

Science for Peace

UNIVERSITY COLLEGE, UNIVERSITY OF TORONTO, TORONTO, ONT. M5S 1A1 (416) 978-6928

Bulletin

Vol. 7, No. 6, June, 1987

President's Corner

FROM CONVOCATION ADDRESS
McMASTER UNIVERSITY, June 4

I FEEL HONORED to have been invited to join an academic community which in one year has attracted the Aga Khan and the Learned Societies of Canada to its campus. It was in the old McMaster Building on Bloor Street in Toronto, more than half a century ago, that I was enrolled in Political Science and Economics. There Harold Innis offered his students the notion of "the application of mature techniques to virgin natural resources".

It is that most vital of our resources - the human - that, in my opinion, has encountered most difficulty in adapting to the pace of technological change in this turbulent century. Providing for our society the intellectual maturity to match the pace of scientific and technological change constitutes the greatest challenge to post-secondary education today. By intellectual maturity I mean developing the attitudes and skills necessary to participate effectively in a free and democratic society and to bring about the changes necessary for survival and prosperity in today's increasingly interdependent world community.

Intellectual maturity involves the development of critical thinking and analysis of facts, arguments and ideas, as well as aesthetic knowledge that leads to the making of independent judgements and is marked by an attitude of personal responsibility for influencing decision making.

It has been said that the future is hidden even from those who make it. We live in the present which makes it vital to develop the skills of adapting to the agenda of an unknown future. I would suggest our generation cannot be proud of the problems we have bequeathed to present and future graduates.

As president of Science for Peace I do not question the need for upgrading the knowledge - intensive technology required to enable Canadians to keep pace with an information society in a post-industrial age. What I plead is the case to give adequate attention to our education system to developing skills and talents for individual

judgement and decision-making, leading to responsible citizenship and statesmanship.

- George Ignatieff

Dr. Ignatieff will receive an honorary degree of Doctor of Laws at McMaster University, Hamilton, June 4, in the Faculty of Social Sciences. Prince Aga Khan was honored by the Faculty of Health Sciences on May 15. June 5 will see David Suzuki among those honored by the Faculty of Humanities and Sciences.



"Not them — they're an endangered species."

The National Youth Peace Prize

Angelo Mingarelli and James Neelin joined National Youth Science Foundation director David Hall and Gary Leblanc to serve as jury for the national Peace from Science Award. There were 11 nominations for the national award, three excellent, according to Prof. Neelin, and 2/3 of them very good. Double winners were the Ottawa and Halifax entries. Dr. Mingarelli will present the awards at the Int'l Science Fair in Quebec City July 10 - 16. Escorting the winners on their prize trip to New York City in August will be Prof. Neelin. The winners will attend sessions of the UN Disarmament Conference.

I have seen something of M. de St. Pierre's plea for maintaining perpetual peace in Europe. It reminds me of an inscription outside of a church yard which ran "Pax Perpetua". For the dead, it is true, fight no more. But the living are of another mind, and the mightiest among them have little respect for tribunals.

-Leibnitz, 1768, Vol. 5

Newsorthy

Recipient of a CIIPS scholarship this year is Walter Dorn (SfP UN Rep) for work toward his Master's degree in chemistry at the U of T. Co-supervisors for his research into chemical detection of CBW agents are Michael Thompson and SfP Secretary, Lynn Trainor. Walter's book, *PEACE KEEPING SATELLITES*, (from PRI-Dundas) comes out in July. He is also participating in history's longest relay - the Sri-Soacechinmoy-oneness-home Peace Run - from June 1 to July 25, Victoria to St. John's. Walter will run from Victoria to Toronto.

The SfP co-sponsored Working Group on International Surveillance and Verification in sponsoring a workshop on satellite and airborne surveillance for arms control verification, peace-keeping and Canadian sovereignty purposes July 7, Physics Dept., U of T. (Financial support comes from CIIPS.) Contact Eric Fawcett, Physics Dept., U of T, for further information.

