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A review of Canada's arms control and disa

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# Gulf War Highlights Need for Better Proliferation Control

## Canada offers proposals for post-hostilities planning

The Persian Gulf War highlighted the global consequences of the virtually unrestrained build-up of arms in a country outside of Europe and North America. Official and public opinion in many countries has been jarred by the revelations of enormous expenditure on arms by Iraq and the resulting costs — and risks — of the war effort. Unfortunately, gross overarmament is not a condition unique to Iraq. Nor is it a condition unique to the Middle East.

The human, economic, military and political costs of the Gulf War are large, but they can perhaps be partially offset if we have the foresight and will to learn the War's lessons. Foremost among these is to recognize the threat posed by the proliferation of weapons of mass destruction and their delivery systems, as well as by massive build-ups of conventional weapons.

There are already several regimes and processes in place — both unilateral and multilateral — to deal with proliferation. These include the Australia Group for control of chemical and biological substances, the 1972 Biological and Toxin Weapons Convention and the



Canadian Forces personnel in the Gulf wearing protective gear against possible chemical weapons attack. Canadian Forces photo

negotiations at the Conference on Disarmament on a chemical weapons convention. They include the Nuclear Non-Proliferation Treaty (NPT) and its associated safeguards, designed to prevent the spread of nuclear weapons. They include the Missile Technology Control Regime (MTCR), which controls the export of

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goods and technologies for ballistic missiles capable of delivering nuclear weapons. They include, as well, the Coordinating Committee for Multilateral Strategic Export Controls (COCOM), which restricts the export of conventional arms.

Most of the existing regimes are neither universal in scope nor rigorous enough in terms of enforcement. All of them can be built upon and improved. Strong regional cooperative security frameworks would reduce the motives for excessive arms acquisition in the Middle East and elsewhere and are

Countries should seize the opportunity provided by Gulf War concerns and the end of the Cold War to address the proliferation problem positively and effectively.

clearly necessary for the long-term, effective control of weapons proliferation. However, it is equally clear that a particular responsibility for controlling arms build-ups rests with the major arms exporters, particularly those leading in the development of weapons technology.

Canada has long been a strong proponent of measures to deal with the proliferation of weapons of mass destruction. We have also called for transparency, restraint and controls on the export of conventional weapons. In Canada's view, the end of the Cold War and the heightened concerns about proliferation as a result of the Gulf War provide a window of opportunity to address proliferation issues positively and effectively. We believe that the international community should seize this opportunity.

Major weapons suppliers in both East and West have already been spurred by events in the Gulf to look at ways of tightening existing restrictions. Canada believes that renewed efforts should be undertaken among these countries — but also reaching beyond them to include other arms exporters — to ensure greater sensitivity to the

problems inherent in the export of weapons and weapons technology, and to encourage transparency and constraint.

In dealing with concerns about the proliferation of weapons of mass destruction, Canada believes that the focus should be placed on global measures that will be as equitable as possible. Efforts to enhance the effectiveness of export controls — a vital component of non-proliferation measures — need to be guided by the principle of non-discrimination. The objective is to control the proliferation of

weapons, not to prevent the use of technology for peaceful purposes.

The success of non-proliferation efforts to date has been limited primarily by the lack of political will and the mixed

objectives of many major players. If real progress is to be made, global political will must be mobilized.

It was with this in mind that Prime Minister Brian Mulroney and Secretary of State for External Affairs Joe Clark proposed on February 8 that there be a World Summit on the Instruments of War and Weapons of Mass Destruction. This would be a gathering of world leaders, under United Nations auspices, to issue a statement of global political will condemning the proliferation of weapons of mass destruction and their delivery systems, as well as massive build-ups of conventional weapons, and endorsing a comprehensive program of action to address these concerns.

Under such a program of action, individual proliferation concerns would be addressed in the multilateral forums set up to deal with them. The following are goals that Canada will be pursuing in its non-proliferation efforts during the coming months, and would hope to see included in a Summit action plan. Since February, the Prime Minister, Mr. Clark and Canadian officials have been consulting with their counterparts in other countries about these goals and the proposed Summit.

