BULLETIN

Vol. 4 No. 2 -- Spring 1984

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S4P thanks Doreen Morton for typing this Bulletin and Pearson-Garnet Press for printing it. Material for the editor should be sent to him at Room A102, University College, University of Toronto, Toronto, Ontario M5S 1A1

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84.12 THE ANNUAL GENERAL MEETING ON MARCH 31, 1984

The Annual General Meeting was held on Saturday, March 31 in the Combinations Room of Trinity College in Toronto. After the minutes of the previous meeting were approved, the outgoing president, Professor Fawcett, gave his report (see 84.13). It was announced that legislation will be soon brought to Parliament enabling the setting up of the Canadian Institute for Peace and Security. The membership of our organization now stands at 682. The treasurer presented his report (attached). The Education Director reported that about 40 people attended the Inter-University Workshop at York University. He also announced a fall course to be given by the University of Toronto School for Continuing Studies in which eight members of our
organization will take part; it is hoped to follow this up with another course in the spring. The British Columbia Chapter, in conjunction with Physicians for Social Responsibility, are planning a major conference in October.

The Research Director reported on a number of items: the failure of two proposals to be accepted for Ford Foundation support, the need to establish widespread contacts in Ottawa, limitations on chemical and space weapons, and a conference on Mutual Balanced Force Reductions to be held in May, 1985 at York University. M. Fernandez announced a one-day workshop on April 27 under the auspices of the Institute for Environmental Studies at the University of Toronto. Rod Byers pointed out that Mr. Caccia, for the federal government, has commissioned Professor K. Hare to do a study of nuclear winter. The incoming President, Professor Anatol Rapoport, was presented to the membership; his inaugural address is reproduced below (see 84.15). The new Board of Directors was elected and the firm of Clarkson-Gordon were approved as auditors.

84.13 THE PRESIDENT’S REPORT FOR 1983-84

Development

Science for Peace (S4P) is growing slowly but steadily as a National Organisation. No new Chapters have been formed, but the existing Chapters (British Columbia, New Brunswick and Waterloo Region) are active and new Chapters are forming in Montreal (at Concordia University) and at Guelph University.

S4P is now registered as a Non-Governmental Organisation (NGO) with the Public Information Division at the United Nations.

Research and Education

Members of S4P at the University of British Columbia and at the University of Toronto made substantial research proposals through their universities in early 1983 for funding by the Ford Foundation. Neither was successful but alternative funding sources are being sought and these continue to be the most ambitious research projects thus far promoted by S4P.

The Inter-University Workshop on Peace Education held in November 1983 is to be followed by a similar meeting (organised by the Peace Research Institute, Dundas) at Brock University in May 1984. The organisation of peace education in the universities may well be the most effective mode of bringing the various Chapters of S4P into cooperative action. We can look to the Canadian Association of University Teachers for support in this activity: the April 1984 issue of the CAUT Bulletin carries a comprehensive article on University Peace Education.

Education of the public through the media is a responsibility that S4P should share with other professional organisations. A memorandum was submitted to the CRC Advisory Committee on Science and Technology in February 1984 at their invitation providing suggestions for TV and Radio programmes and also our Speakers Bureau (a list of about 50 speakers in the Toronto area).
Government

As reported in the S4P Bulletin (Vol. 4 No. 1 – Winter 1984) we responded to Prime Minister Trudeau's Peace Initiative with several proposals. The most important development for S4P possibly resulting from the Peace Initiative would be the formation of a publicly-funded Canadian Centre for Studies in International Peace.

S4P together with Physicians for Social Responsibility is sending to each MP a personal letter with a brief description of the Nuclear Winter scenario. We intend this to remind parliamentarians that the issues of war and peace are of supreme importance — a necessary reminder especially in election year when they might be distracted by domestic issues (see 84.26).

Financial

The registration of S4P as a charitable organisation in January has enabled us to embark on a serious fund-raising programme, first in support of ongoing educational activities and in due course in support of research projects.

Publicity

We intend to publish four editions per year of the S4P Bulletin, which is intended to provide a medium of communication to the members about the activities of the Chapters of S4P and of the National Organisation. We are also publishing a quarter-page article monthly in the Peace Calendar in order to inform a much wider readership of our activities.

Eric Fawcett

84.14 INTRODUCING THE NEW PRESIDENT OF SCIENCE FOR PEACE

Professor Anatol Rapoport was elected President of Science for Peace at the Annual General Meeting on March 31. But he comes to Toronto to fill another position as well. From its founding, Science for Peace has been committed to bringing about the establishment of a Chair of Peace Studies at the University of Toronto. The work, though incomplete, is ongoing, and is marked by a series of heartening successes: University College has determined to establish the chair; the University has agreed; and although the chair has not yet been endowed, it is virtually occupied! — And by the world-renowned scholar we most hoped to attract when the funding was to have been secured: Professor Anatol Rapoport, Professor Emeritus of Psychology in the University of Toronto, former Director of the Institute of Advanced Study in Vienna, game theorist and Gaming Editor of the Journal of Conflict Resolution, author of such varied works as Strategy and Conscience (1969), Clausewitz on War (ed.) (1968), N-Pearson Game Theory (1970), has become a Fellow of University College, taken an office in the College and made a gift to the College of his time and energy in forwarding peace studies there.

Science for Peace and University College will cooperate in attempting to secure funding for the Chair, so that Professor Rapoport may have a suitably qualified successor. His presence and reputation will make our task easier.
84.15 THE INAUGURAL ADDRESS OF PRESIDENT RAPORT (March 31, 1984): NOTES
provided by Professor Rapoport

I am deeply honored by being elected president of Science for Peace. I
feel very strongly about both science and peace as ways of life and regard them
as inseparable, because science extols truth, while war must be nurtured by
deception or by self-deception. At times, in order to wage war, deception had
to be perpetrated on entire populations to induce them to kill and to submit
to being killed. With the advent of intercontinental missiles and nuclear
warheads, such drum-beating, flag-waving, trumpet-blowing deception is no longer
necessary. But now pervasive self-deception has come to the forefront, the self-
perpetuating mutually supported self-deception of political leaders, who con-
tinue to think in terms of pre-nuclear geopolitics.

The activities of Science for Peace comprise peace research and peace
education. These, too, are, to my way of thinking inseparable. The aim of
research is to produce new knowledge, that is, to dissipate ignorance. In the
early stage of peace research, there was a widespread notion among peace
researchers that prevention of war could be facilitated by new knowledge, for
example by development of conflict-resolving techniques or by removing identifi-
able "causes of wars". In this conception, the products of peace research
are to be made available to decision-makers who would thereby become better
qualified to guide the international system along safer channels. In this
approach, the dissipation of ignorance becomes the principal aim of peace
research. But the role of deliberate deception and of self-deception is lost
sight of. I would rather conceive the product of peace research as substantive
materials providing content for programmes of peace education on a mass scale.
The object of such programmes should be more than dissemination of knowledge.
They should also open the way to enlightenment and to emancipation from com-
pulsive delusions.