QUEBEC STUDENTS TO MOSCOW

Paul Cappon, founder and director of the Montreal Centre for Nuclear Disarmament and Community Health, led a group of 30 12- to 15-year olds to Moscow in May. The young people were winners among 1000 entrants in an essay contest - a newspaper ad invited essays about world peace.

"People don't usually listen to kids," said Natasha Kubisch, a 14-year old, "but now that we've started this, we're going to have to be ambassadors for peace all out lives."

George Ignatieff has been invited to serve as a Member of the Rotary Peace Forum Advisory Committee of the Rotary Foundation of Rotary International. (The Advisory Committee is charged with organizing a peace program over a three-year pilot period.)

From an interview with Yasushi Akashi - as of March 1 new UN Under-Secretary General for the Dept. for Disarmament Affairs: "I was in Geneva last month where I saw tangible progress made on negotiations on chemical weapons. Tremendous gaps which existed between East and West on verification points are being bridged to a large extent. So we may be on the verge of major progress."

AGM Highlights

**S4P FEDERAL OFFICE ACCOUNTS
INTERIM REPORT ON 1986-87
(not audited)**

INCOME

Received private contributions (members' dues and donations)	18138.04
Other private contributions (and student dues)	1349.00
MBFR book sales	315.00
Received grant from Gordon Foundation	22000.00
CIIPS grants: Accidental Nuclear War Conference	5000.00
Toronto Lecture Series Project	4500.00
Peace Scientists Directory	2500.00
Interest	<u>563.74</u>
	54365.78

DISBURSEMENTS

Educational and members' projects	12339.60
Conference and publication expenses	5539.49
Professional services for projects	14583.28
Telephone, office expenses, insurance, etc.	1150.49
Auditing fee	600.00
Research expenses	300.00
Chapter rebates	<u>9463.00</u>
	43975.86

Cash balance 10389.92

COMMITMENTS AT YEAR'S END

Gordon Foundation grant: professional services and equipment	6561.23
Final Chapter rebates	1183.00
S4P Information Network budget	76.00
National Peace from Science Award	1000.00
Computer equipment budget	159.00
Secretarial expenses	<u>386.45</u>
	9365.68

Net balance 1024.44

Please note: This is an interim report and applies only to the accounts of the federal office. When the accounts of the Chapters are available a more detailed accounting of the overall finances of the organization will be presented to the Board of Directors and will be available to all members. The figures have not been audited.

the Board 1987 - 1988

Christian Bay, Gian Brenciaglia
Jon Cohen, Chandler Davis,
Walter Dorn, John Dove, Philippe
Ehrensaft, Myriam Fernandez,
Cynthia Folzer, Ursula Franklin,
James Gardner, L. T. Gardner,
Helga Guderley, David Horwood,
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Mingarelli, Peter Nicholls, David
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Rapoport, David Roulston, Norman
Rubin, L. C. Schlichter, Luis
Sobrin, George Spiegelman, M.O.
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Thompson, Lynn Trainor, Israel
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Anatol Rapoport
Michael Lanphier

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Paul LeBlond, Research
Anatol Rapoport, Education
Eric Fawcett, S.P.I.N.

Paul LeBlond was commended for helping to establish a network of regional research directors across the country. A similar network of education directors who will work closely with the research network is envisaged as a major program for the coming year.

COMPLETE SET OF ANNUAL GENERAL MEETING REPORTS AVAILABLE FROM THE NATIONAL OFFICE.

Research

MY MANDATE was to foster "useful peace related" research by Canadian scientists and to keep members of Science for Peace informed of what research of this kind is going on or contemplated across the country. A network of associate research directors across the country is in place now to work toward these objectives. Research associates are C.C. Bigelow (Winnipeg), Kenneth Dunn (Halifax), Helga Guderley (Quebec City), C. S. Holling (Vancouver), James King (Toronto), Robert Korol (Hamilton), Robert Malcolmson (Kingston), Peter Nicholls (St. Catharines), David Roulston (Waterloo), Leroy Sanders (Ottawa), G. P. Semeluk (Fredericton) and Philip Wallace (Montreal).