#### On chemical weapons

- a solemn commitment by countries to conclude, by the end of 1992, the negotiation of a global and comprehensive chemical weapons convention at the Conference on Disarmament in Geneva; and
- the expansion of the Australia Group's membership and the enhanced enforcement of national controls on the export of chemicals that could be used in the production of chemical weapons.

### On biological weapons

a strengthened Biological and Toxin Weapons Convention through (1) further development of its confidence-building and conflict resolution provisions at the Review Conference in September and (2) agreement of signatories to convene a specially mandated conference in 1993 to negotiate verification provisions for the Convention.

### On nuclear weapons

- an early commitment by NPT signatories to the NPT's indefinite extension at the Fifth NPT Review Conference in 1995;
- a reaffirmation by nuclear-weapon states of their commitment to pursue further nuclear disarmament measures pursuant to the NPT's Article VI; and
- the strengthening of effective multilateral controls on dual-use nuclear goods.

### On missile systems

- the achievement of a global consensus on the need to end the proliferation of missile systems capable of delivering weapons of mass destruction;
- the expansion of membership in the MTCR to include the USSR and other potential participants; and
- the revision of MTCR parameters to capture missiles with smaller payloads and longer ranges, and to more clearly promote the legitimate exchange of missile technology for peaceful, space-related purposes.

#### On conventional arms

- the convening of a meeting of the major arms exporters to encourage a formal commitment to ensure greater sensitivity in the export of conventional arms. This could include greater transparency and agreement to consult about situations where unusual build-ups seem to be developing;
- early action on an arms transfer information-exchange system, including serious examination by all countries of the recommendations of the UN Experts Group now studying arms transfer transparency (to be submitted for consideration at this fall's General Assembly); and
- a politically-binding commitment by the 22 signatories of the Treaty on Conventional Armed Forces in Europe (CFE) to ensure that arms affected by that accord are not exported to regions of tension or conflict. While the Treaty obligates signatories to destroy or irreversibly convert to civilian use any equipment reduced under its terms, we are concerned about equipment in Europe not directly limited by the Treaty, equipment outside the Treaty's zone of application, equipment disposed of before the Treaty enters into force, and equipment below the Treaty-allowed level but above what a country wishes to keep.

In addition to the global measures listed above, it is clear that regionally-based measures will have to be pursued. Proliferation will be inevitable as long as the underlying factors that motivate weapons acquisition remain in play. To be effective, efforts towards proliferation control will have to proceed in tandem with efforts to arrive at solutions to regional conflicts, including — most probably — regional arms control agreements.

The choice to opt for security at lower levels of armament is a complex one. Canada is actively encouraging suppliers and recipients to take the steps necessary to halt the spread of weapons of mass destruction, to curtail the excessive acquisition of conventional arms, and to promote the construction of a durable peace in the Middle East and elsewhere.

# Canada and the Challenges of the Post-War Period in the Gulf

The following are excerpts from a speech delivered by the Right Honourable Joe Clark, Secretary of State for External Affairs, at a luncheon hosted by the Canadian Institute of International Affairs in Quebec City on February 8.

The forceful occupation of the territory of a United Nations member is unacceptable and violates the basic principles of the international order. Faced with the invasion of Kuwait, the international community had certain options, one of which was inaction and passivity. This would have been an unpardonable abdication, the acceptance of the outmoded notion of the power of the strong over the weak. An immediate, unilateral counter-strike by a limited number of countries would have amounted to a small group of countries appropriating the role of world policeman. These options were both unacceptable and would both have had disastrous consequences for the future of world relations.

With wisdom but not without some reticence, the community of states resolved to resort wholly to the United Nations to face this threat to its collective security. This was a great victory for the UN system and for countries like Canada, which have based their diplomacy on the construction of a credible, effective multilateral system. Rarely have such unanimity and such determination been shown within the Security Council, and with the support of the vast majority of UN members. Let us not forget that countries as disparate as Pakistan and Argentina, Senegal and Bulgaria, Australia and Spain have played an active part in the 29-country coalition established to apply the sanctions.

The diplomatic community has never, in the modern era, seen such a feverish and intense period as that between last August and mid-January. Every available means was sought to obtain the withdrawal of Iraq from Kuwait. The disappointing and painful recourse to force is the result of our having reached the limits of diplomacy—not the absence of efforts to apply it. The blame for this failure can be placed squarely on the shoulders of the Iraqi President.

