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SIBLING INSTITUTES: ENHANCING U.S.-SOVIET SCIENTIFIC COOPERATION

The Soviet Academy of Sciences is now facing enormous problems. Its workers must spend increasing amounts of time coping with the overhead of life as economic and health conditions in the Soviet Union deteriorate. With scientists and their staffs only working part of each day, projects languish.

They often lack the equipment they need. And with the ruble worth, officially, only three cents, individual scientists can hardly purchase journals, much less computers.

The Academy may soon even lack a budget for its applied research; conceivably, applied researchers may have to find, inside or outside the country, sources of support that are related to their work.

Above all, in the new climate of openness, the Soviet Academy of Sciences must face the possibility that the best Soviet scientists might find jobs abroad and leave permanently.

We believe that it is not only in the Soviet interest, but in the American interest and in the interests of world science that the Soviet Academy be assisted through this difficult period. But how?

Invite a Sibling Relationship

For starters, we invite the 150 Institutes of the Soviet Academy of Sciences to propose to American institutes in their field that a "sibling" relationship be established akin to that of "sister cities." We respectfully request that American institutes respond politely and affirmatively. And we will do what we can to facilitate such arrangements.

In some cases, such a relationship would only formalize close links which a particular Soviet institute had already with an American institute. In other cases, it might create a new relationship. In all cases, it would provide a lifeline to Soviet science, one which might, in the worst contingencies, be of especially great importance.

The institutes themselves will know best how they can cooperate. But we would hope that the American institutes would provide some kind of assistance with preprints, journals and books. Exchanges of personnel, especially younger personnel, might be encour-

aged. And creative approaches to scientific exchange such as enhanced use of E-mail, might be developed. Soviet scientists have a great deal to offer and both sides will benefit from closer contacts.

The leadership of the Soviet Academy of Sciences is not at all opposed to such exchanges, and even favors joint appointments. But, obviously, it prefers that American appointments of Soviet professionals not be for such long periods that a Soviet scientist is forever estranged from his Soviet institution and colleagues. Needless to say, arrangements in which Soviet scientists can spend part time here and part time in the Soviet Union (e.g., six months in each) provide the opportunity for more scientists to come here than would be the case if the appointments were full-time.

Younger Scientists Need Help

Younger Soviet scientists sometimes feel that they will be denied access to such travel grants, and foreign appointments, as might exist in favor of older, more senior and well-established colleagues. American institutions need to think about how to avoid this phenomenon. And to the extent that scientific conferences can be held in the Soviet Union, many younger Soviet scientists who cannot travel would benefit.

Finally, the Federation invites suggestions from American and Soviet scientists with ideas for improving scientific contacts and assisting Soviet scientists. □

—Reviewed and approved by the FAS Council

This editorial arose from conversations which FAS President Jeremy J. Stone held with Soviet scientists, at various levels, during a visit to Moscow in May. Stone was in Moscow to attend the 70th birthday celebration of Andrei Sakharov (see pages 3-4), as well as a Conference organized by the Committee of Soviet Scientists for Global Security on economic cooperation in Asia. FAS proposes to mail the editorial to the heads of the 150 Institutes associated with the Soviet Academy of Sciences. ■

MOSCOW IN MAY: REPORTER'S NOTEBOOK

The Westernized young people seem full of hope as they plan to exploit the new openings for entrepreneurial activity: joint ventures, teaching English at night, travel, cooperatives, etc.

But even at the official rate of exchange, 30 rubles to one dollar, many are earning less than 50 cents a day. It may not matter when buying price-controlled items—taxi fares, rent, bread, etc. But most things from abroad are sold in cooperative stores for the price in dollars at times thirty. For example blue jeans may cost 300 rubles (a month's pay) and meat is 50 rubles a kilo while it was 10 a year ago. Without access to dollars, or the private enterprise sector, many things are completely outside the reach of Soviet wage earners.

People are not starving because bread is cheap. But even well-to-do families are having trouble making ends meet now. One family recently saw cheese for the first time since January. Their savings have been eroded by inflation. Fresh fruits are nowhere to be found except in private markets at very high prices. In poorer parts of the country, the children sometimes faint in their classes from lack of vitamins and malnourishment. All worry about the next winter.

