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FAS Visit to Moscow Initiates Star Wars Dialogue

We left JFK on a Saturday-night overnight flight and arrived in Moscow, disheveled, at 5 P.M. Sunday. Whisked into the VIP lounge, we were received by our host, the increasingly famous E.P. Velikhov, Vice President of the Soviet Academy of Sciences.

Velikhov subsequently turned out to be gregarious, unpretentious, straightforward, hard-working, and much admired in the Academy. On everyone's short list of candidates to succeed President Alexandrov, he is Chairman of the Soviet committee called "Scientists" Committee Against Nuclear War" with which, it turned out, we conducted most of our talks.

As we were chatting with him, and with Dr. Andrei A. Kokoshin, a historian who is a vice chairman of the Committee, Ambassador Dobrynin arrived. He greeted me warmly; we had been talking just two weeks before at the Soviet annual reception. (The Federation is moving on from nudging U.S. political figures to visit Moscow to trying to get Soviet political figures to experience the realities of American political life; in this effort, the Ambassador constitutes a key, and a sympathetic, figure.) He looks pleased to see our group in Moscow, and since the press says he has returned to discuss U.S.-Soviet relations with the Central Committee, I have hopes that he may get me the interview at the Foreign Ministry for which I had earlier asked to get assertions that Soviet officials will come if invited.

The Kennedy Forum

I ask Velikhov if he has received an invitation from Senator Kennedy to attend a forum on nuclear war on December 7 (Kennedy's assistant, Jan Kalicki, had asked me the day before, at a St. Louis conference, to raise this point. He says "No" and that he cannot, in any case, come. I had never believed such a key figure in Soviet life would spend a week going to and from America just to spend an afternoon in Jan's forum—and on 18 days' notice. But I turned out to be wrong!)

Velikhov mentions a TV hookup might permit him to testify before the Committee from Moscow. (The Soviets were much taken with the 90-minute video call in which Sagan and Ehrlich and they discussed the World After Nuclear War a few weeks before.) Accordingly I sent a cable to Jan and forgot about the matter—more later.

Our driver to the Russia Hotel got a traffic ticket for traveling on a road that is closed on Sunday; to console him, I offered him one of a dozen Kennedy half dollars without which I would never travel to Russia. Before I was done, three drivers had each been given one and Velikhov remarked "Kennedy is more popular here, we think, than in America."

How the Trip Evolved

FAS activities in 1975, in defense of the human rights of dissidents and refuseniks, had aroused some Soviet ire, notwithstanding our then 30-year campaign for disarmament. Our report on the condition of our Soviet colleagues had sparked an uprising among American scientists. Although we had devised methods of protest (The American Refusenik) which did not require cutting back on the man-years of scientific exchange, the National Academy of Sciences, and other groups, had moved from neglecting this issue to—from our point of view—excessive compliance in cutting back on exchanges.

In 1980, some months after Sakharov was exiled, Director Stone was denied a visa to visit Moscow to complain about Sakharov's situation. Although this was done politely, we were sore. Accordingly the Soviet Embassy was advised that if FAS could not raise our concerns in Moscow, we would not receive Soviet Embassy staffers unless they came at the explicit request of the Ambassador. (We might not be a sovereign state, but we had our pride!)

When, in 1983, the Soviet scientists sent an open letter to the West on the ABM, we answered it and received in return a positive response from the Soviet Academy President. We thereupon proposed that we send a delegation to Moscow to discuss the ABM issue and, since we would not hesitate to complain about Sakharov, said we would then consider "washed out" the issue of the 1980 visa.

Our delegation was composed of FAS officials Frank von Hippel, John P. Holdren, Jeremy J. Stone and John E. Pike (see picture on page 2). This personal memoir is by Stone, whose last visit to the Soviet Union was in 1975.

The next issue of our publication will carry some follow-on observations by other members and a copy of the Soviet ABM paper discussed herein.





Our host: Soviet Academy of Sciences' Vice President E.P. Velikhov Laughing and Listening

FAS Interview in Moscow with Mrs. Andrei Sakharov on Page 11.

From my hotel room, I can see the Central Committee building, headquarters for the 300-person organization which we would like to "educate" about the West.

Over dinner, we talked to Velikhov, Koloshin (head of the Military-Political Division of Arbatov's Institute of the USA and Canada), staffers from the Academy, and a space scientist, Georgy Managadze. Velikhov made a very good impression. But the staffers acted as if they knew this visit was very important but did not know why. They obviously did not remember my five visits in the late sixties to argue for the ABM Treaty, and except for a human rights mission in 1975, which antagonized the Soviets, FAS had not made any missions to Moscow during their tenure.

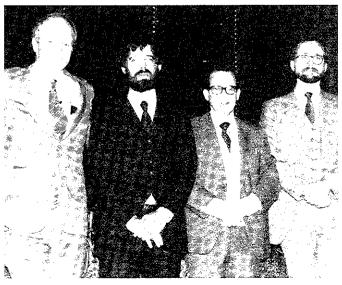
Monday, Nov. 21, Two Soviet Institutes

In the morning we were taken to meet with the famous R.Z. Sagdeev, director of the Institute of Space Research. Of the 150 institutes run by the Soviet Academy of Sciences, his is one of the largest five, with 3000 employees. It represents the interface between science and Soviet space industry.

He explained that his cosmonauts were coming down this week; they had to stay longer to make repairs without which the space capsule's life would have been shorter.

Sagdeev makes a good impression and reminded me a little of our Nobelist David Baltimore—a scientist who was administering a large operation, still doing science and understanding what his subordinates were doing, and very much, we learned, respected by his subordinates for it.

In good english, he said: "Do the Americans really think they are behind?" (Considering what he knows about Western technology, in space and elsewhere, it must be bewildering.) Had not the success of SALT I lent some confidence to the American side about arms control? Although the freeze was the right solution and very popular, should one not worry about losing the present opportunity and, accordingly, try for something less farreaching?



The Delegation: Chairman Frank von Hippel; Vice Chairman John P. Holdren; Director Jeremy J. Stone and staff assistant John E. Pike.

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Sagdeev said that public opinion in the USSR saw U.S. activities as a drive to build up for a first-strike. Other elements in this perception were: the U.S. refusal to adopt no-first-use (as the Soviets did earlier); the U.S. drive for high accuracy on missiles; the deployment of an MX in vulnerable silos; the deployment of Pershing; and some official statements about the ability to win a nuclear war.