Why, you might ask, were the sanctions not prolonged? The answer is simple: we tried, but we had to face facts — sanctions could not succeed where diplomacy had



Soldiers such as Canadian Forces Corporal Susan Lefebvre, shown here downloading an AIM-7 air-to-air missile from a CF-18 in Qatar, are entitled to expect politicians to do everything possible to prevent us from finding ourselves in such straits in the future.

Canadian Forces photo by Sgt. Ed Dixon

failed. For the entire period during which they were in force, he was also pillaging Kuwait, building up huge reserves for his forces and compelling the Kuwaiti population to take flight. Within a short time, the Coalition would have liberated nothing but a desert and a few inhabitants in total subjection to Saddam Hussein. No, the United Nations had no choice, under the Charter, but to use force in the interest of justice and thus begin an operation to restore peace and international security...

The soldiers who are courageously discharging their mission are entitled to expect the politicians to do everything possible to prevent us from finding ourselves in such straits in the future. They are perfectly justified in this.

### The building of peace

Paradoxical as it may seem, this war expresses the firm desire of the international community to build a better world founded on justice and the peaceful resolution of conflicts. This determination must go far beyond the restoration of Kuwaiti sovereignty. We have waited too long for this kind of attitude, this demonstration of responsibility on the part of the United Nations, not to feel collegially committed to ensuring that this new spirit also manifests itself in the search for long-term solutions to the inextricable problems of the Middle East.

Canada is playing an active part in this undertaking. I would like to share with you today my thoughts on the matter, along with certain initiatives that the Prime Minister is announcing today in Ottawa and that Canada intends to pursue in the months ahead.

To begin with, we must, above all, be realistic. For Canada at this stage to claim to have the answers to the problems of the Middle East would be presumptuous. Why? Simply because it is first and foremost the business of the countries in the region to together find solutions to the current situation. No lasting solution can be imposed from without. A commitment on the part of the countries immediately involved is essential to stability and security in this region.

This having been said, the task is a considerable one and will also require the cooperation of countries beyond the Middle East. In fact, many of the causes of instability in this region, such as the central problem of the proliferation of arms, call for solutions that would involve the whole international community. We will also have to count on the mobilization of international resources, notably those of the UN, to respond to the humanitarian and security problems that have been aggravated by Saddam Hussein's adventurism...

# Immediate post-war issues

[T]hree pressing questions will arise once the objectives of the Security Council resolutions have been achieved and the ceasefire has been established:

- humanitarian assistance will have to be provided to the civilian populations and to displaced persons;
- a peacekeeping force will have to be established; and
- the damage caused to the environment by the huge oil slicks in the Gulf will have to be repaired.

#### Humanitarian assistance

We must continue the magnificent coordination and cooperation effort that the various international organizations have begun... Canada has made a substantial contribution to these efforts, by channelling about \$16 million to humanitarian needs of the total \$77.5 million we have committed for economic assistance. We intend to continue our commitment without any a priori exclusivity. It will be necessary, no doubt, to help the Iraqi people and to respond to the needs of countries such as Turkey, Jordan and Egypt. However, we will have to mobilize the resources of the entire international community, especially countries that have shown considerable surplus oil revenues and those whose military commitment within the Coalition has been limited.

### A peacekeeping force

Moreover, the borders of Kuwait must initially be guaranteed by a peacekeeping force, ideally under the authority of the United Nations. Canada feels that this force must consist mainly of troops from the countries of the region. Their expertise, however, is limited. That is why Canada, which has a well-established reputation in this field, has offered its services to the Secretary-General of the United Nations and to the countries of the region to establish a training program. In addition, we are prepared to participate both in the establishment of such a peacekeeping force and in the planning operations that its deployment requires. We are also prepared to cooperate with the United Nations in calling a meeting of experts in Canada with the responsibility of analyzing needs and identifying the various alternatives that are worth exploring...

#### Restoration of the environment

[W]e must collectively tackle the clean-up of the damage caused by the insane dumping of unprecedented quantities of crude oil into the Gulf. A team of Canadian specialists is already on site and is busy planning this operation together with colleagues from many countries. But we must also look further ahead and examine how to strengthen present conventions on the use of the environment for military purposes. It may be necessary to negotiate a new instrument. We have already taken the initiative of contacting certain countries to pursue this project further. At the same time, we will examine the possibility of reinforcing the international mechanisms currently provided to respond to such emergencies.

