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# The Disarmament Bulletin

A review of Canada's arms control and disarmament activities

Number 19 - Winter 1992/93

## Bulletin is Back



I am pleased to announce the resumption of publication of *The Disarmament Bulletin* by External Affairs and International Trade Canada. *The Bulletin* has been widely recognized, both by specialist audiences and the general public, as an information and research tool of high quality with respect to non-proliferation, arms control and disarmament.

I warmly welcome the return of *The Disarmament Bulletin* and hope that readers will continue to find it of interest and value. I believe that *The Bulletin* will play an important role in fostering a better understanding of the issues we are now facing as we endeavour to make the international environment a safer one.

**The Honourable Barbara McDougall**  
Secretary of State for External Affairs

## Chemical Weapons Ban Agreed

After many years of negotiation, agreement on the text of a Chemical Weapons Convention (CWC) was reached at the Conference on Disarmament in September. Once implemented, the CWC will prohibit the development, production, stockpiling, retention and use of chemical weapons and their precursors.

Secretary of State for External Affairs Barbara McDougall welcomed the accord. "This Convention represents one of Canada's major arms control objectives," said Mrs. McDougall. "Ever since Canadian soldiers first came under gas attack in Ypres 77 years ago, Canada has advocated a total abolition of chemical weapons."

International discussions on a chemical weapons ban began in 1968, with formal negotiations underway since 1984. Canada has participated in the talks since their inception and has made a strong contribution to the Convention's verification provisions through, for example, the preparation of expert studies and the conduct of trial inspections. Although Canada would have preferred stricter verification procedures, it has accepted the agreement as the best text attainable.

In December, the UN General Assembly approved a resolution, co-sponsored by Canada, commending the Convention to Member States for signature. A formal signing ceremony will be held in Paris on January 13. Canada has committed to being an original signatory to the CWC. Once 50 countries have signed, a Preparatory Committee will convene to begin planning for the Convention's implementation, including establishment of the Hague-based Organization for the Prohibition of Chemical Weapons, which will verify compliance. The Convention will come into force 180 days after ratification by 65 countries, but

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not earlier than two years after opening for signature, i.e., probably sometime in 1995.

Canada stopped production of chemical warfare agents before the end of World War II and has since destroyed its stockpiles, which it kept for retaliatory purposes only. ■

## CWC Text Meets Canada's Criteria

*The following are excerpts from the address by Canadian Ambassador Gerald Shannon to the Conference on Disarmament plenary on August 6, 1992, commenting on the final text of the Chemical Weapons Convention (CWC).*

[Although this] text is far from being the ideal CWC that Canada would have preferred to see adopted...it reflects the result of years of thorough, complex negotiations during which many states have had to concede ground on issues which they considered extremely important but for which they could not attract the consensus support of others...

All of us have already had to make compromises to get as far as [this] text, Canada perhaps more than most, since we were and still are among the strongest supporters of a truly confidence-building inspection regime which would be rapid, thorough and comprehensive. Thus, the old idea of the right to call for an inspection "anywhere, anytime" and to have it take place virtually at once without any constraints on the inspectors would still be what Canada would have felt safest with. The challenge provisions now in [the text] are a far cry from that approach, given the lengthy time frames, the restrictions on the discretion left to the inspectors, and the increased degree of protection now afforded to the inspected State Party.

In the same way, Canada has problems with the provisions on routine inspection of the chemical industry and with the narrow definition of "capable facilities"...

Our bottom line, however, is that it would be very foolish of us to allow a wish for only the very best of results to obstruct the possibility of our instead obtaining what is, nonetheless, a very good CWC regime. Even as it is, [the text] does

meet Canada's three basic criteria for an acceptable CWC.

First, it is comprehensive: it calls for a complete ban on development, production, stockpiling, retention or use of chemical weapons and their precursors.

Second, it is global, or at least it has the potential to be so if others, too, show flexibility: already, like Canada, a significant number of states from all geographic regions have indicated that they can support it and would be prepared to be original signatories. We are convinced that the vast majority of the rest of the world will join us.

Third, it is effectively verifiable: though the regime is not as strong as we would have wished, it nevertheless establishes new norms of verification and inspection that far surpass those of any previous multilateral arms control and disarmament instruments. ■

## Briefly Noted...

### Canada Ratifies Open Skies

Canada became the first country to ratify the Open Skies Treaty, depositing its instrument of ratification on July 21 in Budapest. The Treaty, signed on March 24, 1992 by 25 countries belonging to NATO or the former Warsaw Pact, allows signatories to conduct short-notice observation flights over one another's territory.

### MTCR Guidelines Tightened

At a June 29 to July 2 meeting in Oslo, Canada and the other 21 members of the Missile Technology Control Regime (MTCR) reached agreement on stricter export control guidelines for ballistic missiles and related technology. The agreement broadens MTCR restrictions to include missile systems and technology capable of delivering *all* weapons of mass destruction (chemical and biological, as well as nuclear weapons). The new guidelines respond to increasing concerns about the proliferation of smaller, lighter missile systems, such as those used by Iraq during the Gulf War.

## UNSCOM Discusses Iraq's Compliance

The UN Special Commission (UNSCOM) set up to verify Iraq's compliance with Security Council Resolution 687 (1991), which mandates the disposal of Iraq's weapons of mass destruction, held its fourth plenary session in New York from October 28 to 30. The Commission discussed the destruction of Iraq's chemical weapons, considered how to implement plans for ongoing monitoring and verification to ensure that Iraq does not reacquire proscribed weapons, and looked at plans for the future control of Iraqi imports. Mr. F.R. Cleminson, Head of EAITC's Verification Research Unit, is one of UNSCOM's 21 international commissioners.

## Canada-South Korea Verification Workshop

Representatives from EAITC's Verification Research Unit travelled to Seoul for a verification workshop with South Korean officials on June 16 and 17. The Canadians made presentations on Canada's verification research program, the Treaty on Conventional Armed Forces in Europe, Open Skies, and new approaches to multilateral verification. The South Koreans, in turn, provided an assessment of problems related to verification and confidence-building on the Korean peninsula. The workshop underscored Canada's interest in confidence- and security-building in the Asia-Pacific region.

## Asia-Pacific Security Conference

Scholars and officials from Russia, Japan, the US, North and South Korea, Australia, Singapore, Malaysia, Thailand, Indonesia and other interested countries will join their Canadian counterparts in Vancouver from March 21 to 24, 1993 to discuss issues related to Asia-Pacific security and stability. The conference is part of EAITC's North Pacific Cooperative Security Dialogue (NPCSD), initiated in July 1990. The NPCSD involves a series of academic and non-governmental organization (NGO) workshops aimed at focusing attention on security issues in the North Pacific and at exploring prospects for regional security dialogue. ■

## SSEA to UNGA: Time for Member States to Act

The following are excerpts from the address by the Honourable Barbara McDougall, Secretary of State for External Affairs, to the 47th session of the United Nations General Assembly (UNGA 47) in New York on September 24, 1992.

Once again the nations of the world meet in full assembly to discuss the state of our world, to report on our actions of the past year, and to express the focus for our intentions in the coming years.

Many of us had hoped that this might have been a time for celebration, a time for rejoicing, as the deep freeze of a lengthy Cold War gave way to the soothing warmth of a new era of enlightenment, understanding, caring and purpose. But we have little joy and our celebration was far too brief. Whatever insights we may have gained from the cruel and terrible events of the past half-century are sorely needed now in a world that breeds new forms of tyranny, hatred and brutality almost on a daily basis.

Many people in this chamber have seen the evidence up close: the bullets, the bodies and the fear in ordinary men and women. But there is no need to lose hope — we have the capacity, and we must continue to build for the future. What we need is the collective will.

I believe that it is this institution, this United Nations, this global forum where we must dedicate ourselves to securing the peace and stability that have evaded many generations before us. We must build a new world, individual by individual, nation by nation, but we must remove the double standards that are everywhere...

It is our belief that we are not in need of better principles in this United Nations — the drafters of the original Charter have served us well. What we need from this organization and its members is the will to act. We need deeper understanding of the root causes of conflict between nations, so that together we can “break the chain of violence, defuse the lust for revenge, voice the peoples’ needs and affirm the peoples’ dignity,” as our Prime Minister said in this Assembly on its 40th anniversary.

I believe that the United Nations has taken up that challenge, and I salute the Secretary-General for his vision and lead-

ership and for his courage in making this organization more relevant in and to our time. His report, *An Agenda for Peace*, lights a path to the future.

The Secretary-General also made the important link between peace among nations and peace within nations when he pointed out that “there is an obvious connection between democratic practices — such as the rule of law and transparency in decision-making — and the achievement of true peace and security in any new and stable political order.”

There are within nation states three fundamental weaknesses that can cause disputes that go beyond their borders. Primary among these is the absence or abuse of fundamental human rights. If people have no rights, they have no hope; if they have no hope, eventually they will have no fear; if they have no fear, they will seek any means possible to restore their rights, even to die in the trying. It is a pattern for instability, a pattern for failure, one that has happened all too often in the past.

The UN must lead in the field of human rights. In El Salvador, Cambodia, Croatia, Bosnia and Somalia, efforts to protect human rights are of fundamental importance in attempts to bring peace to these troubled lands. Canada is currently serving in all of these places.

The 1993 World Conference on Human Rights offers a unique opportunity for all members of the United Nations to work in a constructive and cooperative spirit to strengthen the foundation of universal respect for human rights.

Particularly insidious among the forms

of human rights abuse is systemic discrimination, whether based on gender, race or ethnic origin...

Canada protests, in the strongest terms possible, the abhorrent practice of “ethnic cleansing,” whatever its reason, wherever it is being practiced. It represents the basest form of inhumanity and abuse of the individual and cannot be tolerated by this world community. In this connection, Canada calls for the drafting of a statute by the International Law Commission to establish an international criminal court. For this purpose, Canada will convene shortly an international meeting of experts to mobilize legal expertise on this matter.

A second major weakness that exists within many nation states is the absence of a developed system of democratic values and institutions, and this too can ultimately lead to conflict.

One should not be fooled by the outward trappings of democracy. How can peace flourish when a democratically-elected leader is placed under house arrest, as in Myanmar, or a democratically-elected government is violently overthrown, as in Haiti? A true and lasting democracy requires time and understanding, like a true and lasting friendship, and it requires two-way trust between a nation’s peoples and its leaders.