He predicted that Soviet perceptions would become dominated by fears of this first-strike strategy and that "something will be done here in response". He himself wondered if the Reagan Administration was capable of "tolerating" a 100-megaton retaliatory response as "acceptable damage".

As an example of their difficulties with the Reagan Administration, "we made many changes in the drafts for an anti-satellite treaty but got no reaction, even though the changes were incorporated at the suggestion of American observers".

We talked about the \$20 to \$25 billion that might, in the U.S., be appropriated for ABM. What procedures would be necessary to appropriate the money? The Soviet side would like to ban the tests and save such money. He indicated that the Soviet Union could not afford that kind of money for defenses and would "have its own approach". It would be much cheaper to increase the number of missiles and warheads, and more effective. In effect, he said, they would withdraw from SALT I limits if we moved to violate the ABM treaty.

Soviets Will Concentrate on Smaller Bodies

On space, he discussed a fly-by of Venus and an effort to encounter Halley's Comet. While NASA concentrated on large bodies, they were going to emphasize smaller ones: asteroids and comets. For Halley's Comet, cooperation was important: the Soviets would encounter the comet; NASA would use its deep space network to show precisely where the Soviet space craft was; in turn the Europeans would be enabled to send their probe even more accurately. (I suggested that the Chinese might be involved in this cooperation too—they had the historical data on the arrival of Halley's comet over the last few thousand years! He responded positively.)

We toured the Institute and visited the laboratory of space scientist Georgy Managadze, who gave us a medal plaque commemorating a successful experiment of his. (The Russians are big on medals and plaques.)

On to Georgy A. Arbatov's Institute of the U.S.A. and Canada, but he was in Japan. Deputy Head Vitaly V. Zhurkin received us with some associates (Kokoshin; Vladimir Krestianov, the scientific secretary; Dr. Alexey A. Vashiev, a head of section; Sergei Federenko, a disarmament expert who remembered my visits in the late 60s. (My wife and I had visited Arbatov's infant institute in its first year in 1968, then in 1969 and 1970; now it had 350 employees!)

John Pike warned that it was a time of decision: two or three years for anti-satellite weapons and the next 10 years on ABM. They should think concretely on Standing Consultative Committee (SCC) types of issues on the ABM treaty.



R.Z. Sagdeev, Director Institute for Space Research

Zhurkin agreed. Space was one of the few places where "things could be made worse. We in the Soviet Union think space may be so provocative that conflict might start there." He wanted new parallel discussions on both political and technical issues. The problem was really the political will on both sides to stop the proliferation of weapons into space.

Federenko felt ABM should be discussed in connection with damage-limiting methods more generally, which, after all, were more effective in other areas such as counterforce (as well as anti-submarine warfare, anti-satellite weapons, and so on). He was pessimistic about progress, though he thought the freeze a "very good idea".

Zhurkin noted that while it was hard to get cooperation, space had some special qualities lending to it, and in non-proliferation both governments were moving in the same direction. Space could be an area for improving relations. On the ABM treaty, apropos our proposal for a relevant conference, it would be dangerous to tinker with the existing treaty lest it unravel, but one might add "common understandings", perhaps a "new protocol". (This was our view also).

On the controversial Soviet radar, which some say will violate the ABM treaty when completed, Federenko said that the issue was not outstanding because explanations had been shown to the State Department without a response. (But we know the problem is more serious and this is just a cute debating point.)

Flight Test Bans on MIRV

I discussed flight-test bans on MIRVed ICBMs; the Levin-Kasselbaum amendment had almost passed the Senate (49 votes if absentees were included). It would have meant a pause in the testing of new MIRVed ICBMs, on both sides. Would it be possible for the Soviets to accept the Reagan offer of a working group on build-down if that offer were extended to a one-year pause in flight-tests of new MIRVed missiles? This would encourage successful negotiations on MIRV and prevent deployment from making build-down somewhat moot.

Zhurkin felt that "build-down has two faces", permitting modernization at a time when numbers, which it reduces, are not too important. There was "lots of suspicion" on the Soviet side about it and different structures of strategic forces on the two sides to which it would have to

apply. The Soviets consider heavy ICBMs as "sacred" and stabilizing. To our general amusement, he quoted Reagan admitting learning belatedly about the Soviet emphasis on heavy missiles.

The USSR had expressed readiness to bargain over force levels. They wondered why single warheads were being urged for ICBMs (as in Midgetman) but not for submarine-launched missiles also. (Federenko called build-down a "new plot").

Zhurkin called the notion of "de-MIRVing" a revolutionary idea and a good one. And from a public relations point of view, it was a "brilliant idea". (Congressman Albert Gore will love this.)

Federenko argued that flight test bans had verification problems although, on both sides of the table, the feeling seemed to be that SALT II agreements were sufficient to verify flight tests of MIRVed missiles. He also said that there was "no objection to build-down if it was married to a freeze," but what this would mean was unclear.

Over lunch, Zhurkin discussed an Andropov proposal for resolving the problem of Pershing and Cruise missiles in which two SS-4s would be dismantled each week over two years in return for delay in deployment of Western missiles.

The Plane to Tblisi: Gromyko's Son

That afternoon on the plane to Tblisi, in Soviet Georgia, I met Sergei Kapitza, son of the famous physicist. He is a Soviet TV personality whose show on science is widely viewed. His English and style make one think of a British don somehow trapped in Russia.

I asked some of the party who the individual was who was seated right behind me. They said he looked familiar but they weren't sure. Convinced it must be a Soviet official observer of some semi-clandestine type, I introduced myself. It was Anatoly A. Gromyko, son of the Foreign Minister, who had grown up in the U.S. from 1939 to 1948 when his father was Ambassador, first to the U.S. and later to the U.N. Among the books he has written is one on Congress. Now head of the African Institute, he is a Corresponding Member of the Soviet Academy of Sciences. (He was, however, elected, I knew, over considerable resistance in the Academy.) The Academy is a body of about 200 scientific "immortals" given the life title of "Academician" with special biographies and even special burial plots. In a second tier, "Corresponding Members"



Anatoly A. Gromyko
Corresponding Member, Director: Africa Institute

of the Academy number about 400. Either of these titles is one of extraordinary prestige and leads to salaries on the order of 10 times the Soviet average wage.