I conceive of our organization as a fountainhead of resistance to the
perversions of science somewhat analogous to certain movements intent on re-
storing spiritual and ethical force to religion perverted by greed for power
and by ritualistic formalism. For those are the very perversions that erode
the spiritual and ethical foundations of science -- the misuse of science in
the service of power and the misconception of science as an activity defined
solely by correct rituals, be they techniques of observation or rules of logical
deduction, or standards of statistical inference. Completely missing from this
image is the enlightening and emancipating message of science -- the original
promise, whereby power applied to the shaping of the physical environment and
cognitive procedures designed to protect against self-deception were supposed
to be means of fulfilling that promise, not ends in themselves.

In our age, the mission of restoring the emancipating and enlightening
promise of science is inseparable from the mission of resisting the prepara-
tion for war. War, the triumph of brutality over humanity, of base passions
over reflection and self-knowledge has always been incompatible with the pro-
mise of enlightenment and emancipation inherent in science as a way of perceiv-
ing the world. Today war has assumed an even more ignominious role -- that of
subverting science, seducing scientists to serve in planning and designing
the "final solution" to the human problem. It is against this subversion of
science that peace education programmes designed by scientists should be directed.
I see this as one of the main tasks of our organization.
This conception of peace education as the use of knowledge generated by peace research to enlighten and to emancipate as well as to inform and the conception of peace research as generation of substantive content of peace education answers the troublesome question of whether the scientist can with a clear conscience also be an activist. The answer is yes, of course, he can, indeed not merely in the role of a responsible citizen (which is usually conceded to be every one's right in an open society) but also in the role of scientist, provided his activism is compatible with the role of scientist, that is, provided this activism is aimed at implementing the avowed aim of science -- enlightenment and emancipation. In sum, for the scientist engaged in peace research, activism is co-extensive with peace education.

In closing, I would like to make a solemn pledge to do everything in my power to further the objectives of Science for Peace, which, I believe, coincide with the objectives of science as a whole as well as with the hopes of humanity as a whole.

Anatol Rapoport

84.16 NEW BOARD MEMBERS

We welcome to the Board of Science for Peace the following new members: Arthur Forer (biology, York); Allan Griffin (physics, Toronto); Tom Hutchison (environmental studies, Toronto); Raymond Kapral (chemistry, Toronto); Fred Knelman (philosophy, Concordia); Robert Laxer (OISE); Michael Lanphier (York); Barry Millman (physics, Guelph); M.V. Naidu (Brandon). The following members have been re-elected: Ed Barbeau, Donald Betts, E. Margaret Fulton, Terry Gardner, Brydon Gombay, John Hewitt, J.W. McGowan, Derek Paul, John Polanyi, J.D. Prentice, David Suzuki, Lynn Trainor. About half the board will be entering its second year of office.

84.17 THE RESEARCH DIRECTOR'S REPORT FOR 1983-84

This report is confined to projects such as will require funding from outside Science for Peace. Many smaller efforts are in progress or have already resulted in publication of articles in newspapers and magazines. Such efforts, valuable as they are in the struggle for peace, are mainly individual and often do not depend at all on research coordination. Our efforts therefore have been channelled in two directions:

1. to obtain funding from an agency through a university administration,
2. to obtain funding directly from an agency.

It has been expressed several times that for major projects involving the hiring of research and secretarial staff the route through university channels is to be preferred, mainly because the infrastructure for handling pay, deductions, etc., already exists. Science for Peace currently has no employees and would have to set up such procedures in the event of hiring researchers. A second advantage of applying for major grants through a university is that the fact of existing infrastructure increases the chance of funds being granted. Two proposals, essentially of Science for Peace, were submitted to the Ford Foundation in 1983, but neither was granted.

The first entitled "Towards International Security" was submitted by Profs. Christian Bay and Lynn Trainor through the University of Toronto.
The Second, "A Study on the Facility of an International Arms Monitoring Agency" was submitted by members of the B.C. Chapter, M. Wallace et al., through the University of British Columbia.

Both of these projects remain relevant and could be pursued further.

During the same period one proposal was submitted to the Donner Foundation for funding, directly by Science for Peace. The topic was the causes of war since 1945, with a view to new insights into conflict control. I regret to report that this study was also not funded. One of the reasons given was the lack of infrastructure provided by Science for Peace at the present time. We were able to counter that objection with evidence of available facilities locally and the generous offer of cooperation by the Conflict Studies centre in Fredericton, N.B. However the project remains unfunded.

On the more positive side, a project on the consequences of nuclear war for Canada has been initiated by Professor Tom Hutchinson of the Institute of Environmental Studies, with cooperation and encouragement by Science for Peace. A major element in this study will be the Nuclear Winter. People wishing to take part in this study should contact Professor Hutchinson at the Institute for Environmental Studies, University of Toronto.

In the past year I have kept in as close touch as practicable with the Division of Arms Control and Disarmament, Department of External Affairs, where there are now adequate funds for the support for research on verification. Current priorities of the Division are Chemical Warfare Treaty verification and Comprehensive (nuclear) Test Ban Treaty (CTB) verification. We have jointly explored several areas where Science for Peace could usefully undertake new work, and there is a possible study pending on chemical warfare. This matter should be revisited upon receipt of a general study of verification which is being completed at Queen's University and is due in May 1984. A Chemical Warfare Treaty is perhaps the most likely Arms Control Treaty which could be finalized in the next two years, and since such a Treaty would open the door to further detente, particularly in Europe, I feel that we should cooperate with the Department of External Affairs in the latter's considerable efforts in this direction.

Verification is of importance internationally towards a CTB Treaty. Here there are several verification technologies:

1. for explosions in the atmosphere: satellite observations and fallout
2. for underground explosions: seismic detection, and fallout if there is a leak from the site of the explosion.

The Department of Energy, Mines and Resources (EMR) is managing the Canadian programme of seismic verification both technically and in its linkage world-wide through ISDE (International Seismic Data Exchange). The Division of Arms Control and Disarmament will be supporting two further staff members in this field, in addition to the one recently hired at their expense. What is needed currently are highly specialized experts, and these are being hired as they become available. We should continue to monitor this work in case an opportunity to be of service should arise.
Radioactive air monitoring has been entirely ignored by the Canadian arms control community. The Swedish Government has, however, called for an international data exchange on atmospheric radioactivity and has pointed its desirability for CTB Treaty verification. In Sweden an inexpensive air monitoring system has been in place for many years and operates routinely under their environmental protection branch. Two Soviet underground nuclear explosions have been detected by their system over a period of years. I have personally undertaken to look into the possibility of having a study carried out for Canada in routine radioactive monitoring for verification purposes.

Other fields of research in which grants have been or shortly will be sought are:

1. Accidental nuclear war (M. Wallace, U.B.C.)

Also funding could be required in the next 12 months by A.A. Harms who is chairing a new committee on nuclear non-proliferation.

I note that there is no planned research in the vital fields of naval arms limitations or outer space.