We recognize the enormous challenges facing countries where democracy is in its early stages. We must all promote a climate of trust within these emerging democracies so that new ideas have time to flourish. Canada is doing this through its aid programs and by its participation in

### Verification Bibliography Updated

In October, Canada submitted to the UN an update to the Canadian *Bibliography on Arms Control Verification: 1962-1991*, which was distributed at UNGA 46 in 1991. The original *Bibliography* contained over 1,500 entries, representing English-language publications and submissions by governments and international organizations as well as the academic community’s literature on the subject. The *Update* includes more than 800 new entries, covering approximately the same period as the 1991 *Bibliography*, with special emphasis on literature produced between the summers of 1991 and 1992. The *Update* also encompasses French-language material.

The *Update* was prepared as a further Canadian contribution to the development of a UN data bank on verification, and to assist governmental experts, negotiators and researchers in their work on verification matters. It is being widely distributed to the relevant communities.



Secretary of State for External Affairs Barbara McDougall addressing the UN General Assembly in September 1992.

the social and economic agencies of this organization.

A third major weakness that exists within nation states is the inability to make responsible choices in the management of public policy.

Good governance is important because it ensures that adequate attention is paid to social justice, health and education in the provision of government programs and in the distribution of government resources. It also promotes equitable economic opportunity through the development of a free-market system. Ultimately, these are the means to defeat poverty.

Canada's own assistance to developing nations is increasingly tied to their efforts to protect basic human rights, to develop democratic values and institutions, and to undertake "good governance" in their policies and programs. We urge other Member Nations and this General Assembly to adopt a similar philosophy and similar practices if we are to eradicate the seeds of conflict from within nation states.

These are, of course, resolutions for long-term prevention of conflict. We cannot, however, ignore the current state of the world and that is why the Secretary-General's report, *An Agenda for Peace*, is such an important and pivotal document for this General Assembly.

Canada is no stranger to the process of

bringing and keeping peace to all the regions of the world. Of the 45,000 peacekeeping forces currently serving under the UN flag, 4,300 or almost 10 percent are Canadian.

No other nation has made a greater commitment to UN peacekeeping than Canada. Canada has served in virtually every UN peacekeeping mission, and Canadians currently serve in such varied missions as El Salvador, Cambodia, the former Yugoslavia, Somalia and the Middle East.

Our experience in these and other missions has taught us that no two missions are the same, and our experience has taught us that "peacekeeping," which is not even mentioned in the UN Charter, is a dynamic concept that must be further refined to meet the challenges of the 1990s and beyond. Consequently, we are pleased that the Secretary-General consulted so broadly on this matter and that much of our experience and many of our suggestions are reflected in the final report.

### **Preventive Diplomacy and Peacemaking**

We commend the Secretary-General's emphasis on preventive diplomacy and peacemaking as the preferred options. We encourage him to continue to use all of the

means at his disposal to defuse crises, from fact-finding missions to mediation. We consider it a duty of all Member States to share with the Secretary-General all information that can help him to fulfill this role.

We strongly support the concept of preventive peacekeeping and urge the Security Council to adopt this option when lives can be saved, confrontation averted or democracy stabilized. In Kosovo, for example, preventive diplomacy by the Security Council and the Secretary-General may well prevent bloodshed and anarchy.

In the area of peacemaking, we agree that the Secretary-General should continue to use mediation and negotiation to facilitate the process of peace, and that the Security Council should avail itself of the provisions of the Charter, which permit it to recommend appropriate measures for dispute settlement. We also agree that there is a broader role for the International Court of Justice and that, pursuant to Article 96 of the Charter, the Secretary-General be authorized to take advantage of the advisory competence of the Court.

### **Peacekeeping**

I have already alluded to the 4,300 Canadian men and women currently committed to UN peacekeeping operations. Canada has for many years maintained a battalion on standby for peacekeeping operations. We also have a long-standing policy whereby other Canadian Forces members can and have been called upon for peacekeeping duties. We are prepared to confirm these arrangements in an exchange of letters with the Secretariat as suggested in the Secretary-General's report. We urge other countries to do the same.

We agree with the need to make available human rights monitors, electoral officials, refugee and humanitarian specialists and police, whatever the situation calls for. We have committed, for example, 45 members of the Royal Canadian Mounted Police to serve with the UN civilian forces in the former Yugoslavia. Let me add that we believe that countries that make available such civilian experts to the UN should have their supplemental costs reimbursed.

### **Peace Enforcement and Peace-building**

Whereas "peacekeeping" has become

very much central to United Nations action and philosophy, the concepts of "peace enforcement" and "peace-building" are less familiar. We in Canada believe, however, that both will have an increasing role in the future, if the international community is truly dedicated to ending conflict and to enhancing democracy.

Of the two, the use of "enforcement" is the more controversial. Recent events demonstrate that the use of force may be a necessary option, and we urge full consideration of the Secretary-General's views in this regard. For our part, we insist on the right of Member Nations to take part in any decision involving their nationals.

We also believe that further work is required, on an urgent basis, to determine the circumstances under which enforcement activities should be undertaken and the limits of potential enforcement action.

"Peace-building," on the other hand, has already been undertaken, most notably in the multidimensional UN activities in Cambodia and El Salvador. These operations are long, difficult and costly.

Building lasting peace is critical, despite the obstacles, not only because of the stability and opportunity it brings to the people most directly affected but because, in the long run, it is less difficult, less disruptive and probably less costly than continued hostilities.

Canada, while active in both El Salvador and Cambodia, is fully prepared as well to assist the UN to expand and shape its approach to peace-building in the future.

## Financing

We support the Secretary-General's proposals to improve the effectiveness and timeliness of peacekeeping operations, most notably to establish a peacekeeping start-up fund of \$50 million, and the other proposals in his report.

All Member States must pay their dues fully and on time. In May of this year, in the presence of the Secretary-General, Prime Minister Mulroney noted publicly that money is the clearest measure of political will. He went on to say that "the Secretary-General of the UN, the holder of one of the most important offices in the world, should not be treated as a modern-day mendicant, forced to wander around wealthy capitals, imploring the decision-makers to pay their bills so that the UN can do its job. He must be free to devote

his entire time and energy to running the UN and solving global problems, rather than passing the hat for peace and security."

UN financing *à la carte* will, over time, erode its financial base as well as weaken the commitment of Member States to the broad range of UN activities.

Canada is opposed to the recent decision of the Security Council to enlarge the mandate of the UN Protection Force (UNPROFOR) at no cost to the UN, with the cost to be borne by the participating countries. This sets an unfortunate precedent and goes against the UN principle of collective responsibility.

We also have serious concerns about certain long-standing missions, such as the one in Cyprus, where Canadians and others have served for 28 years. In Cyprus, an entire generation has grown up regarding the presence of peacekeepers as the norm. We cannot allow the parties in any dispute to institutionalize permanent peacekeepers so that they are just another aspect of the status quo. This is simply unacceptable. The parties involved must accept their responsibility directly and work with the Secretary-General to find a resolution without further delay.

## Cooperation with Regional Organizations

We are interested in the Secretary-General's suggestion for increasing cooperation with regional arrangements and organizations in functions like preventive diplomacy, peacekeeping, peacemaking and peace-building. I have encouraged the Conference on Security and Cooperation in Europe to develop some of these mechanisms, and Canada, working within the Organization of American States, remains dedicated to a return to democracy in Haiti.

There is no doubt that regional efforts in preventive diplomacy and peacemaking should be encouraged. I hope that future developments in those institutions will enable them to carry out peacekeeping operations under certain circumstances, but it is the United Nations that has the ultimate authority.

Expanding the circle of peacekeeping and peacemaking organizations may serve to reduce some of the disproportionate burden that, in the past, certain countries such as Canada have willingly assumed. Future needs, however, will require a broadening of participation by Member States.

## Non-proliferation and Disarmament Issues

Member States also have a direct responsibility to reduce the numbers and kinds of weapons available for conflict.

Last year, we took a major step to increase transparency in arms transfers and to inhibit excessive build-ups of conventional weaponry, with the establishment of the UN arms register.

This year, we can take two even more important steps. This General Assembly will launch the preparations for the extension of the Nuclear Non-Proliferation Treaty in 1995. An indefinite extension is the only option.

France and Russia have declared nuclear testing moratoria; the other nuclear powers — the United States, the United Kingdom and China — have no reason not to join them. All nuclear-weapon states should observe an immediate moratorium on nuclear testing and summon up the political will and energy to negotiate a comprehensive test ban treaty.

We are seeing some progress. After many years of difficult negotiations, our negotiators at the Conference on Disarmament have succeeded in producing a

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## **All nuclear-weapon states should observe an immediate moratorium on nuclear testing and negotiate a comprehensive test ban treaty.**

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Chemical Weapons Convention that, when implemented, will ban all chemical weapons forever. I urge all Member States to join Canada as original signatories when the Convention is opened for signature in Paris next year.

There are other substantive issues that I would have liked to discuss in greater detail before this General Assembly today — notably the follow-up to the UN Conference on Environment and Development in Rio de Janeiro. Canada's Prime Minister

urges acceptance of the Conventions on Climate Change and on Biological Diversity in a ringing call to action: "As political leaders, our job is to force the pace and stretch out the limits of international cooperation. Nations... have the human genius to create a world free from deprivation and secure from degradation. What remains is for governments to provide the leadership the world so desperately needs."

The job of this General Assembly is to continue to stretch the limits and to demonstrate that leadership, through the establishment of both a Commission on Sustainable Development and the Conference on the High Seas.

There are as well many issues of process, such as the reform of the UN development system, which require our immediate time and attention. Canada put forward detailed proposals in this regard in July in the Economic and Social Council, and we will continue to take an active role in this matter.

What a large task we have set ourselves!

However, one of the lessons that we have learned in the post-Cold War era is that there is no breathing space; there is no long pause for contemplation and reflection. Decisions must be made on a timely basis, and when those decisions are made, all Member States must vigorously support and abide by them.

Last month, at the London Conference on the former Yugoslavia, I made it clear that Canada is losing patience with much of the posturing that historically masquerades as international diplomacy. I know that others in this Assembly share this frustration. But, as we speak, the body count rises in what is left of Bosnia-Herzegovina, not to mention the thousands of men, women and children facing starvation in Somalia.

The United Nations needs the commitment of its Member States, it needs well-thought-out decisions, and it needs follow-up action. Anything less is failure.

Let us not spend the next four or five years debating the niceties of "this" principle or "that" concept. Let us all get on with the job of building peace and prosperity.