A surprising number of senior scientist administrators are ill. Moscow observers speculate that the stress of life, especially since 1985 when perestroika made life complicated, is taking its toll.

Many fear riots may break out. And there appears to be a tendency for individuals and conservative groups to cultivate Western friends as lifelines or as supporters if some kind of civil war breaks out.

Academy members have been told that there will be no budget cuts through the end of this calendar year, but there are rumors that only basic research will be funded soon. Those doing applied work may be asked to sell their services at home and abroad—much as FAS members saw happen with the Vietnamese Academy of Sciences. (See *FAS Public Interest Report*, May 1989).

Soviet scientists need to participate in conferences abroad to make more contacts, but because the prices for travel have risen and because travel money was not in the budget in the first place, the Institutes cannot really support travel. When Soviet scientists do leave for a year, no one really knows if they are coming back, since they lack the computers and equipment to do their work properly in the USSR.

Six months ago, scientists were adequately paid. Salaries had been doubled in October and compensation for new PhDs ("candidates" in the Soviet vernacular) went up from 250 rubles per month to 500. But now prices have gone up 5 or 6 times. And some Institutes have had to give people two months unpaid leave in order to stay within their budgets.

At the Supreme Soviet, a visitor runs into former Ambassador Dobrynin. Members of the Foreign Relations Committee explain their support for the new Immigration Bill that permits free immigration. They explain that the brain drain problem for scientists was well discussed but that legislation cannot fix it—they can only improve the conditions for the scientists so that they want to stay.

—JJS □

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ELENA BONNER'S TRIUMPH

On the evening of May 20, in the Great Hall of the Moscow Conservatory, about 400 gathered to celebrate Andrei D. Sakharov's 70th birthday. Under Elena Bonner's leadership, a conference had been planned to follow the birthday celebration with discussion of two topics: The USSR and Eastern Europe on the Road from Totalitarianism to Democracy, and Global Implications of the Chernobyl Disaster and the Future of Nuclear Power.

Gorbachev Arrives at Last Minute

At the last minute, President Gorbachev and Raisa slipped into the front row. Earlier, Boris Yeltsin had mounted the stairs to the hall flanked by the camera lights of interviewers. He said this was the first day of his campaign. In the hall were the leaders of the democratic uprising in the Soviet Union and many of Gorbachev's advisers such as Evgeny Primakov, who had tried to settle the Iraqi war; Y. A. Ossipyan, Gorbachev's leading science adviser; Guriy Marchuk, the President of the Soviet Academy of Sciences, and so on. On the dais, ready to speak was none other than Alexander Dubcek with a message from President Havel of Czechoslovakia. It was, in short, one hell of a gathering.

Elena Bonner's opening remarks ranged over many problems, but when she asked the audience to rise, it was with a sarcastic slur on the Soviet Army's activities in her native Armenia:

"And before we speak fine words about Sakharov I ask you to rise for a minute of silence in memory of all who have perished in this country over recent years and in the last month of May, when our brave Soviets, our Azerbaijan OMON fighters, generously shed people's blood on the soil of the Caucasus."

Bonner Insists Soviet President to His Feet

The audience rose for Sakharov, but Gorbachev, keenly aware that the whole thing was being televised and that it was his Soviet troops that had been derided, hesitated. Elena Bonner, implacable, said to Gorbachev: "We do ask you to rise" and he rose. It was, as one Russian observer put it, Gorbachev "dancing to Bonner's tune." Another highly placed Soviet adviser to Gorbachev complained to his seat mate: "I can't stand it; that woman gets into everything."

Dr. Bonner said that some politicians are "trying to build a reputation on Sakharov's life; they should do it on their own life." But in the end, Elena Bonner thanked both Gorbachev and Yeltsin for coming. (Gorbachev had been invited formally, but no one had expected him to come.)

In later comments from the podium, Stanford Physicist Sidney Drell eulogized Sakharov and urged that the next round of U.S.-Soviet arms talks be called the "Sakharov Round" in consideration of Sakharov's idea for resolving the main hurdle in the START talks: how to persuade the Soviets to accept disarmament without a resolution of the conflict over America's intentions to break out of the ABM Treaty and into a Star Wars defense.

