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# Canada and the Pursuit of Peace

Douglas Roche Ambassador for Disarmament

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Dept. of External Affairs Min. des Affaires extérieures

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Ottawa, July 31, 1985

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## Introduction:

### **Concrete Steps**

This booklet, a condensation of 36 addresses I have given across Canada, provides a backdrop for the observance of 1986 as International Year of Peace.

It has three purposes: to state what Canada is doing to further the global work of disarmament; to show how increasing numbers of Canadians are becoming involved in the pursuit of peace; to reflect the widening perspective necessary to build the conditions for true human security.

The facts of the global arms build-up, as outlined in U.N. documentation, need to be continually highlighted:

- There are more than 50,000 nuclear weapons in the world with a total explosive power equal to 1.5 million Hiroshima bombs.
- World-wide annual military expenditures now amount to more than \$800 billion (more than \$1.5 per minute). Four-fifths of this amount is devoted to conventional weapons.
- It takes just 15 days and 15 hours for world military expenditures to reach \$34.3 billion which was the total amount spent in the whole of 1983 for official development assistance for all developing countries.
- The international arms trade doubled in volume between 1976 and 1982 and now exceeds \$34 billion per year, with three-quarters of these weapons going to developing countries.

These statistics are just the tip of a huge iceberg that has devastating consequences for every human being. The world is at a transition moment in the human journey. We must learn how to live together — not merely survive — in the interdependent age.

As I travel around Canada, one question, above all others, is asked with increasing frequency: "Why don't we stop the nuclear arms race?" On one day alone, the question was put to me in three different ways by a doctor, a class in a junior high school, and a group of professors at a university.

There is in the public today a puzzlement, a bewilderment, a frustration, a fear that the arms race may be out of control, that negotiations are impotent in curbing the relentless momentum of global militarism, that disarmament negotiators are not hearing the cries of anguish of those who sense that the future of humanity is threatened by nuclear peril.

The United Nations Disarmament Commission recently concluded an appraisal of the achievements made at the midway point of the Second Disarmament Decade. The answer was short: zero. Not a single substantive agreement has come out of the multilateral process this decade.

The military have more arms, the governments have more rhetoric, people everywhere have more frustration, and the world feels more insecure.

It is as though nations have forgotten the ringing call to sanity that the U.N. flashed around the world in 1978: "Mankind is confronted with a choice; we must halt the arms race and proceed to disarmament or face annihilation."

I don't believe in gloom and doom. Neither do I espouse mindless optimism. Rather, a frank appraisal of the complex disarmament agenda is a better route to enlightenment and hope for a future based on true human security.

This booklet, then, is designed to help Canadians who are looking deeply at the implications for our country, and the world, of a continuation of the arms race. Within government, there is room for different approaches towards the common policy of enhancing security. This is my approach.

Canada's policy on these issues has been consistent, bi-partisan and long-standing: to prevent all war, particularly nuclear war; and to pursue mutual, balanced, verifiable reductions in nuclear and conventional weapons. These goals can only be achieved through genuine negotiations. Declarations of good intentions will not do. Concrete steps are essential. That is why the confidence-building process is so important.

Canada, to have any influence at all, must work from a strong position within the Alliance and, in fact, the Government recently strengthened our contribution to NATO. We are not a neutral nation. We have commitments to our defence partners. We seek to broaden the perspective of everyone's thinking, so that the new concept of the 'common ground' that all nations share on this one planet can lead to a better system of collective security.

Canadians should understand that a realistic role for Canada to play involves a long series of steps, not reliance on a "quick fix" to make the world a safer place. A commitment to the long haul is the surest route for Canada to take if we are to make a lasting contribution to peace, with security and freedom and justice.

Determination is not the least of the qualities Canada needs in the search for peace and disarmament. We must constantly use our influence to reverse the nuclear build-up and reduce the danger of destruction. This determination — as the Rt. Hon. Joe Clark, Secretary of State for External Affairs, expressed it to the United Nations on September 25, 1984 — "will be a constant, consistent, dominant priority of Canadian foreign policy."

Anyone involved seriously in disarmament work quickly realizes how true are the words of the Throne speech at the opening of the current Parliament:

"Patience and perseverance we will need, for in this endeavour even the smallest progress is worthy of the greatest effort."

Three small experiences I had during my first months as Ambassador for Disarmament made a greater impact on me than many of the lengthy speeches I have heard at the United Nations.

- One night at a dinner party, I was seated at a table of U.N. diplomats who, after fighting with one another all day, enlivened the party with common stories about their children and grandchildren. The antagonists by day became the proud parents by night.
- When I finished speaking to a Baptist Peace Convention in Port Hope, Ontario, a number of young people approached me to ask what specific areas of my work as Ambassador for Disarmament I wanted them to pray for.

• I received a letter from a young mother who, expressing her deep concern about the nuclear escalation, said she was none-theless happy to be having another baby to manifest her hope in life itself.

Sometimes, small moments rather than grand designs reveal the human route to progress. Peace is not just the result of United Nations' strategies. It is the result of constructive action by everyone — governments and individuals together.

# Multilateral Forums:

## Canada's Strength

In March 1985, when the United States and the Soviet Union resumed bilateral negotiations on strategic and intermediate weapons and space weapons, the world momentarily breathed a sigh of relief. However, the difficulties of disarmament negotiations quickly became apparent. The first two rounds of negotiations produced no substantial progress.

The statement by External Affairs Minister Joe Clark on the resumption of talks has proven accurate. Mr. Clark cautioned:

"We should be under no illusion that the course charted at Geneva will be an easy one. What we are witnessing now is the beginning of a long and sensitive process."

Something more than ordinary negotiation is needed today. That "something" is political will. That is why the world has welcomed the announcement that President Reagan and Soviet leader Gorbachev will meet in Geneva for two days of talks this November. President Reagan has said he regards the summit meeting as "an opportunity to chart a course for the future." This course, leading to practical steps to improve U.S.-Soviet relations, is urgently needed to unlock the disarmament impasse.

Canada has consistently worked to move forward the bilateral talks with their agreed objectives of preventing an arms race in space and terminating the one on earth; limiting and reducing nuclear arms; and strengthening strategic stability, leading ultimately to the complete elimination of nuclear weapons. These themes reflect Canada's own arms control priorities.

The goals of the superpowers are shared by the world and echoed throughout the multilateral disarmament forums. Concern with the problems of the nuclear arms race and reducing the threat of nuclear war are not the exclusive preserve of the superpowers, though they do have a special and leading role to play. It is also the responsibility of other countries — middle and small powers

— to take an active and constructive part in working to ease international tensions and to advance the global arms control agenda in order to support the work going on in the bilateral talks.

Canada and Canadians have a history of international activism. We were among the founding members of the United Nations, a unique global institution, which is celebrating its 40th anniversary this year. In establishing the U.N. in 1945, the international community expressed its determination to "save succeeding generations from the scourge of war" and recognised the transcendent need for cooperation between nations in the post-war world.

Canada has pursued this tradition of multilateralism in the field of arms control. In fact, Canada has a seat at every multilateral arms control and disarmament forum. This includes: the First Committee of the United Nations General Assembly, the Conference on Disarmament in Geneva, the United Nations Disarmament Commission, the Mutual Balanced Force Reduction Talks in Vienna, and the Stockholm Conference on Confidence-and Security-Building Measures and Disarmament in Europe. Each of these forums is filled with its own set of difficulties and complications. Their potential is far from being realized. Yet each also offers the long-range prospect for progress.

In his speech to St. Francis Xavier University (Antigonish, Nova Scotia) immediately after taking office, Prime Minister Brian Mulroney recognized the utility of the multilateral process when he stressed Canada's commitment to this process and to increasing Canada's "positive and constructive" influence in these forums. He added:

"It is in these forums that Canada can work most effectively to reduce tensions, to alleviate conflict, and to create the conditions for a lasting peace."

The multilateral forums are living proof that, in the nuclear age, global politics is no longer the exclusive purview of the superpowers. The nuclear arms race threatens every nation and individual on this planet — all nations have the right to speak out in defence of their future.

\* \* \*

The United Nations has stood by the goal, adopted in 1959, of general and complete disarmament under effective international control. A number of limited agreements for arms control have been achieved through U.N. initiatives — such as the Antarctic Treaty, the Partial Test Ban Treaty, the Outer Space Treaty, the Treaty of Tlatelolco, the Non-Proliferation Treaty. At the first United Nations Special Session on Disarmament in 1978 (UNSSOD I), the 149 participating nations adopted, by what has been called an ''historic consensus,'' a 129-paragraph Final Document containing a Program of Action which listed measures intended to be implemented ''over the next few years.''

The Final Document held that the accumulation of weapons, particularly nuclear weapons "today constitutes much more of a threat than a protection for the future of mankind." Genuine and lasting peace could only be created through the effective implementation of the security system provided for in the U.N. Charter. Priorities set out were: nuclear weapons; other weapons of mass destruction, including chemical weapons; conventional weapons; and reduction of armed forces. Nuclear weapons "pose the greatest danger to mankind and to the survival of civilization," and the ultimate goal, therefore, "is the complete elimination of nuclear weapons." The process of disarmament should ensure that the security of all states is guaranteed at progressively lower levels of all armaments, nuclear and conventional. It suggested a comprehensive, phased programme with agreed time frames, whenever possible.

But no progress has been made in achieving agreements since then. The fault lies not with the U.N. as such but with those governments that use confrontation rather than cooperation in the conduct of their relations.