No one should be here if they are not prepared to work towards those noble objectives, and no one should leave without confirming their commitment to work together for the benefit of all the peoples of the world. ■

## Arms Control and Disarmament Must Contribute to Cooperative Security

### Ambassador for Disarmament Addresses UN

*The following are excerpts from the statement of Canada's Ambassador for Disarmament, Peggy Mason, to the UN General Assembly First Committee in New York on October 15. The next issue of The Disarmament Bulletin will include a summary of arms control and disarmament resolutions adopted by the 47th session of the General Assembly (UNGA 47).*

### The Global Security Environment

Canada joins other nations in welcoming the complete demise of the Cold War era. The unprecedented levels of armaments built up in those times of East-West tensions were an intolerable burden to both sides and, indirectly, to the world community. The arms race generated by the Cold War was the central challenge to the cause of arms control and disarmament. It is testimony to the perseverance of the UN, the Conference on Disarmament, the CSCE and other multilateral arms control bodies that so much was accomplished even when the political climate seemed so bleak.

We must realize, however, that the challenge today is to adapt our hard-earned successes in arms control and disarmament to the new threats to international security emerging in the aftermath of the Cold War.

It is for this reason that we welcome the general recognition that the work of this Committee must be firmly situated in the larger context of global security. Arms control is an instrument, not a goal in itself. During the Cold War, the goal was to contain and control East-West tensions. Now we must seek to understand the conditions necessary for global security, and to use arms control agreements to help build the foundation on which global security can be based.

On many occasions my government has emphasized the need to promote democracy as a basis for harmonious relations between states...

There is also an obvious connection between development and democracy. Nations and peoples must be able to enjoy a

reasonable standard of living if democracy is to flourish. This is where arms control and disarmament find their place. If we can reach agreement on the global control of armaments and on measures for disarmament, then we improve prospects for regional and global stability, and for "true peace and security."

As we now address these large and complex questions, Canada welcomes the seminal guidance provided by the Secretary-General's report, *An Agenda for Peace*. His emphasis on "peace-building," for example, provides the broader context for the work of this Committee. His support for stronger links between the United Nations and regional organizations may also point the way for our future deliberations.

### Regional Approaches

As the newest member of the Organization of American States (OAS), Canada has sought to share with its hemispheric partners its long experience in verification and the development of confidence- and security-building measures (CSBMs). The OAS now has a working group studying the application of these measures to regional security. Other regional organizations might also profit from the experience and successes of multilateral arms control.

Canada is actively seeking to promote peace through its participation in all five working groups established within the framework of the multilateral negotiations of the Middle East peace process...

The efforts of the Working Group on Arms Control and Regional Security are especially important and relevant to the deliberations of this body. Discussions within the Working Group have focused on a wide range of confidence-building and arms control measures with a view to building peace and stability in the region.

Canada, as one of the non-regional parties in the multilateral phase of the peace process, aims above all to support the efforts of the co-sponsors and all participants to move forward the overall peace process. Responsibility for resolving the

Arab-Israeli conflict rests with the parties involved in the direct bilateral negotiations. The multilateral negotiations are no substitute for these talks.

However, the multilateral negotiations may offer an opportunity for the parties to acquire a vision of the tangible benefits to be gained from an eventual overall political settlement — a more hopeful vision of the future for the Middle East. Canada, with its long-standing experience in peacekeeping and in other areas such as verification and aerial monitoring, and with its developed relations with parties throughout the region, will continue to contribute to the efforts of all participants to build such a future.

As we extend our reach to encompass regional and global security, we should also be aware of new issues on the arms control agenda. The dismantling of conventional arsenals and weapons of mass destruction requires the conversion of military production to civilian uses. That in itself is a Herculean task, but it will not be enough unless it is accompanied by the retraining and democratization of the personnel and military forces created to bear those weapons.

In company with other countries, Canada has begun to lend its technology and know-how to the task of conversion. We are also playing a leading role in the establishment of an International Centre for Science and Technology in Kiev to employ nuclear scientists and engineers in civilian endeavours. But it will require a massive and concerted effort to achieve progress. It would be an irony, indeed, if the very success of arms control created a vast pool of human and technological resources which, unemployed and idle, became the catalyst for future conflict.

Since 1989, the General Assembly and the Disarmament Commission (UNDC) have been placing increasing emphasis both on regional approaches to disarmament and on new and emerging issues on the post-Cold War agenda. Through its three regional Centres for Peace and Disarmament and its program of conferences, such as the one co-hosted with the Shanghai Institute of International Affairs in August of this year, the Office of Disarmament Affairs (ODA) has been actively promoting regional dialogue. Discussions have been facilitated on conflict prevention, non-proliferation in both its global and regional dimensions, confidence-



*Ambassador for Disarmament Peggy Mason (right) with UN Secretary-General Boutros Boutros-Ghali (left) at the UNGA 47 First Committee.*

building and transparency, safe storage and disposal of weapons, and conversion.

In our view, the UN has an important role to play in promoting informal mechanisms for dialogue — particularly in regions or sub-regions where institutional frameworks for such discussions are not yet fully developed. Canada commends these ongoing activities of the ODA and pledges its continuing support for them.

### **Non-proliferation**

Under-Secretary-General Petrovsky drew attention in this Committee to the concern repeatedly expressed earlier this fall in the General Assembly over the proliferation of weapons of mass destruction.

Canada fully shares his view that “non-proliferation in all its aspects... is becoming one of the most important subjects on the disarmament agenda, including not only nuclear but all weapons of mass destruction, as well as their means of delivery and dual-purpose technology that may be transferred for non-peaceful purposes.”

As Prime Minister Mulroney emphasized in Canada’s Non-Proliferation Program of Action in May of this year, the

problem requires sustained action on all fronts, from the strengthening of global norms and their enforcement, through the broadening and deepening of supplier groups, down to the rigorous implementation of national export controls. Particularly important is the work underway in the International Atomic Energy Agency to strengthen the nuclear safeguards regime — work that deserves our fullest support, both political and financial. Simply put, the IAEA must be given the tools and the backing to get the job done.

Turning to the linchpin of the global nuclear non-proliferation regime — the NPT — Canada echoes the satisfaction expressed by many other delegations on the positive developments over the past year. These include continuing cuts in the Russian and American nuclear arsenals, several important new accessions to the Treaty, and concrete steps to consolidate the regimes of military denuclearization on the Korean peninsula, in Africa and in Latin America.

But much remains to be done as we prepare for the launching of the NPT into the 21st century. Our Prime Minister has called for even deeper cuts in the nuclear

arsenals of Russia and the US. He has urged Ukraine, Belarus and Khazakstan to carry out their pledges to honour START and to sign the NPT as non-nuclear-weapon states. There is no rational reason for delaying this process. Any imagined advantage of using nuclear weapons as bargaining chips is far outweighed by the dangers. Adherence to these non-proliferation principles is fundamental to the process of expanding cooperation between Canada and these new states.

Canada believes that the NPT must be indefinitely extended in 1995 and the goal of universal adherence relentlessly pursued. Recalling the basic "bargain" on horizontal and vertical non-proliferation implicit in the NPT, Prime Minister Mul-

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### ***The NPT must be extended indefinitely in 1995 and the goal of universal adherence relentlessly pursued.***

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roney has also urged that the 1995 extension conference confirm that relationship. To help pave the way, he called specifically for all nuclear-weapon states to agree to a moratorium on the testing of nuclear weapons. Canada views the recent US decision to join France and Russia in declaring a testing moratorium as a watershed in the long-standing international effort to achieve a total ban on such tests in all environments for all time. We call on the UK and China to join them. Perhaps even more important is the US commitment not to test at all after 1996 provided other nuclear-weapon states refrain as well. We urge the other four nuclear-weapon states to make a mutually-reinforcing commitment to this end.

Prime Minister Mulronev also called for progress on the issue of security assurances for non-nuclear-weapon States Parties to the NPT. The proposal by President Bush in his General Assembly address that the Security Council take up this issue is a most timely and important one.

Former UN Under-Secretary-General Brian Urquhart wrote recently that the basis for global arms control and disarmament — as foreseen by the architects of the UN Charter — was to be a collective security system that would provide the "sense of security and mutual confidence"

that would allow for arms limitation to take place. Since the demise of the Cold War, we are learning just how hard it is to put that collective security system in place in a positive and enduring fashion. In Canada's view, a credible assurance by the Security Council to all non-nuclear-weapon States Parties to the NPT could be a significant step forward in creating the post-Cold War architecture of cooperative security.

### ***CWC***

Turning to the work before this year's session of the First Committee, Canada echoes the views of all the delegations before me on the historical importance of the Chemical Weapons Convention (CWC) negotiated in the Conference on Disarmament (CD). It is the first multilateral disarmament agreement with effective verification provisions that bans an entire class of weapons of mass destruction. It is comprehensive and calls for a complete prohibition on the development, production, stockpiling, retention or use of chemical weapons and their precursors. It is global and already, like Canada, a significant number of states from all geographic regions have indicated they will support it and be original signatories. Because it establishes new norms of verification and inspection that far surpass any previous multilateral arms control and disarmament instruments, in Canada's view it is a pace-setting agreement.

For many years now, Canada and Poland, working together in the UN, have introduced a resolution supporting the work of the Conference on Disarmament on the Chemical Weapons Convention and urging its early completion. This year we are joined by Germany which, under the most able and dedicated leadership of Ambassador Von Wagner, chaired the CD Ad Hoc Committee on Chemical Weapons to its successful conclusion.

As one of the 133 co-sponsors to the draft resolution, we urge all Member States to endorse the resolution and the Convention itself. Let us set the stage for the signing conference in Paris in early 1993 and, as Ambassador Von Wagner stated, let us seize this "singular opportunity to lay the foundation of a new cooperative concept of international security."

### ***NPT***

During this session of the First Committee we will have before us a resolution that will begin the preparatory process for the 1995 NPT extension conference. Without the NPT there can be neither nuclear security nor peaceful nuclear trade. Canada pledges its full cooperation in bringing about a smooth launching of this vitally important process.

### ***CTBT***

The conclusion of a comprehensive nuclear test ban treaty (CTBT) has long been a fundamental Canadian arms control objective. Nuclear testing moratoria are an important step towards this end, clearing the way for the negotiation itself. Canada congratulates President Bush for signing into law a bill that not only takes that step but, in addition, commits the Administration to submitting annually to Congress a plan for achieving a comprehensive ban on the testing of nuclear weapons on or before September 30, 1996.

