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30th Anniversary
Pugwash Movement

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PUGWASH AT THIRTY: REVIVING

Pugwash appears to be alive and well, notwithstanding reports to the contrary. At its 30th anniversary conference, a number of signs of renewal were apparent as it grappled, as all such organizations must, with changing eras, shifting constituencies, variable opportunities and the ever-present pressures of funding.

Where the *Bulletin of the Atomic Scientists* was born as the educational arm of the atomic scientists and our Federation of American (then Atomic) Scientists was born as the activist arm, Pugwash has always been the international arm. It traces its origination to the Manifesto of 1955 released by Albert Einstein and Bertrand Russell which was addressed to the world scientific community.

Signed by nine other scientists, including Linus Pauling, Frederic Joliot-Curie and Max Born, this manifesto echoed Einstein's famous aphorism about everything changing but our "way of thinking" by saying:

We have to learn to think in a new way. We have to learn to ask ourselves, not what steps can be taken to give military victory to whatever group we prefer; for there no longer are such steps; the question we have to ask ourselves is what steps can be taken to prevent a military

contest of which the issue must be disastrous to all parties.

This "new way of thinking" theme, a third of a century later, is finally being taken up by a superpower leader, General-Secretary Gorbachev, and this is, in and of itself, enormously encouraging to Pugwash organizationally.

The Manifesto appealed to all human beings to "Remember your humanity, and forget the rest." And it asked the governments of the world to "acknowledge publicly" that their purposes could not be furthered by a world war in which, inevitably, nuclear weapons would be used.

The late Cyrus Eaton, a Canadian multi-millionaire, offered to fund a related meeting of scientists if it would meet at his birthplace in the obscure location of Pugwash, Nova Scotia. This gave Pugwash its name, one which it has never been able to shake. (This was, for a time, considered to be a problem because Eaton was meeting in friendly fashion with Khrushchev and giving the movement an image then considered to be overly left.)

Twenty-two scientists subsequently met at Pugwash; many of them played prominent roles in the scientists' movement for peace for three further decades.

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TWO FAS PROPOSALS NOW OPENLY ESPOUSED BY SOVIET AUTHORITIES

The week of September 20 provided evidence that not one but two different FAS campaigns for dealing with the Star Wars issue had been successful in persuading at least the Soviet negotiators.

First, as members know, FAS has been urging since 1985 in articles and lectures (some in Moscow) by FAS Director Jeremy J. Stone that the Soviet Union should finesse the Star Wars issue by agreeing to long term disarmament, e.g. of percentage reductions, without further ado about SDI, coupled only with unilateral statements that it would withdraw from the agreement if the U.S. abandoned the ABM Treaty. (As our report on conversations with Andrei Sakharov in February, 1987 showed, he had reached the same conclusion but with the withdrawal justified on U.S. deployment of Star Wars—rather than just prohibited testing and development.) On September 21, NBC news reported:

A high-ranking Soviet official has outlined . . . the Moscow strategy in arms control over the remaining months of the Reagan Admin-

istration. This Soviet official said once the agreement on short and intermediate-range missiles is complete, they want to move toward a 50% reduction on long-range missiles. Star Wars would be treated as a separate issue, he said, but Moscow would nullify the agreement on long-range missiles if work on Star Wars went too far.

This is exactly the FAS approach: hold Star Wars hostage by putting the world on the disarmament road. (In Moscow, this tactic is being called the Sakharov "finesse".)

Second, as members know, FAS has been urging, as another approach to resolving Star Wars, that the two sides agree on "threshold limits" on the brightness of lasers, the size of mirrors, the power of space-based reactors, etc; above these thresholds, the components would be considered ABM components but below these

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performance thresholds, they would not. On September 23, Edward L. Rowny, a presidential arms control adviser, told the press that Soviet officials had handed over two sets of "options" for dealing with the SDI. The first, according to a Baltimore Sun article by Charles W. Corddry:

... was essentially a highly technical list of proposals for putting performance limits on "star wars" devices that are tested. For example, lasers could be tested, but only to a certain "brightness" or potency.

This is precisely the approach championed by Associate Director for Space Policy John E. Pike.

The second option offered by the Soviets, according to Rowny, was a ten year agreement to adhere to the 1972 pact "as signed and ratified." But this was not mentioned when the Foreign Minister Eduard W. Shevardnadze told the U.N General Assembly:

The recent agreement may be followed by an accord on reducing by as much as one-half strategic weapons, provided of course, that the treaty limiting ABM systems is preserved.

Shevardnadze, in this statement, is sticking to FAS's tactic without further ado.

In sum, FAS has been successful in drawing Soviet attention to one conceptual solution to the Star Wars issue and, at the same time, has also provided a technical approach with which to compromise ABM Treaty differences if need be.

It seems likely that the Soviet negotiators will attempt to negotiate Pike's threshold limits—now called Associated Critical Parameters—and, when and if this proves too time-consuming, will rely on the fallback described in the anonymous quote and the Shevardnadze statement to meet the timetable of Reagan's impending retirement from office.

Both of these FAS approaches have found support, as newspaper clippings show, in the Department of State.



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Staring out of a group portrait, one sees:

Chou Pei-Yuan, who survived the Cultural Revolution in China and is, today in his eighties, the President of the world's largest peace organization: the 500,000,000 member Chinese Association for Peace and Disarmament.

Eugene Rabinowitch, editor of the *Bulletin of the Atomic Scientists* until his death in 1973.