#### U.N. First Committee

The First Committee of the U.N. General Assembly, which deals with political and security matters, has an agenda comprising the entire range of arms control and disarmament questions. The First Committee is a deliberative body and prepares recommendations and draft resolutions which are then submitted to the General Assembly for adoption on the basis of majority vote.

At the 39th General Assembly in 1984, the First Committee adopted 64 arms control and disarmament resolutions ranging from Radiological Weapons to the Reduction of Military Budgets.

The high number of resolutions, reflecting the intense activity, gives the impression of accomplishment, but this is an illusion. Many resolutions cancel one another out, while others are little more than hortatory. On December 12, 1984, when the First Committee resolutions were being funnelled through the General Assembly, Secretary-General Pérez de Cuellar took the extraordinary step of mounting the podium to voice his alarm at the paralysis:

"Discussions have taken on a life of their own. All too often it seems as if the players are only moving their lethal pawns in a global chess game."

Among the most prominent in the plethora of resolutions are those that deal with the questions of a Comprehensive Test Ban Treaty, Chemical Weapons, Outer Space and a freeze on nuclear weapons.

In Canada, most public attention seems to have been fixed on the three U.N. resolutions which called for a comprehensive freeze on the production, testing and deployment of nuclear weapons. Expressing the fear and genuine frustration that the pace of arms control negotiations was too slow compared to the continuous upward momentum of the nuclear arms race, many nations argued that the superpowers should freeze at existing levels of armaments and then negotiate reductions. While the idea of a comprehensive nuclear freeze has an attractive and almost compelling logic, in the present atmosphere it seems very unlikely that it would be possible to agree to negotiate a verifiable freeze. Some hold that mere declarations of a freeze are not a meaningful response to present dangerous levels of nuclear arms, it being better to negotiate reductions than to declare a freeze. Moreover, if comprehensive reductions were taking place, a freeze would lose its appeal. In voting against a comprehensive freeze, Canada was by no means accepting the present situation; in fact, Canada repeated its demand for reductions through negotiations.

There are other, more direct, ways of stifling the nuclear arms race — and Canada takes the lead on two major issues. These two steps represent specific "freezes" in their own right.

The first is the call for a Comprehensive Test Ban (CTB). Since 1945, there have been 1,522 nuclear explosions, and 53 in 1984 alone. The Secretary-General of the U.N. has stated:

"It is of direct importance to the future of humanity to end all nuclear explosions. No other means would be as effective in limiting the further development of nuclear weapons."

For several years, Canada has been one of the ''inner core'' of co-sponsors of a U.N. resolution on the urgent need for a comprehensive nuclear test ban treaty. The resolution reaffirms that a treaty prohibiting all nuclear-test explosions in all environments is a matter of the greatest importance. As the resolution itself states, a CTB would:

"...constitute a vital element for the success of efforts to halt and reverse the nuclear-arms race and the qualitative improvement of nuclear weapons, and to prevent the expansion of existing nuclear arsenals and the spread of nuclear weapons to additional countries."

The realization of an effective multilateral Comprehensive Test Ban Treaty is a fundamental and abiding objective of Canada's arms control and disarmament policy. We believe that a CTB is a concrete and realistic measure that would contribute significantly to halting the nuclear arms race by prohibiting the testing of nuclear weapons.

Canada is working to overcome the significant political and technical obstacles to a CTB, not least of which involves the verification of an eventual treaty. We participated in a 40-nation International Seismic Data Exchange (ISDE) designed to determine the scope and capability for seismic verification of a CTB (see next chapter). This is the sort of steady background work that will form the foundation for the eventual negotiation of a CTB.

The second Canadian initiative has been sponsorship of a resolution calling for the prohibition of the production of fissionable materials for nuclear weapons and other explosive devices. This resolution has been consistently gaining support in the international community. The resolution requests the Conference on Disarmament to pursue an adequately verified cessation and prohibition of the production of fissionable material.

A ban on the production of fissionable material would prevent the development and production of nuclear weapons, while a Comprehensive Test Ban would prevent nuclear testing of any sort. These two measures would thus constitute significant contributions to stopping the nuclear arms race. Canada is pursuing vigorously both of these U.N. agenda items with the long-term goal of halting and reversing the nuclear arms race.

#### Conference on Disarmament

The Conference on Disarmament (CD) in Geneva is the sole global multilateral negotiating body dedicated to arms control and disarmament issues. Its membership stands at 40 and includes all five nuclear powers plus representation from all geo-political blocs: the East, the West and the Neutral-Non-Aligned. Canada's Ambassador to the CD is J. Alan Beesley.

The Conference on Disarmament deals with a number of issues relating to the cessation of the arms race, disarmament and other relevant measures in the following areas:

- nuclear weapons in all aspects;
- chemical weapons;
- other weapons of mass destruction;
- conventional weapons;
- reduction of military budgets;
- reduction of armed forces;
- disarmament and development;
- disarmament and international security;
- collateral measures; which include confidence-building measures and effective verification provisions for disarmament measures.
- A comprehensive programme of disarmament leading to general and complete disarmament under effective international control.

Each year the CD adopts an agenda composed of selected items extracted from this general framework. In 1985, it considered nine items, including chemical weapons, a nuclear test ban and the prevention of an arms race in outer space.

Since 1980, the CD has been working on negotiating a convention which would ban the development, production, stockpiling, transfer and use of chemical weapons. The terrible history of chemical weapons use in the First World War — which resulted in more than 900,000 deaths and one million casualties — and recent evidence of chemical weapons use in the Iran-Iraq war, and allegations of use in Afghanistan and Southeast Asia have reinforced the immediate need for a Chemical Weapons Convention.

While all CD participants recognise the urgency of concluding a treaty, there continue to be many outstanding problems and differences of opinion on such fundamental issues as the destruction of existing stockpiles of chemical weapons, the destruction of production facilities and verification provisions which have slowed considerably the negotiation of a Chemical Weapons Convention.

Under the Canadian chairmanship of the *Ad Hoc* Working Group on Chemical Weapons in 1983, significant progress was made toward identifying those issues that could be agreed upon and that might form the basis for a Chemical Weapons Convention. In April 1984, the United States tabled a draft text for a treaty banning chemical weapons. Canada welcomed this step. Since that time, work has continued, but progress has been slow and there remain several difficult issues to be resolved.

It has long been Canadian policy to prevent the weaponization of outer space, and Canada has been an active supporter of all initiatives to discuss this issue, both in the multilateral U.N. context and bilaterally between the superpowers. We therefore welcomed the modest but significant progress made in 1985 in the CD, when members agreed on a mandate for an *Ad Hoc* Committee on Outer Space. The work in the CD will complement the ongoing bilateral negotiations between the U.S. and the Soviet Union. The establishment of a mandate is an important first step in moving toward the negotiation of a treaty preventing the weaponization of outer space.

Here again, Canada has undertaken some basic research projects to facilitate the discussions. These include a survey of existing treaties and international law relevant to arms control in outer space, funded by External Affairs and undertaken with the assistance of the Institute and Centre of Air and Space Law at McGill University, Montréal; a compendium of statements made in the CD on Outer Space; and a technical feasibility study on space-to-space surveillance conducted by Spar Aerospace under contract from External Affairs.

Although the issues that form the CD agenda are vitally important and have far-reaching implications, they receive little or no public attention or support. Why is this so? Consider the consequences of the negotiation of a CTB, a CW Convention, and a Treaty Preventing the Weaponization of Outer Space:

- Nuclear testing would be prohibited; that would significantly contribute to stifling the development of new nuclear weapons.
- Chemical weapons would be prohibited and existing stockpiles destroyed; the world would be freed of the threat presently posed by these horrible weapons of mass destruction.
- An international convention would guarantee a weapons-free space.

These would indeed be historic and extraordinary accomplishments.

#### The United Nations Disarmament Commission

The present United Nations Disarmament Commission (UNDC) was established by UNSSOD I in 1978 as a deliberative body composed of all U.N. members. The UNDC, which meets annually in New York for four weeks in May, operates on the basis of consensus and makes recommendations to the General Assembly on selected items in the disarmament field which the General Assembly has referred to the UNDC for examination.

In 1985, the UNDC discussed six issues: the arms race in all its aspects, the reduction of military budgets, the nuclear capability of South Africa, the role of the U.N. in disarmament, curbing the naval arms race and a review of the Declaration of the 1980s as the Second Disarmament Decade.

The UNDC has experienced many of the same problems that exist in other U.N. forums and has had difficulty in dealing substantively with its agenda items. At its 1985 session, the UNDC achieved little in substantive terms, except a reaffirmation of the goals of the Second Disarmament Decade. Even perennial agenda items, such as the reduction of military budgets and the nuclear capability of South Africa, remained untouched by progress or movement of any sort. While there was some useful discussion on the role of the United Nations in disarmament, the session was characterized by a lack of urgency.

Nevertheless, the UNDC does have an important role to play in improving and strengthening the manner in which the U.N. deals with disarmament issues. Canada supports the UNDC and believes that if all member-states strive to play a more meaningful role in this process, the Commission could make a real contribution to the deliberation of disarmament questions.

#### The Stockholm Conference

The Stockholm Conference, or as it is formally called, the Conference on Confidence- and Security-Building Measures and Disarmament in Europe, is a creation of the ongoing 35-nation Conference on Security and Cooperation in Europe (CSCE) and represents a unique approach to negotiating arms control and disarmament. The Conference which began in January 1984, is "to undertake, in stages, new, effective and concrete actions designed to make progress in strengthening confidence and security and in achieving disarmament." Canada is represented by Ambassador Tom Delworth.