The Brief which Science for Peace submitted to the Parliamentary Committee on External Affairs and National Defence in 1982 on the Internal Satellite Monitoring Agency (ISMA) is still resting. The position of the Government in 1982 was that the project would require U.S. cooperation. One purpose of ISMA was to lift the monopoly of satellite monitoring from the superpowers and place part of the responsibility into U.N. hands, which should have the effect of strengthening the U.N. A copy of the ISMA Brief was recently placed in the hands of Mr. Joe Clark's commission of enquiry on arms control etc.

I conclude with some comments on the Canadian Centre for Arms Control and Disarmament, a new research centre which Science for Peace cannot afford to ignore. We need to cooperate with this institute, and I recommend my successor as research coordinator to keep in close touch with its director Dr. John Lamb and his research director Mr. Larry Hagen.

Another development which could signify an important step forward is the proposed new institute for peace and security (as yet unnamed), which was promised in the throne speech in December 1983. We have since that time consistently supported the concept of such a federally supported peace institute, and have stressed to Mr. Geoffrey Pearson (who has been collecting and sorting suggestions regarding the new institute for the Government) that such an institute could cooperate with and complement Dr. Lamb's Centre. (The contrary claim is that the two would inevitably become competitive.) I have also presented a Brief to Mr. Joe Clark's commission of enquiry for the Conservative Party, in which I sought the Conservative Party's commitment to support the new institute. In my Brief I made it clear that there were many roles for the new institute which complemented the limited research roles of Dr. Lamb's Centre.

Derek Paul
84.18 EDUCATION DIRECTOR'S REPORT FOR 1983-84

University College has appointed a Professor of Peace Studies, Anatol Rapoport. He will offer a course in Decision Making Processes, engage in research, and help to coordinate other peace studies activities. Still, the endowment for the Chair of Peace Studies has yet to be found. Some new planning is under way for the funding effort. We expect to find funds more easily on account of Rapoport's incumbency, as well as some of our other visible successes, including:

- Our continuing, excellent series of University College Lectures in Peace Studies;
- The series of Inter-university Workshops in Peace Education, of which the first was in November at York, the second will be in May at Brock, and the third will be -- we hope -- even farther from Toronto;
- Planned publication of both the University College Lectures in Peace Studies and the Proceedings of the Inter-university Workshops in Peace Education;
- Our new course in The School of Continuing Studies.

Finally, a remark on the Education Budget. It provides for 1984-85 fund-raising:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>1984-85 University College Lectures in Peace Studies</td>
<td>$16,500</td>
</tr>
<tr>
<td>May 1984 Inter-University Workshop in Peace Education</td>
<td>$1,000</td>
</tr>
<tr>
<td>1984-85 Science for Peace Seminars</td>
<td>$4,000</td>
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(Sub)-Total $22,300

This will be supplemented by other undertakings nationally.

Terry Gardner

84.19 THE ACTIVITIES OF THE NEW BRUNSWICK CHAPTER

The following is taken from the report of the president, Professor Israel Unger, presented to the membership at the annual general meeting at the University of New Brunswick on March 22, 1984: "The New Brunswick Chapter of Science for Peace has been in existence for nearly a year. At this juncture it seems appropriate to review our activities.

"Our membership stands at about 50 and is truly province wide. There are Science for Peace members at the four universities in New Brunswick; we boast amongst the membership students, faculty, lay people, scientists, engineers, social scientists, lawyers, and others.

"In no particular order, our activities last year included:

1. Sponsorship of a talk by Professor D. Bates of the McGill University Medical Faculty, on the consequences of nuclear war to Canada.
2. Co-sponsorship of a talk by Admiral Falls on NATO's nuclear policy.
3. Acquisition of two slide shows on the medical and other consequences of nuclear war. These are available to any member on request to view and show to others.
4. Acquisition and dissemination of information on the nuclear arms race.
5. Talks to student groups at Mount Allison University, Saint Thomas, and UNB (Bridges House, MacKenzie House, and McLeod House, Young Liberals Association).
6. Several radio interviews of Professor Allan Sharp and myself.
7. A talk to the Unitarian Fellowship in Fredericton.
8. Participation by Professor Margarida Krause and me in a panel discussion in Nackawic following the showing of the film 'If you Love This Planet'.
9. Several responses to Daily Gleaner editorials which called for more nuclear arms.
10. An address by Professor Allan Sharp to a Peace Festival in Fredericton on Hiroshima Day.

"Currently, we have invited the Most Reverend T.J. Gumbleton, one of the United States Catholic Bishops who participated in the drafting of the Pastoral Letter in the 'Challenge of Peace', to address a public meeting next fall in Fredericton. I am particularly grateful to Dr. James Downey, Bishop Gilbert, Father Martin, Archbishop MacNeil and Professor K. Wiesner who have supported this invitation, and to Mr. A.R. Doyle and Professor W. Poole for assistance with other aspects of this item.

"Professor Bruce Cumming has suggested that we should request the television stations in New Brunswick to replay the NFB film 'If you love this planet'. The Executive is looking into the possibility of having a chair of Peace Studies established at UNB. Suggestions for other activities are always welcome and can be made at any time orally or in writing.

"I wish to express my appreciation to the other members of the Executive, Professors D. Coombs, M. Krause, and G.P. Semeluk for their help, encouragement and wise counsel."

**84.20 THE ACTIVITIES OF THE MONTREAL CHAPTER**

This report was prepared by Professor F.H. Knelman, Professor and Director, Science and Human Affairs, at Concordia University: "Several activities have already been initiated. These are as follows:

1. The development of a proposal for a core curriculum 30-credit minor 'War and peace in the nuclear age' (Concordia is introducing a General Education Centre and all Arts and Science students will have required G.E. courses and minor options.)
2. A miniseries of 6 lectures on nuclear war and its technical, social, psychological, psychic, environmental and ecological implications (this has been absorbed in a course taught by Professor F.H. Knelman and is a precursor of the minor discussed in #1.)
3. A commission to Dr. F.H. Knelman to write an overview on the 'Star Wars' developments by the McGill Institute for Air and Space Law.
4. An initiative to organize a conference on Unintentional Nuclear War in order to define problems, research tasks and ultimately safeguards, technical and institutional. This application will be made to External Affairs through GAMMA, a non-profit research institute in Montreal. Among the principals are Herb Fluwelling, Professor F.H. Knelman and Professor Paris Arnpoulos. We may be integrating this project with a similar initiative by the Nuclear Age Peace Foundation in Santa Barbara, California.
5. A research proposal to study the politics of peace and ecology in Europe has been submitted to several granting agencies by Professors Knelman and Arnpoulos."
6. In response to a student referendum which would make Concordia a military-free zone (i.e., no military research or recruitment), a group of professors have signed a letter of support written by Professor F.H. Knebelman.