The late E.H.S. Burhop, President of the World Federation of Scientific Workers (WFSW), a sort of "House of Commons" to the Pugwash "House of Lords" that contained representatives of scientific organizations and trade unions and was, and is, considerably to the left of Pugwash.

Leo Szilard, indefatigable and creative, who, among other things, started the Council for a Livable World by inventing the notion that citizens across the country might be induced to contribute to close and important Senate races in small states where small contributions could have a decisive effect. He died in 1964.

V.P. Pavlichenko who was still secretary to the Soviet Pugwash group 30 years later. (More about this later.)

J. Rotblat, a signer of the original manifesto, who became, for fourteen years, the secretary-general of the Pugwash movement and who was, at this 30th anniversary meeting, still the energetic, guiding spirit at 78 years of age.

Ogawa saw Hiroshima Blast

I. Ogawa, a Japanese physicist who actually saw the first Hiroshima blast from the ground and came to the meeting to remind the participants of it; and

Victor F. Weisskopf, chairman emeritus of the MIT Physics Department who has been an active spokesman for the scientists' movement and who was the invited speaker at the Gmunden meeting.

Starting from such a beginning, it was inevitable that Pugwash would be, at the least, a meeting ground for science-trained peace activists and a nexus for their ideas.

This turned out to be the case. And with various ups and downs, it can now boast of the following record:

*37 annual conferences, averaging about 100 people each, with a total of 1,150 different persons having attended one or more, of which about 900 are alive; these are what Pugwash likes to call the "Pugwashites." About half of them attended only one Pugwash conference. A hard core group which attended three or more such conferences numbers about 300. The regulars, measured by those who have attended 10 or more meetings, number 70.

*49 symposia, begun in 1968, averaging about 30 participants each, were attended by another 1,000 different persons from 67 countries and 18 international organizations. Two thirds of these people were new to Pugwash;

*42 workshops, starting in 1974, averaging about 30 participants also, were attended by 450 different persons from 50 countries.

But what has been accomplished? This is a question



Student Pugwash participants from a dozen foreign countries

often raised, and not only about Pugwash. All organizations involved in this work have the problem of describing, often to an audience that is unfamiliar with the context, what are the concrete results for which they can claim responsibility.

Even presidents have difficulty claiming achievements of their own. President Kennedy, for example, was said to have considered the Underground Test Ban his finest accomplishment. But he once told two disputing scientists, Hans Bethe and Edward Teller, who championed the various camps on this issue: "Thank you for making it possible for me to make up my own mind." In other words, without the pressure of the pro-test ban forces, in particular, the treaty would not have been possible. And, certainly, lesser political figures: Senators, science advisers, secretaries of state, newspaper columnists, newspaper editors, journalists, and all the rest normally have difficulty pointing—even after a career of effort—to results for which they can claim a decisive role.

There are, of course, exceptions. But even in these exceptional cases, it requires a supersaturated environment in which, for reasons almost accidental, the forces are arrayed in such careful balance that a lesser individual or organizational force can topple them.

At a second level of analysis, persons or organizations may take credit for organizational achievements without regard to the ultimate success of the effort in securing a concrete result: Organizing a freeze movement, spearheading a coalition with some legislative purpose, networking with a view to promulgating some idea or class of ideas, providing a forum, etc.

Pugwash's most evident achievement has been at this second level where it provided a forum at which all kinds of avant garde ideas for arms control, peace, and related goals, have been circulated among intellectual activists. If ideas can be thought of as a disease, then the Pugwash attendees could be likened to stricken carriers determined to infect the other attendees in the hopes of having it spread throughout the world.

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Normally the ideas are ideas whose time has not yet come. Unlike international meetings of establishment experts, the Pugwash meetings get their strength from the ignorance and/or disinterest of the attendees in what are normally considered political realities. The tradition is, after all, that of natural scientists explaining what ought to be—and how thinking should be changed. This gives the meeting a distinctly lower level, on average, of scholarly expertise than, for example, the meetings of the International Institute for Strategic Studies (IISS). But, by the same token, it gives the meetings the ability to come up with, and campaign for, ideas which—when they are finally accepted—will make a real difference.

Indeed, by the nature of the attendees, any idea that is eventually successful in providing the basis for a treaty can normally be found quite a long time before in a report of some Pugwash meeting.

Over and above the desirability of having focal points for the spreading of such intellectual infections, Pugwash has had the benefit of representatives of both camps which, for example, IISS has not. For the first quarter century, this meant, mainly, having an audience that could receive and understand the newest Western ideas and carry the infection back to the Soviet Union.

Today it means much more as the Soviet Union upgrades its ability to generate its own new ideas and is led by a General-Secretary that wants his country to stand for a new way of thinking. Now the ideas can flow from East to West.

M.A. Markov's Resignation

Of special relevance to this, and symptomatic of the change, was the resignation, at this 30th anniversary meeting, of the 80 year-old head of the Soviet Pugwash group, Academician M.A. Markov. Markov had been head of the Soviet delegation, with Pavlichenko, its Secretary, for more than 15 years. Many Western Pugwashites felt that the Soviet side was using the position as a sinecure and that new blood was needed. A few days before the meeting, he resigned for reasons of health and recommended Professor Vitaly I. Goldansky in his place.