The first stage of the Conference is specifically devoted to the negotiation and adoption of a set of mutually complementary confidence- and security-building measures (CSBMs for short) designed to reduce the risk of military confrontation in Europe. They represent a novel and largely undefined approach to East-West arms control and disarmament. While the mandate stipulates that the CSBMs are to be militarily significant, politically binding, adequately verifiable and applicable to the whole of Europe, the exact nature of these measures is left up to the Conference to determine.

Here, the approaches of East and West are in striking contrast: the West favours a gradual building up of confidence through a series of concrete steps, whereas the East prefers an initial declaration that confidence exists and its subsequent reinforcement with subordinate and limited specific measures.

The Conference has had disappointing results so far. Yet Canada hopes that there will be some significant forward movement on the basis of the degree of consensus that does exist on the need to improve on the existing and admittedly modest confidence-building measures contained in the Helsinki Final Act.

#### The Vienna Talks

The remaining multilateral negotiating forum — the Vienna-based Mutual Balanced Force Reduction Talks (MBFR) — is composed of 12 members of NATO and 7 members of the Warsaw Pact. Canada is represented by Ambassador Tom Hammond.

Recognising that the concentration of forces in Central Europe is the largest in the world, the objective of these talks, as the title suggests, has been mutual reduction of conventional forces in Europe to parity at 900,000.

Although the talks have been under way for 12 years, progress has been slight. There has been disagreement between the two sides on the very fundamental and crucial issues of data and verification. The two sides have been unable to agree on the number of Eastern troops in the so-called "reductions area," thereby making it impossible to determine the reductions required to reach parity.

Without agreement on these very basic issues, particularly the question of data, it has been difficult to make any significant forward movement. However, the talks in themselves constitute an important ''confidence-building measure'' by providing a unique forum for dialogue on a fundamental issue in East-West relations.

#### The Non-Proliferation Treaty

As we have seen, Canada does have a vital role to play in the multilateral disarmament forums. Another prominent area where Canada is heavily involved deals with the Non-Proliferation Treaty. With 128 signatories, the NPT enjoys the widest international support of any arms control treaty. Here indeed is something in the disarmament field for which we can be grateful. The NPT provides a legal framework for the political commitment to horizontal and vertical non-proliferation which underpins the international non-proliferation regime.

It is with a solid reputation as a country historically involved and committed to non-proliferation, as well as one on the leading edge in developing the peaceful uses of nuclear technology, that Canada approaches the Third Review Conference which will be held in Geneva in August 1985. Canada is a country which deeply respects and values the NPT as an invaluable international treaty embodying the objectives of Canada's arms control, non-proliferation and peaceful-uses policies.

The importance of the Non-Proliferation Treaty as an essential instrument of international security cannot be over-emphasized. It is a vital security lynchpin which benefits all countries by reducing the risk of nuclear proliferation.

The NPT is the legal embodiment of a bargain made between the nuclear and non-nuclear states. The non-nuclear states agreed to forgo the acquisition of nuclear weapons (i.e., horizontal proliferation) in exchange for an undertaking by the nuclear states to halt the arms race in nuclear weapons (i.e., vertical proliferation). This agreement, the outcome of long negotiations, is clearly set out in Article VI of the Treaty:

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control."

It is the responsibility of Canada, and indeed all nations of the world, to work to strengthen the NPT. For adherence to the letter and spirit of the Non-Proliferation Treaty would result in a powerful non-proliferation regime guaranteeing the reduction, and eventual elimination, of nuclear weapons.

As this overview indicates, there are no quick fixes in disarmament — but there are long term strategies and ongoing negotiations which have as their common goal security at lower levels of weapons, both nuclear and conventional. If the going is tough and seems slow, it is because the problems are excruciatingly difficult. In discussing the limitation or indeed dismantling of arms, we are dealing with the most intractable problems in the world.



## Steady Work: Verification/ Peace-keeping

It is unfortunately true that arms control agreements cannot be negotiated on the basis of trust alone. The highly sophisticated nature of today's weapons means, that in order to be meaningful and durable, arms control and disarmament agreements must have provisions which ensure compliance and build confidence in the validity and integrity of a treaty. Because arms control agreements are directly related to the security of signatory nations, effective verification measures are vital.

One of the major obstacles to the successful negotiation of arms control and disarmament measures has been the inability of nations to agree on common standards and methods of verifying agreements.

Some years ago, Canada concluded that the issue of verification was central to every significant arms control negotiation and might well be a critical factor in making progress on arms control and disarmament in the 1980s.

An initial cooperative effort between External Affairs and National Defence led to the production of a trilogy of studies on verification which were subsequently tabled at the Conference on Disarmament (CD) in Geneva in 1980 and 1981. The quality and detail of the work in these papers established Canada's credentials and international reputation as a country seriously involved in this complex and central issue. In 1983, a Verification Research Unit, entirely dedicated to all aspects of arms control verification, was established in the Department of External Affairs. The current budget of the unit is \$1 million.

In order to prepare the way for the negotiation of a Chemical Weapons Convention at the CD, Canada has done important pioneering work on the question of chemical weapons use. These studies include a series of examinations of possible chemical weapons use in Southeast Asia undertaken by Dr. Bruno Schiefer of the University of Saskatchewan, a compilation of interviews

with alleged victims of chemical weapons use, and a study of the "Yellow Rain" phenomenon. All of these studies have been submitted to the Secretary-General of the United Nations.

Canada is also working to overcome the significant political and technical obstacles to a Comprehensive Test Ban Treaty, not least of which is the verification of an eventual treaty. At present, there is a great deal of disagreement regarding the technical capabilities for detecting and determining the nature of particular seismic events. Canada has been an active participant in the CD's Seismic Experts Group, committing personnel, resources and funding to Energy, Mines and Resources in order to have Canada represented at the Group and to upgrade existing seismic equipment in Canada.

In 1984, Canada participated in a 40-nation International Seismic Data Exchange designed to determine the scope and capability for seismic verification of a CTB. Canada provided 15 percent of the data collected during this exercise. It is widely recognised that Canada has some of the world's leading experts in this field as well as some of the most sophisticated seismological equipment available for this purpose. The ability to verify a CTB is fundamental to the eventual negotiation of a treaty.

Outer space is another major item on the CD's agenda. Commissioned by External Affairs, Spar Aerospace undertook a feasibility study on remote space to space sensing to determine the function of an unknown satellite in space. These findings will significantly assist in determining exactly what sort of verification provisions might be necessary and possible in an eventual treaty prohibiting weapons in outer space.

External Affairs' study of international law relevant to outer space (see ''The Future Role of Law'' Page 00) will also prove helpful in achieving an outer space agreement.

In addition to its work on these major CD issues, Canada has also undertaken a number of projects relating to the negotiations in Stockholm and Vienna. These include:

- seminars and papers on the general question and concept of arms control verification;
- a Carleton University, Ottawa, "mini-series" of seminars on verification relating to arms control negotiations in Europe;

- detailed analyses of the Soviet approach to verification in various forums;
- papers on the role of confidence and security-building measures in arms control negotiations;
- an examination of the International Atomic Energy Agency's safeguards system as a possible model for other compliance and verification systems.

There is much work to be done in the field of verification. Much of it is detailed, scientific analysis and computation. All of it has a very real practical, political purpose — to make possible the negotiation of meaningful arms control agreements, which would ban nuclear testing, chemical weapons and weapons in space.

The concept of verification has been challenged by some who charge that it is simply a diversion or delaying tactic employed by those who do not truly want disarmament. Canada strongly disagrees with this point of view. It must be remembered that verification is a means to an end and not an end in itself. The end, of course, is arms control and disarmament agreements in which both sides can repose a degree of confidence that the other side will comply. A demand for a perfect verification system is unrealistic because the absence of such perfection will always be used by one side or the other to block movement toward an agreement it does not want. However, verification is an essential ingredient in arms control agreements. Of course, political will to achieve agreement remains fundamental to the negotiating process: but verification can act as a means of facilitating the conclusion of disarmament agreements. Thus, Canada's work on both the concept of verification, as well as the scientific research on technical requirements and capabilities for verification, reinforce the negotiating process.

This steady, though unspectacular work by Canada, is a special contribution to the negotiating process and will help create the confidence and trust vital to the disarmament process itself.

Another way in which Canada has consistently contributed to the building of peaceful conditions throughout the world has been peace-keeping.

Canada has participated in every one of the U.N.'s 19 peace forces\* — the only U.N. member to have done so. Not only does that manifest Canada's commitment to the U.N. in general and to peace-keeping in particular, it also highlights the value of Canada's contribution. Canadian peace-keeping units are seen to be technically proficient and, while representative of Canada's ties to the West, also perform their peacekeeping duties in a neutral manner.

Canadian military personnel have donned the blue beret of the U.N. to help keep the peace in various parts of the Middle East, in Cyprus, Congo, Zaire, Korea, West New Guinea, and on the Indian-Pakistani border. Canada actively participates in three current U.N. peace-keeping operations: twenty officers are deployed with the United Nations Truce Supervision Organization (UNTSO) between Israel and its Arab neighbours; 220 personnel are with the United Nations Disengagement Observer Force (UNDOF) on the Golan Heights; and 515 personnel are with the long-standing United Nations Force in Cyprus (UNFICYP). A U.N. presence is contemplated for Namibia, and Canada has indicated its willingness in principle to contribute to a force when required to do so.

The purpose and scope of each peace-keeping endeavour have varied enormously. At one extreme was the United Nations Command Korea (UNCK) set up when 16 nations responded to a Council recommendation to support South Korea against the North Korean invasion in 1950, by sending troops to fight under a U.N. flag. This was the only case of the U.N. putting a world police force into action — and the decision escaped a veto only because the Soviets were at the time boycotting the Council. At the height of this seven-year operation, Canada was contributing 8,000 troops; 25,000 Canadians served in Korea, with 300 killed and 1,200 wounded.