A working group on the Prevention of Chemical / Biological Warfare has been launched under the leadership of Arthur Forer. The group's mission is to establish communication between Canadian experts, develop up-to-date expertise so as to be able to formulate positions for SFP and to develop the capacity to inform the public.

Unfinished Business: documentation of members' research projects and continuing discussion with CIIPS about funding matters. The practicalities of proposal assessment by the research directors also require further thought and discussion. There are practical difficulties with timing and communication which make a critical review of proposals difficult.

- Paul LeBlond

T. C. Hutchinson and Derek Paul have received grants from the Nuclear Safety Review Committee to prepare briefs. The Committee, chaired by Kenneth Hare (who headed the Royal Society's Nuclear Winter Study), will report to the government by October.

General Systems

Proceedings of the meeting of the Canadian and Northeast U.S. Section of the International Society for General Systems Research, May 20-21 at Ryerson Polytechnical Institute, Toronto, *Foundations and Applications of General Systems Theory with a focus on Science Education*, are available from H. Burkhardt, Dept. of Physics, Ryerson P.I., Toronto M5B 2K3. Phone: (416) 979-5000 Ext. 6976. \$12 per copy.

Conference tapes (9 sessions) are available at \$4 per tape.

Honorary chairman of the conference was Anatol Rapoport, one of the founders of the International Society in 1955. Now president of the new Canadian - Northeast U.S. Section is Ken Burkhardt. Next conference will be held at Concordia College in Montreal in fall, 1988.

WAR BUSINESS

Ernie Regehr, *ARMS CANADA, The Deadly Business of Military Exports*, Toronto, 1987, James Lorimer & Co.

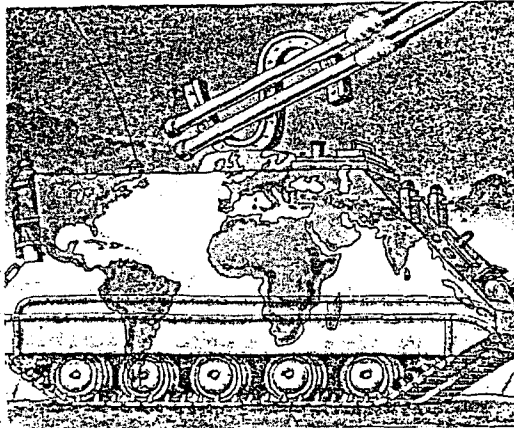
From the Introduction: "Canadian cabinet ministers may be the last to know, but it turns out that no arms seem to be sold with the intention of killing people - this is not a peculiarly Canadian claim. All weapons from the point of view of the vendor are strictly in the service of peace. The U.S. Air Force is well aware of this and accordingly designates its fighter aircraft sales programs with the prefix 'peace'. Thus sales to Israel, Saudi Arabia, Egypt and Japan are code - named 'Peace Fox', 'Peace Sun', 'Peace Farrow', 'Peace Marble' and 'Peace Eagle'.... And if others can call multi-billion-dollar weapons -induced deficits 'economic recovery'.... why can't James Kelleher expect Canadian arms sales to produce a new age of prosperity for this country?"

Ernie Regehr is research director of Project Ploughshares, headquarters at Conrad Grebel College in Waterloo, Ont. He is author of *Making a Killing* and co-editor of *Canada and the Nuclear Arms Trade*.

FOOTNOTE:

"Champion Road Machinery (of Goderich, Ont.) is paving the way for its entry into wider military export markets. The company says it will spend \$9.6 million over the next three years to design, develop and manufacture 'a new generation of road graders specifically engineered to meet the rigors of military export markets'. The federal government is assisting Champion in its development project with a \$4.7 million loan. If the project succeeds, Champion expects to generate 150 new jobs and an increase in its sales of \$70 million over the next five years." *Toronto Star*, Apr. 16.