Sakharov had urged his Government simply to announce that it would engage in disarmament but would cease if the U.S. deployed the ABM. (In fact, the Soviet Government adopted an earlier version of this approach which had been invented, and circulated in both Washington and Moscow, by the undersigned. In this approach, the Soviets would abandon disarmament if the U.S. were considered to have violated the ABM Treaty—which can be done well short of "deployment." For my discussion with Sakharov of the differences and similarities of our approaches, see *Public Interest Report*, March 1987, pp. 6-7). —JJS □

Excerpts From Dr. Bonner's Speech at Celebration

"Today would have been Andrei Dmitrievich's seventieth birthday. The anniversary has come at a hard time for the country, of which Sakharov was a citizen according to his birthright and his bitter right to lie in its soil. But he was also a citizen of the Earth because of his love of it, and his inflexible struggle for preserving peace.

"In our supermilitarized state he was the only scientist who struggled for peace all over the planet with complete professionalism, absolute courage, absolute honesty and total independence: free from the interests of certain parties, groups, departments, or one governmental system.

"With equal staunchness, Sakharov defended the individual, the human personality, the right to personal convictions, the right to choose one's own way of life, the right to freedom, and the simple right to happiness.

"He defended the Chinese in Indonesia and the student from the Celestial Consent square sentenced to death, the



Rostropovich, true friend to Sakharov, and Bonner meet again at concert honoring the 70th anniversary of her husband's birth.

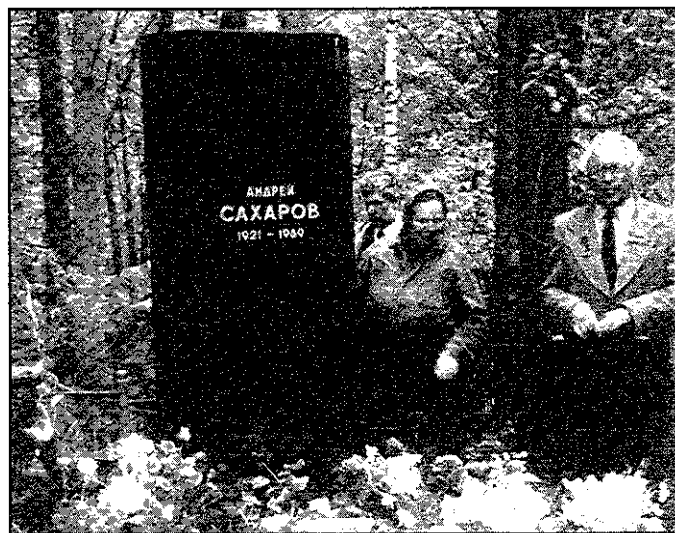
Palestinians in the Tel-Zaatar camp, Afghan mujahedin, Iraqi Kurds, Azerbaijanis in Iran. He defended his compatriots: Russians, Germans, Jews, Buryats, Georgians, Uzbeks, Tatars, Azerbaijanis, Ukrainians, Lithuanians, Armenians.

"But he was not a man of nonresistance or an absolute pacifist. From a truly democratic position he defended the workers' right to strike—whether economic or political. He considered that industrial action could prevent a revolutionary explosion, but more importantly, could create conditions in which the old political structures would resign peacefully without violence.

"Being especially concerned about national problems he used to say that in a dead-end situation, consensus is a meaningless word, and any decision on the inviolability of borders becomes a way of protecting the State system. In the conditions of our country this means the defense of Stalinism. Sakharov repeatedly stated that the right of a people to self-determination is more important than all other rights for any national community.

"Many of those present here were not acquainted with Sakharov personally, not all of them shared his views, very few of them were his friends. What unites us is the fact that we are . . . contemporaries of the man whose fate drew the attention (kind or unkind) of many people throughout the world. Don't you call yourself Sakharov's friends if you only appeared after the telephone call by Mikhail Gorbachev to Gorkii. Don't make political capital so easily. I am ashamed for you before those who used to come to our home under the KGB observation, those who used to come to Gorkii secretly, and one who pawned his house in the USA in order to gain money for the campaign in defense of Sakharov."

