

Science for Peace university of toronto, toronto, ont. MSS 1A1 (416) 978-6928

Bulletin

Vol. 6, No. 6, June, 1986

President's Corner

I am truly honored to have been elected President of Science for Peace. The choosing of a political scientist for this role perhaps conforms to the normative definition of a scientist as one "who possesses knowledge in any department of learning."

My special"department of learning" is diplomacy and defence, applied and honed during 33 years in the foreign service of Canada. During this service I have become convinced that science and technology, twinned with military contractors, may be lucrative for business, but deadly for security and peace. At a time when our entire planet is a potential battlefield and we are tempted to pursue military operations into outer space, it behooves Canadian scientists combine their research efforts with those of scientists throughout the world seeking surer paths to security and survival than those that lead to the "peace of the grave".

"Canadians recognize," said Prime Minister Mulroney to the UN General Assembly Oct. 23,1985, "that there is no greater goal, no more compelling duty, than the quest for peace. We shall not rest until our security can be assured without tens of thousands of nuclear weapons. Above all, we shall not rest until we have secured the future of our children."

I believe that the task of educating the public about the consequences of nuclear war has to go on. But awareness of the fatal consequences of radioactive leaks or explosions or of the instability of the nuclear deterrent is not enough. We have to use our expertise to stop the arms race which is fuelled by scientific and technological innovations.

A close examination of the competitive process of accumulating nuclear weapons in the arsenals of the superpowers reveals that this activity is constant and largely senseless. It has no real or long term objective and sometimes may be even contrary to established law and existing treaty obligations like the ABM Treaty. The change in leadership in the Soviet Union has put a new opportunity in our way to explore the possibilities of putting restraints on this mindless process. Instead of "sharing the burden" with the United States for starting a new escalation of the arms race (through support of the binary chemical weapons program - ed.), Canada should press for a creative dialogue to end the threat of nuclear, chemical and biological warfare.

Disasters in the operation nuclear power plants are timely reminders of the need for research in improving the systematic monitoring of radioactivity, at least to the standards now in operation in Sweden. This, Canadian scientists could do.

In order to reduce the risk of war by accident or miscalculation, Canada could establish a crisis management centre, located as we are on the missile route between the two nuclear superpowers.

Instead of Star Wars, Canadian science has the capability of contributing significantly to "Star Peace". Canadians, through experience in such activities as world-wide reconnaissance through satellites, seismic sensors, oceanography, geodesy amd meteorology, could contribute invaluable research to counter the new trend toward "Fortress America".

One of the most disturbing trends is the retreat being led by the United states from internationalism at a time when the global infrastructure of communications, finance and trade all make the interdependence of nations an imperative. The choice before Canada is whether to contribute to world law and order as we have done in the past, thus being a "middle power", or to become the "ham" in a superpower sandwich. - George Ignatieff

AGM Highlights

OFFICERS FOR 1986 - 87:

George Ignatieff, president John E. Dove, secretary John Valleau, treasurer Raymond Kapral, chairman, and Derek Paul, nominating committee

IN MEMORIAM;

Alva Myrdal and Olof Palme of Sweden

K.A.C. Elliott, Montreal, early supporter and member of Science for Peace

A MOTION OF THANKS:

To Mr. and Mrs. Frank Hsu, of St. Clair Copy & Printing, for their outstanding assistance with the production of printed materials for Science for Peace, especially for the BIILLETIN.

ON THE CHANGING FACE OF EDUCATION PROGRAMS:

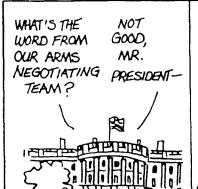
Terry Gardner, Science for Peace education director for the past three years, reported that lectures, radio programmes and seminars in Toronto all initiated by the national officehave become programmes of the Toronto Chapter. Patterns established by the Toronto members are underway on many campuses across Canada and are led by local groups. Principal need from the national office will most likely be for coordination and servicing of chapter-originated programmes in the coming years.

ADVISORY COUNCIL ESTABLISHED

The Council will consist of past members of the Board of Directors and constitute a "pool of talent" upon which the Board can call for expertise and assistance.

COMPLETE RECORD OF THE MEETING

Complete minutes and reports of the officers are available upon request from the national office.