Goldansky, along with Anatoly Gromkyo, son of the Soviet President, and Sergei Kapitsa, son of famed physicist Peter Kapitsa, are the three Soviet citizens on the Pugwash International Council. All are prominent members of the Scientists' Committee For Peace, Against the Nuclear Threat led by Academician Evgeny P. Velikhov. In effect, Velikhov's men are now in control of Pugwash which was not the case heretofore. (This assumes that Pavlichenko will be replaced as well—a likelihood but not a certainty.) In any case, Western Pugwash representatives all welcomed this change as upgrading the knowledge, relevance and capabilities of the Soviet team; one senior American participant commented that "Pugwash has an opportunity now after some dormancy because the new Soviet group is alive."

To general surprise, Markov's letter of resignation had a



V.I. Goldansky, new Soviet delegation chairman

bitter tone. He said his resignation, attributed first to a "serious deterioration" in his health, was "also related" to "disappointment over the results of my work" in Pugwash. He had ten years before, he said, urged that millions of copies of the Einstein-Russell Manifesto be circulated—and this had not been taken up. Three years before, he had written a manuscript "The Russell-Einstein Manifesto Today" calling for a world Congress to discuss the new way of thinking—and this had gotten nowhere. In his opinion, it has been "a stroke of luck for history" that the new way of thinking was "rediscovered, though several decades later, by world leaders who imbued it with a generic and truly powerful challenge." His main complaint seemed to be that general and complete disarmament was not sufficiently emphasized and that Pugwash was adopting too low a profile.

This change came at a time when Pugwash was challenged by its need for finances to review its claims to usefulness. In the past, it had normally emphasized its utility in bad times when dialogue was at a low point and when Pugwash, with its long relations with the Soviet bloc, could still find interlocutors. Now, in an era of evolving good relations, and with much dialogue going on, Pugwash spokesmen were beginning to emphasize that they could "get the work done." A new and more vigorous Soviet delegation was really critical.

Pugwash Rejuvenated

Starting in 1983, former FAS Chairman John P. Holdren became one of the three Americans on the Pugwash Council and, that same year, Chairman of the U.S. Pugwash delegation. He is given, by many insiders, a great deal of credit for having rejuvenated Pugwash. First and foremost, he has been the draftsman for the Pugwash statements. A careful and skilled organizer of statements, he negotiates what few changes are requested and gets consensus. Second, he negotiates skillfully on the Pugwash Council, putting together "deals" that satisfy everyone and, meanwhile, shaping Pugwash policy. Above all, he has worked to upgrade the representation from the U.S. at the various Pugwash conferences, symposia and workshops.

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PUGWASH WORKSHOPS: 1982-87

Date	Location	Topic	Number of Participants	Number of Countries
17-19 Dec. 1982	Geneva, Switzerland	Nuclear Forces in Europe (VII)	38	15
19-20 Feb. 1983	Geneva, Switzerland	Chemical Warfare (X)	30	9
11-12 June 1983	Geneva, Switzerland	Nuclear Forces in Europe (VIII)	31	16
11-12 Dec. 1983	Geneva, Switzerland	Nuclear Forces in Europe (IX)	40	16
01-04 June 1984	Geneva, Switzerland	Nuclear Forces in Europe (X)	42	15
15-16 Dec. 1984	Geneva, Switzerland	Nuclear Forces in Europe (XI)	34	17
14-16 Mar. 1985	Pocking, FRG	Conventional Forces in Europe (II)	25	14
09-12 Apr. 1985	Lusaka, Zambia	Crisis Prevention and Control in Africal	15	11
25-26 May 1985	Geneva, Switzerland	Nuclear Forces in Europe (XII)	33	18
09-10 July 1985	Campinas, Brazil	Crisis Prevention and Control in Latin America	19	11
24-27 Oct. 1985	Stockholm, Sweden	Chemical Warfare (XI)	31	19
01-03 Nov. 1985	Pocking, FRG	Conventional Forces in Europe (III)	29	14
18-20 Apr. 1986	Stockholm, Sweden	Conventional Forces in Europe (IV)	29	15
14-15 June 1986	Geneva, Switzerland	Nuclear Forces in Europe (XIII)	34	17
09-12 Oct. 1986	Castiglione, Italy	Conventional Forces in Europe (V)	38	15
13-14 Dec. 1986	Geneva, Switzerland	Nuclear Forces in Europe (XIV)	34	14
05-08 Mar. 1987	Berlin, GDR	Chemical Warfare (XII)	38	18
12-14 June 1987	Geneva, Switzerland	Nuclear Forces in Europe (XV)	35	12

*See page 10 for Pugwash Symposia

SOME PUGWASH CONTRIBUTIONS

1. Early recognition of the unfeasibility and malign influence on arms control of the SDI and of the "broad" interpretation of the ABM Treaty. Pugwash led in promoting the idea of limiting space defense research to the laboratory . . . and for barring extension of activities to development and testing.

2. Achievement of a future treaty for a total ban on chemical weapons through clarifying problems of verification and monitoring of such a treaty, e.g., arranging a visit by the Pugwash Study group on Chemical Weapons (CW) to a major industrial chemical production plant in an eastern European country (GDR). This helped to open the doors to reciprocal East- West official visits to chemical weapons facilities which will start this coming October . . .

3. Restructuring of WTO and NATO conventional forces in a non-provocative defensive array, and substantial reductions in these forces. This approach, advanced since 1984 by our Study Group on Conventional Forces, has now been accepted and advocated by the WTO and is presently being studied in NATO.

4. Development of crisis prevention and control networks in Africa and Latin America. An example of the latter is our promotion of confidence-building measures and talks between Argentina and Brazil (now underway) to allay fears that either country will develop facilities for the production of nuclear weapons.