Elena Bonner's speech was followed by Academician Leonid Keldysh, Dr. Sidney Drell, Dr. Yuri Orlov and Alexander Dubcek, each answering the question "Who is Sakharov?" After that, the Great Hall of the Moscow Conservatory filled with music. □



Sakharov's grave was covered by flowers from admirers.

FAS ISSUES REPORT ON VERIFICATION OF NUCLEAR WARHEAD REDUCTIONS

At a June 14 press conference in Washington, FAS released a new study on the verifiability of reductions in nuclear weapon stockpiles. Though current arms negotiations deal with nuclear weapon delivery systems, such as ballistic missiles and bombers, they make no provision for actual reductions in, or disposal of, the nuclear warheads themselves. The newly released study describes how such "nuclear warhead control" could be verified. The study is the product of a joint effort by FAS and collaborating groups of Soviet scientists from the Soviet Academy of Sciences and the Kurchatov Institute of Atomic Energy under the leadership of FAS Fund Chairman Frank von Hippel. Following are excerpts from the summary.

Introduction

As a result of the INF, START and SNF negotiations, the Soviet Union and United States are expected to retire or withdraw from Europe about one half of their total nuclear arsenals—on the order of 10,000 nuclear warheads each. However, thus far, no arrangements have been made to ensure that these warheads will not be stored for possible rapid redeployment (in the case of nuclear artillery shells, for example) or recycled to increase the numbers of warheads available for uncontrolled or difficult to verify systems (nondeployed air-launched or sea-launched cruise missiles, for example). There is also always the small but finite possibility that stored intact warheads might become targets for unauthorized use or subject to accidents.

This report therefore outlines an approach to a verified halt to the production of new fissile material for warheads and the verified elimination of retired warheads.

The US has halted the production of fissile material for weapons, and the Soviet Union is in the process of doing so, although the final stages are currently not scheduled for completion until the year 2000. As both countries expect the numbers of warheads in their nuclear arsenals to decline, they will be able to obtain any material that they need for new warheads more cheaply from warheads being retired. Both the Soviet government and the US Congress have expressed interest in making the production halt formal and verifiable. This would lay the basis for verifiable reductions in the nuclear arsenals.

The verification of a production ban would require IAEA-type safeguards on civilian nuclear facilities and materials. Safeguards would also be required on reactors producing tritium for nuclear weapons and on the enriched uranium used to fuel naval propulsion reactors.

As with the Nonproliferation Treaty, the primary task of detection of any clandestine (undeclared) production facilities would be left to the national intelligence agencies of each country. However, as with the verification arrangements for the proposed ban on chemical weapon production, on-site inspections at declared facilities could be supplemented by challenge inspections at suspect sites.

We have considered three alternative approaches to the verified reduction of the US and Soviet nuclear warhead stockpiles:

- Shifting agreed quantities of fissile materials out of the control of the weapon complexes to safeguarded non-weapon use or disposal.
- The verified dismantlement of agreed numbers and types of warheads and the placement of the recovered fissile material under safeguards for nonweapon use or disposal.
- A combination of both approaches according to which warheads would be verifiably eliminated and agreed amounts of fissile material that might be more or less than was originally in these warheads would be placed under safeguards. This approach could both provide considerable confidence that warheads were being dismantled and that agreed quantities of fissile material would be removed from potential weapons use.

The cost of the verification arrangements would probably be less than the fuel value of the uranium-235 recovered from the dismantled warheads—about \$6 billion for one half of the US nuclear arsenal. This highly-enriched uranium could be used to fuel safeguarded nuclear reactors—in most cases after dilution with natural or depleted uranium. Plutonium would probably have to be stored under bilateral safeguards because plans for the use or disposal of plutonium being produced in civilian reactors are still not settled in either the Soviet Union or the United States.