<sup>\*</sup> Since 1945, the U.N. has dispatched seven multi-national forces to restore the peace (four to the Middle East, as well as to Cyprus, Congo, Zaire, and West New Guinea); one to fight (Korea); and another eight to supervise peace (three in the early and later stages of the Korean conflict, three to the Middle East, two with respect to the India-Pakistan conflict). Other peace-keeping efforts have not come under the auspices of the United Nations (such as two in Indo-China and one in relation to the Nigerian Civil War) but have drawn on the U.N. paradigm for their inspiration and their operations.

At the other extreme from the mammoth UNCK operation was the tiny United Nations Temporary Executive Authority (UNTEA), where 13 Canadian soldiers joined those from seven other nations in 1962-1963 to give temporary administration to West New Guinea (West Irian) while it passed from Dutch to Indonesian control.

The most frustrating peace-keeping work has been in the Middle East, the theatre for six U.N. forces which have managed to suspend but not resolve conflict. The creation of the United Nations Emergency Force (UNEF) in 1956 — the first true peace-keeping operation — illustrates Canada's U.N. diplomacy at its most innovative, setting the standard for our endeavours.

Following the invasion of Egypt by the combined forces of Great Britain, France, and Israel, Canada immediately introduced and skilfully persuaded the General Assembly to approve a resolution requesting the Secretary-General to submit within 48 hours "a plan for setting up, with the consent of the nations concerned, of an emergency international United Nations force to secure and supervise the cessation of hostilities." Within five days of the resolution, a ceasefire had been concluded. Within twelve days, advance troops from UNEF were arriving in the canal zone; in another six weeks they were fully operational. Canada contributed signals and other specialist units, and a Canadian, Major-General E.L.M. Burns, was appointed the Chief of Staff.

For his work in initiating this effort, Lester B. Pearson, later Prime Minister of Canada, won the Nobel Peace Prize. As Pearson noted at the time, UNEF manifested "the organization of peace through international action." In its demise, however, UNEF highlighted weaknesses inherent in peace-keeping. The outbreak of the Seven-Day War in 1967, after Egypt ordered the peace-keeping force to leave its territory, showed just how dependent was the force upon the host government. Moreover, it showed how little had been done over UNEF's eleven-year life span to create a durable peace. In fact, some even stretch the argument, suggesting that the prolongation of peace-keeping forces removes the incentives to reach a lasting settlement, and reinforces the status quo.

Canada's ongoing commitment to peace-keeping has recently been reaffirmed. On June 28, 1985 External Affairs Minister Joe Clark signed an Exchange of Notes with the Director-General of the Multinational Force and Observers (MFO) establishing the terms and conditions of Canada's participation in the Sinai-based peacekeeping force. Canada has agreed to provide up to 140 personnel and nine helicopters to the force which was established in 1981 to monitor the security provisions of the 1979 Egypt-Israel Peace Treaty. When Canada takes up its post on March 31, 1986, it will join nine other participating nations including, Fiji, Great Britain, the Netherlands, New Zealand and the United States.

The steady work of peace-keeping, as a Canadian contribution to peace-making, goes on.

## Nuclear Winter:

# A View from Saskatchewan

Visiting the vast and beautiful province of Saskatchewan makes one vividly aware that agriculture and farming of all types is an integral part of life. As is well known, Saskatchewan produces 60 percent of Canada's total wheat crop and most of the country's canola, rye, barley, oats and flax.

Supplying 20 percent of the global wheat market, Canada is, in fact, the world's seventh largest producer of wheat. More than 50 percent of our agricultural exports are in grain; grain exports — which represent 5 percent of Canada's total exports — were worth \$5.5 billion in 1984.

It is interesting to note that Canada finds its largest single wheat market in the Soviet Union; exports to that country were valued at \$2.2 billion last year. Canada — and significant sections of the world — depend on the abundant harvests from this land.

In an agricultural community, weather assumes a special significance. It requires constant monitoring and analysis. It must be both understood and anticipated. Too little rain or too early frost can mean disaster to a crop which is sensitive to minor variations in temperature and precipitation. In Canada, we cultivate our crops on the very margin of permissible climatic conditions. The prairies lose their capability for maturing wheat when the temperature decrease is slightly more than 2 degrees celsius for wheat and 4 degrees for barley. Weather is a constant concern to farmers.

Saskatchewan — a land so bountiful in its harvest, and yet so vulnerable to the climate — provides an appropriate backdrop to consider the full meaning of "Nuclear Winter."

In 1971, the *Mariner 9* space-probe began orbiting Mars and transmitted to Earth photographs of a planet enveloped in the dust of a Martian storm. Astronomers, planetologists and geologists studying this phenomenon recorded that the surface temperature of the planet was lower than that of the dust in the upper atmosphere.

Drawing on this data, scientists, including the pre-eminent astronomer and author of *Cosmos*, Carl Sagan, determined that there might be similar effects on Earth should vast amounts of dust and smoke be released into the atomosphere as a result of volcanic eruptions, mass forest fires or a major nuclear exchange. Follow-up work, including scientific modelling, furthered the hypothesis that catastrophic cooling could occur on Earth in these circumstances.

In 1982, scientists Paul Crutzen of West Germany, and John Birks of the United States published the first major study of the effects of smoke generated by a nuclear war. They concluded that forest fires caused by a major nuclear exchange would emit hundreds of millions of tonnes of smoke which would severely reduce the amount of sunlight reaching the earth's surface.

Based on this study, a group of U.S. scientists and biologists undertook the first comprehensive analysis of the phenomenon which came to be known as Nuclear Winter. They examined not only the climatic effects of nuclear war but also, for the first time, possible biological effects and the impact on human life itself.

This study, *The Long-Term Atmospheric and Climatic Consequences of a Nuclear Exchange* (known as ''TTAPS'' after the initials of the names of the authors: Turco, Toon, Ackerman, Pollock and Sagan), became the basis for a major scientific symposium in April 1983 which brought the Nuclear Winter theory to international attention. A group of more than 100 scientists from the United States and other countries, reviewing the findings of the TTAPS study, declared their general agreement with the Nuclear Winter hypothesis.

A number of biological scientists then examined the potential impact of post-nuclear war conditions on the Earth's life-support systems. Discussing the effects on plant life, animal life, marine

and fresh water eco-systems, climate, weather and soil preservation, they agreed that the effects of nuclear war "could be devastating to a degree previously unforeseen." They could not rule out the possibility that:

"...the long-term biological effects of nuclear war could cause the extermination of humankind and most of the planet's wildlife species."

In order to make the startling details of Nuclear Winter widely known to the public, as well as other scientists and policy-makers, a major conference was convened in Washington in October 1983. The Conference on the World after Nuclear War attracted more than 600 participants, including scientists, ambassadors and officials from more than twenty countries, educators, religious leaders, business people, environmentalists and arms control, foreign policy and military specialists. This conference brought the Nuclear Winter theory out of the laboratories and into the headlines.

The conference ended with a live satellite linkage between Washington and Moscow consisting of a 90-minute exchange of scientific information and views on Nuclear Winter. During the exchange, the principal scientific secretary of the U.S.S.R. Academy of Sciences, Gregori Skryabin, said that American and Soviet scientists had reached a consensus:

"They are unified in their views that there should be no nuclear war, that this would mean disaster and death for mankind...and we should all try to bring our influence to bear in order to bring about an end to the arms race so there will never be a nuclear war."

At the end of the satellite link-up, conference moderator Dr. Thomas Malone expressed the hope that this frank exchange of views would be viewed as a turning point in the affairs of humankind and would "elevate the level of consciousness among policy-makers."

Early in 1984, the Canadian Government, noting the growing number of national studies produced by such respected institutions as the Swedish Academy of Sciences, the U.S. National Academy of Science and the U.S.S.R. Academy of Science and the U.S.S.R. Academy of Sciences, commissioned the Royal Society of Canada to study the environmental and ecological consequences of a nuclear war from a Canadian perspective.

The Royal Society of Canada, founded in 1885, is an 1,100-member interdisciplinary society which has participated actively in the learned scientific and academic affairs of Canada. Chaired by Dr. Kenneth Hare, Provost of Trinity College, University of Toronto, the Royal Society Committee on the Environmental Consequences of Nuclear War spent seven months studying the possible effects of nuclear war on the Canadian environment.

In February 1985, the Royal Society submitted its report, *A Canadian Appraisal of the Environmental Consequences of Nuclear War*. The conclusions were in agreement with the findings of earlier studies undertaken by other major national scientific organisations:

"A Nuclear Winter in the wake of a major nuclear exchange appears to be a formidable threat. If calculations are correct — and the Committee believes them credible — temperatures in the interior of continents will plunge by many degrees after the exchange, probably far below freezing in many mid-latitude areas. Severe damage or destruction will ensue for crops and vegetation. The winter will last for some weeks to several months, and will have lasting repercussions."

The Committee of the Royal Society determined that the Nuclear Winter findings added new dimensions to established strategic thinking, and enumerated their own list of ''Strategic Considerations'' which included the following:

- The environmental impact of a major nuclear exchange would be global. No country would be immune;
- Nuclear Winter would imperil the food and drinking water supplies of all survivors in mid-latitude nations, and probably the whole world;
- There would be few spectators in a major nuclear exchange; non-combattant nations would be the helpless victims of a Nuclear Winter, just as would the combattants;
- Even if spared direct attack, there would be major damage to Canada's forests, fisheries and agriculture;
- The U.S.S.R. would also be extremely vulnerable to the effects of a major nuclear exchange. Soviet agriculture, already very sensitive to drought and frost, could not survive a Nuclear Winter.

