



# Science for Peace

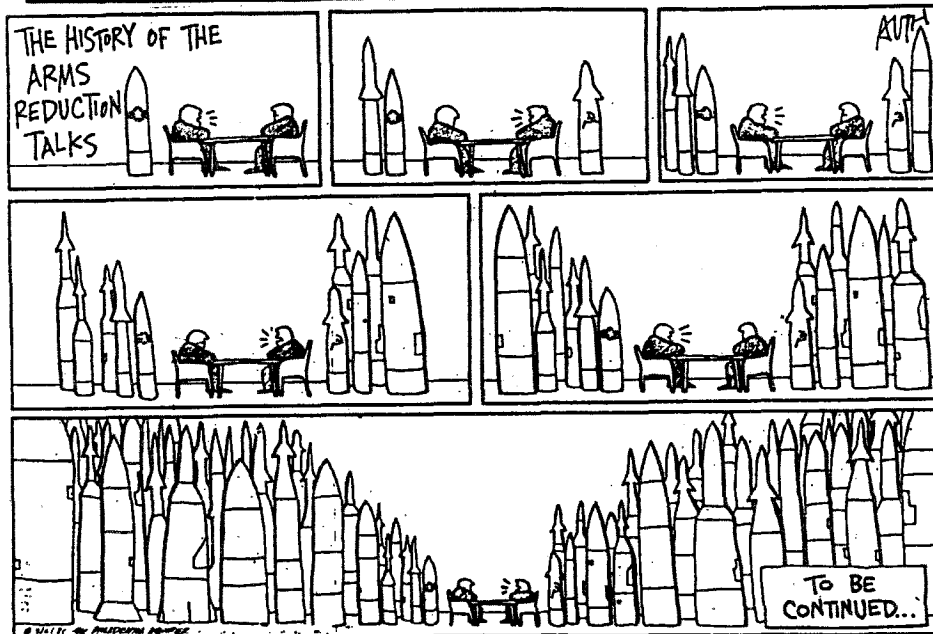
UNIVERSITY COLLEGE, UNIVERSITY OF TORONTO  
TORONTO, ONTARIO M5S 1A1

Brydon Gombay, Editor

BULLETIN

Vol. 5 No. 5

May, 1985



May '85

May 6-7: Conference on European Security and the MBFR Talks. Croft Chapter House, University College, U of T. Conference Director - Derek Paul, Sec'y S4P.

May 8: 3 pm in the Dean's Conference Room of the Medical Science Bldg U of T, the annual board meeting of Science for Peace.

May 8: 8 pm in the Croft Chapter House of University College, U of T, the annual general members' meeting of Science for Peace.

May 10-11: John Polanyi speaks during the Nuclear Winter Symposium in the Senate Chamber of the Ross Bldg York U. Open to the public.

May 24, 31: 7:30 pm. ACT seminars with S4P members Lynn Trainor and Andrew Pakula. Telephone: 362 -0354 Ext: 9434.

## President's Corner

For S4P members who come to the annual meeting May 8 there will be an extended version of this report - my picture of where we stand as an organization today and the challenge that lies immediately ahead.

Your executive intended to strengthen the structure and the financial condition of S4P and we feel that we have been successful. Functioning chapters are now five in number: St.F.X. Univ., New Brunswick, Quebec, Waterloo, and B. C. The Toronto Chapter now has a secretary-Terry Gardner - and may revitalize itself. An Ottawa chapter seems imminent. Guelph has a small residual bank account waiting for renewed chapter interest. There is more potential for support for members' activities through active chapters than through a centralized organization that must, of necessity, be somewhat bureaucratic. Mobilizing the rest of our colleagues is easier through decentralized groups.

Conferences have been successfully organized by the New Brunswick Chapter (visit by Bishop Gumbleton), Quebec Chapter (program for the

Futures Society at the 1985 Learned Societies Meeting), and the BC Chapter (in cooperation with the PSR, the 1984 conference on Nuclear War: The Search for Solutions). The BC Chapter has projected a research-testing program for materials for study at the undergraduate and graduate levels and a possible conference on accidental nuclear war. Toronto members have been involved in the planning and organizing of the Conference on European Security and the MBFR Talks, scheduled for May 6-7.

At other places in the BULLETIN you will find reports of the educational activities of S4P - lectures, seminars and conferences. This year we launched a "seminar by Mail" venture with a major position paper on the non-proliferation treaty and comprehensive test ban resulting. The paper is ready for distribution. It was presented for discussion in Ottawa by Norm Rubin, member of the preparatory group. Amplifications are in order - and new topics are to be treated in a similar way.

