons Documentation on PC DES and IBM PC XT Software - application packages	4sets by specifica- tion	

4. Disposition or use of commodities by ultimate consignee named in Item 1 (Check and complete the appropriate box(es))

We certify that the commodity(ies) listed in Item 3:

- a. ☒ Will be used by us (as capital equipment) in the form in which received in a manufacturing process in the country named in Item 1 and will not be reexported or incorporated into an end product.

- b. ☐ Will be processed or incorporated by us into the following product(s) \_\_\_\_\_ (Specify)  
to be manufactured in the country named in Item 1 for distribution in \_\_\_\_\_ (Name  
of country or countries)

- c. ☐ Will be resold by us in the form in which received in the country named in Item 1 for use or consumption therein.  
The specific end-use by my customer will be \_\_\_\_\_ (Specify, if known)

- d. ☐ Will be reexported by us in the form in which received to \_\_\_\_\_ (Name of country(ies))

- e. ☐ Other (Describe fully) \_\_\_\_\_

**NOTE:** If Item (d) is checked, acceptance of this form by the Office of Export Administration as a supporting document for license applications shall not be construed as an authorization to reexport the commodities to which the form applies unless specific approval has been obtained from the Office of Export Administration for such reexport.

(Reproduction of this form is permissible, providing that content, format, size and color of paper are the same)

Please continue form and sign certification on reverse side.



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5. Nature of business of ultimate consignee named in Item 1 and his relationship with U.S. exporter named in Item 2.

a. The nature of our usual business is scientific research  
(Broker, distributor, fabricator, manufacturer, wholesaler, retailer, etc.)

b. Our business relationship with the U.S. exporter is contractual  
(Contractual, franchise, exclusive distributor, distributor, wholesaler, continuing and regular individual transaction business, etc.)  
and we have had this business relationship for \_\_\_\_\_ years.

6. Additional information (Any other material facts which will be of value in considering applications for licenses covered by this statement.)  
The Institute reports directly to and is under the jurisdiction of the Academy of Sciences of the U.S.S.R. E.P. Velikhov is the vice presiden of the Academy with responsibility for the Institute of Mathematics of Academy of Sciences

7. Assistance in preparing statement (Names of persons other than employees of consignee or purchaser who assisted in the preparation of this statement.)  
Edward Fredkin, Chairman, Fredkin Enterprises, S.A.

8. CERTIFICATION OF ULTIMATE CONSIGNEE AND PURCHASER (This item is to be signed by the ultimate consignee shown in Item 1 and by the purchaser where the latter is not the same as the ultimate consignee. Where the ultimate consignee is unknown, this item should be signed by the purchaser.)  
We certify that all of the facts contained in this statement are true and correct to the best of our knowledge and belief and we do not know of any additional facts which are inconsistent with the above statement. We shall promptly send a supplemental statement to the person named in Item 2, disclosing any change of facts or intentions set forth in this statement which occurs after the statement has been prepared and forwarded. Except as specifically authorized by the U.S. Export Administration Regulations, or by prior written approval of the U.S. Department of Commerce, we will not reexport, resell, or otherwise dispose of any commodities listed in Item 3 above: (1) to any country not approved for export as brought to our attention by means of a bill of lading, commercial invoice, or any other means; or (2) to any person if there is reason to believe that it will result directly or indirectly, in disposition of the commodities contrary to the representations made in this statement or contrary to U.S. Export Administration Regulations.

<p>Ultimate Consignee</p> <p>Signature in ink <u>E.P. Velikhov</u> (Signature of official of ultimate consignee) E.P. Velikhov Vice President Type or print <u>Academy of Sciences of the U.S.S.R.</u> (Name and title of official of ultimate consignee) <u>On Behalf of the</u> <u>Institute of Mathematics of</u> Date <u>Academy of Sciences</u></p>	<p>Purchaser</p> <p>Signature in ink <u>[Signature]</u> (Signature of official of purchaser firm) Type or print <u>Electronorgtechnica</u> (Name and title of official of purchaser firm) Type or print _____ (Name of purchaser firm) Date _____</p>
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9. CERTIFICATION FOR USE OF U.S. EXPORTER in certifying that any correction, addition, or alteration on this form was made prior to the signing by the ultimate consignee and purchaser in Item 8.  
We certify that no corrections, additions, or alterations were made on this form by us after the form was signed by the (ultimate consignee) (purchaser).

<p>Type or print _____ (Name of exporter firm) _____ (Date signed)</p>	<p>Sign here in ink _____ (Signature of person authorized to certify for exporter) Type or print _____ (Name and title of person signing this document)</p>
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The making of any false statement, the concealment of any material fact, or failure to file required information may result in denial of participation in U.S. exports. Notarial or governmental certification is not required.





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АКАДЕМИЯ НАУК  
СОЮЗА СОВЕТСКИХ СОЦИАЛИСТИЧЕСКИХ РЕСПУБЛИК  
ACADEMY OF SCIENCES OF THE USSR

Москва, В-71  
Ленинский проспект, 14  
Телефон: 232-29-10  
Телекс: 7564 ANS SU  
Для телеграмм: Москва В-71  
Наука

Moscow V-71  
Leninski prospect, 14  
Telephone: 232-29-10  
Telex: 7564 ANS SU  
Cable: Moscow V-71, Nauka

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ADDENDUM TO FORM ITA - 629

The following end use information and certification is submitted in support of the Statement by Ultimate Consignee of the Mathematical Institute of the Academy of Sciences, dated March 1, 1985.

We hereby certify to the following:

1. The Mathematical Institute has placed orders through the Academy of Sciences of the U.S.S.R. and Electronorgtechnica, a government purchasing agency of the U.S.S.R., for the purchase of the microcomputer systems identified below from Fredkin Enterprises, S.A.
2. The microcomputer systems will only be used by the Mathematical Institute and for the purpose of mathematical research. The microcomputer systems will only be used for civilian, non-nuclear purposes.
3. Fredkin Enterprises, S.A, will (a) have the right of access to the "computer using facility" and all equipment, wherever located, during normal working hours and at any other time the equipment is operating; (b) be furnished information demonstrating continued authorized application of the equipment; and (c) be notified of any significant change in the application or other facts on which the export license is based.

Commodity and quantity

IBM PC-XT microcomputer systems - 4 units

PC-DOS software

- 4 sets

Signature: 

E.P. Velikhov  
Vice President  
Academy of Science  
of the U.S.S.R.  
On Behalf of the  
Mathematical  
Institute

Signature: 

Electronorgtechnica

Date: \_\_\_\_\_

Date: \_\_\_\_\_