With respect to Canada, the report stated that:

- Canadian agriculture would be severely affected;
- Canadian forests would be vulnerable to radiation damage from fall-out and could suffer extensive fire damage;
- There could be damage to ocean eco-systems and fisheries, including a possible loss of fisheries and non-commercial fish within two to six months.

Most significantly the report concluded:

"It is possible that long-term climatic anomalies caused by a nuclear war might hinder or prevent the re-establishment of pre-war (or indeed any) high-intensity agriculture in Canada."

The Royal Society report recommended that Canada investigate the Nuclear Winter hypothesis much further, concentrating on those areas that are of particular concern or relevance to Canada and in which Canada has a particular expertise i.e. agriculture, forestry and ocean resources. It also recommended that Canada support fully any action by the United Nations or other international agencies to facilitate greater understanding of the global implications of Nuclear Winter.

Upon receiving the Royal Society's report, the Government undertook an interdepartmental review of the Committee's findings. After several months of discussion and consultation among nine departments and agencies, including External Affairs, National Defence, Agriculture, Health and Welfare and Fisheries, External Affairs Minister Clark tabled the Government response in the House of Commons on June 27. Mr. Clark said:

"There is general agreement within the Government that the Nuclear Winter hypothesis is scientifically credible, even though the details regarding its magnitude and duration are subject to great uncertainties."

Mr. Clark noted that the Canadian study would be forwarded to the United Nations in accordance with a resolution on Nuclear Winter passed during last autumn's session of the General Assembly. Canada played a leading role in the adoption of this resolution, which urged all states and intergovernmental organizations to submit to the Secretary-General scientific studies on the climatic effects of nuclear war. Canada stressed the importance for nations to undertake and report such findings as part of an ''international undertaking to reduce the possibility of nuclear war.''

As Mr. Clark stated in the House:

"The submission of the Royal Society's report to the United Nations will serve as a useful Canadian contribution to international recognition that in a nuclear war there would be no winners."

The Royal Society report makes clear once again that a nuclear conflict would be catastrophic. This, Mr. Clark noted, "reinforces our basic conviction that any nuclear war must be prevented." Noting that the report has "national security implications," he reaffirmed Canada's commitment to NATO and to its policy of deterrence which "has ensured Canada's security for over 35 years." He stressed that the Royal Society report reinforced the basic conviction that "no nuclear war can be won in the traditional understanding of victory," adding that the Canadian Government would therefore continue to do everything within its power to deter all war. This includes maintaining an active role in multilateral arms control negotiations in Geneva, Stockholm and Vienna, as well as supporting and encouraging the United States in its efforts to negotiate reductions in nuclear weapons with the Soviet Union.

What, then, does the Nuclear Winter theory tell us about how to live in the nuclear age?

The world has known since August 6, 1945 — the bombing of Hiroshima — that nuclear weapons are the most deadly tools of war and that a nuclear war would wreak destruction on a scale never previously witnessed or imagined. Now, a growing number of astronomers, biologists and physical scientists have informed us, through the Nuclear Winter findings, that nothing less than the continuation of human life is at stake.

Of course, Nuclear Winter has not been proven beyond all doubt. Such proof can only be determined with certainty in the wake of an actual nuclear war. Nevertheless, a growing body of reputable, informed, scientific evidence makes it clear that anyone who would disregard the implications of Nuclear Winter is acting in a most reckless manner.

The consideration of the effects of Nuclear Winter must be taken into account by all policy-makers in all national governments. It must lead us to renew and redouble our efforts to reduce and eliminate all nuclear weapons from the face of the earth.

Nuclear Winter leaves us with profound questions for the future. We must begin to think seriously about our planet. Do we want Earth to be nothing more than a frozen, smouldering chunk of clay going about its galactic way — no longer a shining beacon of blue light in outer space? Or do we want this planet, our home, to continue to glisten with the glories of nature and resound with the vibrancy of its inhabitants?

There is no better country in which to ask these questions than Canada, with its stunning beauty and immeasurable potential. And in Canada, there is no more appropriate place to ponder the future than in Saskatchewan, where the most bountiful glories of this planet are in full evidence.



# The Value of Canada's Peace Movement

- In Vancouver, 80,000 people joined in the 1985 March for Peace, sponsored by End the Arms Race.
- In Winnipeg, 30,000 people participated in the 4th Annual Walk for Peace, sponsored by the Winnipeg Coordinating Committee for Disarmament.
- In Toronto, 10,000 high school students took part in a massive peace celebration in front of City Hall.
- In Halifax, more than 300 women, from Labrador City to Denman Island B.C., gathered for five days at an historic International Women's Conference to discuss alternative ways of negotiating peace.

These are but a few of the examples of the vibrancy of the peace movement of the 1980s in Canada.

Across the country, thousands of individuals are involving themselves in a myriad of organizations, expressing their concern that the world has too many arms; demanding that the relentless upward spiral of ever-more sophisticated and lethal weapons be stopped.

The peace movement in Canada is gathering strength, continuously widening its body of support. In the 1960s, it was often dismissed as being left-wing and radical, representing a minority opinion. But in the 1980s, the expanded peace movement — led by pioneering organizations such as Project Ploughshares and Operation Dismantle — cuts across all ages, professions and backgrounds.

Lawyers, physicians, teachers, students, scientists and countless concerned individuals have formed associations so that they might act in concert in helping the public and politicians to understand the threat posed by the world's conventional and nuclear arsenals. The new, broad-based membership of the movement reflects the universal danger of the nuclear threat and the realization that the debate over nuclear and conventional weapons is something that involves everyone. The Canadian public, through the peace movement, wants to participate in the determination of its future.

Since the early 1980s, coalitions of disarmament groups have been developing and growing throughout the country. Today there are disarmament networks in Montreal, Toronto, Hamilton, Winnipeg, Calgary, Edmonton and Vancouver — representing hundreds of organizations and tens of thousands of individuals.

The growth of the peace movement has been impressive. For example, the Toronto Disarmament Network, which was established in early 1982 with 15 member organizations, now includes more than 70 groups. In Vancouver, End the Arms Race, established at the same time, encompasses 200 organizations, including churches, labour, community and professional groups.

The peace movement is becoming a national movement, and in November, the first attempt to form a national coalition of peace groups will take place in Toronto. This conference (assisted by a \$25,000 grant from the Disarmament Fund of the Department of External Affairs) will bring together more than 300 delegates from major peace groups across the country.

While the marches and protests receive the most media attention, it is, in fact, the educational activities of the peace movement that are having the most profound effect. Efforts to educate the public are having a demonstrable effect on public opinion and awareness.

External Affairs Minister Clark recognized this when he stated:

"The Canadian peace movement plays an essential part in the new Canadian dialogue: for the peace movement challenges assumptions, not just policy, and forces us to examine those assumptions more closely." The peace movement has been instrumental in giving a sense of hope and power to individuals who have felt frightened and isolated in their concerns about the alarming trends in international relations. In a country as vast as Canada, the peace movement is an essential component in giving groups and individuals a common sense of purpose — something that universally unites people and communities from Charlottetown to Whitehorse — the preservation of life on the planet.

Prime Minister Mulroney has also given his support to these efforts. Speaking of the peace movement December 21, 1984, in the House of Commons, he said:

"I urge them strongly to maintain the pressure at all times...
the pressure of honourable people working for the pursuit of
peace is the strongest assurance that a democracy is healthy."

The Government's commitment to dialogue is nowhere more evident than in the tabling of the Green Paper — the first public review of Canada's international relations. Mr. Clark has said of the review process and Canada's future foreign policy that:

"...it should not be the exclusive preserve of bureaucrats and parliamentarians, but reflect the opinions and convictions of the Canadian public at large."

The Green Paper on Canada's International Relations was prepared precisely to aid the public review on the future directions of Canada's international relations. Few (if any) countries in the world have ever invited such open and extensive public participation in the foreign policy process.

On June 12, Parliament approved the creation of a Special Joint Committee of the House and Senate to discuss the Green Paper. Public input will be a fundamental and vital component of the review process. As Mr. Clark said in the foreword to the Green Paper:

"I encourage all Canadians with an interest in the future of their country and the contributions Canada can make to a safer, more prosperous and humane world to come to the Parliamentary hearings which will take place across the country and to make their views known." There are several other ways in which the Government actively seeks and assists communication with the public on arms control and disarmament issues.

As Ambassador for Disarmament, I reconstituted the Consultative Group on Disarmament and Arms Control Affairs. The Consultative Group is made up of more than 50 representatives from non-governmental organizations, universities and interested individuals who gather regularly to discuss and tender advice to the Government on arms control and disarmament questions.

The Consultative Group has met twice in recent months — a general meeting in November 1984, and a smaller, sub-group meeting in April 1985.

- In November, the Consultative Group discussed a broad range of issues: from Canada's role and influence in Washington, Moscow, within NATO and the United Nations, to a careful examination of the arms control and disarmament agenda from chemical weapons to nuclear non-proliferation.
- In April, a sub-group met to discuss in detail Canada's approach to the Third Review Conference of the Non-Proliferation Treaty. The Group also considered the question of the Strategic Defence Initiative (SDI). Some members prepared a statement expressing their concern over superpower efforts to achieve a capability to deploy ballistic missile defence systems and the risks they could pose to both ongoing arms control negotiations and existing agreements, in particular the ABM Treaty.

The Government also maintains a Disarmament Fund for the purpose of helping Canadians discuss, research and disseminate information on arms control and disarmament issues.