I asked Gromyko if he knew Sergei Khruschev, son of the former Premier, whom I wished to contact. He said he did not. (I found this impossible to believe because the sons of the rather thin elite in Russia always knew each other and Gromyko had been a close lieutenant of Khruschev; indeed, I think they lived in the same apartment building.)

At the airport, we were met by the head of the Georgian Academy of Sciences and the Vice Premier of the Georgian Republic. Our local host, the physicist Jumber Lominadze, took us in hand.

Lominadze is a Corresponding Member of the regional Georgian Academy of Sciences; he is also the secretary of the physics and mathematics section.

Tuesday: Encapsulating the Foreigner, and Opening Talks

We begin to get the traditional treatment of visitors by Russian "encapsulation"—breakfast in a separate dining room nook and a morning program of no less than three museums on the history of Georgia. This for a delegation that contained two members who had never before been in the Soviet Union and were on their second day there; only I had been to Tblisi.

The Georgians apparently joined the Russian empire out of fear of the Turks. Reacting to the 20th anniversary of President Kennedy's death, the guide telling us such things says her grandmother thinks of Kennedy often and complains to her of his being shot.

When we arrive 15 minutes early for the luncheon reception, Jumber takes us next door to still another museum—this time for children's paintings. I begin lobbying Jumber to let use our one free day in the Soviet Union (Thursday) for a free program.

It turns out that the Scientists' Committee with which we are convening was formed at an "all-union" (i.e., national) "Conference of Scientists for the Safeguarding of Mankind from Nuclear War and for Disarmament and Peace". (This is a typical Soviet title in length and fulsomeness.) Organized by Velikhov on May 19, 1983, it has such American attendees as Bernard Lown and David Hamberg. The Scientists' Committee decided, after some internal debate, to make studies rather than just declarations and pronouncements. (This is a startling new development and represents a much-desired evolution from the perspective of the American side.)

At lunch we get innoculated into the infamous practice of Georgian toasts. People pop up at intervals, like members of a Quaker meeting, but they advance humorous homilies, or banalities, and require everyone to drink to them. (Quaker meetings are easier on the stomach.)

Teller's name comes up; I happened to have notes on the back of an envelope on comments which he had made as the witness just before me at the House Armed Services Committee hearings the week before. There was some incredulity. Teller had said:

- 1). "In the ideal case, (of defenses), not a single human life has to be sacrified (in nuclear war).
- 2). The Russians were defending Moscow today in a very effective fashion. (In fact, with only 100 interceptors allowed under the ABM Treaty, nothing like that can be very effective against the 7,500 missile warheads we have.)

(Teller's post-war insistence on building a hydrogen bomb—and the Russians' learning of the US. effort through the spy Fuchs—increased the destructive power of nuclear weapons 1,000 times. He has probably done more to put the human race at risk than was done by any other member of our species in its existence. As he moves on to find ingenious methods of justifying a continuation of this contest, I have come to consider him the personification of scientific evil.)

John Holdren is quickly acquiring the Georgian Toast lilt and Frank is also pulling himself together and offering toasts. I am telling Velikhov stories about my involvement with M.D. Millionschikov, 15 years before; he was holding down Velikhov's precise position at that time, and I was very fond of him, as were all the American scientists who knew him.

We discuss the late Donald G. Brennan, and Freeman Dyson, who seem to have become the philosophical fathers of the new justification for ABMs. (Or so I was told by the young man who drafted the People's Protection Act). I recall to Velikhov conversations with Freeman 20 years before in which, already, he showed the most shallow understanding of the political effects of building these systems. (Freeman, who is very well intentioned, has been wrong also on the Comprehensive Test Ban—which he opposed so that we could build a neutron bomb, and his memoirs show, and sometimes admit, a fantastic naivete about nuclear weapons.)

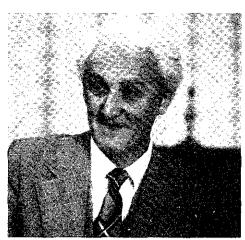
The Talks Begin

After lunch, Velikhov opens the meeting with introductory remarks. He refers to us as a "well-established organization" rather than as the original child of the atomic scientists and the oldest group of scientists against the arms race. (How much does he know about us? I shall have to straighten this out.)

The Committee has 22 people and includes—as well as some of the people we have so far met—two Presidents of Republic Academies of Science who never once said anything. There was also a neurophysiologist (the only woman) and a molecular biologist.

We sit round a table big enough for about 16 and use interpretors seated beside us. Frank makes opening remarks, after which the Soviet side introduces and explains their paper.

S. Rodionov explains the paper, "Political-Military Implications of Perspective (sic) American Space-Based Antimissile Systems (SBAMS)" (Predictably, the Soviet side cannot bring itself to discuss space-based systems per se but has to discuss "American" space-based systems. When asked about this, they say, "Well, your side is the only side which has proposed them.") R.R. Nazirov makes some additional comments and discusses mechanical and electronic methods of disrupting the guidance of such ABMs.



Jumber Lominadze
Corresponding Member Georgian Academy of Sciences

Dr. Alexei A. Vashiev adds some conceptual arguments of the kind we all agree with. Space-based ABMs would: make a first strike more appealing because they work on second strike much better; increase tension; and rest on the premise that a nuclear war can be won. (It is staggering to remember the 10 years I spent trying to talk these guys into this approach from 1963 to 1972; they certainly understand it now.)

One point he emphasizes is that \$400 billion is the lowest expense they can estimate. Since, considering the costs, the proposers must intend to build a system of only *limited* effectiveness, they must be planning to use it as part of a general first-strike to catch a degraded retaliatory strike.

Frank observes that our own conclusions about the ABM are quite similar. (The crux of any differences always falls into such motivational issues as "they must be planning to use it as a first strike" or "it would be useful only as part of a first strike". But this difference is enough to make us nervous about press conferences and misstatements in the Soviet press.)

Shortly after the discussions began, I realized they were going out live on radio. When I objected to Velikhov, he suggested that they be turned off shortly after we had begun, but evidently no one moved to turn them off. I gave my interpreter a note saying that we had not agreed to recording. The result was immediate. The recording was turned off. Some scurrying around resulted. Gromyko left the table, presumably to call someone. And, in the end, my interpreter relayed somebody's apology for not talking to us about this earlier. (So, just as they say, one must expect to be nudged and pressed by the system but, if one resists the pressure, it degrades rapidly and politely.)