5. Assessing the capability and technical and financial requirements of an international satellite for peace-keeping purposes. The Pugwash analysis was widely recognized.

6. Adoption of unilateral initiatives for arms control to promote mutual trust and possible reciprocal actions, e.g. the Soviet moratorium on underground testing, and various governmental declarations for nuclear weapon-free zones and a freeze on nuclear weapons.

7. Ridding Europe of nuclear weapons, a first step of which would involve elimination of INF and short-range nuclear weapons, now under negotiation.

8. Focussing attention on the very low limits of detectability of underground nuclear tests (about one kt.).

9. Deep cuts in all nuclear arsenals, working towards minimum deterrence levels.

10. Prevention of accidental nuclear war arising from technical malfunction, misjudgement, and psychological factors.

11. Development of the concept of "common security," with first emphasis on Europe.

12. Analysis and promotion of measures to resolve problems of foreign debts, particularly of developing countries, that affect international stability; the relation of the arms race to security and development.

Add to the above the fact that the good offices of Pugwash have occasionally been used by the USA and USSR in connection with the ongoing Geneva negotiations on nuclear and chemical weapons.

From: Annual Report of Secretary-General for 1986/1987

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The 30th Meeting: Reporter's Notebook

The Austrian Pugwash group hosted the 30th meeting in Gmunden, Austria, paying the food and board of the 100 some participants. Gmunden, halfway between Linz and Strasbourg is a town built around a lovely lake.

The American participants were: Ruth Adams of the MacArthur Foundation, who had attended the first Pugwash meeting and many others in her three decade association with the *Bulletin of the Atomic Scientists*; Professor Viola W. Bernard, a psychiatrist and philanthropist; Dr. Jeffrey Botwell who staffs the American Pugwash group at the American Academy of Sciences in Boston; Star Wars expert Ashton B. Carter of Harvard; Former Pugwash Secretary-General Professor Bernard T. Feld; famed analyst Richard Garwin of IBM; FAS Fund Chairman Frank von Hippel, who was elected to the Pugwash Board at this meeting; John Holdren; Michael Intriligator of UCLA; Katherine McArdle Kelleher of The University of Maryland; former Hubert Humphrey assistant Betty Lall; MIT Professor and former FAS Chairman George W. Rathjens; psychiatrist Rita Rogers; MIT Professor Jack P. Ruina, a member of the Pugwash Council; Jane Sharp of Cornell; John Steinbruner of Brookings and the undersigned.

There were about a dozen Soviet participants. Besides Goldansky, Gromyko and Kapitsa, there was former Soviet Ambassador to the U.N. and to China, Nicolai T. Fedorenko—whom one Chinese participant said spoke Chinese better than she did. And a Soviet General, Yuri Markelov, who works for the Disarmament Group in the Soviet Defense Ministry but who did not speak English.

Traditionally, all past Pugwash Conference participants were invited to attend the five year anniversary conferences. But this number having gotten too large, a decision was taken to invite all persons who had attended two Pugwash conferences. This had shaped the attendance on the U.S. side. The Soviet delegation, of course, was determined by the Soviet Government and mediated by the Soviet Pugwash group. (According to Pugwash theory, all participants in Pugwash activities are "individually invited by the Council." In fact, the national delegations determine whom they wish to invite.)

The Chinese delegation included the Deputy Director of Chou Pei-Yuan's Chinese Association for Peace and Disarmament, Ms. Xu Yuanchao, who had received FAS in China in 1986.

Secretary-General's Opening Address

Martin Kaplan's opening address showed that Pugwash was receiving awards: The Olympia Prize of the Onassis Foundation; the "Antonio Feltrinelli" prize; and the Lenin Peace Prize awarded to President Dorothy Hodgkin. And it was getting modest grants from American foundations including Carnegie, MacArthur and The Albert Einstein Peace Prize Foundation. But it was seeking a three

million dollar endowment in the hope that it could, among other things, hire an assistant to the secretary-general.

Pugwash's effort to incorporate young people, "Student-/Young (S/Y) Pugwash" was proceeding. There were ten such national groups, loosely linked to the national Pugwash groups in their country.

Kaplan gave a dozen examples of concrete Pugwash successes (see page 5). Among defects, he listed five criticisms sometimes made: elitist quality with small numbers of scientists participating; aging population of Pugwashites; too low public relations image; insufficient rotation of the leadership; and redundancy due to the existence of other peace organizations.

Among other things, the Council is considering restructuring the annual conferences so that much larger numbers of scientists would attend from the host countries. (A paper prepared by Joseph Rotblat had recommended this "radical" restructuring and, had, indeed, suggested that Pugwash had the duty to be closer to the main stream of

STRUCTURE OF PUGWASH

Pugwash normally seeks a prestigious scientist for president: currently Dorothy Hodgkin, British Nobel Prize winner. At age 66, she has become somewhat frail and has asked to retire when the current secretary general is replaced.

Next in line is an administrator, the secretary-general. This position was held by Joseph Rotblat from 1959 to 1973 and then by M.I.T Physics Professor Bernard Feld from 1973 to 1978. Currently, the position is held by U.S. citizen Dr. Martin M. Kaplan, a former World Health Organization official who works out of a Pugwash office in Switzerland. He also is seeking to retire so that the two top positions are about to change.

Kaplan's impending departure is much regretted since he has been the hard-working, long-suffering, administrator responsible for keeping together a group that has many of the qualities of a small U.N. In the nine years of his administration, Pugwash has grown steadily.