Since its inception in 1979, the Fund has disbursed \$1.5 million to a total of 149 recipients, including a wide range of prominent Canadian groups, non-governmental organizations and academic institutions from virtually every province. A full report on this unique method of assisting public discourse has just been published.

With assistance from the Disarmament Fund, which last year provided \$753,000 to 53 groups:

 Scientists at McGill University's Institute of Air and Space Law are undertaking research projects relating to arms control, disarmament and outer space;

- The Prairie Christian Training Centre in Fort Qu'Appelle, Saskatchewan held a "Prairie Region Peacemakers Workshop;"
- Project Ploughshares has undertaken research and documentation projects and publications and a national conference on the broad theme of "Disarmament and Development;"
- The Arts Faculty at the University of Moncton organized an international conference on the themes La politique, les armes et la paix; le développement et la paix; l'éducation et la paix.

The External Affairs Department also provides an annual sustaining grant of \$100,000 to the privately-created Canadian Centre for Arms Control and Disarmament to assist it in its public information and research activities. As well, the new Canadian Institute for International Peace and Security has been allocated annual funds which will increase from \$1.5 to \$5 million over the next five years. Under the guidance of a board of 15 distinguished Canadians, chaired by William Barton, and its Executive Director, Geoffrey Pearson, the Institute will finance and conduct research and information programmes designed to raise the level of public knowledge and discourse on the entire range of questions relating to international peace and security.

The Government is directly helping U.N. efforts to develop public support for disarmament through contributions to the World Disarmament Campaign. Canada is one of the few countries to have contributed twice to the World Disarmament Campaign. This includes contributions of \$100,000 in 1983 and \$100,000 again in 1984.

The peace movement in Canada is in a privileged position. The democratic nature of our political system means that government is both sensitive and responsive to the opinions of the public — not the case in many parts of the world. This places a special responsibility on the peace movement in Canada, not only to air its concerns but also to give the Government the best advice it possibly can on questions relating to arms control and disarmament. In order to accomplish this task, the peace movement must continue to be informed and balanced in its opinions, as well as active and vocal in making its concerns widely known.

There are many ways of conveying opinions — through marches, letter-writing campaigns, meetings with Members of Parliament. Through the Disarmament Fund, the new Canadian Institute for International Peace and Security, and the foreign policy review process, the public has the opportunity to present new perspectives and to suggest new approaches.

The call for public participation in the Green Paper study has been made strongly and repeatedly — by the Prime Minister and by the Secretary of State for External Affairs. I add my voice to theirs — reminding all concerned Canadians that, as the Green Paper states:

"The imperative of ensuring security at lower levels of nuclear weapons requires that no proposal or line of thinking on a possible solution be dismissed without careful examination."

The Canadian public, through the review process, must bring forward its concerns, its views and above all, its ideas.

The search for peace is not a one-person or one-nation crusade. It must be a cooperative effort; only then will it succeed.

## The Benefits of Twinning

The former Secretary-General of the United Nations, Kurt Waldheim, recently urged the world to imagine the benefits that would accrue if East-West polarization did not exist. Many problems today considered insoluble would be overcome — from regional conflicts in developing countries to the ever-increasing wastefulness of the arms race.

International cooperation would replace confrontation were we to overcome the paralyzing polarization which presently exists between East and West. The arms race is the direct result of the fundamental problems of tension and breakdown of trust between East and West. A prerequisite to progress in arms control and movement toward disarmament is a new spirit of mutual understanding.

Municipalities have long shown leadership in the development of human relations through the twinning process. The concept of cities and towns joining together to achieve mutual objectives has led to many instances of affiliation for purposes of commerce, trade and defence. It is a common occurrence that problems which seem massive and insoluble at the national level become more manageable at the local level. The public can frequently identify with the concerns of a similar public in a comparable city or town in another place, either in the same or a different country.

Whether focussing on cultural exchanges or trade opportunities, twinning becomes a practical learning experience. For, in exposing different cultures to one another in a manner that promotes openness and understanding, twinning provides a cultural link fostering the development of lasting bonds between one society and another.

In Canada, twinning has become a well-established tradition. There are approximately 200 cities and towns twinned with sister municipalities in this country or with municipalities abroad. For example, my home city of Edmonton, Alberta, is twinned with

Hull, Quebec and that association has enriched the understanding of the francophone dimension of Canada among my neighbours. Vancouver is twinned with the city of Odessa on the Black Sea in the Soviet Union — an association that has facilitated contacts between citizens of the two cities, thus enhancing East-West understanding. St. Catherines is twinned with Port of Spain; Mississauga with Kariya, Japan; Windsor with Ohrid, Yugoslavia.

Even provinces are twinning. In 1981 Alberta twinned with the Northern province of Heilongjiang in China — an association that resulted in a recent \$7 million sale of oil field equipment to China. Saskatchewan has a formal link with the northeastern Chinese province of Jilin. In March, the Ontario Government announced it would twin with the highly industrialized south coastal province of Jiangsu in China, where the province will also establish a technology and trade office.

There seems little doubt that twinning is becoming popular — for both cultural and commercial reasons. But the concept has an even greater potential when applied to the easing of tensions and mistrust that characterize international relations today.

I would like to suggest that the Federation of Canadian Municipalities consider ways of expanding the twinning process so that many more Canadian municipalities decide to twin with Soviet and East European municipalities. This would be a concrete step in improving East-West relations that could be taken at the local level. The very core of the idea of twinning is people in one community getting to know and appreciate the people in a similar community. The essential requirement is to stimulate the interest of people in extending human contacts.

On the national level, governments attempt to bridge chasms through state visits, bilateral discussions, exchanges of notes or memorandums of understanding on various issues. The recent successful visit of External Affairs Minister Clark to the Soviet Union demonstrated the crucial importance and continued necessity of high-level visits. In Moscow, Mr. Clark stressed:

"...even where differences exist, consensus can be built upon a foundation of mutual understanding and areas of common purpose." This understanding is based on the recognition that we all share a planet and a common human identity. Our common purpose is to live in peace.

These high-level national initiatives can be reinforced by municipal twinning programmes. For these activities promote increased political confidence between East and West based on restraint, dialogue, contacts and exchanges. People in your own neighbourhood *can* make a difference.

In Moscow, Mr. Clark suggested some ways of managing both the spirit and substance of East-West relations by, among other things, maintaining open lines of communication and the simple habit of being present in each other's countries. He called for the recognition that:

"...authentic security is multi-dimensional and indivisible: political, economic and cultural — as well as military."

The success of twinning programmes to date demonstrates the gains achieved in advancing global inter-personal relations. Twinning proves that people everywhere share many common interests and concerns and that differences and divergences in approach can be bridged through contacts and communication. It is through the development of human relationships at every level — from tourists to diplomats — that we will solidify and cultivate the bonds of empathy that universally join us as members of the human family.



### Guns vs. Butter

Like disarmament, the issue of development has preoccupied the United Nations. A continuing series of conferences, declarations, strategies and programmes of action have carried out the pledge in Article 55 of the Charter to ''promote higher standards of living, full employment and conditions of economic and social progress and development.''

While it is true that a great deal has been accomplished to improve the lives of millions of people, it is equally true that deprivation and suffering are still widespread throughout the developing countries, which contain an ever higher percentage of the world's population. Behind the statistical shadow of income disparities, inflation and retarded growth, are hundreds of millions of individuals trapped by shocking neglect. Almost one-quarter of mankind lives in conditions of dire poverty.

The crisis of development has lasted so long that it has been blunted, despite the warnings from experts that international development cooperation is a prerequisite for peace and stability. The international commission headed by Willy Brandt, former Chancellor of the Federal Republic of Germany, said that re-shaping world-wide North-South relations will be the "greatest challenge to mankind for the remainder of the century." Yet, in the North, we continue to be consumed by our domestic problems and regard with suspicion the global strategies advanced by the United Nations. Those strategies deal not just with the volume of aid but, more importantly, with the structural changes that must be made in the monetary and trading systems of the world.

It is the U.N. that has pioneered the study of the linkage between disarmament and development. In a three-year study by 27 experts from every area of the world, the U.N. demonstrated its breadth of vision in converting the arms of war into the machinery of peace. Headed by Inga Thorsson, Under-Secretary of State of Sweden, the group concluded:

"The world has a choice. It can continue to pursue the arms race, or it can move with deliberate speed towards a more sustainable economic and political order. It cannot do both... the arms race and development are in a competitive relationship."

Mrs. Thorson quotes with approval the linkage established more than 30 years ago by President Eisenhower, who said: "Every gun that is made, every warship launched, every rocket fired, signifies, in a final sense, a theft from those who hunger and are not fed, from those who are cold and are not clothed."

Presenting her report to the U.N. in 1981, Mrs. Thorsson said, "...governments have, over the past 30 years, spent vast resources on armaments, resources which — on grounds of morality, equal human justice, enlightened self-interest — ought to have been directed to ending world hunger and building for human and material development."

By taking a broader approach to the problem of security, the Thorsson group has defined a ''dynamic triangular relationship'' between disarmament, development and security. The purpose of national security is to secure the independence and sovereignty of the national state, the freedom and the means to develop economically, socially and culturally — which is precisely what we mean by development. Security is threatened by reduction in economic growth, ecological stresses and resource scarcities, and the morally unacceptable and politically hazardous polarization of wealth and poverty.

The Earth's carrying capacity is well able to provide for the basic needs of the world's entire population. The Brandt Report emphasized that one-half of one percent of one year's military expenditures would pay for all the farm equipment needed to increase food production and approach self-sufficiency in food deficient, low-income countries by 1990.