John Pike commented on X-ray lasers and particle beams, saying some were "optimistic" about X-ray lasers working but particle beam weapons were less likely, though they might occur.

Boris V. Rauschenbach, a Corresponding Member in the Institute of Control Science, observes that all modern weapons are part of a big system and that offensive and defensive weapons are two sides of the same coin.

Sergei Kapitza asks, "How soon can we expect the Western program would break out of the ABM Treaty?" (But he actually says SALT II, confusing us.)

Pike explains that erosion of the Treaty is the main problem and we need to resolve points of ambiguity.

Holdren explains the importance of worst-case analysis in stimulating the arms race as the reason we cannot just let the other side "waste" its monies—these wastes are too provocative.

Pike and Kokoshin raise various possibilities; e.g., will the U.S. try to use ABM to defend command and control?

At a break—which is always referred to as "coffee" but which turns out to be an elaborate banquet—a number of toasts are presented. Holdren seems to get the record for longest toast.

After the break, Velikhov expresses concern about the absence of a response to the Soviet draft treaty on space. Pike explains various factors involved such as, in particular, the uncertainty on the U.S. side as to what the draft treaty really means. He proposes that the moratorium should be on actual tests against targets in space and urges restraint even if the U.S. tests continue while recognizing that, at some point, U.S. testing will produce a qualitatively new situation to which the Soviets would have to respond. (Pike is even abler than we all thought and is doing splendidly with organized and balanced phrases issuing through translation like bursts from a machine gun.)

Ambiguities in Soviet Proposal

Pike asks what exactly is covered by the existing unilateral Soviet moratorium. Velikhov looks for his copy and, in the end, says the questions are "beyond the Academy" and that the Committee will discuss this with leading bodies. (We thanked him for this candor but, in the end, got no clarification before we left; the problem is that the negotiators are not eager to clarify ambiguities with us—they will do it at the negotiating talks if the U.S. will ever agree to sit down with them on this, which it shows no signs of doing.)

I launched into a pitch on the importance of devising political solutions to technological problems. After the Chinese exploded a bomb in 1964, I reminded them, Americans, who had been isolated from China for 15 years and who had developed some rather peculiar notions about the Chinese, became mildly hysterical. They predicted a Chinese ICBM force for the late sixties—which still has not really materialized—and began to develop a "light ABM". After 8 years of internal struggle over this issue, President Nixon went to China. Not a word about the anti-Chinese ABM has been heard since; it is dissonant with our new political relationship. (Perhaps we need some Sadat to go to Moscow.)

Frank discussed a Senate amendment about an antisatellite activities treaty (ASAT) that required the President to certify that he had tried to negotiate before testing on ASAT weapons against a target in space. Velikhov urged that ASAT talks start at once.

After we broke up, Holdren and von Hippel gave some interviews about which we were all somewhat ambivalent. In all these cases, they expressed views about the destructiveness of nuclear war which they felt were both true and worth expressing everywhere (and hard to distort into anti-



Dr. Andrey A. Kokoshin
Chairman, Department of History Institute of the USA & Canada

Americanism). By the time they were done, the evening reception was almost over after a number of banal toasts. When I gave a toast to Soviet scientists for discussing things with American experts in the past even in the worst times, Velikhov said, "Isn't this the worst time?"

Jumber still seems intent on taking us to a monastery on Thursday. I finally said: "Look, Jumber, there are two possibilities we are speculating about. One is that the KGB has warned you that we have a quota of secret letters to drop around Tiblisi and you must stop us. The other is that, in Georgia, the guest must do what the host wants and the host simply does not care what the guest wants." When he flushed, I added that our delegation was getting the impression that every person in Georgia was either an Academician or a Corresponding Member. He laughed and said he would try to give us free time.

Wednesday, November 23: More Talks

I woke up early on what is my 48th birthday—for mathematicians an important round number having more factors than any birthday until my 64th. I calculate on my Casio watch that, in terms of psychic time, I have only about 15% of my life, at most, left. (Intimations of mortality.)

In a characteristically enormous Soviet bath tub, I wonder if space war could really happen. But I can well remember reading top secret documents in 1962 on MIRV and thinking that nothing so absurd would ever be built, so I distrust my judgment.

At breakfast Pike and I discuss the analyst's Hobson's choice. If we make much of the first-strike aspects of new developments, we encourage an analytic approach that is somewhat unreal. If we fail to do so, however, we will have trouble ending the arms race. And these developments are dangerous.

As we start up in the morning, a sense of exhaustion is already making itself felt. Andrei Kokoshin is calling for radical cuts, the freeze as only a first step, and so on. (The setting is producing a kind of U.N. session effect which is debasing the currency of discussion.) Gromyko, sitting across the table, looks impassive and, like his experienced father, is trying to gauge the mood of the adversary by concentrating on our expressions. He admits this later.

Velikhov is planning to leave the table for an hour to ad-

dress the Georgian Academy of Sciences, and when Frank cannot join him, having already scheduled a presentation, he accepts my offer to volunteer. (I volunteer because Frank has asked my advice and I fear their concluding that I have vetoed yet another possibility—it is already clear that I am the most difficult member of the delegation.)

Velikhov addresses a few hundred members of the local Academy for 30 minutes. He says that the Soviets will "not be the pioneers" in the arms race, though they could be, and discusses the arms race situation. (It is interesting to see him instructing the local scientists, because we know that his Committee plans the same meetings all around the Soviet Union with other local Academies. In the process, Velikhov will probably clinch his successorship to Alexandrov, having become known to so many scientists on such a favorable issue: opposing nuclear war.)

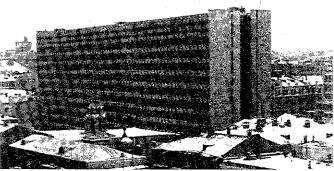
Kissinger Joke Recycled

When my turn comes, I feel, even through translation, that psychic bond which speakers feel with attentive audiences. We were started by the atomic scientists (stir: aren't they good guys?) and have 5,000 scientists and 45 Nobel prize winners (stir: are there really 45 Nobel prize winners in America?) I observe that the Soviet scientists have not always agreed with us on the ABM and tell a story which, 20 years ago, Henry Kissinger told to their colleague Vassily Emelyanov (stir: did Henry Kissinger exist 20 years ago?)