S4P's publication program for members' research and "think" articles has had some interesting results: most recently, Arthur Forer's article on Canadian Chemical and Biological Warfare Research has been made the feature story in the April

Canadian Forum. Since the Bulletin has become a monthly publication, information about members' work circulates increasingly freely as requests for proffered reprints attest.

A system of careful control of income and expenses was instituted by our treasurer, Ray Kapral. We started our term in office with commitments and debts of \$3835, now paid off. Our income this year was approximately \$17,700, of which almost \$5000 was returned to the chapters for their programs. It has been challenging to contemplate how much program we could accomplish with so little money.

My own research program into the conditions facilitating or inhibiting escape from social traps was begun in February and will conclude in February, 1986. Chandler Davis and John Valleau have been in touch with increasing numbers of members who have ideas for new research programs. Arnold Simoni has already submitted a project to the new national institute, CIIPS, as has the B.C. Chapter.

- Cont. on pg. 4

## Members in the News

Metta Spencer represented S4P at a conference on European Peace and Security at Houthalen, Belgium. Of particular interest was a proposal of Albert De Smaele, a Belgian instrumental in generating the Helsinki Process, for a European "security zone" of all the nuclear weapons free European countries (30). The proposal, unaccompanied by implementation plans, was widely endorsed by Europeans as well as Russians present.

Quebec Chapter members Paris Arnopoulos, chairman of the Canadian Assoc. for Futures Studies, Philip Ehrensaff, Chapter sec'y, and Jean-Guy Vaillancourt are coordinators of the tenth anniversary conference of the Futures Society June 6, 7, 8, in Montreal at the Univ de Montreal. Lynn Trainor, U of T, will be among the conferees. S4P members are welcome as discussants and places might be found for short papers even at this late date. Write Dr. Arnopoulos at Institut Gamma, 3764 Cote-des-Neiges, Montreal, P.Q. H3H 1V6.

With this issue you receive an invitation to subscribe to Montreal member Don Bates' new publication, THOUGHTS on Peace and Security. Dr. Bates has chaired the McGill Study Group on Peace and Disarmament for several years.

Another S4P member, Robert Laxer, is editor of another new journal, Canadian Spectrum. Lead article in the first issue, "Star Wars: Shield - Sword", explores views of Miroslaw Matuszewski, ch. of the Cdn. Coalition for Peace through Strength, and Derek Paul, secretary of S4P. The magazine will be published quarterly by the Intra-Professional Centre for Arms Control, R.R. #2 Lyndon, Ont. LOR 1T0.

Ursula Franklin (U of Toronto) was informed by letter April 22 that she was being appointed to the Atomic Energy Control Board. On April 23, in the morning, she discussed the required secrecy oath with the Board's secretary, inquiring whether she could discuss the issues before the Board with colleagues. By 3 pm of the same day she was notified by a policy adviser to Energy Minister Pat Carney that there had been an administrative foul-up and she had not been appointed after all. Miss Carney's press secretary said the cabinet rejected the appointment because Prof. Franklin refused to sign the secrecy oath.

## Seminars

The position of seminar coordinator was created last summer with the objective of extending peace education to community groups. A number of Toronto groups that might potentially be interested in seminars for their members were contacted and we responded to requests for assistance from many in both Toronto and the surrounding area: ACT (Their first series was in August - September, 1984; their second is for May-June, 1985), the Graduate Student Union and UCAM at the U. of Toronto, Hillcrest for Peace, The Toronto Board of Education, etc. Members whose participation in these activities is gratefully acknowledged are Mel Watkins, Lynn Trainor, Anatol Rapoport, Derek Manchester, Derek Paul, Michael Lanphier, Jack Dainty, and Arthur Forer.

Requests for a series with the Barrie Chapter of PSR and the Canadian Association of Young Political Leaders for fall are on hand. It is helpful to have an updated roster of willing speakers and topics they are willing to speak on, publications, research, etc. If you will help, let me know.

- Myriam Fernandez

Last fall S4P launched what was called the "Preparatory Group" whose purpose was to prepare position papers to be ready to respond to the "green Paper" promised in January by the Departments of Defense and External Affairs. When the Green Paper failed to arrive, the Preparatory Group became the "seminar by mail" that has attracted participation from across the country. Scribe for the seminar by mail became Michael Lanphier (York U). Joined by Anatol Rapoport, Norm Rubin, Hanna Newcombe and Janis Alton, Michael chaired the Science for Peace Policy Writing Group, whose first product is now available: a position paper and recommendations on the NPT and the CTB Treaty.

Waiting in the wings is the need for coming to grips with the issue of chemical and biological warfare. The April issue of Canadian Forum carries Arthur Forer's article on Canada's role in CBW research. There are three articles in the May issue of the BULLETIN OF THE ATOMIC SCIENTISTS. Ursula Franklin and Jane Zavitz address the issue in the spring issue of QUAKER CONCERN. sipri has announced a CBW series, three studies to be forthcoming in 1985, three in 1986.