<sup>\*</sup> External Affairs' Disarmament Fund financed the publication of a popular version of the Thorsson Report, *Safe and Sound* by the Canadian journalist Clyde Sanger (Deneau).

Reinforcing this point four years later, the United Nations 1985 Report on the World Social Situation begins:

"It is evident that the material foundations for achieving widely-shared social objectives exist on a global level, and that failure and pessimism derive not as much from limitations of the productive capacity of the world economy, as from the misdirection of resources..."

The misdirection of the world's resources — natural, financial, technical and above all human — is graphically illustrated by the analysis of global military expenditure and conflicts contained in this U.N. report.

In 1984, the world spent \$800 billion on its armed forces. This represents \$130 for each person in the world. Of this figure, fully 80 percent was spent on conventional arms. While the vast arsenals of the Warsaw Pact and NATO account for the largest portion of the \$800 billion, total spending by developing countries has increased at twice the rate of that in industrialized countries and today represents approximately a quarter of the world's total. Developing countries spent almost three times as much on their military as on health programmes.

Since 1945, most armed struggles have been fought on the territory of countries in Africa, Asia and Latin America. The majority of the dead and injured have been from developing nations.

So far, nations have been unable to advance development through disarmament savings. But at least a new examination of security has started in the past few years as the potential for global nuclear destruction and the realities of an interdependent world become better known. International economic cooperation would help to reduce the mistrust that results in so much human suffering. And, as the North-South Institute points out in a new analysis, *Disarmament and Development: Security in an Interdependent World*:

"Curbing the global arms build-up would have an even more salutary effect, for it would not only ease international tensions, but would also release substantial resources for the reduction of poverty worldwide." In 1984, the U.N. General Assembly adopted a resolution calling for an international conference on Disarmament and Development in order to conduct "a comprehensive discussion of the subject at a high political level."

Canada will strongly support the international conference, which will be held in Paris in 1986. The Government believes it is important to highlight the costs of a continuing arms race and compare it to the potential benefits that might be derived from a degree of disarmament. It is clear that if even a fraction of the arms expenditures of the superpowers, or the other militarily important powers, were to be diverted to meeting the needs of development, great prospects for development could open up. If the expenditures on arms by the developing countries themselves could be reduced, an additional substantial amount of resources, financial and human, could be released for development purposes.

The future of the U.N. and of progress toward global security through disarmament and development lies not just in the hands of government. It lies also in the determination of growing numbers of individuals participating in the development of a global community at the grassroots level. The role of people and governments everywhere is to ensure that the world moves steadily towards a new definition of security, based on the common ground that we all share as inhabitants of this small and fragile planet.

# The Future Role of Law

The arms race, world economic development, the global environment, political terrorism, the population explosion, utilization of resources of the sea and the benefits of space exploration are all on the agenda of every nation, but are not capable of being solved by any one acting alone. The United Nations is, in fact, the only global instrument we have to protect the global community.

The U.N. is concerned with a multitude of global problems, including peace, disarmament, outer space, the seas and oceans, natural resources, human rights, multinational corporations and criminality. Its whole effort is directed at trying to consolidate peace, reduce tensions, and stimulate economic and social development.

The United Nations Charter sets out a noble course for humanity. The nations of the world have been brought together, at least for discussion purposes, under one roof. The problems of our time have been illuminated with a global spotlight. The strategies for security and development have been devised. We have the machinery for peace in our hands. It ought to be a moment of triumph. Instead, it is a decade of despair.

What is wrong? There is more fighting, more exploitation, more terrorism, more violence, more hunger and more suffering with each year that passes. Critics maintain that the United Nations has not fulfilled its promise. It is labelled as a sea of rhetoric, a paper factory, a bureaucracy of international proportions. The big powers frequently bypass the U.N. except when it suits their narrowly-defined purposes. The poorer states use it as a forum for criticizing the industrialized countries. At the very moment when the U.N.'s global strategies to protect human survival and economic development are so desperately needed, member-states are resorting increasingly to confrontation, violence and even war.

The global arena today strongly resembles Hobbes' *State of Nature* where each nation, no matter how small or poor, feels obliged to protect its national security and promote its economic growth through military strength and 'beggar thy neighbour' policies. With the erosion of morality as the foundation of human solidarity, the vision of a world community of people has faded; old, narrow nationalisms have re-emerged in the place of the spirit of global cooperation, fortified by an adversarial system of international relations rooted in the concepts of absolute national sovereignty.

This phenomenon is doubly dangerous for peace and debilitating for development, when it is so starkly at variance with the commonality of human needs and the mutual dependence of nations in satisfying them. Internationalism has lost its moorings just at the moment when we need a new global awareness and a new global activism to overcome the forces of death.

All the Secretaries-General have been hamstrung in their efforts to achieve peaceful resolution of conflicts by the absence of effective world law. Neither strong personalities and ethical values nor political strategies can guarantee peace and security. Rather, a system of law is required. This is not a utopian dream but the hard reality of a modern world whose interdependent features make us all, irrespective of geography, vulnerable to one another. Just as no one would expect to live in a community without the protection of the rule of law, so everyone's security and safety today demands a body of world law. The system of world law we have today is primitive. In the face of the need for legislative, executive and judicial institutions to maintain world order, our present international institutions are alarmingly weak.

We now begin to see the fundamental weakness of the United Nations. Its declarations, exhortations and strategies are clearly aimed at peace, security and economic development, but it has almost no power to enforce its solutions. It depends on voluntary acceptance by nations of global strategies; it depends on international goodwill and trust. And when international mistrust, aggression, greed and protectionism prevail — as they do at this moment in history — global strategies fall by the wayside. The most sadly ironic feature of the U.N. is that it is blamed for being ineffective while national governments refuse to invest it with the necessary power.

Nonetheless, the U.N. is quietly building up a body of law that will — when the political will develops — be the basis for world institutions with some teeth in them. In fact, under Article 13 of the Charter, one of the General Assembly's functions is "encouraging the progressive development of international law and its codification." As of 1982, the United Nations alone, excluding the specialized agencies, had concluded 319 multilateral agreements, including some of fundamental importance.

In the 19th century, multilateral treaties had limited subjects and rarely more than ten parties. Today, a typical U.N. convention has a least fifty parties and some major ones have more than 100. The scope of such treaties now covers practically every important activity: disarmament, human rights, the law of the sea, diplomatic and consular relations, outer space, narcotic drugs, trade and development, commodities, transport and communications. Most of these treaties are not strong enough; nonetheless, in this way international law is moving in large measure from a customary to a codified system.

The U.N. machinery is drawing nations, old and new, into the process of writing laws for the planet. Canada is very much part of this process. For example, a detailed study of international law relating to arms control and outer space was prepared by Canada and recently tabled at the Conference on Disarmament.\* This survey identifies a number of important themes for examination if an international treaty banning all weapons in space is to be successfully written. It also serves as an excellent example of the evolution and contemporary relevance of international law to the disarmament process.

In reflecting the wide basis of law which already exists and now needs to be developed, the study found that:

I General international legal norms regarding military activities on Earth (e.g. the U.N. Charter) also apply to military activities in outer space (Outer Space Treaty and Moon Treaty).

II Outer space and celestial bodies are not subject to national appropriation and are free for non-prohibited uses such as exploration and scientific investigation by all states (Outer Space Treaty and Moon Treaty).

<sup>\*</sup>Survey of International Law Relevant to Arms Control and Outer Space, July 1985.

III States bear international responsibility for their national activities in outer space and on celestial bodies (Outer Space Treaty, Moon Treaty and Liability Convention).

IV Certain military activities in outer space are consistent with international law. These include:

- The use of military personnel in space (Outer Space Treaty).
- The use of space-based remote sensors for military purposes (ABM Treaty, SALT Treaties, Threshold Test Ban Treaty, and Peaceful Nuclear Explosions Treaty).
- The use of space-based communications, navigation, meteorological systems.

V Certain military activities in space are inconsistent with international law. These include:

- Interference with space-based remote sensors used for military purposes as between the U.S. and U.S.S.R. (ABM Treaty, SALT Treaties, Threshold Test Ban Treaty and Peaceful Nuclear Explosion Treaty).
- Placement of nuclear weapons and other weapons of mass destruction in orbit around the Earth and on celestial bodies or in orbit around them. (Outer Space Treaty, Moon Treaty, SALT II). This includes new fractional orbital systems (SALT II).
- Hostile acts or use of force on celestial bodies and orbits around them. (Moon Treaty).
- Placement of military bases and conduct of military tests or manoeuvres on celestial bodies and in orbits around them. (Outer Space Treaty and Moon Treaty).
- Testing of nuclear weapons in outer space (Partial Test Ban Treaty).
- Development, testing, deployment of space-based ABM systems or components (ABM Treaty).
- Military or hostile use of environmental modification techniques in outer space (Environmental Modification Treaty).

The perspective and detail found in this Canadian survey is applicable not only to the CD's deliberations on outer space but also to the widening body of international law that is becoming an integral part of the arms control negotiating process.

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The protection of all human life in the fifth decade of the nuclear age requires well-considered moral, legal and political answers to the fundamental questions posed by the threat of nuclear war. It is time for the international legal community to distinguish itself in addressing the full range of nuclear weapons questions in the same manner as the scientific, medical, and religious communities have done.

The President of the Canadian Bar Association, Claude R. Thomson, has taken a very important step, in an address July 21, 1985 to the Conference on the Law of the World in Berlin, calling on international lawyers to determine that nuclear weapons of destruction are unacceptable in law.