7. Recruitment attempts for Science and Peace beginning with the 14 professors (out of 60 polled) who signed §6."

84.21 THE ACTIVITIES OF THE BRITISH COLUMBIA CHAPTER

Professor Vera Webb, of the Microbiology Department at U.B.C. submits the following description of events and projects undertaken by the B.C. Chapter:

"The following is a brief description of events that have occurred and projects currently undertaken by the B.C. Chapter of Science for Peace.

1. We were addressed by Ferenc Mezei of the Hungarian National Academy of Science on East-West Conflict: Personal Perceptions.

2. We are sponsoring with Educators for Nuclear Disarmament weekly talks and films. We are currently showing the War Series produced by the National Film Board.

3. In May we are holding a mini symposium on Nuclear Winter at U.B.C.

4. On April 28th we will join with thousands of other B.C. residents in the annual Walk for Peace. We will also man an information booth at the Rally grounds after the Walk as we have done in previous years.

5. Members of the B.C. Chapter executive submitted a brief for Joe Clark's disarmament committee. (See 84.23).

6. Members have been involved in a number of speaking engagements, these include appearances on local television programs and participation in peace seminars.

7. At our February meeting Harold Kazinsky spoke to us on Chemical and Biological Warfare: History and Current Problems. The results of an election held were:
   President George Spiegelman
   Vice-Presidents Luis Sobrino
   Paul Le Blond
   Treasurer Brian Turrell
   Secretary Vera Webb
   Rep. to EAR Jim Foulks

8. Our current projects include the following:
   a) preparation of briefing papers on disarmament issues for all candidates in the next election.
   b) participation in the organization of a major symposium on disarmament in October which will be held in conjunction with the Physicians for Social Responsibility annual general meeting. (See 84.22).

84.22 PROPOSED AGENDA FOR OCTOBER SYMPOSIUM IN B.C.

On the week-end of October 19-21, the B.C. Chapter of Science for Peace and Physicians for Social Responsibility are planning a major symposium on disarmament. Sessions are planned on the topics:

1. consequences of nuclear war: the "nuclear winter"
2. current arsenals and the balance of power
3. Canadian policy on arms control/ new weapon technologies
4. psychological aspects of the arms race/ peaceful alternatives.
Among the speakers taking part will be Dr. R.P. Turco (Stanford University), Dean Michael Pentz (Open University, U.K.) and retired Rear-Admiral Eugene J. Carroll (Centre for Defense Information, Washington). Further information: Dr. Vera Webb, Department of Microbiology, University of British Columbia.

84.23 B.C. CHAPTER PRESENTS BRIEF TO JOE CLARK

Professor Paul H. LeBlond presented a brief to Mr. Clark's Taskforce on Disarmament on February 10, 1984, on behalf of the B.C. Chapter:

Science for Peace is a group of Canadian Scientists concerned with the global effects of modern weapons on mankind. Scientists have played a major role in the development of weapons: many feel that it is their responsibility to inform the public of the technical aspects and environmental consequences of nuclear and other weapons systems from a point of view which places the survival of mankind above that of current ideologies and political alliances. Science for Peace is a national organization, with headquarters in Toronto.

The immediate motivation for the existence of Science for Peace is the recent escalation in the deployment of nuclear weapons and in the improvement of their delivery systems. Members of Science for Peace have attempted to warn the public of the direct effects of nuclear war, including local blast, radiation and fall-out, and to dispel illusions that simple civil defense measures could prove effective in the case of a nuclear attack. There is also growing evidence that indirect, longer-lasting effects of a nuclear war may be as devastating as the immediate explosions. The "nuclear-winter" post-nuclear war scenario recently described in "Science" is also attracting public interest and raising a number of scientific questions. Science for Peace is involved in the preparation of various meetings and symposia which will discuss this issue.

The Cruise Missile Issue

This is an issue in which Science for Peace has played an active role, distributing a pamphlet on the subject, in which we opposed Canada's decision to support the development of long-range cruise missiles by accepting to test the air-launched cruise missile on her territory.

The long-range cruise missiles, now being developed, are extremely accurate weapons designed for war-fighting. They are very difficult to detect; they are also capable of changing course. Because of this, and in spite of their slowness, cruise missiles can penetrate enemy defense and approach closely enough to reinforced military targets to have a high probability of destroying them. Advanced cruise missiles, with longer range and anti-radar "stealth" technology which will make them more valuable as war-fighting weapons are now under development. According to reports from the United States department of defense, the Soviet Union is also developing long-range cruise missiles.

Cruise missiles present a great danger to world security because they are war-fighting rather than deterrent weapons, and because they may be very difficult to include in any arms control agreements in view of their small size and flexibility of deployment.

There are also more direct and more specific dangers for Canada. United States Strategists estimate that in order to create an effective defense against the present generation of cruise missiles, the Soviet Union would have to set up an extensive air and ground interception system consisting of up to one thousand surface-to-air missile complexes. Should soviet development of a cruise missile force take place -- U.S. Intelligence reports that the Soviets
are now developing the BL-10, an air-launched missile with a range of 3,200 KM. -- there would be enormous pressure on Canada to establish a similar giant interception complex in its Northern territories. Canada's own armed forces might well be thought insufficient to the task, and Americans would do it instead.

We might thus be faced, as a consequence of Canada's role in testing the cruise missile, with the presence of significant U.S. armed forces on Canadian soil. Far from being a science fiction scenario, this very issue was raised by a Washington columnist earlier this week (Bogdan Kipling; U.S. troops on Canadian soil?: The Sun, Vancouver, Feb. 7, 1984).

It would seem in the best interests of our country to make every possible effort to achieve an immediate moratorium on the development, testing and deployment of long-range cruise missiles before we find ourselves right in the middle of the firing range.

Canada's Role in Disarmament

In addition to taking an unambiguous stand against testing new weapons or delivery systems, Canada should play a more visible role within international organizations. It is easily forgotten that departures from existing policy may often be taken by junior partners in alliances while major powers become trapped by the momentum of their existing policies. Our Prime Minister's present peace initiative is a case in point.

In NATO, Canada should press for an overall reduction in nuclear and conventional arms in Europe. Support for the 300 KM wide nuclear-free zone proposed by the Palme Commission (independent commission on disarmament and security issues) would aid greatly in decreasing the chance of any conflict escalating into a nuclear exchange. Reaction time to false alarms would be kept high enough to prevent catastrophic accidents. The current policy which links proposed cuts with the simultaneous deployment of new weapons systems should be vigorously opposed. This "build-down" policy (the year of new-speak has truly arrived) will only end by replacing existing weapons by more dangerous, destabilizing ones, leading to greatly reduced security on all sides.

In the United Nations, Canada should support measures which build trust and mutual confidence among world powers. Canada should pressure the U.S. in all possible ways for a return to support of UNESCO and the UTI. Support of such agencies and of proposals such as the International Satellite Monitoring Agency: cooperative treaties such as that of the Law of the Sea and scientific and cultural exchanges should be forcefully encouraged by monetary and diplomatic support. Speaking as an advanced and wealthy nation of the North American continent, with a global reputation for the respect of democracy and civil rights, Canada's voice would carry significant impact in the world community.