In our view, this law embodies a clear political commitment by the US to negotiate in good faith a CTBT within a reasonable time frame. Moreover, this political commitment is reinforced by the fact that Congress will have the opportunity to annually review the plans of the executive branch on the achievement of a successful outcome to the negotiation.

In light of these momentous developments, Canada hopes for even broader support on the CTBT resolution than last year, when two related resolutions were, for the first time, successfully merged.

### ***Cut-off***

Canada will once again introduce our traditional resolution regarding a prohibition on the production of fissionable material for weapons or other nuclear explosive devices. We regard this as a timely call supporting global non-proliferation objectives. In light of recent important developments regarding the disposition of fissionable material as a result of the dismantlement of nuclear weapons and the US decision to unilaterally cease the production of fissionable material for weapons purposes, we hope for even broader support than in the past for this resolution.

## Verification

I would now like to turn to the question of verification. Delegations will recall that, two years ago, Resolution 45/65 of December 4, 1990 welcomed the Group of Governmental Experts study on "The Role of the United Nations in the Field of Verification." That consensus resolution encouraged Member States to give active consideration to the Group of Experts study's recommendations and to assist the Secretary-General in their implementation where appropriate. It also called on the Secretary-General to report to UNGA 47 on actions to implement these recommendations.

During the last decade, Canada has played a particularly active role in the United Nations consideration of the issue of "verification in all its aspects," including the study conducted by the Group of Governmental Experts. Following on this, Canada, working closely with a number of other Member States, including France and the Netherlands, and building upon the text of earlier consensus resolutions on verification, will submit a draft verification resolution at this year's UNGA. The resolution will take note of the Secretary-General's report on implementing the recommendations of the Group of Experts study and reiterate the call for assistance by Member States in this implementation. As I have said before in this Committee, the usefulness of United Nations activities with respect to the Group of Experts study's recommendations will be determined in large measure by the assistance provided by Member States.

The draft resolution will go beyond this, however. Since the 1990 Group of Governmental Experts study, there have been major developments in the international system that indicate a renewed interest in, and commitment to, multilateral institutions for addressing security questions. Such developments — including the recent experience of the United Nations and the increasing reliance of the world community on United Nations peacekeeping activities — provide important opportunities for the consideration of a useful United Nations role in verification.

To explore these new opportunities, the draft resolution introduces language calling for a follow-on Group of Governmental Experts study focusing on two topics: 1) the preliminary practical lessons from the recent UN experience and other in-

ternational developments relating to verification, for UN verification activities; and

- 2) how the verification of arms limitation and disarmament agreements can facilitate UN activities with respect to preventive diplomacy, peacemaking, peacekeeping and post-conflict peacebuilding.

Canada is convinced that verification remains as relevant today as it was at any time in the past. Verification is not an East-West issue that has died with the Cold War. In the words endorsed unanimously in Resolution 43/81 (B) of December 7, 1988, "adequate and effective verification is an essential element of all arms limitation and disarmament agreements."

Moreover, verification must be seen as more than simply a matter of substituting concrete evidence for blind trust or of providing some sort of "police" function for arms control and disarmament agreements. Rather, verification is one dimension of a common institution-building process. It should help meet the need to institutionalize, in the context of relations among states, the kind of accepted rules, procedures and expectations that govern the conduct of relations among individuals in all civilized societies. Such rules and procedures do not presume bad faith or malevolent intent, but they allow for such possibilities and provide a framework in which unjustified accusations can be authoritatively rebutted, misunderstandings clarified and resolved, and non-compliance objectively established. Viewed in this light, an exploration of the role that verification activities can play in relation to the ideas advanced by the Secretary-General in his *An Agenda for Peace* report, should prove very timely.

## BTWC

While on the topic of verification, I would also like to briefly comment on the work that has been accomplished to date by the Ad Hoc Group of Governmental Experts concerning potential verification measures for the Biological and Toxin Weapons Convention (BTWC). A framework has been established that will permit detailed examination of such measures and an eventual narrowing of the field to a promising few.

The difficult technical task of assessing each measure's potential contribution to verification, simply or in combination with other measures, should not be underestimated. At the same time, however, we must not allow the study to become so bogged down in detail that we lose sight of the overall determination of the last BTWC Review Conference that effective verification could reinforce the Convention. With those objectives clearly before them, the experts should be able to provide the technical basis in 1993 for early subsequent consideration of such measures by the appropriate political authorities of States Parties to the Convention.

## Arms Register

As a country that participated in the Secretary-General's Panel of Governmental Experts, Canada welcomes his report. I am especially pleased that the report reflects a consensus among a wide geographic range of countries. In that aspect, the report is one further indication of the dedication of the global community to promote transparency in armaments and to tackle in a practical way the problem of excessive and destabilizing arms build-

## NPT Preparatory Committee to Meet

During UNGA 47's First Committee, 133 countries voted in favour of a resolution that set in motion the process of extending the Nuclear Non-Proliferation Treaty (NPT) at the Treaty's Fifth Review Conference in 1995. No country voted against the resolution and only Cuba and India abstained. The resolution mandated the formation of a Preparatory Committee, open to all NPT parties, to prepare for the Review Conference, with its first meeting to be held in New York from May 10 to 14, 1993. The 1995 Conference will be crucial for the future of the nuclear non-proliferation regime. As noted by Prime Minister Mulroney in a speech at Johns Hopkins University last May, Canada is pressing for indefinite extension of the Treaty as well as universal adherence to it. Despite bilateral and multilateral urging, a number of major countries, including Algeria, Argentina, Brazil, Chile, India, Israel and Pakistan, have not yet acceded to the NPT.

## Canada to Report Military Holdings

As part of its commitment to promoting transparency in military matters, Canada is thus far the only country to announce that it will include statistics on military holdings in the data submitted to the UN arms register for the 1992 period. The register was established by a 1991 UN resolution, co-sponsored by Canada. It calls for the reporting of exports and imports of seven categories of weapons and invites states to include information about their arms holdings and arms procurement. The 1992 reports are due by April 30, 1993. In addition, Canada will continue to issue its own annual report on military exports, which covers all categories of military equipment, not just the seven reported to the UN.

ups. We hope that all 17 Panel countries will co-sponsor the current resolution endorsing the Secretary-General's report. We now must work for universal participation in the register. Canada will report fully to the register by April 30, 1993, for the calendar year 1992. We call on all Member States to do likewise.

The Panel agreed on definitions of categories of equipment of which transfers are to be registered. It also developed a user-friendly, standardized form for reporting international transfers. Most importantly, the Panel focused on the question of the modalities for early expansion of the register. In this context, the Panel noted that the possibility of the addition of further categories of equipment and the elaboration of the register to include military holdings and procurement through national production will follow the examination of these issues by the group of governmental experts to be convened in 1994.

In Canada's view, the inclusion of military holdings and procurement through national production in 1994 is essential to making the register a meaningful instrument of transparency in armaments. In the interim period, we encourage all Member States to contribute fully to the register and to prepare their views, as requested in Paragraph 11(a) of Resolution 46/36L, on the operation of the register during its first

two years, and on the addition of further categories of equipment and the elaboration of the register to include military holdings and procurement through national production.

### ENMOD

Canada pledges its cooperation with respect to the resolution to be introduced by Australia as President of the Second Review Conference of the Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (ENMOD). The environmental aggression by Iraq during the Gulf War catapulted this hitherto obscure treaty onto centre stage. The Review Conference held in September provided the opportunity to put in place a process for adapting ENMOD to contemporary relevance.

In Canada's view, the Review Conference made plain that all is not well with the ENMOD treaty, largely because of serious differences of interpretation of the treaty's scope among States Parties. The Final Declaration made a modest step towards clarifying those differences. Most notably, it was agreed that "any" and all environmental modification techniques are covered, regardless of the level of technology employed. Further, it was agreed that the use of herbicides is covered by the Convention.

However, the review also made clear that there is no basis for affirming the continuing effectiveness of this treaty without a more careful examination — by experts — of the interpretational problems. Canada is therefore one of the countries referred to in Paragraph 2 of the Final Declaration as desiring a Consultative Committee of Experts to be convened pursuant to Article V of the Treaty.

It is our hope that the First Committee will lend its support both to the resolution and to the efforts of many States Parties to ensure that there is a timely follow-up to the Review Conference. Like Finland, Canada will consult with other interested States Parties to this end. In our view, the ENMOD Convention must be liberated from its Cold War past and allowed to play a more meaningful role in curbing the obscenity of environmental warfare.

### Procedural Reform

The Cold War has left its mark not only in the immense quantity of weaponry that

must now be dismantled, but in an equal weight of mind-sets and work habits that are the direct result of the First Committee being reduced for 40-odd years to a mainly declaratory, rather than genuinely deliberative, body. The sheer logistics of keeping track of the resolutions are such that genuine dialogue within groups, let alone among them, is stymied. The impediment this situation creates to truly meaningful progress in this body cannot, in our view, be overestimated.

Since 1988, in a process begun under Canadian chairmanship of the First Committee, low-key but fairly consistent efforts have been underway to improve the efficiency of this body by encouraging delegations to dispense with outdated resolutions, merge related ones and to biennialize recurring issues. This process has had modest but steady results...

Last year's experience with the resolution establishing the UN arms register, in our view, directly contributed to the decreased number of resolutions. Delegations were engaged in an important negotiation involving a range of views that crossed traditional groupings and that had as its goal a concrete and important objective. In short, all of us were forced to set priorities and the result was less resolutions and more dialogue. In our view, this is a trend that must continue if we are to successfully adapt this body to the new challenges on the multilateral arms control agenda.

### An Agenda for Peace, Part Two

On the occasion of this general debate on disarmament and international security, we have all alluded in one way or another to the basic contradiction that confronts us. On the one hand, the end of the Cold War has opened the way to significant arms control and disarmament measures. On the other, it has unleashed an avalanche of local and regional conflicts.

*An Agenda for Peace* gives us both the broad framework for promoting global security and concrete recommendations with respect to many critical aspects of conflict prevention and peace-building. However, it does not deal at all with the role that arms control and disarmament *per se* can play in this overall process. Neither is this touched on in the first annual report by Secretary-General Boutros Boutros-Ghali.

In Canada's view, the time has come for *An Agenda for Peace, Part Two*, which will elaborate in more detail the contribution that the multilateral arms control and disarmament fora can make to building a new cooperative security framework. An essential aspect of this review will be the role of the Office of Disarmament Affairs as the focal point for a revitalized UN role in multilateral arms control and disarmament. We urge all members of the First Committee to consider how they might contribute to this end.