The first is a selective review and bibliography of British state papers.

## for your Bookshelf

George Ignatieff, The Making of a Peacemonger, U of Toronto Press, May, 1985. \$19.95.

Robert W. Malcolmsen, Nuclear Fallacies, How We Have Been Mis-Guided Since Hiroshima, McGill - Queen's Press, May, 1985. Cloth - \$20.00, Paper - \$8.95.

NUCLEAR WAR: THE SEARCH FOR SOLUTIONS, proceedings of the PSR - sponsored conference at UBC, October 1984. \$7.50 per copy from Physicians for Social Responsibility, BC Chapter Box 35426, Station E, Vancouver, BC. V6M 4G8.

## BC Chapter News

### ACCOMPLISHED IN 1984-85:

1. Prepared and presented a brief to then MP Joe Clark's forum on disarmament.
2. Delivered 20 lectures to a variety of audiences.
3. Participated in organizing an international conference in Vancouver (NUCLEAR WAR: A SEARCH FOR SOLUTIONS) and made presentations at the conference.
4. Held a half-day seminar at UBC on Nuclear Winter.
5. Prepared and distributed a "Briefing Kit" on nuclear disarmament issues to all candidates for the Sept federal elections.
6. Held monthly meetings and co-sponsored a screening of the NFB series "War" at the UBC campus.

### PLANNED FOR 1985-86:

1. Preparing lectures on nuclear weapons and their effects for inclusion in the curriculum for all first year physics courses at UBC.
  2. Project to support the development of materials for post-secondary science curricula.
  3. Investigating possibilities for interdepartmental programmes at UBC, in particular a graduate programme in studies on nuclear war and its prevention.
  4. Preparing a study similar to the S4P Cruise Missile Report which will deal with the Strategic Defense Initiative.
  5. Preparing a position paper for consideration during the promised review of foreign and defense policy by the federal government.
  6. Participating in the organization of an international conference on accidental nuclear war.
- Our annual membership renewal campaign is under way.

- George Spiegelman, Pres.

## Lectures

### STATEMENT OF REVENUE, EXPENSES AND SURPLUS

FOR THE YEAR ENDED MARCH 31, 1985

Revenue:	
Private sector contributions	\$17,724
Expenses:	
Direct charter activities	7,707
Transfers to chapters	4,902
Office and sundry	1,307
Members functions	838
Professional services	1,880
Bank charges	<u>146</u>
	<u>16,780</u>
Excess of revenue over expenses	944
Cash in hand at start of year	<u>1,359</u>
Current assets	<u>2,303</u>
Liabilities	1,810
Surplus, end of year	* <u>493</u>

### BALANCE SHEET

MARCH 31, 1985

#### ASSETS

Current assets:	
Cash	\$2,303
Accounts receivable	-----
Total current assets	<u>\$2,303</u>

#### LIABILITIES AND SURPLUS

Current liabilities:	
Accounts payable	\$1,000
Advances from directors	- 810
Total current liabilities	<u>1,810</u>
Surplus	* <u>493</u>

President of S4P Anatol Rapoport taught one of the courses in Waterloo University's Peace Studies Program (1984-85), and the first as Professor of Peace Studies at the U of T. This will be expanded in the next academic year and lead, hopefully in 1986, to a full four-year program at the U of T.

S4P members cooperated with the School of Continuing Studies at the U of T in offering its first peace studies program (Oct - Dec, 1984).

Topics and discussants were  
 The Changing Nature of War, Anatol Rapoport  
 Physics of Nuclear Weapons, F.D. Manchester  
 Climatic Effects and Ecological Consequences of Nuclear Detonations, T.C. Hutchinson

Medical and Psychological Effects of Nuclear Weapons, Joanne Santa Barbara  
 Economic Effects of Arms Races, Mel Watkins

Decision making Processes, Logico-strategic Systems, Anatol Rapoport

The Random Factor in Initiating Nuclear War, Chandler Davis  
 Radioactive Monitoring and Verification of Test Bans, Derek Paul

Can We Avoid an Arms Race in Space? John Polanyi

The annual UC - S4P Lectures in Peace Studies were given this year by George Ignatieff, Leonard Johnson, Kenneth Hare, Henry Wiseman and Noam Chomsky. Copies of Ignatieff's, Johnson's and Chomsky's lectures are available from the S4P office.