At home, Canada should commit a much greater part of its resources to the creation and funding of Peace Research Centres. These centres could be located on University Campuses and elsewhere, perhaps even in foreign countries. There is much work needed to understand the roots of conflict and there is obviously a crying need for practical means to resolve differences between nations without resort to violence.

As a country dedicated to freedom and multiculturalism, Canada's intellectual and moral climate are well suited to exploring the means for solving international relations problems. We could play an important role in the Quest for world peace. The problems are enormous, looming even larger than the complexities of the arms race. The issue cries out for leadership -- It is a call that Canada should heed.
84.24 BRIEF FROM PROFESSOR URSULA FRANKLIN TO JOE CLARK

Professor Ursula M. Franklin of the Department of Metallurgy and Materials Science presented a brief to Mr. Clark's Taskforce on March 9, 1984. Here follows her notes:

Not wishing to repeat arguments that have already been made to this task-force, I would like to concentrate my comments on the need for Canadian policies that focus on the challenges of peace.

Others have already made the case against nuclear war. It has been amply demonstrated that nuclear war cannot be won by any nation and that it entails threats to the very existence of life on this planet. The massive over-kill in nuclear and conventional weapons is equally demonstrable. The dire economic and social consequences of the arms race are painfully evident around the world.

People of all walks of life and in all nations are deeply frustrated and angry that their governments are apparently neither able nor willing to make those changes in policy that would turn the world away from the race toward global disaster.

There are many reasons why the turning away from the arms race is difficult. But I would like to suggest that one reason is that, though it is perfectly clear what it is that nations should not do, it is somewhat less clear what they should do. In other words, there is, at least in some public perceptions and certainly in the perception of politicians, a great lack of models of alternate conducts of international affairs, conducts that are not based on systems of individual or collective threats.

An observer may well be struck by the sterility of the political arguments surrounding official disarmament debates and by the mirror images that occur on these occasions: it seems always as if for one side the responsibility for the current state of affairs can be placed squarely on the "other side" and nothing can be done to resolve a conflict unless "the other side" changes its ways.

This sort of sterility of approach can be traced in many ways to the fact that there hasn't really been peace in this world since 1945.

Immediately after the end of the Second World War the prospects of another war began to dominate the political and intellectual scene. Thus, preparations for war and the prevention of war became central to the public discourse and the absence of war emerged as the goal and aim of national governments.

But the absence of war is not peace. Peace, as it is inextricably linked to justice, is the absence of the threats; it is the absence of the use of force as an instrument of policy both nationally and internationally. Peace is the presence of instruments of social order that are not dependent on the imposition of force and thus make the citizen neither victims nor executioners.

The pursuit of peace is not simple or trivial, particularly in a technological age. In spite of this, over the last thirty five years or more, people have thought much less about peace than about war and little expertise has been
developed regarding the skills of peace, the economics of peace, the politics of peace, the costs of peace, or the technologies of peace. Nevertheless, it is precisely this knowledge and this expertise that the world needs right now.

Even if we hope that international negotiations may lead to an easing of tension, the best one could hope for are precarious stalemates unless one can introduce alternative ways of negotiation, of conflict resolution, of stressing a different approach, an approach of peace, to the problems that the world faces.

I would like to make the case for vigorous Canadian policy to address these challenges of peace. What would such policies involve? Let me address here only two areas: (a) industrial strategies and (b) federal support of scholarly research.

Regarding industrial strategies it should be noted that over the past decade programs were put in place that support, through loans and grants, the activities of those Canadian firms that wish to enter the defence production sector. As the figures appended show, these programs have been accelerated during the last few years.

One must seriously question the reasoning and philosophy behind this development. Any government of Canada will understand that the continuation of the arms race means global suicide. There may be geo-political considerations as to which nation or block should disarm first -- but disarmament must come.

Why then would this country invest billions of dollars to tool up its industry to make things that must become redundant? Why increase the already extensive expertise for inventing instruments of war, when we so lack the expertise and the technologies of peace?

And there is technology of peace. Let me only mention the great needs in the technology of pollution abatement and control, proper resource recovery and management, adequate modern transportation, health care and delivery, the control of drugs and pharmaceuticals both in the environment and the food chain, the technologies for testing and verification of drug related environmental and health effects. The processes and instrumentation of the peace-related technologies are as sophisticated and as demanding as any military application of technology.

There is not only the human need to develop these peace technologies there is also substantial profit in doing so. Nevertheless, the Federal government helps the Canadian research community and industry far more in terms of a war effort than in terms of being innovative about peace. In fact, for many, the support under the defence arrangements is often the only game in town.

It is absolutely necessary to change this. I can only deplore the cynicism implicit in the current policy: how can one tie Canadian manufacturing increasingly to the U.S. war machine, knowing that this machine must be curtailed if the world is to survive. Why make something that must be scrapped rather than invest in peace, in technologies the world needs?
It would be a great advantage and profit to Canadian industry if Canada could enter the world market with these new technologies as soon as possible. Why should Canada be saddled with useless high tech. developments when the cutting edge of the technology of peace could propel Canadian manufacturing into world market? In reality, though, it seems that the technology of peace is being developed, at present, in Sweden, in Switzerland and in Japan.

Similar and equally compelling considerations apply to the Federal support of research. Both NSERC and SSHRC provide, in addition to their traditional support of academic disciplines, strategic grants in areas defined as encompassing problems of national concern. In these areas, concentrated research and training efforts are funded because in terms of national goals they are particularly needed.

The list of strategic areas of both granting councils do not include: Peace, its strategies, its political science, its technology and the training of its practitioners.

This does not imply that there are no practitioners of peace, researchers or inventors. The peace community, as you will have seen from the presentations to committee is viable and strong in Canada. The world wide peace movement is a source of considerable knowledge, of alternate paradigms and strategies. Within Canada this community could be brought into play quickly and its expertise could be used as building blocks for genuine programs on the challenge of peace.

What is needed is an expression of political will to accept this challenge and to put Canada into the forefront of its study and practice. I hope that your committee will express the need for a new political peace philosophy for Canada: a philosophy that results from the realization that in the nuclear age war and the preparation for war are no longer viable instruments of policy. The policy of our age can not consider war as a possible alternative to constructive conflict resolution. Canadian policies must be based on the assumption that peace is possible and normal and that we have to develop the knowledge, the strategies and the technologies of peace in order to survive.

It is often quoted from the classic literature that "If you want peace you should prepare for war". That may have been fine in ancient Greece or Rome. It is not applicable in our technological societies where the preparations for war have already produced conditions that are unsuitable for the maintenance of peace.

I would therefore recommend to your committee
1. to discontinue the support of defense production by Canadian industry and to put in its place a program of strong support for peace-based technology and manufacturing;
2. to designate "peace" as an area of strategic funding in both SSHRC and NSERC.