Unfortunately we do not have the lux-

ury of unlimited time for reflection. As the demand for UN peacekeeping missions only too clearly shows — as we speak the UN has over 40,000 men and women currently serving in 12 UN peacekeeping operations in Central America, Europe, the Middle East, Asia and Africa, and nearly 10,000 more are preparing to go to Bosnia, Somalia and Mozambique — the need for progress in creating a new framework of international security is in

danger of completely outstripping our capacity to respond.

Let us therefore ensure that the deliberations of this Committee over the coming

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### ***Need for revitalized UN role in arms control and disarmament.***

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weeks reflect the need for prompt and concrete actions in our shared task of peacebuilding. ■

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## ***Arms Register Panel Reports to UN***

The Panel of Governmental Technical Experts, charged with elaborating procedures for reporting to the UN arms register, has arrived at a consensus report that recommends adjustments to the categories of weapons to be reported and details procedures for the register's operation, including a standardized reporting form.

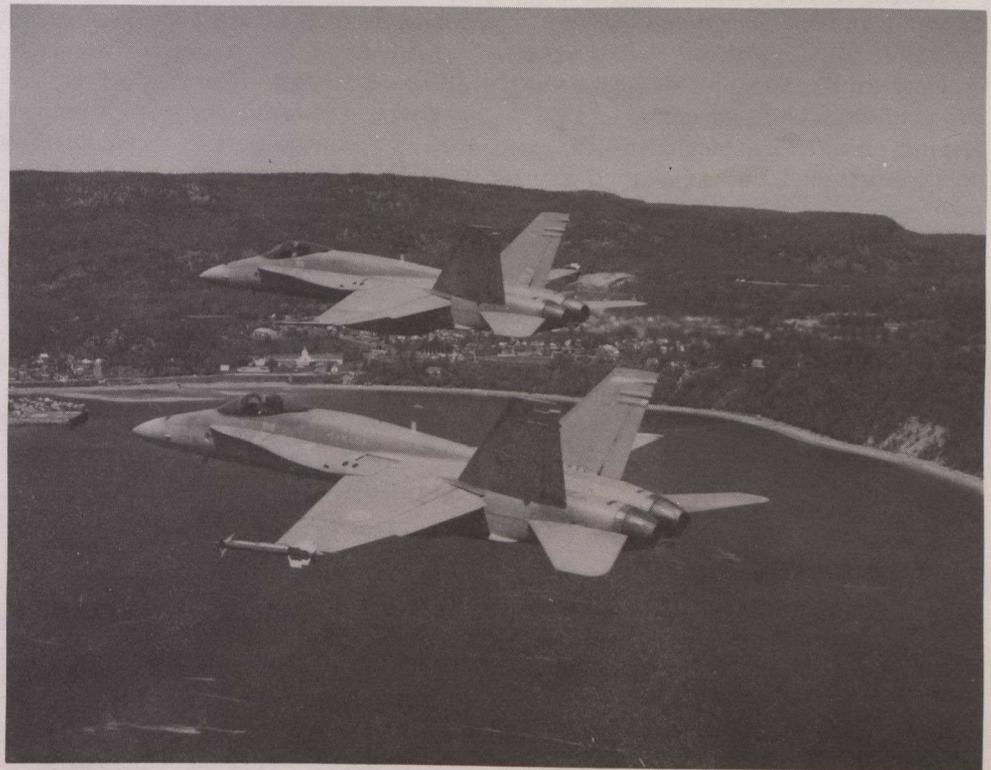
The adjustments affect the definitions of the seven weapons categories (tanks, armoured combat vehicles, artillery systems, combat aircraft, attack helicopters, warships and missiles) annexed to the 1991 General Assembly resolution that established the arms register. For armoured combat vehicles, the Panel recommended reducing the relevant gun calibre from 20 mm to 12.5 mm and broadening the category to include armoured combat vehicles that launch any type of missile, instead of only anti-tank missiles. The Panel also recommended modifying the wording of the combat aircraft and attack helicopter categories to make clear that transfers of reconnaissance and electronic warfare versions are to be reported. For combat aircraft, transfers of versions designed for air defence suppression are also to be reported.

In the warship category, the Panel called for lowering the reporting threshold to 750 tonnes, thus extending the category's scope to ensure coverage of all corvettes. Panel members also recommended including vessels below this threshold that are equipped to launch missiles or torpedoes to a range of 25 km or beyond. In the missile category, the Panel reached consensus on the exclusion of ground-to-air missiles from the register. It did, however, recommend the inclusion of remotely-pi-

loted vehicles that are capable of delivering a weapon at least 25 km, to address concerns about the possible modification of such vehicles into cruise missiles.

As for operating procedures, the Panel designed a form for reporting arms exports and imports that is simple to complete and lends itself to easy compilation. The reported data will be collected and stored by the UN Office for Disarmament Affairs (ODA) in a computerized data-

base. The ODA will also maintain an index of any background information submitted by states on their military holdings, procurement through national production, and relevant policies. Each year, the Secretary-General will combine the arms transfer reports and the ODA index in a report to the General Assembly. The Panel's report outlines the duties and rights of Member States, the Secretariat and the public with respect to access to the register.



*Canada will be reporting its transfers and holdings of combat aircraft, such as these CF-18s from 425 Tactical Fighter Squadron, Canadian Forces Base Bagotville (Quebec), along with six other categories of weapons, to the UN arms register in 1993.*

*Canadian Forces Photo by M.Cpl. Michel Roy*

The Panel also offered suggestions for early expansion of the register's scope and looked at the resource implications of maintaining the register. The Panel noted that recent UN cutbacks give rise to serious concerns about the ODA's ability to operate and maintain the register.

The Panel was established by the Secretary-General in December 1991. It consisted of representatives of all geographical regions of the globe, including both arms exporters and arms importers. Canada was represented by Mr. Don Sinclair, Deputy Director of the Non-proliferation, Arms Control and Disarmament Division of EAITC. In December 1992, the UN General Assembly approved by consensus a resolution accepting the Panel's recommendations. A second group of governmental experts will be convened in 1994 to review the register's operation and to consider its further development.

## Report on Military Exports Released

Canada's *Second Annual Report on the Export of Military Goods* was released in June 1992. The *Report* outlines the government's strict criteria for permitting the export of Canadian-made military goods and lists countries that purchased Canadian military goods under the export permit system during 1991. Of these goods, 75 percent were classed as "non-offensive," such as bomb-disposal suits and communications equipment. Overall, 95 percent of Canadian military exports during 1991 went to Canada's NATO allies and to countries belonging to the Organization for Economic Cooperation and Development.

"Canada leads the world in the campaign for transparency in arms transfers," said Secretary of State for External Affairs Barbara McDougall on the *Report's* release. "We were instrumental in the United Nations decision to establish a new global arms register last December and our own report far exceeds what is required for the register. I'm confident that our efforts will contribute to greater international openness about the sale and transfer of arms."

The *Report* was tabled in the House of Commons and at the United Nations.

## Canada Responds to Secretary-General's Report on Arms Control

On October 27, UN Secretary-General Boutros Boutros-Ghali presented Member States with a report containing his vision of the UN's potential role in disarmament. *New Dimensions of Arms Regulation and Disarmament in the Post-Cold War World* builds on the Secretary-General's earlier report on UN involvement in preventive diplomacy, peacemaking and peacekeeping, entitled *An Agenda for Peace*.

In a November 11 statement delivered by Ambassador for Disarmament Peggy Mason, Canada welcomed the report and strongly supported its thesis that three key issues — namely integration of disarmament issues into the broader peace and security agenda, globalization of the arms control and disarmament process, and revitalization of the process in the wake of the Cold War — must be the foundation of an intensified international effort to enhance the effectiveness of arms control and disarmament.

On the issue of revitalization, Canada noted that despite recent positive developments, the proliferation of technology and equipment capable of making weapons of mass destruction continues to be a source of instability. In Canada's view, the multilateral system must respond quickly in two key ways:

- 1) by confirming and strengthening global non-proliferation instruments, like the Nuclear Non-Proliferation Treaty (NPT), the Biological and Toxin Weapons Convention (BTWC) and the forthcoming Chemical Weapons Convention (CWC); this also involves concluding a comprehensive nuclear test ban and developing further — and harmonizing where possible — export controls of sensitive technologies; and
- 2) by developing and applying regional arms control regimes, linking global and regional measures as required.

Canada noted with interest the report's proposal to examine the role of private arms dealers and their connection to problems associated with international arms transfers. Canada commended the proposal to establish a task force to provide Member States with advice on military conversion programs. Canada also expressed interest in receiving further details concerning the role the Secretary-General envisages for the Security Council in disarmament matters, especially in the enforcement of non-proliferation.

Canada strongly supported the Secretary-General's proposal to reassess the UN disarmament machinery to ensure it is able to address new realities and priorities. The Conference on Disarmament (CD), in particular, requires a rationalization of agenda and membership to reflect changed geo-political circumstances. However, Canada expressed reservations about a suggestion that the CD take on the role of a permanent review and supervisory body for some existing multilateral arms control and disarmament agreements. In Canada's view, the CD's focus should not be diverted from being the sole UN body with the authority to negotiate global arms control agreements.

## ENMOD Review Conference Held

*The Second Review Conference of the Parties to the Convention on the Prohibition of Military and Any Other Hostile Use of Environmental Modification Techniques (ENMOD) was held in Geneva from September 14 to 21. The Canadian delegation to the Conference was led by Ms Peggy Mason, Ambassador for Disarmament. The following are excerpts from Ambassador Mason's opening and concluding statements to the Conference.*

### Opening Statement

Our task, according to Article VIII, is to "review the operation of the Convention, with a view to ensuring that its purposes and provisions are being realized, and...in particular [to] examine the effectiveness of the provisions of Article I, Paragraph I, in eliminating the dangers of military or any other hostile use of environmental modification techniques"...

Clearly the time is most opportune for assessing the relevance of a multilateral instrument that was borne of the Cold War and then largely ignored. It existed without much notice over the years, mainly because the conduct it sought to preclude, such as man-made earthquakes, seemed esoteric and beyond practical application in the foreseeable future.

ENMOD emerged from obscurity in 1991 in the wake of the Gulf War and the scenes of billowing clouds of smoke as hundreds of Kuwaiti oil wells were deliberately set ablaze, and the equally horrifying pictures of slick, black waves of oil slopping onto the shore along with the bodies of dying cormorants and gulls. These images brought to centre stage what had hitherto been seen as a peripheral agreement on an obscure topic. But the glare of centre stage immediately exposed the weaknesses of the Convention. Did the ENMOD Convention even apply? The prevailing sentiment at the time was — and I believe remains so — that, if ENMOD did not prohibit such deliberate acts of environmental aggression as were perpetrated by Saddam Hussein during the Gulf War, then clearly it should. This is certainly the Canadian view...