The governing Pugwash Council has 24 members, including three from each superpower, and has been chaired for more than 15 years by Polish Professor M. Nalecz, a biomedical researcher. Feld chairs a 10 person Executive Committee.

There are National Pugwash Groups in 32 countries: Austria, Belgium, Brazil, Bulgaria, Canada, China, Czechoslovakia, Denmark, Egypt, Finland, France, German Democratic Republic, Federal Republic of Germany, Greece, Hungary, India, Ireland, Israel, Italy, Japan, Mexico, Netherlands, Nigeria, Norway, Poland, Rumania, Soviet Union, Sweden, Switzerland, United Kingdom, United States, and Yugoslavia.

the scientific community "from which we appear to have become alienated." His solution was to broaden attendance at the conferences while increasing the symposia and workshops where detailed informal but informed exchanges take place in the traditional Pugwash fashion.)

In effect, the annual conferences have become the least interesting part of Pugwash activities from the point of view of some of its key leaders. The various working groups are not nearly so expert on their subjects as the workshop and symposia participants. And much time continues to be wasted on prepared summaries of the working groups during the conference that are not, in fact, much read. (For example, Pugwash has never been able to get these documents published in a commercial press. Even the rule that the summaries are not consensual documents of the working groups, but only reports by the rapporteur, have not lessened the irrelevant rhetorical warfare over their contents.)

Martin Kaplan has been Pugwash's secretary-general since 1976. He said that the offices in Geneva were strategic and that the foreign missions there bedeviled his life with requests for information. They had become intermediaries in a number of official negotiations—including U.S.-Soviet strategic issues, chemical weapons and some issues in Latin America.

Kaplan serves without salary, supported by his pension, and the Geneva offices are rent free. (Since the president also serves without salary, Pugwash is able to run its offices on quite a low budget of a few hundred thousand dollars.)

Conference Begins

The conference broke into seven working groups such as: Nuclear Arms Race; Prospects for Space; Weaponization or Peaceful Cooperation; Conventional Forces in Europe; Offensive Build-up or Non-Provocative Defense?; Impact of Major Power Relations on the Security of the Third World; Arab-Israeli Confrontation.

The Working Group on disarmament spent its initial session trying to figure out a rationale for reductions that would motivate reductions. Its soul-searching was intensified by one participant who questioned whether deep cuts in strategic weapons would really provide the benefits normally attributed to disarmament.

One participant allowed as how it was a bad sign that so many disarmament devotees were spending so much time trying to rationalize disarmament. He suggested that disarmament be based on something topical and striking—such as the desire to avoid Star Wars—and that this could be done by justifying disarmament as something that would get us off, and keep us off, the Star Wars road. Could not the Soviets accept disarmament contingent on the U.S. staying within the ABM Treaty?

This idea, predictably, never made the summary even though it is being considered in both superpower capitals. (See page 1; it was openly accepted by the Soviets two weeks later.) The Soviet response was to make a joke—

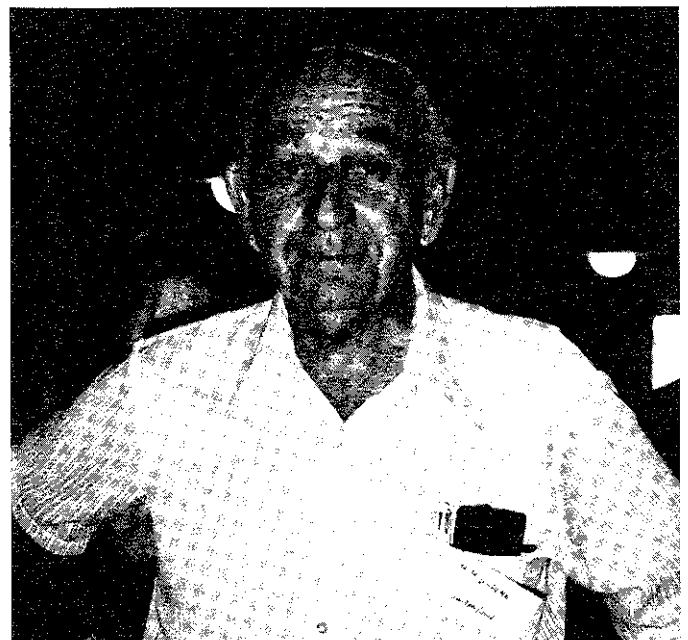
quite a good one but one that was hard to interpret. (Pugwash statements, which must have the approval of the Soviet representatives as part of the consensus, can never take positions openly at odds with Soviet positions; accordingly, something like this, which is an issue in Moscow, would get the Soviet delegation in hot water.)

Most of the time appeared to be spent trying to justify 1,000 weapons as the minimum deterrent or 95% reductions. Clearly 50% reductions have become passe at Pugwash.

Another participant urged each side to assign values to the other side's forces after which the other side would get its 50% cut by choosing forces that added up to 50% in those values. This is the kind of notion that makes good sense at meetings of scientists but would get nowhere at meetings of non-scientific experts.

In the corridor, a senior official explained that Pugwash needs more money for an executive secretary to enable the general-secretary to have more free time. He called the financial situation "not a real crisis—desperate but not serious." In general, he said,

For a while we were discouraged, but now we feel that the effective channels are not so numerous. The real value of Pugwash was to be able to communicate between scientists of influence and, for this, Pugwash was still the best existing group. If abolished, he felt, it would have to be reinvented. The new Soviet team would be much more effective than Markov. Holdren had been a tremendous asset with great energy and judgement. So the U.S. and USSR groups were better than ever. The budget was up. The prospects for more symposia were good. Everything would be alright if they could get the \$2 million trust fund.