"The Canadian Defence Products Guide is an Eaton's Catalogue of the arms business." - *ARMS CANADA*



FOOTNOTE 2:

The Ontario Chamber of Commerce, the Canadian Manufacturers' Ass'n, the Cdn. Federation of Independent Business and the Investment Dealers Ass'n complained on May 21 that the Ontario budget should have done more to cut the deficit. But there was no complaint from the same groups when federal government proposed a deficit building expenditure of \$10 billion for nuclear submarines and other military hardware.

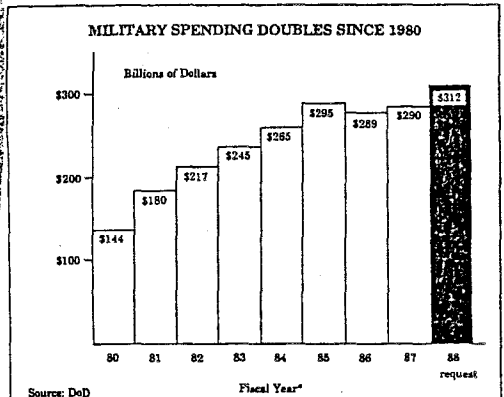
- - THE TORONTO STAR, May 29

A reprint from the May 3 *Washington Post* presents Washington's opinion of the \$10 billion, 10 nuclear subs plan espoused by Perrin Beatty..... A May 1987 *Disarmament Times* article by William Epstein, "A Total Test Ban." is also available.

"No Business like War Business", Vol. XVI, #3, *The Defense Monitor*.

"The Pentagon Prepares for Nuclear War: the 1988 Budget", *The Defense Monitor*, Vol. XVI, #4.

The *Monitor* is available for \$1 U.S. per copy from CDI, 1500 Massachusetts Ave., N.W. Washington, D.C. 20005, U.S.A.



Source: DoD
Chart by CDI

The Reagan Administration embarked upon the largest peacetime military buildup in U.S. history. The U.S. has spent \$1.9 Trillion on the military since 1980. Military spending has more than doubled since 1980, growing at an average annual rate of 10.5%.

The Reagan Administration is projecting military spending of \$1.8 Trillion from 1988 to 1992, with an average annual growth of 6.2%. The military budget under these projections will be nearly \$400 Billion by 1992.

*Fiscal Year 1988 runs from October 1, 1987 to September 30, 1988.

From *The Defense Monitor*

SDI ZAPPED!

"Science and the Citizen" Department of *Scientific American*, June, 1987, discusses the finally released American Physical Society's Report on Directed Energy Weapons (SDI). Its summary comment: "SDI zapped!" Formal publication of the report will be in *Reviews of Modern Physics* later this year.

The "Executive Summary and Major Conclusions" of the Report on Directed Energy Weapons to the American Physical Society appeared in the May, 1987 *Physics Today*, Special Insert pages S1-16..... A reprint of the *Scientific American* commentary is available from the *SfP Bulletin*.

From *Harvard Magazine* we can reprint for you John E. Mack, M.D.'s Frederic William Atherton Lecture for 1986, "Action and Academia in the Nuclear Age".

REPRINT AVAILABLE:

John Ralston Saul, "Macabre Truth of the Arms Trade" from *The Globe and Mail* of Apr. 3, 1987.

John Ralston Saul looks at "The War Business" from a British point of view for *The Spectator*, Apr. 11. From the *SfP Bulletin*.

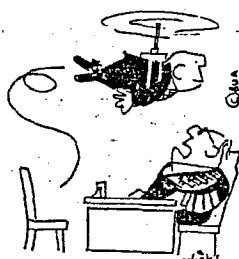
"U.S. protectionism represents the most direct threat to the one market on which the Canadian (arms) industry most depends."