- THEY WANT US TO CUT THE NUMBER OF OUR MISSILES BACK TO THEIRS



NO WAY TELL THEM WE'LL AGREE TO CUT THE NUMBERS OF OUR MISSILES BACK TO THEIRS -



- IF THEY AGREE TO CUT THE NUMBER OF THEIR MISSILES BACK TO OURS

Now, the CW "Deterrent"

NGO FORUM ON CBW PROHIBITION
22 May, 1986 at UN Headquarters:

"Over the last five years more progress seems to have been made in the Conference on Disarmament in Geneva in the negotiation of a Treaty to eliminate chemical weapons than in any other area."

Toronto, 10 May, 1986

The Prime Minister
The Secretary of State for External
Affairs

The Defence Minister

We strongly urge that Canada vigorously resist acceptance by NATO Defence Ministers' Meeting May 22 and 23 of U.S. manufacture of binary chemical weapons. Scientific opinion strong that such weapons would drastically reduce probability of agreement on treaty banning chemical weapons due to near impossibility of Corbachev and PRAVDA and recent progress at ad hoc committee on CW give hope time ripe now for advance towards...treaty. Essential not to squander possibility of progress.

/S/ George Ignatieff John Valleau
John E. Dove

On motion of the meeting of the Board of Directors of Science for Peace, 10 May, 1986.

Brussels (Reuter-CP) Defence Minister Erik Nielsen, Canada's representative at the session (meeting of NATO defence ministers), made a strong plea for NATO unity, urging all members to help Washington "share in the moral burden" of the decision.

Stephen Strauss, The Globe and Mail:
"The US navy began its binary program with the 225-kilogram Bigeye bomb in 1965. It was halted in 1969 after 6000 sheep were accidentally killed in the Dugway testing ground in Utah."

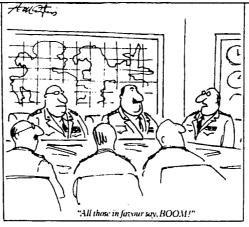
ON THE US CHEMICAL ARMS PROPOSAL:

"It is deemed prudent by all NATO countries that the US increase or modernize its chemical capability for the maintenance of deterrence and peace." - Harvie Andre to the House of Commons.

The Geneva Treaty on chemical weapons outlaws first use but not research or deployment.

"INSIDE INFORMATION":

"The threat of a Soviet invasion of North America via the Arctic is not as remote as some people think....And our potential opponent has more than arrows in his quiver."- Lt. Gen.C.H. Belzile at Mobile Command HDQTRS, St. Hubert, Quebec.



Nuclear WinterThreat

Given the recognition of the fact that nuclear "deterrence" is unstable, in that, given an international crisis, each opponent is under pressure to strike first, Don Bates (Montreal) proposes a higher order deterrent which would guarantee devastation for aggressor as well as victim. His simple proposal is that missile silos be surrounded by large numbers of tanks of crude oil. A first strike against the silos would cause huge smoky fires and generate a "nuclear winter".

gathered at the Scientists University of Toronto May 6 to assess the technical feasibility of the proposal, as well as its political, diplomatic and strategic aspects. The conferees agreed there is still a great deal to learn about the processes which could give rise to nuclear winter and much uncertainty in the data on which an assessment of feasibility would have to be based, so further study seems justified. A most important reason for undertaking serious consideration of the nuclear winter deterrent is to increase public awareness of the issues surrounding nuclear deterrence, SDI and the effects of global nuclear war.

Don Bates' original proposal is to be found in the March/April 1986 issue of "Thoughts on Peace and Security" which he publishes at P.O. Box 608, Victoria Station, Montreal H3Z 2Y7. A summary report of the May 6 meeting is available from the Science for Peace national office.

- John Dove

Multiple Choice

U.S. Dept. of Energy spokesman Jim Boyer said the recent US nuclear test was planned for one of three reasons: to test systems designed to guard against accidental or unauthorized detonation; to make sure weapons in the US strategic stockpile were still in usable condition; or to test a new design. He would not specify which. (Washington, Reuter)

Chernobyl

It is significant that the reactor accident was detected through the Swedish radioactive air monitoring system. The Swedish system is unique and has no parallel in Canada. It detects airborne radioactivity in a routine way all over the country and at an exceedingly high level of sensitivity.

In 1982 Sweden proposed an international radioactive data exchange, envisaging a world-wide system of radioactive monitoring stations as an arms control verification measure connected with a possible Comprehensive Test Ban Treaty. But what was proposed as an arms control measure clearly now has an important dimension in public health and safety.

Despite the monitoring which is already done by provincial health authorities, Canada does not possess continuously operated nation -wide systems and has no monitors of sensitivity comparable to the Swedish. Perhaps it is timely now for a Canadian pilot project.