84.25 ACTIVITIES AT DALHOUSIE UNIVERSITY

Professor Gerhard Stroink of the Physics Department of Dalhousie University has sent information on a number of events. On January 24, 1984, the Dalhousie
Faculty Association passed unanimously the motion: "The Dalhousie Faculty Association joins with the CAUT in urging the Government of Canada to take all possible steps to control the development and deployment of weapons of mass destruction, and, in particular, to refuse to participate in the development and testing of any such weapons or their delivery systems, including the cruise missile."

The Maritime Undergraduate Physics Conference was held on February 14. Science for Peace members were invited to join with the undergraduates to hear an address by Professor Lyn Trainor of the University of Toronto: "Scientists: architects of hope or despair?"

Professor Stroink was invited to represent Science for Peace at a seminar-panel of several members of different peace organizations on March 16. Professor Stroink's 12-year-old son gave a placard to the visiting USSR hockey team in a bid to enhance friendship between our two countries. Finally, he plans to have an article in the University News on Science for Peace.

84.26 ON HUMAN SURVIVAL: NUCLEAR WINTER

The Presidents of Science for Peace and of Physicians for Social Responsibility (Canada) sent a letter dated March 28, 1984, to Members of Parliament, drawing their attention urgently to work published recently by Dr. Paul Ehrlich, Dr. Carl Sagan and their colleagues.

It is estimated that as many as one billion people would die as a direct result of a 5000 megaton exchange in a major nuclear war. A team of scientists has recently shown that the indirect effects would be even more catastrophic. They have calculated how much dust and smoke is produced in nuclear wars of various sizes, how much sunlight is absorbed and how much the temperature falls. In addition to the known results showing widespread radioactive fallout followed by increased ultraviolet radiation, they have found that soot from burning cities obscures sunlight in a manner not previously predicted. Within a week of the war an unbroken pall of darkness covers the Northern Hemisphere. This lasts for several weeks and disrupts plant growth and hence food chains. The effects spread to the Southern Hemisphere and the harsh Nuclear Winter lasts for months, having a major impact on climate for several years.

Most survivors of the war, both human and animal, would die of starvation, cold and thirst in this Nuclear Winter. In the Third World even more people would die of the indirect effects than died of the direct effects in the Northern Hemisphere. The radioactive fallout appears to be worse and more widespread than previously estimated and would cause extreme susceptibility to epidemic infectious disease. Uncontrolled fires in forests and especially the cities release large quantities of toxic gases, which would inhibit the recovery of vegetation damaged by blast and fire. Ozone depletion leads about 3 months after the war to increased exposure to ultraviolet light, which damages biological systems in many ways -- for instance, depressing immunity to infectious disease and causing blindness in humans and animals. Tropical forests are especially at risk, and most animal and vegetable species in the tropics might become extinct.
Even a relatively small nuclear exchange of 100 megatons targeted on cities, where there is a great deal of combustible material, could produce a two-month period of subfreezing land temperatures reaching down to \(-23^\circ\text{C}\). The cold and dark would be almost as bad as after a much larger war targeted on military facilities.

In summary: after a 5000 megaton nuclear exchange, or perhaps even after a much smaller nuclear war, survivors would face extreme cold, lack of food, fuel and water, heavy burdens of radiation and pollutants, disease and severe psychological stress. It seems likely that a nuclear war, even of relatively limited dimensions, would extinguish human civilization in the Northern Hemisphere and possibly human life on this planet.

References


The letter to Members of Parliament ends:

"Our organizations believe that these predictions of global catastrophe resulting from nuclear war are well grounded in scientific fact. The threat to Canadians and all humanity is clear and urgent. We ask you with respect to ponder deeply the attached summary of these new scientific findings and to reflect upon their consequences for Canadian international policy."

84.27 STUDY GROUP BEING FORMED ON CONSEQUENCES OF NUCLEAR WAR

Professor T.C. Hutchinson, of the Institute for Environmental Studies of the University of Toronto has proposed a project to investigate the consequences of nuclear war and, in particular, the danger of nuclear winter. The outcome of this may well be a symposium and a volume of papers to back up the attempts to make politicians and other influential people aware of the precariousness of our position. Those who are interested in the project or who have special expertise to offer should contact Professor Hutchison at the University (M5S 1A1; phone: (416) 978-3532).

84.28 INTERUNIVERSITY WORKSHOP ON PEACE EDUCATION IN MAY

There will be an interuniversity workshop on peace education at Brock University, May 11 to 13. The workshop is the second of what organizers hope will be an ongoing series designed to generate interest in peace studies at Canadian universities. (The first was held at York University last November.) Sponsors are Science for Peace, Physicians for Social Responsibility, the World Federalists of Canada, the Canadian Peace Research and Education Association
and the Peace Research Institute-Dundas. The workshop will include plenary sessions with guest speakers; open to all who are interested. Information: Sally Currie, Peace Research Institute, 25 Dundana Avenue, Dundas, Ontario L9H 4E5.

84.29 BOOK REVIEW

The new high ground, by Thomas Karas (Simon & Schuster 1983)

Reviewer: Derek Paul, Physics Department, University of Toronto

It is scarcely necessary to be familiar with the details of Canadian Arms Control Policy to know that our leaders in Ottawa have for long been interested in the prevention of the militarization of outer space. As recently as February 1983, Secretary of State Allan MacEachen, in an address to the Committee on Disarmament in Geneva, focussed on four important issues "on which I wished to put Canada's position strongly": one of these was the prohibition of "all weapons for use in outer space".

Mr. Karas' new book is of tremendous importance, as it provides us with much of the information which we need to assess the arms race in space, the driving forces behind it, its technical aspects, the financial aspects, the threat that it poses, and the prospects of arms control.

On the whole it is a book which may very well cause dismay, because the forces driving the race in space are strong and vigorous; U.S. technical expertise tends to lead to illusions about the increase in security which further armaments can provide; the resources which could go into the militarization of space would further distort world economy; the threat to peace of the military space programme is extremely difficult to assess; and the prospects of arms control are dim.

And yet, the knowledge presented by this book is absolutely vital. To "keep the lid on things" we must have knowledge of what is actually going on, and we must not fall into the trap of dubbing the entire military -- industrial complex irresponsible warmongers. Karas makes it clear, simply by quoting people he talked to, that the viewpoints and attitudes in the military hierarchy are not the product of a simple stereotype. Take his reference to Col. Charles Heimach on p. 174, for example, who "likes the idea of an agreement that would make U.S. satellites safer -- he just doesn't think it is possible." Heimach's views are presented in contrast to the view of Major Lance Lord of the Pentagon office who "sees space as a place where we can get the jump on the Soviets, take a lead in the arms race, and restore American superiority." What Karas does is to paint a very full and complex picture so that the reader really knows what society is up against. On the whole the corporations which benefit from large space contracts emerge as the primary generators of the contest, with the military divided between determined drivers and reluctant realists.