Secretary-General Martin M. Kaplan

After a formal plenary, with some delegates expressing relief that Kurt Waldheim had not attended, a visitor introduced the Chinese delegation to an Israeli representative and a useful but intense discussion ensued; these two countries have no diplomatic relations.

On the first day, the Arab-Israeli group had a blow up and thought was given to discontinuing it. But a look at its second session was reassuring.

An Israeli participant had ended his learned and eloquent paper with the sentence:

The most helpful manifestation of impatience is to make haste slowly, to encourage the parties to grope for an accommodation and to remain available to them in a manner acceptable to them. Doing more amounts to doing less.

This aroused Arab ire which sees delay as simply supporting inertial forces that favor Israel "which holds most of the cards in their hands," as in the West Bank settlements.

The Middle East, one participant said, was ruled by a "Shamir-Arafat" alliance in which the status quo would lead to annexation as far as Shamir was concerned and a demographic explosion as far as Arafat was concerned. The further extremes (Sharon and Habash, respectively) were not so dangerous.

The Israelis called for any Palestinian State to be demilitarized and the Arabs, they say, then called for Israel to be demilitarized. An Arab said that this is, obviously, just a negotiating position and that this is the gap which must be bridged. And so it went, but in a civilized and interesting way.

Regional Disputes

A working group on regional disputes ended a discussion on South Africa with a speaker asserting, "Cutting off postal, naval and rail lines to South Africa would effect its policy."

In the discussion on the Iran-Iraq war, M.S. Wionczek said:

... in the summer of 1980, the Soviet Union, for its own reasons, put a lot of pressure on its "ally," Iraq, not to invade Iran, while in the midst of the hostage crisis in Teheran some high U.S. policy makers intimated that they would be neutral in the face of the forthcoming conflict. Moreover, the Iraq attack on Iran did not come unexpectedly to the Iranians who three months before the breakout of hostilities had received all the details of the Iraq military plans from Iran's Ambassador in Moscow—of all places.

Another paper (by Egyptian Ali E. Hillal Dessouki) proposed an international regime for the Shatt al-Arab waterway as a key part of a solution to the war—treating

this river as the Rhine, the Moselle and the Danube had been dealt with in Europe.

A Brazilian author (Luiz Pinguelli Rosa) discussed the 1986 report that a hole (one meter in radius and 320 meters deep) existed in a military area in the Brazilian hinterland and might be designed for a nuclear explosion test. The Brazilian nuclear society had decided that this hole was a "necessary but not a sufficient" condition for a Brazilian nuclear test and speculated that it might have been designed under an earlier administration.

A Pakistani author (Ishfaq Ahmad) gave the Mujahideen view on what the Soviets should do to achieve peace: "... complete dismantling of the Moscow backed regime of PDPA and total withdrawal of the Soviet troops."

A Pugwash Insider

A long-time Pugwash attendee thought that the real role for Pugwash was to secure East-West cooperation on North-South issues. One of its biggest problems was that the local national groups monopolized the Pugwash connection as a kind of sinecure. Pugwash had, originally, been built around people who were sufficiently notable that they could take it or leave it. Now some clung to the organization.

The U.S. Delegation

The American attendees met at lunch to be briefed. The U.S. Pugwash Committee is a subcommittee of the Committee on International Security Studies (CISS) of the American Academy of Arts and Sciences. It pays an assessment of \$18,000 per year to help fund the Geneva office. It decides who attends the meetings from the U.S. based on their expertise, energetic and effective participation, geographic and other criteria.



S. Frier, Israeli delegate

U.S. Student Pugwash had about 15 Chapters with 30 universities involved and ran a conference every two years. It was non-advocacy and issued no statements, but it dealt with more general science and society issues than did Pugwash, e.g., technology in agriculture or computers.

After Lunch

An address by Brookings' John Steinbrunner was followed by commentary by Vitaly Goldansky. Steinbrunner discussed the optimistic and pessimistic approaches to disarmament and sided slightly with the optimists. Goldansky emphasized the new Soviet initiatives aimed at chemical weapon treaties. Evidently, the Soviets are trying to reform their budgetary accounting which, one Soviet participant said, could lead to agreements on military budgets.

The new way of thinking was said to be the "main principle" of Gorbachev's thinking. But a Soviet participant said, laughingly, that the notion could be derived from Lenin. In a formerly banned but now published Soviet work, "Remembrances of Krupskaya" there is written:

I remember Lenin's talking about the war in 1918. He said the modern technology was leading to ever more destructive wars. The time would come when war will be impossible. He discussed this passionately. It was easy to see how he looked forward to this.

Another Pugwash Insider

He felt that things were "going quite well" but that the basic trouble was that people did not know when Pugwash had done something good. Pugwash had done a great deal with unconventional notions of conventional defense and given this credibility in the Eastern bloc. Gorbachev had picked up on the notion of "restructuring" in defensive modes and this was now being picked up in the U.S. Now lots of military were involved where, previously, they laughed.

On chemical weapons, Pugwash has had a long-running workshop that generated the first visit of Western scientists to a chemical facility in East Germany.

There was a "huge" difference between the level of expertise between symposia and the annual meeting; the recent Star Wars workshop in London had shown this clearly. The toughest problem was to get active duty officers on the Western side to participate. And funding is difficult because the profile is low. Much more publicity occurs in Europe than in America.