In the joke, Kissinger describes a Texas sheriff who is beating a gang of communists. One says; "Don't beat me, I'm an anti-communist". The Sheriff replies; "It makes no difference to me what kind of communist you are." (Delighted laughter with overtones of relief that the sensitive issue of communism has not backfired on the speaker.)

Emelyanov had then defended the Soviet position and had turned the joke against me the next morning at breakfast. He had said, "That's the way you are, Stone, missiles, anti-missiles, you don't care, you beat them all." (I had provided the basic paper against ABM that year, playing the role then which Pike is playing now—younger expert taken along because his expertise is needed. Who knows what jokes Pike will be recycling in the year 2003 when he brings his own delegations back to debate the same ABM question then. If we survive.)

Seizing the moment, I put myself forward as a mere "candidate" in mathematics who decides to "count" how



Building Housing the Central Committee

wise is the political leadership on each side. Ours, I point out, has at least come to the Soviet Union in such proportions as 50% of the Senate and 25% of the House of Representatives. They have, I point out, only one Poliburo member who has been here (Gromyko senior) and about 20 of the 300 Central Committee Members (7%). The scientists on both sides, I allow, must criticize their leaders for not traveling more. (Later, I am told, the audience was told, or was telling itself, that this disparity was caused by insufficient invitations from the U.S.)

Returning to the meeting, I have lost track of what is transpiring and interest in absorbing it. Kapitza is urging a closing of the gap between "technology and mentality". Holdren is speaking in favor of the freeze and Frank is, rather expansively, answering Kapitza.

Gromyko says this U.S. Administration is on the level of the 1950s and says nothing will be solved until political power lies elsewhere. It is, he says, common knowledge that the bombs used against Japan were designed to threaten the USSR. And why does the U.S. not accept the Typhoon and Trident submarine negotiations offered by Brezhnev? (On this I quite agree, since, in the absence of pursuing limits on accuracy on sea-based missiles, the U.S. faces a new window of vulnerability in the 1990s.)

During a short coffee break, a scientist asks me why Panofsky does not have the Nobel Prize. (I know nothing about this but advise him that the Federation has given Wolfgang K.H. Panofsky our highest award, the Public Service Award, in 1972, for work on the ABM treaty.)

We decide not to participate in a press conference. Velikhov, in all these decisions, takes a relaxed and unpushy approach—if you don't want to, no problem. (But the system is pushing us, and we have no real idea what the press is being told.)

Frank did make a brief statement on Soviet national TV however. He noted that the two scientific groups were in basic agreement on four fundamental points: that nuclear war would be the ultimate catastrophe; that there can be no effective defense against nuclear weapons; that superpower nuclear forces are currently in overall equality; and that this would be a good time to stop the arms race.

Later we learned that his appearance was followed by a partial showing of "The Day After."

After coffee we broke up into two groups. Pike gave a little briefing to Kokoshin on ASAT while I briefed Velikhov and Gromyko on percentage reductions, build-down, and the freeze, and explained who some of the players were and what they were like: Senators Cohen and Nunn, Alton Frye, etc. Velikhov seems to think the freeze is what one should try for if Reagan is not reelected but build-down is the approach to try if he is.

Frank presented a proposed research agenda on the technical basis for a freeze agreement. We all agree that a good research project for the Academy Committee might involve how many operational confidence tests of ICBMs could be permitted before accuracies could be upgraded.

Raising The Sakharov Issue

There are 25 minutes before the break. Seizing the occasion of sitting with Velikhov and Gromyko, we raise the

issue of Sakharov. We go through the whole thing. He is being strangled intellectually, and the situation is just a political time bomb waiting to go off. Could he not be moved somewhere closer to Moscow, or to a hospital environment for Academicians? After a bit, Gromyko walks out. (It may be in the genes.) Velikhov thinks that there is a "real" problem of secrecy here and notes, anyway, that the Academy could do nothing for Alekseeva, the famous case now resolved by the Sakharov hunger strike.

After lunch, the scene reverts to U.N. style, and I take a break in the corridor. A Soviet participant says that I am persona non grata with the Soviet bureaucracy and that it was quite difficult to "get me in," (or get "us in" I am not sure). I believe this to be exaggerated but he clearly considers me responsible for the breakoff in scientific exchange. In fact, these resulted from many Soviet actions. (It is characteristic of debates with Soviet officials that they tend to be oblivious to the effect of Soviet actions on the outside world and attribute all bad things to the actions of outsiders on them.)

Later, I asked Sergei Kapitza if he was the Kapitza who, I remembered, had signed a letter attacking Sakharov. (I had been cool to him up till then for this reason.) He said "no", neither he nor his father had signed this letter. (It turned out to be his brother, who had held a high position at the time and had been, no doubt, pressured to do so.) Kapitza called the Sakharov matter a "family affair", in which Sakharov played the role of the enfant terrible; he characterized my interest in the matter as arrogant, since I could know so little about the conditions inside the Soviet Union. (But my relief at realizing he was not a signer of that letter left me feeling, on balance, warmer toward him!)

Pointed Suggestions

As I return to the general meeting, Velikhov is summing up: the most important thing is that we have agreed to discuss strengthening the ABM treaty in May, at a joint conference in the United States, which will be published. (He certainly is not worried about press in America, evidently he has instructions to the contrary.) Most around the table don't know how to reach a wider audience; this work will therefore be carried out by our American colleagues (talk about pointed suggestions!). Kapitza chimes in that he wants us to "think about how to get a wider audience". (Since we do indeed want, anyway, to draw a wide attention to our views—what else—it is embarrassing to have the Soviet side suggest it so baldly. But neither rain nor sleet nor hail, nor counterproductive Soviet suggestions, will interfere with our appointed rounds.) It is even suggested that "we could present the results of the symposium to lawmakers". (Perhaps they later agreed to the Kennedy Forum because they like the general idea and want to establish the precedent! But some of the relevant committees have rules against foreign witnesses.)