Exchanges of Information

Uncertainties in Soviet and US knowledge about the sizes of each other's stockpiles are considerable but need not prevent either a halt in the production of fissile materials for warheads or a first round of stockpile reductions. However, in order to go beyond the first cuts of 50 percent or so, the Soviet Union and United States will want to have an improved idea of the sizes of the other's arsenal. We therefore suggest that they seriously consider mutual declarations of the total amounts of fissile material in their nuclear weapons and otherwise available to their nuclear weapons establishments, exchange production records and undertake a program of cooperative research ("nuclear archeology") on physical evidence that could be used to confirm and refine these production records.

There are important first steps that could be undertaken without delay. These include: the joint Soviet-US technical studies and demonstration projects that have been proposed by the US Congress; the placement of warheads to be retired in sealed, tagged containers; the verification of the shutdown status of plutonium production reactors; and the placement under IAEA-type safeguards of key civilian nuclear facilities. □

Editor's Note: Copies of the 58-page study report are available to members, subscribers and other interested persons at a cost of \$5 each. Please make checks payable to FAS Fund.

AMBITIOUS PLAN FOR USING SATELLITES TO VERIFY START AGREEMENTS APPARENT VICTIM OF COLD WAR'S END

A number of recent developments suggest that an ambitious program for expanded intelligence satellite coverage in order to verify the START offensive nuclear arms agreement has been abandoned—like many other military systems, a victim of the end of the Cold War. The expansion of treaty verification satellite programs was largely due to the efforts of Oklahoma Democratic Senator David Boren, Chair of the Senate Intelligence Committee.

In early 1988, Boren began a move for a six-year, \$6-billion plan, saying that if the plan were not approved he was prepared to oppose ratification of the START agreement.

Lacrosse and Advanced Keyhole Featured

The centerpiece of his plan was the procurement of six additional Lacrosse imaging radar satellites over a six year period. At over \$500 million each, the satellites were to be used in verifying a START arms reduction agreement. In addition, as much as \$5 billion was programmed for a new system of satellites that would be deployed in the mid-1990s, or no later than the 1997-99 time-frame, to monitor Soviet laser testing. These satellites would have been in addition to the Advanced Keyhole (sometimes improperly referred to as the KH-12) and Lacrosse satellites already planned for procurement.

The previously programmed systems would have probably included annual launches of one of each of these satellites, resulting in perhaps three or four of each type of the spacecraft operational in orbit at any one time by the early 1990s. The additional satellites proposed by Senator Boren would have been launched at a rate of one each year, adding a further three or four operational spacecraft in orbit, bringing the total to somewhere between 9 and 12 satellites.

Plan Would Have Strained Analysis Capabilities

This launch program would be in stark contrast to the historical pattern of the 1970s and early 1980s, during which two KH-11s would typically be in orbit year round, joined by a KH-9 perhaps six months out of the year. The five-fold increase in the number of satellites in orbit probably translates into at least a ten-fold increase in the number of images returned daily, since most of the new satellites are Lacrosse imaging radar spacecraft with an all-weather capability, in contrast to photographic imaging satellites, whose coverage is frequently obscured by clouds.

Initially, the Boren plan did not receive the support of the intelligence community, which was concerned about the formidable task of analyzing the mountain of additional data that the additional satellites would generate. Director of Central Intelligence William Webster argued against the plan, stating "I believe this nation would receive greater benefit by funding more modest proposals designed to

take better advantage of existing and programmed assets rather than by trying to fund a multi-billion dollar . . . system at this time.”

Citing this testimony, the House Appropriations Committee rejected the Boren plan, noting that these “proposed improvements to our intelligence collection capabilities for verification will cost billions of dollars, are not the highest priority of the intelligence community, did not result from a thorough review by career intelligence professionals, and may ultimately provide only a marginal increase in our treaty monitoring capability.”

Although initial funding for the plan was approved in 1988, Webster remained concerned about the impact of the funding requirements for this new program on existing intelligence efforts. And the new Bush Administration recommended termination of the program in early 1989, much to the displeasure of Boren. The Senator, however, eventually succeeded in obtaining a commitment by President Bush to fund his program, although with delays of one to two years. The plan once again faced opposition from

the House Appropriations Committee but, finally, with Webster’s acquiescence, prevailed by the end of 1989.