Victor Weisskopf

A major address was secured from Victor Weisskopf, who had attended the first Pugwash meeting. He complained that he found it disturbing that so many organizations, including Pugwash, FAS and UCS, "took the confrontation as a basic assumption." They look upon it, he

felt, as a problem of stabilizing deterrence, removing MIRV or introducing mobile missiles. But the main problem was "fear and distrust" and this must be "changed to one of common interest." He wished he "knew how to do it."

He said, "I have hope because we are witnessing a new attitude, glasnost." "Who would have expected that it would have come from the Soviet Union. It is a challenge to the West . . . nuclear weapons—who cares—this is the attitude I would like to see."

Weisskopf's address, one observer noted, revealed the fact that the Pugwash movement had never developed the eloquent, charismatic speaker that could, through his person, deliver the Pugwash message to millions in the sense that Carl Sagan has.

The movement is proud of its scientific ability but, as in Weisskopf's speech, deplores the overly scientific approach that its members have spawned. It is, however, a bit late in the movement to emphasize that it ought not take the confrontation as a "basic assumption." And a bit hard to announce this without explaining what Pugwash and its collaborating organizations should do about it.

Still, Weisskopf's approach addressed what is otherwise often a tone of organizational complacency.

Comments from the Floor

One speaker thought Pugwash should reread the Russell-Einstein Manifesto (as Congress rereads annually the farewell address of President George Washington) rather than spend so much time reading death notices of Pugwashites.

Another Third Worlder complained of the ethnocentric and Eurocentric aspect of most discussions.



Ms. Xu Yuanchao, Deputy Director Chinese Association for Peace and Disarmament (CAPAD).

Still another Third Worlder said: "Can you give me one good reason why the North should care about the South and not just tell it to go to hell?"

In a moving statement Student Pugwash delegate Terry Sabonis-Chafee praised Pugwash for encouraging Student Pugwash, and Martin Kaplan in suffering them and giving them their head.

Some Conclusions

In the first place, Pugwash is extremely cost-effective. Because it maintains the support and enthusiasm of so many national groups, and because these are sufficiently influential with their governments, it is able to conduct an unprecedented number of annual meetings, symposia and workshops for an organization whose (headquarters) budget is a few hundred thousand. To get so many people together so often, at this price, is noteworthy.

The people themselves are, from the point of view of a Western expert, a mixed bag. But viewed from the point of view of who are currently available to attend such meetings in Eastern Europe, the Soviet Union, and in the developing world the participants are quite interesting. With few exceptions, all would be quite interesting contacts for a Westerner interested in pursuing matters inside the delegate's country and their opinions on their subjects are valuable. Of course, in many cases, the delegates are quite knowledgeable and expert—especially so in the case of delegates to the workshops and symposia.

The papers range from worthless to splendid and the areas in which the organization is working vary in payoff. The work in chemical warfare and non-conventional defense seem to be especially useful and the work on Third World debt especially irrelevant. But it ought to be the norm that an organization like Pugwash is working in various areas at once—on speculation as it were—with no expectation that results will occur in more than one or two areas at any given time. After all, the problems being worked on are especially intractable and many other forces are being brought to bear on them.

The conventional wisdom would have Pugwash becoming irrelevant at just this period of warming of superpower relations. In fact, however, with the channels now open to the Soviet Union, and with the recent changes in the Soviet Pugwash delegation, and with Pugwash having useful things to say that arise from its shift to symposia and workshops, the organization may turn out to be more useful than ever.

Much depends upon the new leadership as it seeks a new president and new secretary-general. And, as with all such groups, much depends upon the vagaries of foundation funding. But Pugwash, having sustained itself and its constituency for 30 years, may yet outdistance newer organizations whose adherents must offset their uncertainty about what is to be done with the enthusiasm of the newly committed. ■

—JJS



Terry Sabonis-Chafee American Representative of Student Pugwash

PUGWASH SYMPOSIA: 1982-87

Location	Topic	Number of Participants	Number of Countries
Versailles, France, 1982	An International Agency for the Use of Satellite Observation Data for Security Purposes (II)	25	12
Helsinki, Finland, 1983	The Arms Race and International Law	19	9
Plovdiv, Bulgaria, 1983	The Role of Small of Countries in the Security of Europe	29	17
Bucharest, Romania, 1983	A Nuclear Weapon-Free Zone in the Balkans	29	15
Vedbaek, Denmark, 1984	Conventional Forces in Europe	31	14
Cairo, Egypt, 1984	African Security	56	19
London, UK, 1985	Strategic Defenses: Technological Aspects; Political and Military Implications	50	14
Lima, Peru, 1987	Foreign Debts and International Stability	19	12
Mragowo, Poland, 1987	Common Security in Europe	48	21

(Continued from page 12)

Soviet spokesmen gave FAS the clear impression that there would be no hurry about finishing the Krasnoyarsk radar which, some specialists believe, would not be a violation in any case until it is finished. (This is not the official FAS view however.)

Jones Foundation Contingent Grant

As members know, FAS has been enjoying a multi-year grant from the W. Alton Jones Foundation; more recently, the Foundation made a handsome grant of \$200,000 toward the Joint Disarmament Project. Showing admirable caution, however, the Foundation Board made the grant contingent upon the Velikhov Committee receiving an equal sum from some Soviet Foundation, e.g. the Soviet Peace Fund. This contingency was designed to ensure that the Velikhov Committee had the staff, and had the commitment, to actually follow through on the joint agreement at issue. (The Jones Foundation Director, R. Jeffrey Kelleher, was acutely aware that the Velikhov Committee had made many agreements and this method provided him with reassurance that the project would be fulfilled.)