Concern over the inability of ENMOD to adequately address environmental warfare centres on two interrelated issues — first, the limited adherence to the Convention and second, the significant interpretational problems in respect of its scope.

Since there are only 55 States Parties to the Convention, ENMOD lacks the degree of broad international support that is essential for an effective multilateral treaty. In the case of Iraq, though a signatory, it is not a party to the Convention. I hasten to add, however, that as a signatory Iraq was, at a minimum, under an obligation to refrain from acts that defeat the very object and purpose of the Convention.

Clearly, the perceived lack of relevance of ENMOD to the real security needs of most states is the reason for the low level of adherence. This brings us to the second problem in relation to ENMOD — what exactly does it prohibit?

The answer is not clear because there are interpretational difficulties associated with key elements of the Convention. Most problematic is the lack of agreement on what constitutes a “deliberate manipulation of a natural process” (Article II). The second problem relates to what has been called the “threshold of seriousness”

## Workshop Looks at ENMOD Verification

“Verifying Obligations Respecting Arms Control and the Environment: A Post-Gulf War Assessment” was the topic of a workshop held in Saskatoon from April 13 to 16. Sixteen specialists drawn from the legal, technical, scientific and diplomatic sectors reviewed existing provisions for verifying compliance with the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Techniques (ENMOD), with a view to identifying possible improvements.

Participants discussed such issues as:

- whether or not the ENMOD Convention was breached by Iraq’s deliberate release of oil into the Persian Gulf and the ignition of oil well fires in Kuwait during the 1991 Gulf War;
- how to collect evidence in terms of verification of non-compliance, and what form that evidence might take; and
- how the results of using a variety of monitoring techniques could improve the effectiveness, including cost-effectiveness, of the verification process with respect to ENMOD.

Participants concluded that, in general terms, there is a need for clearer definition of terms such as “environmental modification techniques” (ENMOD Article II) and for development of more effective verification provisions (ENMOD Article V). On this last, they suggested following the precedent set by the Biological and Toxin Weapons Convention (BTWC), where States Parties agreed to first develop confidence-building measures that could eventually form the basis for a more formal compliance mechanism. Participants noted a number of illustrative events for which it might be possible to demonstrate a verification process, including forest fires, oil fires, misuse of herbicides, water diversion, electromagnetic pulses and introduction of new species.

The significance of the use of oil as a weapon was less clear. While participants felt that Iraq was unlikely to be found in technical or legal breach of ENMOD, they argued that Iraq was in moral contravention of the Convention.

The workshop, which was sponsored by EAITC’s Verification Research Program and organized by the Toxicology Research Centre of the University of Saskatchewan, was helpful in making final preparations for Canada’s participation in the ENMOD Review Conference held in September.



Participants at the ENMOD verification workshop in Saskatoon.

set out in Article I, which limits the Convention's ambit to environmental effects that are "widespread, long-lasting or severe"...[T]hese terms remain ambiguous at best...

[T]here are also more fundamental questions such as whether *any* level of damage caused by the hostile use of environmental modification techniques should be tolerated. Another question relates to the scope of the protection afforded by the Convention. It currently applies only with respect to States Parties. Given the inherent difficulty in controlling such environmental effects, should this limitation be deleted? Finally, questions arise as to the degree of intent necessary to be found in breach of the Convention...

Canada joins others in appealing to all states to accede to the ENMOD Convention, as well as to all other relevant international agreements that provide protection for the environment in times of armed conflict, particularly:

- the Geneva Convention Relative to the Protection of Civilian Persons in Time of War of 12 August 1949 (The Fourth Geneva Convention);
- the Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (the First Protocol); and
- the 1980 Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, and Annexed Protocols.

The simple truth is, however, that all such appeals will fail unless we address the interpretational problems forthwith.

There have been a number of proposals on how to do this. It has been suggested that the Final Declaration seek to express in as clear language as possible the understanding of all participating States Parties on certain key elements of the Convention's scope. I would draw particular attention to the following affirmations:

- actions like the massive release of oil into the Gulf as well as the deliberate setting on fire of oil wells by Iraq during the Gulf War fall within the ambit of Articles I and II of the Convention;
- the Understandings in relation to Articles I and II are confirmed as is the interpretative statement of the US in relation to herbicides; and
- the Convention covers the hostile use

of environmental modification techniques of *whatever level* of technical sophistication — or lack thereof.

A Final Declaration incorporating these understandings is an immediate step that we can take to make ENMOD more relevant to today's security concerns. But it is clearly not a sufficient step. We must...start a process that could lead to legally-binding improvements in the Convention's effectiveness. At the very least, we need to thoroughly canvass what measures might be taken to that end. It is for this reason that Canada strongly supports the creation of a Consultative Committee of Experts, pursuant to Article V of the Convention and the Annex thereto, with a mandate "to examine the provisions of the Convention, with a view to determining the effectiveness of their application in relation to its objectives, and to identifying areas for improvement."

In keeping with the urgency of the task, it is our proposal that the Terms of Reference of the Consultative Committee include a provision for recommendations to be presented to the States Parties at a consultative meeting no later than six months after the end of the Second Review Conference...

Beyond the legal issues of the Convention's scope and applicability, however, lies the still relatively unexplored area of verification procedures to monitor compliance with the Convention. In April of this year, Canada convened a workshop, entitled, "Verifying Obligations Respecting Arms Control and the Environment: A Post-Gulf War Assessment"... I am pleased to submit to the Conference the proceedings of this extremely informative workshop...

In addition, I would draw to the Conference's attention a paper prepared by Canada's Verification Research Unit that seeks to provide a comprehensive overview of the capabilities of space-based and airborne sensors as a significant means of verifying compliance with the ENMOD Convention. It is the conclusion of this paper that the science of overhead remote sensing — a science that has progressed to the point of admissibility as evidence in courts of law — could play a valuable role in the verification of non-compliance with respect to the ENMOD Convention.

However, given that our point of departure is a convention — the scope of which is unclear and with enforcement provi-

sions that are, as yet, limited to a "complaint and consult" mechanism — it seems unlikely that substantive progress on verification procedures to monitor compliance with the Convention can be agreed upon in the near term. In the meantime, we need not settle for inaction. If we follow the example of the Biological and Toxin Weapons Convention (BTWC), a proven pragmatic course could be the implementation of a series of confidence-building measures (CBMs) that enhance the short-term effectiveness of the Convention, while laying the groundwork for more substantive progress in the future.

Recently, Canada commissioned a study to examine — in light of our experience with the BTWC — what CBMs might be applicable to ENMOD. One example, increasing military awareness of the provisions of the ENMOD Convention and the obligations of States Parties, would involve a minor financial outlay and could be implemented immediately. Other examples of CBMs directed at promoting greater transparency with respect to activities of relevance to the Convention include the declaration of past environmental modification research, development or operational programs, and advance notification of such activities in future. Unilateral CBMs would demonstrate a State Party's commitment to compliance and would serve to encourage others to follow suit. The next step would entail increasing contacts among States Parties, through the exchange of data and the promotion of ties among scientists conducting environmental modification research. As the barrier of mistrust erodes, we could then move from informational CBMs to consideration of more substantive verification measures.

Canada therefore proposes that the Consultative Committee of Experts also be mandated "to consider ways of enhancing the process of consultation and cooperation amongst States Parties to the Convention, including the use of confidence-building measures."

## Final Statement

Our work over the past week, culminating in the text of the Final Declaration, has demonstrated that all is not well with the ENMOD Convention, due in large measure to significant interpretational problems in respect of the treaty's scope.

In Canada's view, it is self-evident that

ENMOD fits within the larger context of international treaty law on the protection of the environment in times of armed conflict. Yet at least one State Party maintains that ENMOD has nothing to do with the protection of the environment. It is — this Party alleges — solely concerned with prohibiting a certain means of warfare. Of course this is patently not the case because, even taking the most limited interpretation of the Convention, its ban is not confined to military uses but also covers...“any other *hostile use*” of environmental modification techniques... [W]hy are we bothering to outlaw military or other hostile uses of environmental modification techniques if it is not precisely because we want to protect the environment from the horrendous damage that might otherwise ensue?

I raise this...to make the point that there is a fundamental disagreement among States Parties even over what constitutes the overall objectives of the ENMOD Convention. Debate, however, has mainly focused on the scope of ENMOD.

There are some States Parties who maintain...that ENMOD is a futuristic document, covering exotic technologies that have yet to be invented, while at the same time asserting that it also covers the use of herbicides, a decidedly low-technology environmental modification technique, in existence for at least as long as the Convention itself. Canada prefers the more consistent approach that any and all environmental modification techniques are covered, regardless of the level of technology employed...

There is no basis for affirming the con-

tinuing effectiveness of the ENMOD treaty unless and until we clear up the interpretational problems. That is why Canada, along with other delegations, sought a decision of this Review Conference to establish a Consultative Committee of Experts (CCE)...Let me indicate now that Canada will be consulting with other countries on the issue of requesting...the establishment of the CCE before the end of 1994...

In summation...[we] have it in our power to bring ENMOD into contemporary relevance. I believe the Final Declaration takes a very modest step in that direction. Let us ensure we follow through and see that a Consultative Committee of Experts...is established to carry on this important work. ■

## Open Skies Sensor Parameters Defined

Technical issues dominated the agenda as the newly-formed Open Skies Consultative Commission (OSCC) made agreement on the operational parameters and specifications of airborne imaging sensors a priority following signature of the Open Skies Treaty in March. Canada took the lead as chair of the OSCC's first session.