"We must direct our message not only to those in charge of governments but to all citizens of the world who are at risk. Mankind must be shocked out of its complacent acceptance of the continued build-up and proliferation of nuclear weapons. They are illegal because they have the potential to destroy all of us."



## Developing Global Citizens

"Since wars are made in the minds of men, it is in the minds of men that the defences of peace must be constructed." - Charter of the United Nations Education, Scientific and Cultural Organization, 1945.

A new national survey of 3,600 teenagers from 175 high schools across Canada shows that the threat of nuclear war is considered a "very serious" problem by 48 percent of 15-19 year-olds."

A recently published survey of 690 primary, secondary and college students in Central Alberta reveals a high degree of concern about nuclear annihilation.<sup>2</sup>

In a Canadian pilot study of 1,011 students undertaken by the Children's Mental Health Study Group, the worry of nuclear war was listed as "very important" in 63 percent of responses.<sup>3</sup>

In addition to the evidence of these three studies, psychiatrists and psychologists have told me personally that the threat of nuclear war is having a harmful psychological effect on young people.

It is now evident that the nuclear weapon mentality of our age has seeped through to the minds of the coming generation. Far from making children feel secure — something every parent wants to do — the ceaseless nuclear arms build-up is producing a sense of fatalism in a growing number of young people.

<sup>1.</sup> Reginald Bibby and Donald Posterski, *The Emerging Generation—An Inside Look at Canadian Teenagers*, Irwin, 1985.

<sup>&</sup>lt;sup>2</sup> Dr. B.Y. Card, Central Alberta Student and Teacher Behaviours and Attitudes Related to War, Red Deer College, 1984.

<sup>5</sup> Children's Mental Health and the Threat of Nuclear War: A Canadian Pilot Study, Toronto, 1984.

The results of many professional studies — in several other countries as well as Canada — force us to ask what sort of world we are building when so many young people cannot envisage the future because they believe that there will be none. They think it will have disappeared, consumed in a war before the year 2000; the war will have been fought with nuclear weapons, there will be no winner and total devastation.

We must ask ourselves: what is happening in our world that young people have such a fatalistic view of their futures and are left with such a sense of powerlessness?

- How is education to cope with these attitudes?
- How can educators inject hope into the minds of our youth?

No one should be in a hurry to taint the precious and all too transitory nature of childhood with premature discussion of war and nuclear annihilation. Parents and teachers have a natural and understandable desire to shield children from such unpleasant facts. However, the fact remains that children are absorbing all the realities of the modern world through exposure to the media. Modern communication forces adults, particularly parents and teachers, to be prepared early in a child's development to address the question of nuclear war. This in turn means that adults must educate themselves on the issues involved.

There are many people working to produce effective programs for arms control and disarmament, but it must be admitted that the results are meagre — especially compared to the rising level of danger. Without discounting the importance of political action today which is attempting to produce a more secure world, I want to examine here how we can help young people cope with the existing situation in their formative years; and also how to form them so that they grow up with a better understanding of the integrity of all human relationships.

The roots of the problem underlying all of today's conflicts are deeper than "nuclear accountancy." The problem is traced to the aggressiveness that has underlain so many wars of the past, and must be examined in the totally new condition of our times: planetary interdependence. The problem of insecurity today is directly related to our approach to life in which geographical boundaries mean less and less, to living with one another on one planet, to sharing scarce resources. The world will move closer

to the resolution of these problems only when we recognize that we are all members of the human family, living on a planet too small and too fragile to continue to sustain the belligerent, fractious nature of the population that has inhabited it thus far.

The new, totally destructive character of nuclear weapons demands that law, religion and education emphasize new codes and clear teachings that respond to the new conditions of planetary life. In calling upon law, religion and education to assert the underlying necessity of protecting human life, I am not diminishing the responsibility of politicans. But the political process by itself cannot solve this grave disorder that jeopardizes God's creation. A new outpouring of intellectual and spiritual energy is required on behalf of the whole of society.

The long-term solution lies in the education of today's youth. Education cannot carry the total burden in bringing about a new concept of global existence, but it is and will be the foundation upon which we can build and develop a new global awareness. We must teach our children to recognize the fundamental twentieth-century reality of co-existence. Are our children being educated for the world of yesterday or the world as it will be in their immediate future?

As we move toward the 21st century, it becomes obvious that the next generation will need more knowledge and understanding about the rest of the world than their elders presently possess. We are here talking about much more than the development of a few specialists. There must be millions of contacts between individuals which will help to develop an awareness of other people and a sense of shared interests. The interdependent nature of today's world, and the world of the future, must become as inherently understood by today's youth as the world of the isolationist, independent sovereign state has been by the last.

We have long been conscious of the interdependence of national economies and commerce. We have been made aware, in graphic detail, of the interdependence of the global environment and planetary eco-system. To that we must add the interdependence of physical security in this age of omnipotent nuclear weapons.

Therefore, the first requisite in helping young people cope with this new reality is to give them a sense of world consciousness in which every individual realizes his or her role as a member of the world community. Famine in Ethiopia should be considered as relevant and as disturbing to a resident of Alberta as famine in the city of Calgary. This recognition leads to a new ethic in the use of material resources and an improved attitude toward nature, based on harmony rather than conquest.

Finally, if the human species is to survive, the human family must develop a sense of identification with future generations. From both a material as well as a moral point of view, questions of survival in harmony must occupy a central position in the preparation of those who in a few short years will be the leaders of society. A global perspective in the classroom is essential; education must be internationalized.

The educator Edwin Reischauer, in his book *Toward the 21st Century: Education for a Changing World*, said we will never operate successfully unless the bulk of people develop a sense of world citizenship:

"This is clearly the biggest educational task of all, for millenniums of history have conditioned men to think in terms of smaller and more exclusive units, while suspicion and hostility toward other groups lie deep in their patterns of thought."

A sense of world citizenship should be developed early in life. The breaking down of barriers and the acceptance of political, societal and cultural differences must be accomplished while minds are yet open and flexible. We must form our young people's attitudes now so that they can become stewards of the planet in the future. A new global ethic must take hold, one based on a vision of social justice, tolerance and hope, that the present war-based reality of international relations can be radically altered.

Professional educators are the first to know that elementary and secondary education can work to break down feelings of suspicion and hostility and to provide instead an enhanced understanding of world problems and a sense of world citizenship. Education can foster an awareness and, above all, an empathy for peoples of diverse histories, cultural and religious backgrounds, peoples whose political and economic situations might not even permit them the luxury of education. Since peace and world development are fundamentally ethical problems, they must be of concern to those who are entrusted with the education of youth.

Today's 12-year-old will be 27 in the year 2000, just entering his or her prime years. For this student, the 21st century has already arrived. The challenge for today's teachers is to meet the demands of students who will be faced with ever-increasing and complex global challenges.

As the late U Thant, Secretary-General of the U.N., stated, education must produce "a veritable mental renaissance" to build the conditions for lasting peace. We need renaissance individuals who, though they have grown up under the nuclear shadow, have forsaken the luxury of despair for the driving optimism of hope.

Those who are seriously concerned with trying to save the world from nuclear destruction must never give up hope. It is essential to maintain a commitment to negotiating nuclear weapons down to zero and to refuse to be discouraged just because that goal cannot be achieved overnight. The final words of Freeman Dyson in *Weapons and Hope* are useful:

"To achieve this goal, we shall need a world-wide awakening of moral indignation pushing the governments and their military establishments to get rid of these weapons which in the long run endanger everybody and protect nobody."

Can we give the next generation the determination that the world must go on and the prospect of other, better ways of organizing global society than by dividing it into hostile, warring factions?

This will be the work of the next generation, and we must prepare young people for it.



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Disarmament — Canada's work in arms control and disarmament Verification — an overview of Canada's work in verification Seismic Verification — a detailed look at Canada's work on seismic verification.

#### For additional information contact:

Canadian Institute of International Affairs, 15 Kings College Circle, Toronto, Ontario M5H 2M5.

Canadian Institute for International Peace and Security, P.O. Box 3425 Station D, Ottawa, Ontario K1P 6L4.

Canadian Centre for Arms Control and Disarmament, 275 Slater Street 5th floor Ottawa, Ontario KIP 5H9.

Centre Québecois des Relations Internationales, Faculté des Sciences Sociales, Université Laval, Québec G1K 7P4.

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#### **Douglas Roche**

A former Member of Parliament, Douglas Roche was appointed Canada's Ambassador for Disarmament October 5, 1984. In that capacity, he represents Canada at international meetings on disarmament, is a Special Advisor to the Government, and is the chief liaison between the Government and non-governmental organizations. He heads the Canadian delegation to the Disarmament Committee at the United Nations; since his appointment, he has spoken in all 10 provinces.

Mr. Roche served in Parliament from 1972 to 1984, specializing in the subjects of development and disarmament. He was a consultant to the Canadian delegation to the United Nations Second Special Session on Disarmament.

He is the author of eight books, including *Justice Not Charity: A New Global Ethic for Canada*. The latest, *United Nations: Divided World*, is a contemporary examination of the United Nations amidst the global crises of the nuclear arms race and economic development.

Ambassador Roche has served as President of the United Nations Association in Canada and International President of Parliamentarians for World Order. A member of the North-South Roundtable of the Society for International Development, he has lectured at Harvard, Columbia, Nehru University, New Delhi, and several other universities. An Honorary Doctor of Divinity was awarded him by St. Stephen's College, Edmonton.

He also received an Honorary Doctor of Laws degree from Simon Fraser University in 1985, the Alberta Premier's Award for Excellence in 1984, and the Peace Award of World Federalists of Canada in 1983.