That evening at a reception, Gromyko is discoursing at length on "mutual security for all", a favorite topic. (This is a Soviet phrase with loaded implications which I have long forgotten.) In a throwback to the same 1950s attitudes which he has just attributed to us, he actually intones: "In



Georgian Statue

war, you would perish and we would not be in a very good way". Did he really think the Soviet Union would survive a nuclear war with us? Well, he said, a few people would survive. On our side also, I said, and so what. He muttered.

Thursday, November 24, 1983: Semi-Free Day

The "free program" on Thursday had to include a courtesy visit to the Deputy Head of the Council of Ministers of Georgia. He has heard about my speech and says that he is "not against parity in visits" and refers to a trip of his that was postponed two years ago. (So the line is certainly going to be that any visiting gap is on the shoulders of the inviters; I shall have to think of how to handle that.) Holdren's toasts are still improving.

The free time! Frank and John Holdren decide to go up a mountain with Georgy Managadze. TASS sends a photographer to record the event. John Pike walks around with a guide and I stroll around the city with Jumber. Eating some meat pies at a standup open air bar, I enjoy myself more than at any reception.

Later, at a high-class pizza place, the woman who is its administrator advises that "men like women to be a bit foolish and they like to feel superior." She affects a girliegirl air and worries that she will become and seem a businesswoman. (The Soviet Union here, as in other ways, sometimes seems a society arrested in the 1950s.)

Frank reports that, on top of the mountain, a citizen accousted him and asked, "Why do you Americans want war?"

Our free day really lasted from noon to three because, at that time, we were taken to Managadze's house and the proposed meeting with his mother turned into virtually another reception with, of course, the dreaded toasts. We learned of three new ways of drinking from a glass, each more gross than the other. (There is a college sophomore quality to drinking in the Soviet Union.)

Georgy's mother, who could not be sweeter, worries that he lives in Moscow. A party member since 1944, she says that Georgy is "typical Georgian" and was a "very good boy" as a child. (Meeting Mrs. Managadze would certainly give our Senators a somewhat different idea of the composition of the Communist party.)

Enroute to the airport, we see a crowd of 5 to 10 thou-

sand persons and hundreds of cars. A funeral service is being conducted for some of the 8 dead in a hijacking, presumably to nearby Turkey. Three crew, two passengers, and two or three of the hijackers had died. And the youth of the hijackers has raised questions in the local mind of a "What has happened to our young people?" quality.

Friday, November 25: No Help From Foreign Ministry

No word from the Foreign Ministry about my request for an appointment, nor any word from Gromyko, who had said he would help, so it is evident that they do not feel ready to deal with my proposal for visits by Central Committee Members. (The political situation is bad, with the INF talks being broken off the day before, so this is no real surprise.)

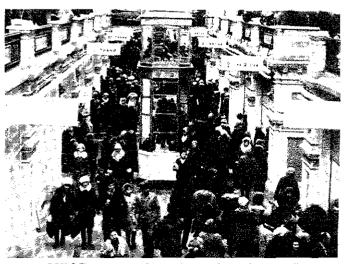
I decide to visit the American Embassy to see whether my request to have a meeting arranged with Elena Bonner (Mrs. Andrei Sakharov) is en train. Under the Embassy equivalent of Maxwell Smart's "cone of silence", I hear that it is. But no decision as to where and how and, accordingly, perhaps it would be best to have just one of us meet with her.

Shopping in GUM, the giant department store across from the Kremlin, I find what John Pike craves: exact models, sold as toys, of Soviet space craft.

At 3 we visit the Presidium of the Academy for a reception with the President of the Academy, Alexandrov. He is, by law, the highest paid civil servant in the Soviet Union—higher paid even than Andropov because Lenin wanted things that way. (Lenin also insisted on the Academy's independence, and as a consequence, it has secret ballots and more internal freedom than any other element in Soviet life.)

Alexandrov never shows because of Kremlin business, and a meeting on energy issues takes place in his absence. I duck out to meet with a famous mathematician who is my friend from 15 years before. (Watching him emerge from his car after such a period, and in front of the Presidium building with its typical Russian architecture, one feels like a character in Dr. Zhivago who is merging one era with another.)

My friend, who has the Lenin Prize for Mathematics, is not feeling so well. As we talk, Skryabin, the Secretary of



GUM Department Store Across from the Kremlin

the Academy, walks past us, stooped, wearing an enormous medal, and followed by an aide. We exchange wordless comments and my affection for my friend is rekindled over the years like a brush fire. He is a giant flower nourished in an intellectual desert by some ancient Georgian spring. (But how does he know from a distance of 10,000 miles and through censorship, that Reagan's economic policies have been "a miracle" and that, because I am "a democrat," I cannot be expected to recognize it.)

Back in the meeting, it develops that the Academy Presidium has decided to send Velikhov and three others to the Kennedy Forum, and we discuss ways in which FAS can help them arrange a supplemental program and whom they might like to meet.

As we are leaving at 5 p.m. with no sign of Alexandrov, Velikhov passes out some momentos of our visit. Pike gets an enormous book conveying space photographs of parts of the USSR which he had complained was not available in the West. (He is overcome with satisfaction.) I am given a beautiful little box in recognition of my having had a birth-day there.

Dumbfounded by their knowing that little boxes are a minor passion of mine, I joke that they must have consulted the KGB computer listing all such weaknesses. A staffer says, "Jeremy, you are too experienced for us". And, indeed, that night, I realized that I had fondled some boxes in an airport valyuta shop some days before and mentioned to Georgy that I was fond of boxes. (Nothing of this kind is ever missed here, and it has certainly been this way for hundreds of years.) Frank is given a book inscribed "From Russia With Love" by Velikhov.

We move on to a reception in a hotel built by Armand Hammer which Pike characterized as Hyatt on the Moscow River.

At the reception, Gromyko took the offensive by asserting, "Why didn't you apply to the Foreign Ministry to see Bessmertnik? I talked to them about your interest, and they were ready to receive you". (This is just baloney, since, without advice as to where to apply and how, there would obviously be no way to do it.) Controlling my anger, I asked, "Well, how was this received, as an idea?"

Gromyko then admitted that Bessmertnik, the head of the American desk, was not in fact there, but on vacation; he had talked to a deputy. As I dropped the matter, he was suggesting that he tell them, if I liked, that I had had a headache so that they would not blame me for not applying. (If you think this is Byzantine, so do I.)