The Soviets are of course not blameless in the proliferation of weapons of mass destruction, but in Karas' work it becomes clear that they lag in important aspects of the most modern Control, Command and Communication technology,
as well as in the development of anti-satellite weapons. The most dangerous anti-satellite weapon is the PMALS -- the Prototype Miniature Air-Launched System -- which can seek out and ram a satellite at a relative speed of thousands of miles per hour. To destroy present-day satellites PMALS doesn't even need to carry an explosive charge. Nevertheless, this weapon, propelled into space by a rocket that is launched from an F-15 fighter in the upper atmosphere, could destroy the network of satellites from which a part of Soviet security is derived. Karas does not say that soon the Soviets will have developed a corresponding weapon. There is no need to say it: it has always happened in the past that they catch up and usually the retaliation has given us cause for regret that the first step had ever been taken. Space lasers emerge as much less important, in Karas' presentation, except that they could result in the most extraordinary expense the world has perhaps seen if a full complement of laser space stations was even built. The consequences of deploying such stations do not seem to have been thought through by the proponents of laser defence.

And after this dazzling run through establishments, opinion, high technology and science near-fiction, what impression is left? For me it was the quoted opinion. Karas has been generous in his inclusion of direct quotes from military officers and people linked with them on the industrial side. All of them, perhaps with the exception of Heimach and his ilk, seemed not to be able to take the really broad view, the view which might resolve rather than exacerbate conflicts, which sees security of the individual in the nuclear age as being nonsensical except within the broad framework of security for all.

Karas has some gems waiting for you to read, like his comments on the Disarmament Game in Chapter four, so it isn't just a tough grind. And he concludes nicely with six brief propositions in an epilogue. An important book. Please read it. Please.

84.30 TIM BRAC WRITES ON TEST BAN TREATIES

Tim Brac, a London member of Science for Peace, has done a great deal of research into the history and present status of arms control agreements. He sends an article which he wrote for the "Perspective" section of the London Free Press, January 9, 1984. Entitled Test ban could be negotiated, the article reviews the history of test ban negotiations over the last two decades. Mr. Brac makes the following points:

- During the negotiations following the Cuban missile crisis, the Soviet Union eventually agreed to allow up to three inspections per year of suspicious seismic events. The United States originally sought 10-20 inspections, but eventually agreed to settle for seven. Failure to agree on an inspection protocol meant that only a partial test ban (PTB) could be negotiated which still permitted underground tests.

- John F. Kennedy and Nikita Kruschev, although apparently eager to conclude significant arms control agreements, were each restrained by factions resisting any compromises. Thus the opportunity of possibly inhibiting the development of tactical nuclear warheads, neutron bombs and MIRVs was lost.

.../20
- President Reagan's assertion that the U.S. had to withdraw from comprehensive test ban (CTB) negotiations because of verification problems was contradicted by geophysicists Lynn Sykes and Jack Evernden who contend that on-site inspections are no longer necessary.

- The CTB is resisted by producers and supporters of nuclear weapons since it would brake their development and deprive the military of a show of force.

- While it is difficult to provide a detailed comparison of nuclear strength of the two sides, there is a rough parity between them. In any case, the stockpiles of both sides are excessive.

The article concludes: "If the technical means exist to verify a CTB, why does the U.S. not show willingness to negotiate? In 1963, when there was great pressure to negotiate, the important main part of the PTB was negotiated in 10 days. From a technological point of view, the U.S. sets the pace of the arms race, especially in the field of nuclear weaponry. In order to slow down the arms race, the U.S. proposes huge increases in the number of nuclear weapons.

"The U.S. policy of negotiating from a position of strength (read 'superiority') has not worked and will not work to stop the nuclear arms race. This, coupled to the mutual suspicion that exists, will be the basis for decreased international security and an unprecedented threat to the people on this planet."

84.31 NATIONAL OFFICE OF PSR

Dr. Eric Letovsky, the National Executive Secretary of the Physicians for Social Responsibility, informs us that PSR has established its national office at Room 534, Banting Institute, 100 College Street, Toronto, Ontario M5G 1L5 (phone: (416) 593-6828). The office will serve as a resource centre for people interested in the medical aspects of the nuclear arms race. Ms. Elizabeth Barry will be on hand each morning.

The national president of PSR is Dr. Ian Carr and the president of the Toronto Chapter is Dr. Gordon Hardacre.

84.32 INTERNATIONAL PEACE RESEARCH ASSOCIATION

Chadwick F. Alger, the new Secretary-General of IPRA, invites new members to join the organization. The modest membership fee is $15 includes a subscription to the IPRA newsletter. S4P members may be interested to know that Prof. Anatol Rapoport is one of the founders of IPRA and presented a keynote paper at their 1983 conference.

Membership applications accompanied by $15 in U.S. funds should be mailed to International Peace Research Association, the Ohio State University, Mershon Center, 199 West 10th Avenue, Columbus, Ohio 43201.

.../21
84.33 SNIPPETS FROM THE PRESS (Summarized)

(a) U.S. Taking Wrong Road: MacEachen (Globe & Mail, Tuesday, April 17, 1984, p.1). In an interview on the CBC programme, Morningside, External Affairs Minister Allan MacEachen spoke out against the intrusion of outsiders which has complicated the problems of Central America. He emphasized that the issue goes further than mining Nicaragua's ports, and cited an increase in the level of guerrilla activity. For the past two weeks, Mr. MacEachen has been on a tour to Nicaragua, Costa Rica, Columbia and Honduras, but not, to the consternation of the U.S., to El Salvador. In Managua, last week, Mr. MacEachen affirmed Canada's support for impartial elections in Nicaragua and was prepared to allow the Sandinista government the benefit of the doubt with respect to opposition participation.

(b) Editorial (Forum for Correspondence and Contact, Vol. 14, No. 2, March, 1984, p. ii). While the arms race debate and the threat of nuclear war intensifies, an ever-growing number of organizations, some philanthropic, are trying to give expression to the widespread yearning for peace. Yet governments appear to be oblivious to this as their increasing militarization increases the danger. Ruth Leger Sivard in World Military and Social Expenditures, two years ago drew attention to the tendency of political process to come under military control, with attendant violations of human rights, and to the fact that even in developed countries, decisions on military matters seemed to be out of the reach of public control. The global military expenditure of over $1,000 billion per year has become our century's "burden of Sisyphus". While the prospects appear bleak, our time period may be the harbinger of change as people become more educated and willing to act and channel resources. "We are going to see fully tested whether or not a growing multitude of concerned people determined to speak out against military mania can have an effect on world priorities". [F.C.C. is published by the International Center for Integrative Studies, 45 West 18th Street, New York, NY 10011.]

(c) Is peace institute needed? (Toronto Star, Tuesday, April 17, 1984, p. A16). Adam Bromke, professor of international politics at McMaster University, is concerned about setting up a new research body while existing organizations such as the Centre for Russian and East European Studies at the University of Toronto and the Institute of Soviet and East European Studies at Carleton University are being strangled by insufficient funding. These organizations along with other (such as the CIIA) already have assembled the experts who can suggest ways out of the East-West impasse.

84.34 CJRT-FM OPEN COLLEGE SUMMER LECTURES 1984

The following will be broadcast on Mondays at 6 pm. on CJRT-FM (Toronto; dial 91.1).