Three Signs Point To Plan’s Demise

In contrast to prior years, 1990 was not marked by public controversy over the Boren Plan, and there are at least three indications that it may have been quietly abandoned by year’s end.

The first suggestion came in mid-1990, when there were indications that the planned launch rate for the Titan 4 space booster, which will place the Lacrosse and Advanced Keyhole satellites into orbit from Vandenberg Air Force Base in California, was being reduced. Prior plans had called for launching these rockets at a rate of three per year, sufficient to accommodate the single Advanced Keyhole and Lacrosse, which are the baseline program’s annual requirement, as well as the additional Lacrosse envisioned under the Boren Plan. But by the end of 1990, Titan 4 launch rates had been scaled back to two per year, suggesting that the additional Boren-inspired Lacrosses had been dropped.

The second indication that the Boren Plan might be dying can be found in comments by John Keliher, Staff Director of the House Permanent Select Committee on Intelligence (HPSCI, known as hip-see to the cognoscenti). Addressing a February 1991 meeting sponsored by the American Association for the Advancement of Science, Keliher downplayed the prospects for large expenditures on intelligence systems that would be used solely for verification. He observed “You won’t get Congress to buy big buck items for arms control.” Concluding that arms control verification will require “piggy-backing” on current intelligence assets, he noted “Arms control is an adjunct of national security and defense.”

Budget Request Scale Back Is Most Telling

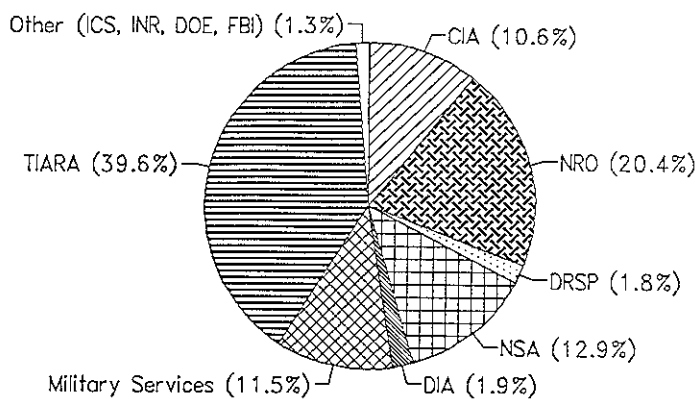
The third and most conclusive indication of the program’s moribund state is to be found in the Fiscal Year 1992 Defense budget request, specifically the P-1 Procurement Programs budget document. The line item under Air Force Missile Procurement entitled “Special Programs” is generally regarded as the National Reconnaissance Office budget for buying satellites. In 1987 the budget for this item was \$1.8 billion, growing to \$2.1 billion in 1988. But following the Boren initiative, the budget grew to \$2.8 billion in 1989, and almost \$3 billion for 1990. Under the Boren program, the budget was slated to remain at this level in subsequent years. But the budget request submitted in February 1991 indicated that “Special Programs” spending was slated to receive only \$2.5 billion annually from 1991 through 1993. This half-billion dollar annual reduction is consistent with the elimination of one Lacrosse satellite (costing about a half-billion dollars) from each year’s spending plan.

With the impending START ratification debate, the question remains whether Sen. Boren will be prepared to support the Treaty in the absence of augmented satellite intelligence systems. The answer is expected late this year or early 1992.

—John E. Pike □

Intelligence Budget

Estimated \$ 30 Billion for 1992



1992 American Intelligence Budget		(billions)	
TOTAL		\$30.02	
ICS	Intelligence Community Staff	\$0.10	0.3%
CIA	Central Intelligence Agency	\$3.20	10.7%
NRO	National Reconnaissance Office	\$6.20	20.7%
DRSP	Defense Reconnaissance Support Program	\$0.54	1.8%
NSA	National Security Agency	\$3.90	13.0%
DIA	Defense Intelligence Agency	\$0.58	1.9%
USAF	Air Force Intel Agency + Electronic Security Cmd	\$1.50	5.0%
Army	Army Intelligence (INSCOM, AIA, ISA, etc)	\$1.50	5.0%
ONI	Navy Intelligence	\$0.50	1.7%
TIARA	Tactical Intelligence and Related Activities	\$12.00	40.0%
INR	State Department Intelligence & Research	\$0.05	0.2%
DOE	Department of Energy	\$0.15	0.5%
FBI	Federal Bureau of Investigation	\$0.10	0.3%