In June, the OSCC negotiated the technical parameters for Open Skies-permitted cameras, assisted by trial overflights at Boscombe Down in the United Kingdom in which the Canadian Department of National Defence took part. As a result of the trials, such issues as camera and film

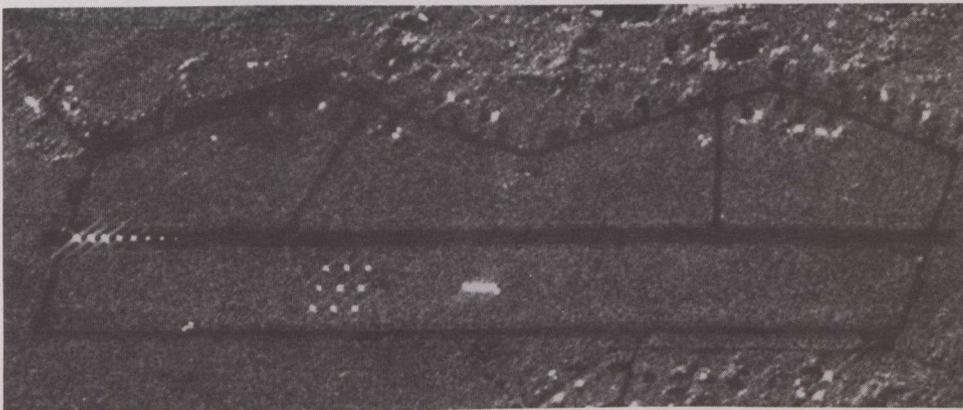
types, methods for optimum film processing, and minimum requirements for aerial camera operations were recommended and introduced as Decisions 3, 4 and 5 of the Open Skies Treaty.

The OSCC's next task was the development of technical specifications for synthetic aperture radars (SARs), the most complex of the sensors allowed under the Treaty. In September, under a United Kingdom chair, the OSCC's informal working group on sensors met with technical experts in Vienna to discuss an outline of agreed parameters and specifications for SAR sensors.

These were tested on October 6 and 7 at an abandoned airfield south of Budapest in Hungary. Three aircraft and SARs, provided respectively by Denmark, Russia and Canada, flew over a series of agreed targets, or corner reflectors, provided by the United States. The reflectors were specifically designed to backscatter SAR microwave energy. The intent of the trials was to demonstrate technical issues with respect to the spatial resolution calibration of three very different SAR systems, and to introduce the “lessons learned” into the Open Skies Treaty as a decision.

The resultant SAR data were processed at the Hungarian Institute of Geodesy, Cartography and Remote Sensing, where specifications of calibration targets to measure dynamic range, impulse response and the ground resolution of the SAR systems were determined. These data were taken back to Vienna to be discussed by the OSCC and drafted as Decision 7 by the SAR technical experts.

This experiment was a milestone in technical cooperation among parties to the Open Skies Treaty. The monumental task of negotiating such complicated issues as SAR parameters was a vivid example of the confidence-building intent of the Treaty at work. Technical experts from the Department of National Defence and EAITC participated in the October SAR trials. ■



Synthetic aperture radar (SAR) imagery collected by a Canadian aircraft, owned by Intera Information Technologies Ltd., during a trial overflight in Hungary in October. The bright returns located on the airfield's main runway and between the taxiways are readily discernable. The spatial resolution of this image is six metres. The Open Skies Treaty permits SAR imagery resolution down to three metres.

## New European Security Forum

At a meeting in Helsinki on July 9 and 10, leaders of the 52 states participating in the Conference on Security and Cooperation in Europe (CSCE) decided to establish a new Forum for Security Cooperation (FSC). The Forum's objectives include:

- to strengthen security and stability through the negotiation of concrete measures aimed at keeping, or achieving, levels of armed forces to a minimum commensurate with common or individual legitimate security needs within Europe and beyond;
- to address the question of harmonization of obligations agreed among participating states under the various existing instruments concerning arms control, disarmament and confidence- and security-building; and
- to negotiate new stabilizing measures in respect of military forces, and new confidence- and security-building measures designed to ensure greater transparency in the military field.

The Forum opened in Vienna on September 22. It replaces both the Negotiation on Conventional Armed Forces in Europe (CFE) and the CSCE Negotiations on Confidence- and Security-building Measures (CSBMs). Participating states have already begun discussions on cooperation in non-proliferation and arms transfers, a code of conduct in the field of security, extension of existing security obligations to all European states, a global exchange of military information, and a common review of defence planning.

As a priority, Canada is working within the FSC to encourage wider and more effective adherence to the objectives of existing multilateral non-proliferation regimes, and to achieve greater transparency in arms transfers.

The full potential of the CSCE process as an educational mechanism and forum for dialogue involving the newer CSCE states has not yet been met due to the inability of many such states to attend the FSC on a permanent basis.

## CSCE: A Comprehensive Approach to Security

*The following are excerpts from the address by Secretary of State for External Affairs Barbara McDougall to the Conference on Security and Cooperation in Europe (CSCE) summit in Helsinki, Finland on July 9, 1992.*

We all have preconceived notions about what we can and should do in the CSCE. There are traditions, positions and a diplomatic language that have their own mystique and philosophy — and rigidity. But publics everywhere are demanding more from multilateral institutions: more action, more decisiveness, more leadership. That is why we have a special responsibility to make sure the CSCE works.

In the past, we have dedicated ourselves to the promotion of what I would call certain basic propositions: the right of people to freedom of thought, conscience, travel, expression, religion, human contacts and things that we really believe in. Back in 1975, the mere fact that we, as so-called ideological adversaries, could sit at a common table and reach agreement on some issues was a security-giving exercise in itself.

Our world has become more complex and so have our security needs. We now have a CSCE community where, ostensibly, democratic pluralism, human rights and the rule of law are accepted as our common foundation. Our task now is to entrench our CSCE commitments and take steps to implement them, promote them and protect them. Then and only then will we have meaningful security. In other words, we have to mean what we say, and as members of this organization we are going to hold each other to it...

Ensuring the equal treatment of all citizens, whatever their ethnic or religious origin, must be the first task of all governments. The time for clever arguments in this forum has passed. The minority issue in Europe is not a question of definition; it is a question of basic human rights and, in many cases, basic human survival. Our CSCE commitments in this regard are clear. The time has come to hold governments to these commitments — in bilateral relations and multilateral programs. Otherwise, Canada's cooperation with any offending country will be affected...

There is some useful machinery in the CSCE — the Human Dimension Mechanism and the new High Commissioner on National Minorities. We can take action without consensus and we can send missions to fact-find and to expose violations. We have to continue to strengthen the machinery and to use it effectively. Countries that are concerned about their minorities outside their borders must seek recourse through these types of mechanisms.



*Canadian inspectors carrying out a CFE baseline inspection in Zary, Poland in October. See article on next page.*

Unilateral action through military force will never be accepted by this community, but neither will the flagrant abuse of human rights...

The CSCE framework also offers us a way of dealing with conflict — not simply resolving conflict but, more importantly, preventing conflict.

Canada continues to believe that the best conflict prevention mechanism is the implementation of our commitments. To enhance that, we need other tools.

Early warning through the Committee of Senior Officials, the Office for Democratic Institutions or the High Commissioner is essential, but we must respond promptly once we have been warned. We must be prepared to dispatch fact-finders or a good offices mission to sit on the ground and work patiently to bring parties together before they get too far apart...

We also need the means to interposition forces, before or during a conflict. Canada has been a leading force in developing CSCE peacekeeping. Our credentials on this issue are, I believe, beyond question.

Some months back we said we needed to reconcile the ability of the CSCE to create security with NATO's ability to provide security. I believe we have finally done it.

The Helsinki Document gives us the political mandate for CSCE peacekeeping. The procedures in that document, coupled with the willingness of regional and transatlantic organizations to support our efforts, give us the means. This is an important step forward in giving the CSCE the operational ability it needs to take action.

It also gives life to the notion of the interlocking elements in European security. Not simply the CSCE and NATO, but the European Community, the Western European Union and the Council of Europe all contribute to our security blanket.

Protection for minority rights, effective conflict prevention, a positive security forum — these are all keys for the 1990s.

The drafters of the 1975 Helsinki Final Act have indeed been vindicated in the comprehensive approach they took to security so many years ago. Canada strongly believes in the enduring validity and importance of the CSCE.

Our challenge now is to translate the unique political and moral authority of the CSCE, which we struggled so long to establish, into effective machinery to manage our problems. ■

## CFE Enters Into Force



*Canadian CFE inspectors in Poland in October.*

The Treaty on Conventional Armed Forces in Europe (CFE) entered into force on a permanent basis on November 9, following the deposit of instruments of ratification by the last of the 29 signatories. In view of the Treaty's importance, and faced with only minor technical delays in ratification by some of the newly independent states on the territory of the former USSR, CFE States Parties had earlier agreed to a provisional entry into force effective July 17.

On that date, signatories began the first phase of Treaty implementation, namely the 120-day baseline validation period. During this period, each state was obliged to accept a number of inspections equivalent to 20 percent of its declared objects of verification. An object of verification is essentially a military unit, such as a brigade or an air wing holding Treaty-limited equipment (TLE), or a TLE storage site. Canada was one of the first CFE states to initiate its program of on-site inspections, visiting units in Russia, the Czech and Slovak Federal Republic, Ukraine, Belarus, Poland and Georgia.

The Canadian program was coordinated with NATO partners to ensure that inspections by Allies provide a reasonable basis for determining that all signatories fulfill their Treaty obligations. NATO members conducted 238 inspections during the baseline period and were subjected to 128 in-

spections by teams from non-NATO countries. Non-NATO states conducted an additional 17 inspections within their own group.

The Canadian inspectors found no anomalies and the majority of inspections carried out by NATO members were similarly uneventful. The most significant exceptions occurred immediately after the August 14 exchange of new information on military forces, at which time Russia tried to curtail inspectors' access by redefining the boundaries of military facilities in a manner incompatible with the Treaty definition. Following high-level demarches to the Russian government by other States Parties, inspector access was restored to the levels permitted by the Treaty.

During the baseline period, several CFE parties that are required to destroy or convert military equipment began these procedures on a small scale. Now that the baseline period is over and the three-year reduction period has begun, states will intensify their destruction efforts. Twenty-five percent of the final reduction target must be reached by November 13, 1993, with the remaining excess equipment to be destroyed or converted by November 1995. Opportunities to inspect such procedures and their results will keep Canadian inspectors fully occupied during the coming months. ■

## Canada Hosts Seismic Experts Workshop



Participants in the Group of Scientific Experts November workshop at Montebello.

The Russian, French and American nuclear testing moratoria, reinforced by a US Congressional call for a comprehensive test ban (CTB) by 1996, provided fitting backdrop for a November 17 to 22 workshop sponsored by EAITC's Verification Research Program and hosted by Energy, Mines and Resources Canada. Seismic experts from 19 countries gathered at Montebello, Quebec, for the first significant discussions to focus primarily on the design and implementation of a global monitor-

ing system for verification of a CTB. Participants were members of the Conference on Disarmament's Group of Scientific Experts (GSE), which recently completed a comprehensive multi-year experiment involving the world-wide exchange and processing of seismic data. As a result of this test, the GSE concluded that the development of a global seismic network to provide adequate verification of compliance with a CTB is technically feasible.