Have we Learned Our Lesson?

Arbatov, in a characteristically "patronizing-friendly" fashion, suggests that, perhaps, I have learned my lesson, i.e., for having kicked up a fuss about human rights in the last half of the 1970s. (The problem in dealing with Russia is in continuing to be yourself, notwithstanding such intellectual provocations.)

Told by Zhurkin that I must give a toast, I point out that Velikhov and I were the same age when I arrived (age parity) but now I am ahead (with age superiority). Rather than surrender, he is just waiting and, soon, will catch up.

But by then we will both be worse off, alas, just as in the

arms race. So after arms control, we need age control—to age control. (I have finally mastered the Georgian toast style.)

Arbatov suggests I write him about the travel by Central Committee Members in about two months and he will see what he can do. After many jokes told by Velikhov, we return to our hotel.

A staff member accompanies me to the hotel to discuss the Kennedy Forum. My effort to call Kennedy's office, where it is 4 p.m., produces no answer. After 18 rings, I realize it is the Friday after Thanksgiving. (These 18 rings cost 18 rubles and I thank my lucky stars that no conversation resulted, since it would have cost, in the end, between 1,000 and 2,000 rubles to have the conversation. And I doubt that the Academy would have paid for it, though it was done for the Academy's benefit.)

Saturday, November 26, 1983: Mrs. Sakharov (Elena Bonner)

I woke at 4:30 a.m. and tried to kill time with a hot bath, after which I decided to go out for a walk and early breakfast. Walking for an hour, from 6:30 to 7:30, toward the U.S. Embassy, I realized anew that fast food shops don't exist in Moscow in off hours. Waiting for a half hour outside a closed cafe, slightly cold and increasingly hungry, bullied by charwomen, I was, at least, experiencing Russia rather than a reception.

Entering the Embassy at 9, I learned that they preferred to give no impression of "clandestineness" and would bring Bonner to the Embassy. Efforts to reach Frank to get him to join us failed. He was jogging around the Kremlin.

The human rights aide tells me that the dissident movement has been forced well underground, although Jewish refuseniks are still active. But the lid is still on and the Soviet press is saying that emigration is solicited by foreign intelligence agencies.

Waiting at 11:00 for Bonner's arrival, with a camera to record any interference, it seemed like the scenes in so many movies at checkpoint Charlie as someone comes in from the cold.

A two-hour discussion with Elena Bonner is summarized in a box on page 11. We had not met before; she had been in Italy for an eye operation the day I spent with Andrei Sakharov at his dacha in 1975. But we had been in correspondence intermittently, had received a present from her and Andrei some years ago, and had played an important quiet role in getting a resolution of the hunger strike, as well as helping in the two campaigns she waged to get visas for foreign eye operations. So she knew who we were and, indeed, her eighty-year-old mother had stayed overnight at our house in Washington a few years before.

After the interview, I had a quick chat with the numberthree man at the Embassy. I really am alarmed at the possibility that my efforts to get Central Committee Members here might get caught up in some kind of visa war. This Administration's reaction to Soviet tactics is uncomfortably close to trying to out-bolshevik the bolsheviks. (But if I were locked up in that embassy, and subjected to Soviet tactics every day, no doubt I would soon be much more combative.)

SOME TRIP ACCOMPLISHMENTS

Besides expressing our views first-hand both on arms race issues, and the Sakharov case, and seeing Mrs. Sakharov, our visit is leading to four events: 1) we negotiated details of a May conference on strengthening the ABM Treaty; 2) John Holdren, as Chairman of the U.S. Pugwash Committee, negotiated details of a freeze conference for Pugwash; 3) Frank and John opened up a channel, through Velikhov, on energy conservation issues; and 4) FAS facilitated, and became co-host for, the arrival here of a Velikhov delegation, invited by Kennedy, for a nuclear war forum.

Departure To London

At the airport, we board the plane. Notwithstanding our economy tickets, we are ushered into a first-class section of Aeroflot with tags on our bags saying VIP.

In London, Frank, John, and I engage in a postmortem, all of our consciousnesses having been raised and renewed by the experience; our conclusions are remarkably similar. Just as the Solomon-Asch psychology experiment shows that two dissident opinions are much strengthened by agreement, so the three of us, in agreement, will be able, I believe, to withstand any Soviet threats to abandon principle on human rights.

(We have the strength, after all, that comes from self-esteem—something that one cannot maintain in a system that forces one's conscience to compromise. In the end, Arbatov may learn a lesson from us.)

So from the land of Potemkin villages to the world of letting it all hang out, four visitors, armed with openheartedness, prepare to tell it like it is.

We all recognize that arms control agreements cannot be linked to changes in Soviet society. But neither can arms controllers be oblivious to the fact that some evolution in Soviet attitudes toward dissent is critical, in the long run, to world security. In this regard, Sakharov has become a splendid example of the very issue for which he received the Nobel Prize. It was given for his assertion that there was a link between a modicum of democracy in totalitarian countries and the possibility that others might have a modicum of security elsewhere.

So this, FAS members, is a moment in time viewed from a totally involved angle—outer life viewed from inner life. Perhaps just because this report with reflections trespasses against so many, it will be forgiven by all.

In any case, some new method of rendering reality is necessary to break through the usual mental barriers. Giving the feel of Soviet intellectual reality is just as important as describing its attitudes toward ABM systems.

Not only in reportorial style, but in negotiating strategy, is a thoroughly mixed strategy needed. Perhaps some day a President will offer to remove one GLCM or Pershing for every Central Committee Member who will visit the West—and then we will begin to see results.

Until then, like so many others, I feel forebodings. While I do not think nuclear war is coming soon, it does

seem likely to come eventually as probabilities of nuclear war through random events pile up over the years.

Sometimes I feel like a minor, but centrally placed, character on Krypton, awaiting the destruction of the planet while compiling a diary that will, like Anne Frank's, be read after the Holocaust to prove God knows what.—Jeremy J. Stone.

Interview With Elena Bonner: Trouble is Brewing Interview

Looking through pictures which I had brought from her children in Boston, she observed that she had had a camera taken from her on the grounds that it was a "criminal object" because she might photograph forbidden institutions

Advised that Soviet scientists had said that "real secrets" might be involved in Sakharov's emigrating, she asked bitterly, "What do secrets have to do with moving him to a Moscow hospital?" If they would put him in his Moscow dacha, they could have as many militiamen around it as they wanted.