THE DEVELOPING SITUATION IN CAMBODIA: A SOVIET VIEW

by Dimitri Mosyakov

Editor's Note: Dimitri Mosyakov is a senior research associate at the Institute for Oriental Studies of the USSR Academy of Sciences. He is a fluent speaker of Khmer and had, in 1990, spent one year out of five in Cambodia. Author of numerous first-hand reports on the Cambodian situation, Dr. Mosyakov wrote the following article at the request of FAS. It represents, of course, his personal views and was prepared before the most recent new developments in June.

Today it is perfectly clear that the so-called "plan for a peaceful solution of the Cambodian conflict" that was proposed by the United Nations is at a dead end. Efforts to realize it have been undertaken for about two years, but without real success. What other possible ways are there for the situation in Cambodia to develop?

"Two Plus One" Is Possible Option

The first is to return to the so-called Tokyo formula "two plus one" (*i.e.*, the opposition groups of Sihanouk and Son Sann plus the Phnom Penh government). This formula was proposed in Tokyo in 1988, but then rejected because some superpowers (especially, the U.S. and China) thought that the Khmer Rouge—the most powerful military group of the opposition—would be thus excluded from the process of a peaceful solution.

They considered it impossible to reach an agreement without the Khmer Rouge.

It is rather strange that few recognized that herein was the main advantage of the Tokyo formula. The fact is that the Pol Pot regime soiled its reputation by its policy of mass genocide. Pol Pot, Yeng Sari and Ta Mok, Khmer Rouge veterans still in power, are not striving for coalition and stable government, but for full revenge. They regard concessions as steps to seizing power. That's why excluding them from the peaceful solution process is the right thing to do. And today, compared with 1988 (when the Vietnamese troops were still in Cambodia), Khmer Rouge military abilities are diminished.

If the Tokyo formula is accepted, it will be necessary to draw up military and political measures to neutralize the Khmer Rouge. These measures have to envisage the cessation of arms and ammunition supply, the complete disarmament of the Khmer Rouge, the disruption of their military and political organization and, no doubt, mass support for the new government of Cambodia to fight the Khmer Rouge. When the Khmer Rouge are deprived of military aid, they will lose the political cover provided them by the coalition with Sihanouk and Son Sann and will remain under permanent pressure. The Khmer Rouge will inevitably dissolve and a process of self-elimination will ensue.

Another possible way to solve the Cambodian problem is the so-called "red alternative," *i.e.*, an agreement to divide power between the conservative faction of the leading People's Revolutionary Party and sub-grouping of the Khmer Rouge that share their ideas. This possibility would occur only in cases where there was a real threat to the

Party's conservative power which, according to some sources, is led by Chea Sim. Perhaps to save themselves, they will welcome the assistance of the Khmer Rouge. For the time being, though, there is nothing to worry about. Therefore, the conservatives would rather not get rid of Hun Sen's "liberal" faction, but rather would make them subordinate so as to take advantage of their authority.

An external condition of the "red alternative" solution is to resume the whole combination of Vietnam-China relations. Recently, these contacts first came to life, then weakened. A number of unsolved and difficult problems remain between the two countries, but lately the search for mutual compromise has received impetus from ideology. More and more, the idea of socialism's downfall in Europe strengthens ties between China and Vietnam and even among some in the Phnom Penh government. They believe the only socialism remaining is Asian socialism, which might be defended by uniting—thus, the "red alternative."

At the last Congress of the Laos Communist Party, the leader of the Phnom Penh regime, Heng Samrin, declared for the first time in the party's twelve-year history that the Cambodian Revolution had been receiving support from China since 1975.