- Derek Paul

"BW"

London, Ont. 12 May

I am currently working on a contract with the Verification Section of Arms Control and Disarmament (Dept. of External Affairs). The contract, entitled "Collateral Analysis and the Verification of Compliance with the Obligations of the Biological and Toxin Weapons Convention which came into force in 1975 prohibits the development, production, stockpiling and acquisition of biological and toxin weapons. However, there is no practical restriction on research.

- Tim Brac



Arms Race

Letters

Vancouver

Our AGM was held in Calgary in April and I am now "past president"! It was a very important and worthwhile experience to be president of PSR for the year and a half, but I feel glad to hand on the reins to others. Obviously I will still be very much involved but in a different way.

A lot of new things are happening with PSR: For one thing we changed the name to Canadian Physicians for the Prevention of Nuclear War. There is now an office in Ottawa, an executive director, and Jan Van Stolk, our new president in Edmonton, will be able to work closely with others there who have an incredible amount of energy to go with their ideas.

- Dorothy Goresky, M.D.

Dartmouth, April 26

winter we had our first nuclear submarine visitor of the yeara repeat visit of the SSBN Von Steuben -carrying 16 Trident I missiles with a total of 128 - 100 kiloton warheads.

It was a strange experience to be on a residential street (part of Shearwater CFB married quarters), peering across and down through the thick fog to the dim shape of the less than 200 m away. submarine Especially as there was not a soul in sight.

Had I been a terrorist with a powerful anti-tank gun, there wouldn't have been anyone to stop me hitting the hull with a good chance of blowing the rocket fuel up and scattering the reactor and warheads all over the harbour!

Dartmouth May 11

Nuclear powered subs have been coming here since 1965. Since 1980 a small "sub watch group" has welcomed 29 nuclear powered attack submarines, 17 nuclear powered ballistic missile subs, and various nuclear weaponscapable surface ships....The sub power plants are in the 10-20 MW(E) power range, carrying a 7-10 year supply of uranium fuel. Many of the subs can carry small nuclear warheads for torpedos and the ballistics carry either 16 Trident I missiles or 16 Poseidons. The Trident I (range 7000 km) carries 8 - 100 kiloton independently targetable warheads.

I question whether the sub power plants are as well protected against accidental releases of radioactivity as the CANDU stations. The missiles each with many tons of propellant and implosion explosives in each warhead are clearly not ideal neighbours for a nuclear reactor, nor ideal things to welcome in an urban area.

> For more information, write - John Osborne 5 Blink Bonnie Terrace Dartmouth, N.S. B2Y 2G9

Dear Sirs:

We are very impressed by your support of the Soviet peace initiatives expressed in your letter to the General Secretary of the Communist Party Mikhail Gorbachyov.

It is very important to develop close and productive cooperation in the struggle for peace between peoples all over . the world who are in fact preoccupied with the destinies of peace on earth.

We think that our peaceful activity and your calls for an end to the arms race could help improve the world situation.

The Soviet Union will do everything possible to ensure to the people the possibility of working and living under conditions of enduring

> - I. Liakin-Frolov First Secretary Embassy of the USSR

> > Toronto, 15 May

Dear Mr. Gorbachyov:

We were most gratified to learn that the Soviet Union has extended its moratorium on testing nuclear weapons. In our opinion, your steadfastness is the most promising way of mobilizing world public opinion to press for ending the arms race and for embarking on the road to disarmament and peace.

/S/George Ignatieff Anatol Rapoport President Director

Ottawa, 15 May

"...In assessing Canada's role in this international crisis (the bombing of Libya by the US), the security of Canadian citizens becomes paramount. At the same time, however, we believe that the Canadian government has a wider responsibility to ensure that all peaceful means available, including the use of economic sanctions and the rule of international law, are exhausted before resorting to military action.

John N. Turner

Ottawa, 15 May

I appreciate your bringing to my attention your views on the United States' military action against Libya, a matter of great concern to all citizens and particularly those of us who work for world peace.

.....We felt a responsibility to speak on behalf of Canadians who were shocked by the action of the Reagan administration and who fear that this attack will only lead to further violence.

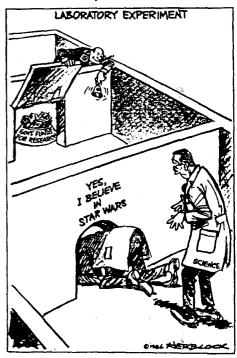
- Edward Broadbent

See May BULLETIN for SfP statement.