Right now, the Sakharovs feel they could not get adequate treatment anywhere in the USSR. The campaign against her produced abuse from the public in train stations and other public places. The key thing in the line was that, "She's guilty and he's crazy".

She produced a journal of the Ministry of Justice called "Man and the Law". It was extraordinarily antisemitic. Under title "E. Bonner and Children Incorporated", it said:

"In its effort to undermine Soviet structures from within, the CIA has gone to Imperial Zionism and created a special section for 5,000 agents. This "Jewish section" of the CIA acts in three directions: works with financial resources and big business; works with intelligence sources of Israel using Zionist organizations which get data on politicians, scientists, etc.; and, finally, the CIA agents undertake special direct spy activities in the USSR and socialist countries using not only an agent net of Israelis but connections with Jewish organizations such as Bnai Brith. A.D. Sakharov has become the victim of one of the Zionist agents of the CIA." (editor's note: i.e., of his wife Elena Bonner).

They have received, as a result of this campaign, 2500 abusive letters saying, for example, "Divorce this Jewish woman".

Campaign Against Her Triggered

I asked what had touched off this campaign and she referred to a letter signed by four Academicians, Skryabin, Tikhonov, Prokhorov, and Dorodnitsyn. This letter referred to Sakharov's letter to the West and said, "He has called on the West to attack the Soviet Union". In fact, Bonner points out, the title was "The Danger of Nuclear War".

Sakharov's condition is "more or less stable", and he receives treatment at home. She, however, had a heart attack in October and now gives herself injections, including nitroglycerine.

"We are really afraid"; in particular, Sakharov fears



Elena Bonner (Mrs. Andrei D. Sakharov)

they want to isolate him and kill her. With her out of the way, they could put pressure on him, perhaps to recant.

Her doctors say that she needs a pacemaker, but she does not trust the official doctors to do the operation.

"We cannot trust the official doctors. We have proof of this. During the hunger strike, they put us in different hospitals and doctors would go to Sakharov and lie about me and vice versa.

Second, at a trial of Sergei Shmeman (?), one of the doctors who treated us in Gorky testified against Sergei, saying that he had written falsely that the hunger strike was related to Alekseyeva (when in fact it was true).

Third, the doctors had said that we were fully recovered from the hunger strike when we were not."

(At this point, Mrs. Bonner confided certain desires. While we were asked not to describe them, and while the Soviet authorities know of them, they confirmed mainly that the Sakharov case continues to be a fused time-bomb waiting to go off. The prospects for arms control, and for the world, will be much better as soon as this matter receives a satisfactory settlement.)

Ms. Bonner attacked the Soviet Nobel Prize winner N. Basov bitterly. As director of the Lebedev Institute, he must have known that Sakharov had asked to be moved to the Academy hospital. Yet Basov had told the U.S. National Academy of Sciences delegation that Sakharov had never personally applied for this and should do so.

In fact, Sakharov had done so in January, 1982 by letter to Alexandrov and she, herself, had sent it to one of Alexandrov's assistants, Natalia Leonidovna (unknown last name), who had said that the President says, "This is excluded". Later, in May of 1983, Sakharov sent three telegrams on this subject to Alexandrov and has postal receipts for them.

After these efforts, the Academy did send doctors to Georgia who determined that Sakharov did need hospitalization. But subsequently, Alexandrov had given an interview in mid-June saying that Sakharov was crazy.

In the past, when Sakharov was a great name, he related well to these people. She is certain that they still recognize that he is honest, and after all, "put in their rockets first".

She felt that Western scientists should insist that Sakharov participate in disarmament talks held in

Moscow—he was, after all, the only independent view here. (In 1975, after asking Sakharov's permission in personal conversation, I had written the Central Committee of International Pugwash with just this suggestion for Soviet-based Pugwash meetings. Later, the head of the Soviet Academy's Pugwash group had advised me, in fatherly fashion, that the Academy group had discussed my request and decided that, if Sakharov attended, none of them would.)

Bonner was indignant that the NAS group had failed to meet with her in October, 1982 after applying, in advance, for such a lunch. She said that an American Embassy official had appeared, shamefaced, and reported that the Soviet authorities had threatened the U.S. Academy that the semi-annual disarmament talks with them would be broken off if they met with her. (The Chairman of the Academy delegation, our own former Chairman, Marvin Goldberger, denies this. He says that the Embassy advised the delegation that Bonner was planning to hold a press conference in conjunction with the lunch and that, this being the first day of the talks, they felt it was inappropriate to start off their talks in such a provocative manner. Nor, he says, had they applied to see her in the first place.)

I explained the Federation's recent history of breaking off relations with the Soviet Embassy for three years over the refusal to give us visas to complain about Sakharov. We had come only on our stated understanding that we could complain about the case when here this time. Still, no one knew what would happen and the Soviet authorities could conceivably break off our talks; it was an unstable situation. (She did not thank us for these or past efforts—the dissidents in Russia, one Amnesty International official told me years ago, never do. She just looked down, smiled, and said she understood. In fact, what are strains for us are victories for her. In their campaign to emigrate or improve their conditions, events can look quite different.)

She had earlier denounced the alleged Soviet ultimatum to the U.S. Academy delegation as a "criminal bluff" and "blackmail". Asked how she knew they would not break

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off these talks, she said, "If they are interested in disarmament, would they really break off these talks just because the group had dinner with Mrs. Bonner? It is an absurd juxtaposition of incompatibles—disarmament versus dinner with Bonner."

The three conditions she would like to have Sakharov supporters consider are: 1) Improving his medical treatment through access to Moscow medical attention; 2) returning Sakharov to his Moscow dacha, where he could have regular contact with Soviet scientists; and 3) defending his right to emigrate.

Foreigners could not, she said, appreciate the force of propaganda here and, in general, the quality of totalitarian life. Every Soviet dissident was a miracle. The Government was composed of deeply cynical people who think only of their personal position and nothing more.

She closed by saying, "We are strong spiritually even if not strong physically". (She then gave me a hug to send to her children and I asked her to give Andrei Dimitrivich a hug for us.) JJS



Stone, Velikhov and Holdren, Lominadze at right

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