In spite of all the moves toward a "red alternative," it is quite obvious that the United States, France and ASEAN countries would confront it. After all, in such circumstances they would be excluded from the process of a peaceful solution. The Soviet Union should approach this alternative carefully. Otherwise, it will also be "out of play" and regarded only as a "socialism defender," and nothing more.

Time May Solidify Phnom Penh Successes

Some independent experts suggest another, more possible solution—the self-extinction of the conflict in Cambodia. They believe time works for the Phnom Penh government. By reasonable economic policy and military success, the government slowly but surely strengthens its hold. Military operations become localized in distant and thinly populated mountain regions.

Eyewitnesses report that it is quiet in the cities and villages of the central and eastern provinces as well as those of the vast territories in the west. The conflict is likely getting weaker and may become a long-term conflict of limited intensity, like the everlasting war in Burma or the war against the partisan, detached forces of the Communist Party in Thailand. Under these conditions, Cambodia could successfully develop—despite the military activities. This way of developing is quite real, if we take into account that there will not appear comparable leaders from the opposition after Sihanouk's and Son Sann's death. Norodom Ranaridh, Sihanouk's son, who is regarded as the future leader of the opposition, is well known among Cambodian emigrants, but is not so well known in the country.

The major obstacle to this way of solving the Cambodian conflict is the absence of legitimacy of the Phnom Penh

government in the international arena. If the government and the political system of the State of Cambodia (SC) are not officially recognized in the West and in China, there is no use talking about stable and gradual economic development in the country. This is the key problem and not only for economic development. The legitimization of the Phnom Penh government would halt the aid to opposition forces from the West and China, as well as open possibilities for the SC to receive credits, which are in great demand, and other assistance from the western countries and to export to international markets rice, valuable wood species, natural rubber and precious stones.

We should not exclude another possible solution: the SC government in power invites Sihanouk to Cambodia, giving him an honorable but worthless post of President.

This variant was under consideration at the first stage of the Vietnam-Cambodia national reconciliation policy in 1987-88. Though Sihanouk hesitated, this option had no subsequent results.

The situation is different now: the Phnom Penh government survived, and even strengthened its position, after the withdrawal of Vietnamese troops. Therefore, the old ex-monarch may eventually decide to resign from trilateral government and return to Phnom Penh. The last option would be the best—both for the Phnom Penh government and for Vietnam and the Soviet Union. It could also suit (especially, if the restoration of Sihanouk would be accompanied by democratic elections) the United States and other Western countries, primarily France. But this solution is unlikely to meet the interest of China.

There are no ways to satisfy all parties to the Cambodian conflict. A compromise—which is possible, providing the opposed forces in Cambodia are equal—gets less and less real because of the increasingly dominant role of the Phnom Penh government. If nothing radical happens, the Cambodian conflict is likely to shift to the outskirts of the international arena.

BWC GROUP REPORTS DRAW PRAISE FROM INTERNATIONAL COMMUNITY

The FAS Working Group on Biological and Toxin Weapons Verification—organized two years ago in anticipation of the Third Review Conference of the Biological Weapons Convention (BWC) this September—has released two reports, both well received by the international community as the most succinct and explicit proposals for strengthening the BWC that have been put forward. According to a number of diplomats, the FAS proposals represent a convergence of expert and diplomatic thinking. Peru, an adherent to the BWC, is now lining up cosponsors and is committed to formally introducing many of the FAS proposals at the Review Conference.

Members of the Working Group have participated in four recent international conferences and in UN-sponsored meetings looking toward the Review Conference. A running list of measures under consideration is being continually revised by Working Group members as a means of focusing international discussion and facilitating consensus formation.

In addition to those measures which might be enacted this year at the Review Conference, the FAS has proposed a verification regime that would have to be negotiated as a legally binding Protocol to the Convention. It is likely that the Review Conference will establish an ongoing conference of experts from the States Parties to consider the feasibility of these and other verification measures. In order to investigate the effectiveness of the proposed verification regime and to minimize its intrusiveness, the Working Group has undertaken a program of inspection visits to various relevant types of facilities. They plan to report on this project by the end of this year and, beyond that, to continue consultations with Parties to the Convention at every opportunity to develop a verification protocol that will be both effective and politically acceptable.

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