-ARMS CANADA

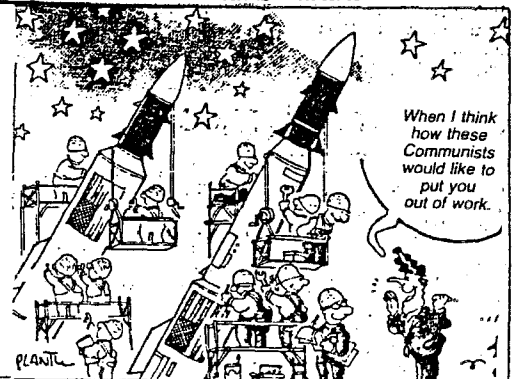
3rd generation of A-weapons in the works

Reuter
NEW YORK

The United States is developing a third generation of nuclear weapons using extremely small charges-to accomplish highly specialized purposes, *Time* magazine reported yesterday. As an example, *Time* cited the Hazebrook nuclear device, which has the explosive power of 40 tonnes of TNT, 0.2 per cent the strength of the atomic bomb dropped on Hiroshima, Japan, during the Second World War. The device is designed to send a spray of pellets through space at a speed of up to 100 times that of a rifle bullet to destroy missiles before their warheads can be released.



"Okay, I like it. Now what's your nuclear bomb-carrying capability?"



Letters

Willowdale, Ont.

I am a member of the Young Scientists of Canada (an affiliate of the Youth Science Foundation). I have a school assignment on Science and Society. I've decided to choose a scientist's point of view on the arms race and SDI as an example.

It would be tragic to blame man's catastrophic deeds on science. Using science in a moderate way to eliminate nuclear weapons and achieve international peace are some things that I would like to see. There are a lot of unfulfilled promises that science can bring to the world as a whole because no racial barriers exist for scientists.

Any suggestions on how to implement science and society into the classroom, as well as any information on how science can be put to peaceful uses in terms of SDI would be appreciated.

- Amy Ma, Grade 9
Zion Heights JHS

Montreal, P.Q.

I heard George Ignatieff speaking French on the Quebec educational network. He was very good.

Vermont ETV and TV Ontario are re-running Gwynne Dyer's WAR this month. The seven-part series begins Friday, June 19, 10pm in Ontario and on Tuesday, June 23, 10pm on Vermont ETV, Channel 33, cable channel 14, in Montreal.

- Tish Kasirer

Toronto, Ont.

The New York Review of Books recently published an excellent three-part essay on Star Wars and nuclear strategy by Lord Zuckerman. The author who has been chief scientific advisor to successive British prime ministers and ministers of defence offers insightful and far-reaching analysis in the context of reviewing several books on nuclear issues. The articles appear in the April 9, 23 and May 7 issues.

- Andrew Pakula

Bookshelf

Stephen Salaff, "Better Trade with Russia", *Policy Options*, May, 1987. "Redressing our trade imbalance with the USSR would yield present and future economic benefits as well as more international harmony." (Reprint available.)

William Epstein, a reprint from *Disarmament Times*, May, 1987: "A Total Test Ban is an Indispensable First Step".

Materials for exhibits such as A-Bomb artifacts, photo panels, posters, film and video tapes, etc., are available for "A-Bomb Exhibitions" free except for packing and shipping charges. For information write one of these addresses:

Hiroshima Peace Culture Foundation
1-2 Nakajima-cho
Naka-ku, Hiroshima 730, Japan
or
Hiroshima Peace Memorial Museum
1-3 Nakajima-cho
Naka-ku, Hiroshima 730, Japan.

Books and papers donated to and collected by the national office are now stored in Room 50, University College, Anatol Rapoport's office. They are available for use by SFP members and students of the peace and conflict studies program.