May 7  "Medical Aspects of Nuclear War"  by Dr. Ian Carr

May 14 "Arms Control Initiatives"  by Robert Reford

May 21 "Verification of Nuclear Test Bans Part I"  by Dr. Lynn Sykes
May 28  "Verification of Nuclear Test Bans Part II"
        by Dr. Lynn Sykes

June 4  "Canada's History in Matters of War & Peace"
        by Dr. Kenneth McNaught

84.35 PEACE PETITION CARAVAN CAMPAIGN

The Campaign is looking for volunteers for canvassing, leafletting, office
work and planning. Its aims are to stop cruise testing, declare Canada a
nuclear weapons free zone and cut military spending to fund human needs. Fur-
ther information: 736 Bathurst Street, Toronto M5S 2R4 (416) 534-5762.

84.36 NUCLEAR WINTER AND PARLIAMENTARIANS

Professor CARL SAGAN will address Members of Parliament and Senators on:
"Nuclear Winter and its Foreign Policy Implications" at a special meeting on
Parliament Hill, June 4 1984. We encourage members of Science for Peace to
contact Members of Parliament to impress upon them our deep concern in this
matter and to encourage them to attend the meeting. There will also be a
Public meeting in the evening of June 4 with Carl Sagan as principal speaker
and a panel including representatives from Science for Peace and from Physicians
for Social Responsibility (PSR). The Ottawa Chapter of PSR is arranging these
events.

84.37 OTHER BRIEFS TO JOE CLARK'S COMMISSION

Professors Anatol Rapoport, Derek Paul, and Peter Richardson (Principal,
University College, University of Toronto) each presented briefs to the Hon.
Joe Clark's commission during its hearings in Toronto. Professor Rapoport's
brief discussed peace in the broadest terms and was thus general in its scope,
while Derek Paul's sought the commitment of the Conservative party to support
the proposed new "Canadian Institute for Peace and Security". Peter Richardson's
brief drew attention to the disparity between strategic studies and peace
studies in Canada and sought support for the latter, in particular for chairs
of Peace Studies at universities.

84.38 CANADIAN PEACE RESEARCH AND EDUCATION ASSOCIATION (CPREA)

CPREA will be meeting at the University of Guelph June 8, 9, 10 on the
occasion of the Conference of Learned Societies. There will be Symposia
and Sessions of Contributed Papers on various topics in Peace Research.
The theme for 1984 will be Peace Studies: Goals, Methods and Results.
Registration should be made at: Secretariat, 1984 Learned Societies Conference,
Rm. 054, McKinnon Building, University of Guelph, Guelph N1G 2W1.

84.39 DOLLARS FOR PEACE

U.S. Foundations have decided to fund peace! See New York Times,
March 25th, p. 1 for details.
Clayton Gordon

TO THE MEMBERS OF
SCIENCE FOR PEACE

We have examined the balance sheet of Science for Peace as at March 31, 1983 and the statements of revenues, expenses and surplus (deficit) and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly, includes such tests and other procedures as we considered necessary in the circumstances, except as noted in the following paragraph.

In common with many not-for-profit organizations, Science for Peace reports as revenue, grants, donations and private sector contributions the completeness of which is not acceptable to conclusive audit verification. Accordingly, we were unable to determine whether any adjustments for unrecorded revenues might be necessary in revenue from grants, donations and private sector contributions, or to the surplus.

In our opinion, except for the effect of any adjustments which might have been required but we have been unable to verify ourselves with respect to revenue from grants, donations and private sector contributions referred to in the preceding paragraph, these financial statements present fairly the financial position of Science for Peace as at March 31, 1983 and the results of its operations and changes in financial position for the year then ended in accordance with accounting principles described in note 1 to the financial statements, applied as a basis consistent with that of the preceding year.

The financial statements for the preceding year were not examined by Chartered Accountants.

(See notes to financial statements)
### Statement of Revenue, Expenses and Surplus (Deficit)

For the year ended March 31, 1983
(with comparative figures for the year ended March 31, 1982)

<table>
<thead>
<tr>
<th></th>
<th>1983</th>
<th>1982</th>
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</thead>
<tbody>
<tr>
<td><strong>Revenue:</strong></td>
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</tr>
<tr>
<td>Private sector contributions</td>
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<td>Federal government grant</td>
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<td>Bank interest</td>
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<td><strong>Total revenue</strong></td>
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<td>7,663</td>
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<td><strong>Expenses:</strong></td>
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<tr>
<td>Direct charter activities</td>
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<td>5,793</td>
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<td>Office and sundry</td>
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<td>Printing and postage</td>
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<td>729</td>
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<td>Members’ functions</td>
<td>614</td>
<td>453</td>
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<td>Bank charges</td>
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<tr>
<td><strong>Excess of revenue over expenses</strong> (expenses over revenue)</td>
<td>$(1,815)</td>
<td>$428</td>
</tr>
<tr>
<td>Surplus, beginning of year</td>
<td>507</td>
<td>79</td>
</tr>
<tr>
<td>Contribution of library books</td>
<td>1,000</td>
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</tr>
<tr>
<td><strong>Surplus (deficit), end of year</strong></td>
<td>$(308)</td>
<td>$507</td>
</tr>
</tbody>
</table>

(See notes to financial statements)

### Statement of Changes in Financial Position

For the year ended March 31, 1983
(with comparative figures for the year ended March 31, 1982)

<table>
<thead>
<tr>
<th></th>
<th>1983</th>
<th>1982</th>
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<tr>
<td><strong>Sources (uses) of funds:</strong></td>
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<tr>
<td>Operations —</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess of revenue over expenses (expenses over revenue)</td>
<td>$(1,815)</td>
<td>$428</td>
</tr>
<tr>
<td>Working capital, beginning of year</td>
<td>507</td>
<td>79</td>
</tr>
<tr>
<td>Working capital (deficiency), end of year</td>
<td>$(1,308)</td>
<td>$507</td>
</tr>
</tbody>
</table>

Represented by:

<table>
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<tr>
<th></th>
<th>1983</th>
<th>1982</th>
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<tbody>
<tr>
<td>Current assets</td>
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<tr>
<td>Current liabilities</td>
<td>$(1,301)</td>
<td>$84</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$(1,308)</td>
<td>$507</td>
</tr>
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</table>

### Notes to Financial Statements

#### 1. Accounting policies

- The following is a summary of the significant accounting policies followed in the preparation of the financial statements:
  - **Revenue recognition** -
    - Revenues from donations, grants and memberships are recognized in the year in which they are received.
  - **Expenses are recognized** in the year in which they are incurred.
  - **Depreciation** -
    - The library books are expected to have an indefinite useful life and therefore are carried at cost.

#### 2. Income taxes

Science for Peace is a not-for-profit organization and is therefore exempt from income taxes (note 4).

#### 3. Library books

The library books were donated to the organization and were recorded at their fair value at the date received.

#### 4. Subsequent event

On June 24, 1983 Science for Peace became a registered charity.