At Montebello, the experts explored

practical aspects of a global monitoring system. These included issues related to design and selection of, and communications and interactions between, national seismic data centres with the intent of establishing an International Data Centre for CTB verification. Concepts for a global system and related costs were also addressed. The workshop followed on Prime Minister Mulroney's recent reaffirmation of a CTB as a Canadian priority, and aimed to assist the GSE with its mandate to make expeditious progress in the next Conference on Disarmament session. ■

## Cooperative Security Programs Established

On July 27, Secretary of State for External Affairs Barbara McDougall announced the establishment of the Cooperative Security Competition Program with an annual budget of \$2.1 million. The program will provide financial assistance for projects that advance understanding, knowledge and public discussion of cooperative security issues. Mrs. McDougall also announced the establishment of a Cooperative Security Scholarship Program of \$200,000 per year.

"The Government of Canada firmly believes that international peace and security is dependent on fostering bilateral and multilateral dialogue and cooperation across the entire range of interstate relations," said Mrs. McDougall. "These pro-

grams will allow us to assist scholarship and projects that increase Canadian and international understanding of cooperative security and promote its practical implementation."

Establishment of the programs follows through on the government's February 1992 budget commitment to reduce expenditure. Some continuing resources have been transferred from the now-closed Canadian Institute for International Peace and Security (CIIPS) to EAITC. The Competition Program also incorporates monies previously allocated to EAITC's Disarmament Fund. The termination and consolidation of programs will result in significant savings.

Mrs. McDougall further announced that

CIIPS' library collection and associated database are being transferred to the Canadian Forces Command and Staff College in Toronto. The College will maintain and develop the collection, and will ensure that scholars and the interested public continue to have access to the library.

Examples of projects eligible for assistance from the Competition Program include research, publications, conferences and seminars. Application deadlines are April 30 for an August decision and October 31 for a February decision. For further information and an application form, contact the Cooperative Security Competition Program, 55 Metcalfe Street, Suite 1180, Ottawa, Ontario, K1P 6L5 (tel: 613-233-4448; fax: 613-238-2062). ■

## Focus: On Chemical Weapons

*Focus is written primarily for secondary school students.*

"The story they told we could not believe; we put it down to their terror-stricken imaginings — a greenish grey cloud had swept down upon them, turning yellow as it travelled over the country, blasting everything it touched, shrivelling up the vegetation...[the soldiers] were blinded, coughing, chests heaving, faces an ugly purple colour — lips speechless with agony, and behind them in the gas choked trenches we learned that they had left hundreds of dead and dying comrades...It was the most fiendishly wicked thing I have ever seen."<sup>1</sup>

This account of the German use of chlorine against French troops at Ypres in April 1915 provides a graphic description of the horror of chemical warfare. Canadian soldiers came under chemical attack in that same German offensive, as well as several other times during World War I. Driven by this memory, Canada has long been working with other countries to achieve a complete ban on chemical weapons. The negotiators have finally succeeded. By the time you read these words, Canada will have put its signature to a treaty that aims at ridding the world of this category of weapons forever.

### Chemical Weapons

Chemical weapons (CW) are weapons that achieve their effect through use of a toxic agent derived from chemical substances. In other words, they are poisons. The chemical agent may take the form of a gas, aerosol, liquid or solid. It can enter the human body in several ways: by being inhaled through the nose and mouth, by being absorbed through the skin, or by being consumed as a contaminant on food.

Not all chemical weapons are lethal. Some can be used to temporarily disable troops but do not usually have long-lasting effects. Others — like chlorine, described above — can cause rapid death, depending on the dose.

Chemical agents can be delivered to their targets by ground, air or naval weapons. Examples of delivery systems include missiles, aerial bombs, grenades, artillery shells, mines and mortar bombs. CW can be used in many weather conditions, at

any time of day or night, and in any location. However, weather conditions and location affect how well CW work. Wind is the most important factor because it determines how long an airborne agent will stay in the target area. Temperature, rain and humidity can also affect the behaviour of chemical agents.

### CW Use

CW can be used to harass the enemy, to cause casualties, or to deny the use of terrain to an enemy. While some CW remain in the air for only a few seconds before dispersing, others, such as mustard gas, can contaminate an area for weeks at a time. CW may also be acquired in the belief that they act as a deterrent, or threat, against the potential use of CW or other powerful weapons by a rival country. Whether in fact they do so is a question open to debate.

Chemical weapons were used widely in World War I, resulting in over one million injuries and over 90,000 deaths. Since 1918, there have been numerous reports of the use of CW in various conflicts. The main documented events are the use of mustard gas by Italy in Ethiopia in 1936, the use of mustard gas and other agents by Japan against the Chinese in World War II, and the use of mustard gas by Egypt in Yemen in the early 1960s. Iraq used several chemical agents, particularly mustard gas and nerve gas, during the Iran-Iraq War in the 1980s. Many other accusations of CW use have been made but not confirmed. It is possible that accusations of CW use are sometimes made for political purposes.

The fact that CW have not been used more often is due in part to public revulsion against these weapons, which makes leaders reluctant to authorize their use. There are also legal constraints on CW use. In response to the horrors of World War I, states signed an agreement in 1925 called the Geneva Protocol, which bans the use of chemical weapons in war. Over 125 countries, including Canada, are parties to this treaty.

The rarity of CW use is also due to the fact that it is hard to create an effective CW military capability. While CW are easier to make than nuclear weapons, producing large quantities requires materials

and technologies that are not always readily available, even in advanced industrialized countries. Although there are thousands of natural and synthetic chemicals, fewer than 100 have been developed for chemical warfare and even fewer used. In the field, CW require special operational skills, for which troops must be trained. Also, the vulnerability of CW to factors such as weather means it is hard to predict the outcome of CW use.

To defend against CW use, a soldier can wear a mask and respirator and special protective clothing. It is harder to protect the general population. This means that CW are often feared as a terror weapon, which could be used against civilians. For example, many people worried that Iraq might use CW in its Scud missile attacks on Israel and Saudi Arabia during the 1991 Gulf War.

### CW Possession

The US, the former USSR and Iraq are the only countries that have said they possess chemical weapons. In 1990, the US and the USSR agreed between themselves to stop producing CW and to destroy their CW stockpiles. It is often reported in the media that perhaps another 15 to 20 countries either have CW or are trying to acquire them. Canada does not possess CW, although it does undertake research on how to defend against CW.

### CW Control

Although the 1925 Geneva Protocol bans the use of CW, it does not prohibit the stockpiling, development and production of these weapons. This means that states have been able to legally develop and build these weapons and to equip their armed forces with them.

In September 1992, negotiators completed a treaty that seeks to close this option. When the new Chemical Weapons Convention (CWC) is ratified and enters into force, states that are parties will be required to destroy any CW they possess and to undertake never to acquire CW. Since CW are not easily identifiable from a distance (e.g., from surveillance satellites), the CWC contains very strict provisions for checking that states are living up to their obligations under the Convention.

These verification measures include watching the destruction procedure, monitoring certain national chemical industries, and providing for the inspection of civilian and military sites at short notice.

Canada and a number of other states have already said that they will sign the CWC when it is opened for signature in January 1993. Even so, the CWC will not enter into force before 1995. It is very important that all countries agree to abide by the Convention. Too many states leaving open the option of arming themselves with CW would undermine the treaty. Canada will be working hard to convince other states that they will be more secure if the world is free of the threat of CW than they will be if they hang on to the CW option.

In the mid-1980s, concerned about the spread of CW, Canada joined with a number of other countries in the so-called "Australia Group" to place strict controls on the export of legitimate chemicals and certain legitimate equipment that could be diverted to make CW. These controls will stay in place to help ensure that Canadian exports are not contributing to the production or acquisition of CW by other countries.

<sup>1</sup>O.S. Watkins in the *Methodist Reporter*, cited in Valerie Adams, *Chemical Warfare, Chemical Disarmament* (Bloomington: Indiana University Press, 1990), p. 25.



Canada is a leader in research in gas mask technology and other defences against chemical weapons.

Photo courtesy of the Defence Research Establishment Ottawa

## Forecast

*Arms control and disarmament activities involving Canada, January through April 1993.*

**Ongoing:** CSCE Forum for Security Cooperation, Vienna

**Ongoing:** CFE Joint Consultative Group, Vienna

**Ongoing:** Open Skies Consultative Commission, Vienna

**January 13:** CWC signing ceremony, Paris

**January 18-20:** Conference on Non-Proliferation of Weapons of Mass Destruction in Latin America and the Caribbean (co-sponsored by Canada), Asuncion, Paraguay

**January 18 - March 26:** CD in session, Geneva

**January 27-29:** ENMOD seminar, Geneva

**February:** Middle East Working Group on Arms Control and Regional Security, Washington

**February 8-12:** CWC Preparatory Committee, The Hague

**March 8-11:** MTCR experts meeting, Canberra

**March 8-12:** Resumed session of UNGA First Committee, New York

**March 21-24:** North Pacific Cooperative Security Dialogue Conference, Vancouver

**April 19-23:** CWC Preparatory Committee, The Hague

**April 19 - May 10:** UNDC, New York

## Acronyms

BTWC — Biological and Toxin Weapons Convention

CCE — Consultative Committee of Experts

CD — Conference on Disarmament

CFE — Conventional Armed Forces in Europe

CIIPS — Canadian Institute for International Peace and Security

C(S)BM — confidence- (and security-) building measure

CSCE — Conference on Security and Cooperation in Europe

CTB(T) — comprehensive test ban (treaty)

CW — chemical weapons

CWC — Chemical Weapons Convention

EAITC — External Affairs and International Trade Canada

ENMOD — (Convention on the) Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques

FSC — Forum for Security Cooperation

GSE — Group of Scientific Experts

IAEA — International Atomic Energy Agency

MTCR — Missile Technology Control Regime

NGO — non-governmental organization

NPCSD — North Pacific Cooperative Security Dialogue

NPT — Treaty on the Non-Proliferation of Nuclear Weapons

OAS — Organization of American States  
ODA — (UN) Office for Disarmament Affairs

OSCC — Open Skies Consultative Commission

SAR — synthetic aperture radar

SSEA — Secretary of State for External Affairs

START — Strategic Arms Reduction Treaty

TLE — treaty-limited equipment

UNDC — UN Disarmament Commission

UNGA — UN General Assembly

UNSCOM — UN Special Commission (on Iraq)

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