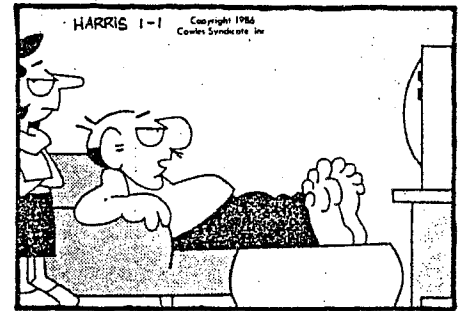
N.I. Lapin and V.N. Sadovskii, "Soviet - American Scientific Discussions on the Methodology, Theory and Practice of Systems Research", *Soviet Studies in Philosophy*, Winter 1986-87. M.E. Sharpe, Inc., 80 Business Park Drive, Armonk, N.Y. 16504, USA. A report on the 34th annual conference of the Society for General Systems Research and a Soviet-American symposium on the foundations of cybernetics and systems theory.

Report of the Committee of Soviet Scientists for Peace, Against the Nuclear Threat, *The Large-Scale Anti-Missile System and International Security*, Moscow, 1986 (in English). Write the Novosti Press Agency Publishing House, Moscow, USSR.

Call for papers

A new quarterly political science journal is scheduled to appear in January 1989: *The Journal of Theoretical Politics* will be the official publication of IPSA's Committee on Conceptual and Terminological Analysis (COCTA) and its study group on policies, institutions, performance and evaluation (PIPE). To be published by SAGE Publications, 28 Banner St., London, EC1Y 8QE. Anatol Rapoport is on the editorial board.

Eric Fawcett will represent SFP at the Global Challenges Network - Int'l Science & Technology Study Group Conference in Munich, Germany July 17-19. Sept. 1 - 6 will find him at the Quincennial Conference of Pugwash in Austria.



"Being inactive has its benefits. I don't have to worry about attracting any heat-seeking missiles!"

The *Bulletin* takes a holiday until September 1, knowing full well that SFP members are doing their bit for peace in deep thought or in busy conferences.

Science for Peace

UNIVERSITY COLLEGE, UNIVERSITY OF TORONTO, TORONTO, ONT. M5S 1A5

NATIONAL EXECUTIVE

George Ignatieff, *president*

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CHAPTER ASSOCIATES

Science for Peace New Brunswick

G.P. Semeluk, Dept. Chemistry,
UNB, Bag Service #45222,
Fredericton, N.B. E3B 6E2

Science et Paix Quebec

David W. Horwood, 3540 Durocher,
#12, Montreal, Que. H2X 2E5

Science for Peace Ottawa

A.B. Mingarelli, Dept. of
Mathematics, Univ. of Ottawa,
Ottawa, Ont. K1N 9B4

Science for Peace Toronto

Phyllis Creighton, Dictionary of
Canadian Biography, Univ.
Toronto, Toronto, Ont. M5S 1A1

Science for Peace Waterloo

David Roulston, Dept. of
Electrical Engineering, Univ.
Waterloo, Waterloo, Ont. N2L 3G1

Science for Peace Brock

Peter Nicholls, Dept. of
Biology, Brock University, St.
Catharines, Ont. L2S 3A1

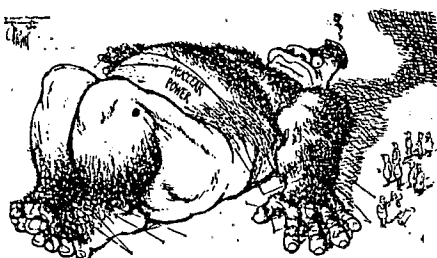
B.C. Chapter of Science for Peace

Colin Bell, Dept. of
Microbiology, UBC, Vancouver,
B.C. V6T 1W5

Chapter Information: SFP Office

Editor: Gwen Rapoport

Bulletin Enquiries: (416) 656-5496



Everything is under control

Decker, The Washington Star