New York, 14 May

"A leaky roof on a home with no walls" - this is how Star Wars is characterized by the Center for Defense Information in its recent issue pf THE DEFENSE MONITOR, Vision and Reality". If your Wars: organization could effectively use this issue, please write to Admiral Gene La Rocque at 1500 Massachusetts Ave., N.W.., Washington, D.C. 20005 U.S.A. He will be happy to send a reasonable number of them to you at no

-Sidney Katz, CDI NGO Representative to the UN



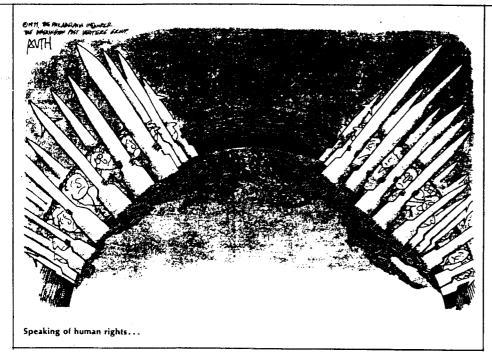
Newsworthy

Another editor among Science for Peace members is Prof. J. Tully, Dept. of Political Science, McGill University. Prof. Tully edits the newsletter of the McGill Study Group for Peace and Disarmament.

Alan G. Newcombe is on the editorial board of the World Encyclopedia of Peace and a contributor. Other member contributors are William Eckhardt and Anatol Rapoport.

Pergamon Press, publisher of the World Encyclopedia, has an extensive o f catalogue peace - related publications. For sales and Canadian price information write the Press at Suite 104, 150 Consumers Rd., Willowdale, Ont. M2J 1P9.

David Suzuki has been named as the recipient of the 1986 \$100,000 Royal Bank Award for Canadian Achievement. Roger Gaudry, chairman of the bank's award selection committee, said Suzuki has brought issues and themes of great importance into public consciousness.



Bookshelf

William Epstein, "A Test Ban -Halting the Nuclear Arms Race".Reprint from the CHRISTIAN SCIENCE MONITOR, 23 April. (From the national office.)

CIIPS REPORT on "Negotiations for Peace in Central America", a Conference Report by Liisa North. Proceedings of the roundtable on the subject in Ottawa 27-28 Sept. For a free copy, write to CIIPS, 307 Gilmour St., Ottawa, K2P OP7.

William Keeney, "Peace Careers" from Spring 1986 issue of International Peace Studies Newsletter published by Center for Peace Studies, Univ. of Akron, Akron, Ohio 44325 USA. This is a look at an expanding field worldwide, with no reference to a place for scientists in the overview!

William Bunge, Epilogue from A WORLD IN CRISIS?, Geographical Perspectives, edited by R.J. Johnston and P.J. Taylor, 1986, "Our Planet Is Big Enough for Peace But Too Small for War". Reprints from the national office.

Union of Concerned Scientists, NUCLEUS, Vol. 8, No. 1, Spring 1986, "What Future for US Strategic Nuclear Forces?" Free from UCS Publications Dept., 26 Church St., Cambridge, Mass 02238, USA.

From the UN Dept. for Disarmament Affairs: The United Nations and Disarmament: 1945 - 1985, United Nations, Room 3161, New York, NY 10017 USA, or from your local bookstore.

Derek Paul, <u>Chemical and Conventional Disarmament as Co-requisites of Nuclear Disarmament</u>, paper delivered to the second All-Unions Conference of the Academy of Sciences of the USSR, May, 1986. From the national office.

Ralph K. White, ed., <u>Psychology</u> and the Prevention of <u>Nuclear War</u>, New York University Press, Washington Square, New York, NY 10003 USA, 1986.

This book makes readily accessible the best short selections available that represent a psychological perspective on the present situation of international conflict, on the conflict process and how it is and may be exacerbated or reduced, and on psychological and interactive processes that bear on the likelihood of war.

De-escalation

(Associated Press, 28 May)

TWO NUCLEAR SUBS RETIRED BY REAGAN

"President Ronald Reagan ordered the retirement of two nuclear submarines yesterday, keeping the US within the limits of the SALT II arms agreement with the Soviet Union."

SOVIETS TO ALLOW EMIGRATION OF 117

"The Soviet Union has agreed to settle 36 divided - family cases by permitting 117 people to emigrate to the United States to join family members."

the Board

1986 - 1987

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NEXT ISSUE OF THE BULLETIN: SEPTEMBER

Science for Peace

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