Accordingly, FAS called on the Soviet Peace Fund Director, Thomas G. Grigoryev, accompanied by the Secretary of the Velikhov Committee, Elena Loschenkova, to lobby for a matching grant. We received a most sympathetic hearing and he expressed interest in having more contact with Western foundation executives with a view to exchanging experiences and improving his work. The project will go before the Peace Fund Board chaired by former world chess champion Anatoly Karpov.

Further, that afternoon, von Hippel and Stone presented the project to the nascent Board of Gorbachev's Human Survival Foundation, which E.P. Velikhov chairs. The Board promptly voted a matching grant to the Velikhov Committee which will be funded out of early donations to the Foundation, possibly from the Soviet Peace Foundation. (This Foundation, funded by small contributions from the salaries and wills of millions of Soviet citizens concerned about war, gives away 100,000,000 rubles a year.) It appears that the Jones Foundation has been successful in stimulating the first U.S.-Soviet "challenge" grant.

Besides a number of conversations with Academician Velikhov, the FAS delegation met with Deputy Chairman Andrei Kokoshin and Roald Sagdeev, Director of the Institute for Space. It also had a 90 minute conversation with Georgi Arbatov, Director of the Institute for the U.S.A.

FAS influence in Moscow has never been higher. In particular, it was evident there and on return that the Soviet negotiating team had been much influenced by the notion of "Threshold Limits" championed by Associate Director for Space Policy John E. Pike—they have proposed eight such limits. Meanwhile, the disarmament approach to the Star Wars-START dilemma championed by FAS and, later, by Andrei Sakharov, is still gaining mo-

mentum, viz. get things on the disarmament road and let the resultant political atmosphere deal with Star Wars. And Frank von Hippel's scientific leadership in the Joint Disarmament Project is shaping the studies on both sides and spinning off a number of potential future advances. FAS is invariably treated with great courtesy and personal warmth.

More generally, the Gorbachev team is obviously determined to fulfill goals that are also FAS goals: an end to the arms race, disarmament, economic savings, a safer European confrontation and better relations. No Soviet government has ever been so open to new ideas and to these ideas. Only the hopelessly cynical can overlook the important changes taking place now in Moscow's thinking and the efforts being made there to reach agreement on arms control issues. ■

UCAM PROGRAMS

United Campuses to Prevent Nuclear War (UCAM) is a North American network of university students, faculty and staff working on campus to end the arms race. UCAM, founded in 1982 in response to concern about the threat of nuclear war, today has chapters on eighty-five campuses, as well as individual members at campuses throughout the United States and Canada.

UCAM offers a number of programs and services to its members. Every month chapters receive a resource packet on an issue surrounding the arms race. *NETWORK NEWS*, UCAM's newsletter, is published nine times during the school year. Legislative Alerts are sent to chapters informing them on legislation up before Congress on nuclear weapons and military spending. UCAM also organizes a U.S.-Soviet university exchange program where a delegation from UCAM visits the U.S.S.R. and a similar Soviet delegation visits North American UCAM chapters. In the spring of the year, UCAM brings together hundreds of students for training on issues and to lobby their representatives.

If you would like to know about UCAM activities in your area or would like to know more about UCAM, contact their new office at:

United Campuses to Prevent Nuclear War
309 Pennsylvania Ave., SE
Washington, D.C. 20003
(202) 543-1505

THE JOINT DISARMAMENT PROJECT

After the 30th anniversary Pugwash Conference, FAS Fund Chairman Frank von Hippel and Fund Director Jeremy J. Stone journeyed to Moscow to discuss the on-going five year Joint Disarmament Study that had been agreed at the February Forum.

We arrived the day after the celebrated visit to Krasnoyarsk by Congressmen Downey, Moody and Carr accompanied by National Resources Defense Council (NRDC) staffer Thomas Cochran and Senator Kennedy aide Christopher Paine, among others. Both of these are FAS Council Members but the entire affair was a spin-off of a trip designed especially to examine the NRDC project at Semipalatinsk where underground explosions were being monitored with enormous precision. (Velikhov showed us the reading at which they were able to measure a chemical explosion of ten tons—far less than a kiloton, i.e. 1,000 tons—at a distance of 600 kilometers.)

Velikhov Press Conference

At a subsequent press conference in Moscow on the affair, Academician E.P. Velikhov said the opening of a chemical plant in the Soviet Union to foreign observers and the permission for observers to watch maneuvers in Belorussia and the most recent Krasnoyarsk affair showed that the Soviet Union wanted to “show openness” and to “increase mutual trust.” Precisely because technical issues could impede the process, those engaged in scientific issues must do all they can to show openness. In this connection, he said, he drew the attention of an audience of about 50 media representatives to the agreement between his committee and FAS that called for just such unveilings of military-industrial sites and said that they were ready for more like this.

He said that the Krasnoyarsk radar “could not be an early warning radar unless modified but that the modifications would be prohibited by the treaty.” He noted that the Soviet Union said it “would never be used for ABM purposes.”

Alexsi Arbatov, head of a department on strategic issues at the Institute of World Economics and International Relations, said that the radar would be working “only on an impulse basis so that it could not be an early-warning system.”

(Continued on page 11)



Vice President E.P. Velikhov presides over Human Survival Foundation Board

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