- L. T. Gardner

The following are authorized S4P Chapters and contacts:

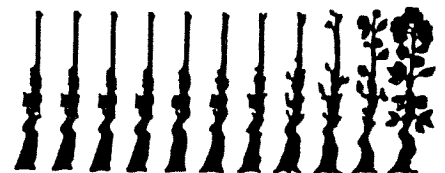
St.F.X. Univ: Dr. M. O. Steinitz, Physics

New Brunswick: Prof. G.B. Semeluk, Chemistry, UNB

Quebec: Prof. Philip Ehrensaft, Sociology, U du Quebec a Montreal

Waterloo: Prof. David Roulston, Elec. Eng. U of Waterloo

B.C.: Dr. Colin R. Bell, Botany, UBC



- Raymond Kapral, Treasurer

The 1984 audit by Clarkson - Gordon is available for inspection.

## President's Corner

(cont)

Our relations with Physicians for Social Responsibility have deepened over the year and the two groups are now working together in a trusting supportive way.

A similar relationship seems to be emerging with computer professionals who are organizing across Canada. The differing "publics" with which we are in contact extends the outreach of each of us.

The chair of peace studies at the U. of Toronto has not been funded, and we have not really been free to work on funding. The first course in a peace studies program was launched in University College at the University, however, and a full program has been planned for 1986, if all goes well.

I have met a great number of you this year, either in visits to your campuses, or cities, or in your visits to Toronto. It seems to me that there is a growing feeling of collegiality - we may become a real "community" of scholars, each doing what he does best, saying and writing what must be said or written, but knowing we share certain ethical terrain together and assuming some responsibility to support each other as we work toward common goals. We have been a growing team that have functioned as your executive board this year: Derek Paul, Ray Kapral and I, your elected officers, have been ably joined by Terry Gardner, education director; Ed Barbeau and then Brydon Gombay, editor; Chan Davis and John Vallean, research directors; Metta Spencer and Myriam Fernandez, seminars and speakers bureau coordinators; John Brenciaglia fund-raising; John Dove, conference coordinator; Michael Ianphier and Hanna Newcombe, principals of the policy writing group; Maureen Kapral, assistant treasurer; Gwen Rapoport, administrative assistant.

- A.R.

The Philip Wallaces, who shared both Montreal and McGill with F.R. Scott, share the following from his "The Collected Poems" (Winner of the 1981 Governor General's Award for Poetry):

### STREET CRY

Mushrooms!  
Mushrooms!  
Who'll buy  
My Mushrooms?  
Fresh from  
Los Alamos!  
Very big,  
One is enough,  
Who'll buy?  
Who'll buy?

(1956)

## Nuclear Winter

SCOPE, the non-governmental scientific group which reports to the UN through the International Council of Scientific Unions, has for the past 15 months been assembling a detailed report on the possibility of nuclear winter as a consequence of a major nuclear war. Recent workshops have brought together a number of experts from temperate and tropical regions with agriculturalists, preparatory to publication of a final two-volume report by October, 1985, by Wiley (U.K.). Professor Tom Hutchinson of the U. of Toronto, organized a temperate systems workshop March 20-23 at the University.

There now seems to be general agreement that a nuclear winter is likely to follow a major nuclear war and that its onset would occur within days of detonations. Assuming a northern war, winter would spread rapidly through the northern hemisphere followed by major climatic shifts in tropical regions as smoke and dust intruded into their stratosphere and upper tropospheres. Temperatures would fall below zero even in summer for weeks or months. Below-normal temperatures of up to 5°C could persist for several years.

While the climatic data seem robust, predictions for changes in precipitation are only that it may be reduced by 25 - 100%, depending upon local conditions.

Biologists and ecologists focused upon effects on the dominant vegetation in various ecosystems. If

temperatures fell below freezing in the tropics for more than a few days forests would die, as would the animals in them. In temperate ecosystems, prospects for survival would be much better. The tundra was believed able to recover even from a nuclear winter starting in the summer. Grasslands, deciduous forests and deserts were considered much more vulnerable. For recovery, much would depend upon banks of viable soil-stored seed which can often survive and germinate after long periods. In the first year of a nuclear winter almost no crops could ripen, so food production for survivors would be close to zero. Even temperature drops of 3 - 5% from present levels would be sufficient to eliminate almost all wheat, corn and soybean harvests.

The nuclear winter studies for SCOPE are comprehensive and global. While many uncertainties and details are missing, what is known presents a grim picture of conditions over the world following a nuclear war. The problems of radioactive fallout and dust have not been considered here.

- Tom Hutchinson

### THE TENTH ANNIVERSARY

of the Institute for Peace Science at Hiroshima University in Hiroshima Japan will be observed with an international conference. This will follow an international symposium on the reunification of Korea and peace in Asia July 6 - 8 in Yokohama. S&P president A. Rapoport will be present at both.