# Medium-range challenges

But these immediate post-war problems seem almost trivial compared to the challenges of establishing lasting peace and security in this region...

### A global approach to security

While a peacekeeping force is a factor in maintaining equilibrium, it cannot in and of itself claim to fully guarantee the security of the Gulf states. Regional arrangements must thus be complemented by international guarantees

which could take the form of international accords committing some of the countries in the Coalition under the authority of the UN. Such multilateral arrangements would, no doubt, be more acceptable to the people of the region. In the same spirit, Canada feels that it would be preferable for these guarantees not to include the permanent deployment of foreign forces in the Gulf.

On a longer-range basis, however, these countries must work to establish mechanisms and structures that will enable them to resolve their disputes peacefully and contribute to greater trust among them. While the experience of the Conference on Security and Cooperation in Europe cannot be transferred to this region as is, some of its lessons may offer promising avenues.

Several European countries are engaged in actively exploring this concept. After the War ends, they may propose the creation of a Conference on Security and Cooperation in the Mediterranean, which would also include the Persian Gulf region for this purpose. This is an ambitious project and Canada is carefully monitoring its development.

In the same spirit, when visited recently by my colleague Dr. Meguid, the Egyptian Minister of Foreign Affairs, we agreed on the importance of beginning immediately a study of postwar security structures. This would include a consideration of possible mechanisms to incorporate into a regional security structure. Border guarantees, a peaceful mechanism for the resolution of disputes and the establishment of confidence-building measures would form the bases for this structure. Such a mechanism would also allow the discussion of non-military matters, as in the case of the CSCE's second and third baskets.

Such a global approach to security matters, based on the establishment of genuine dialogue among the various regional partners, would allow such issues as the development of democratic institutions in the region to be addressed. But if they are to have any chance at all of succeeding, efforts to achieve greater regional security and stability must courageously address the

very roots of the problems that exist in the Middle East. These root causes are well known.

#### The Israeli-Arab conflict

The thorniest issue involves relations between Israel and the Arab countries. After decades of conflict, the build-up of hatred and misunderstanding has been enormous.

No regional security plan can expect to succeed unless it is firmly determined to make progress towards a comprehensive, lasting, negotiated settlement of the Israeli-Arab conflict, including the Palestinian question. Such a negotiated settlement must be founded on Resolutions 242 and 338 of the Security Council. In this regard, even before the Gulf War, Canada let it be known that it favoured holding an international conference. While we should not exclude other options, a well-organized conference with reasonable chances of success could indeed be useful and contribute to the peace process.

### Economic disparities

When faced with numerous conflicts, especially those involving less-developed countries, Canada has always emphasized social and economic imperatives. This need is even more urgent in the Middle East. Reconstruction is doomed to fail if it ignores social and human dimensions and does not address economic disparities.

The region requires a new framework, which must be defined by the nationals and the states that make up the region and the people who live in them. There can be no peace without prosperity and no stability without justice either within states or between states. Democracy also promotes justice, prosperity and peace. Long-term security cannot be built solely on military structures and political agreements. Long-term security, in the Middle East as elsewhere, can rest only on genuine cooperation between states, a guarantee of dialogue and confidence...

Our role is to encourage the countries of this region to strive towards such an objective. For instance, after the hostilities have ceased, the Gulf states and indeed the entire Middle East

might consider creating an organization for the purpose of economic cooperation. Such an organization, which might be affiliated with the United Nations and maintain contact with the major international economic and financial institutions, would help to ensure greater economic stability in the region.

### Lessons of the crisis

Finally, we must begin now to learn the important lessons of this conflict. We bear a considerable burden of responsibility. Over the years, to varying degrees, we have all helped to create a military apparatus in this region, especially in Iraq, that is beyond human comprehension. Military assistance in the region has exceeded economic assistance. This must stop. The governments most concerned are already making an effort in this regard.

To be credible, any peace plan must include strict measures to check the proliferation of weapons of mass destruction and the stockpiling of conventional weapons in the region. Multilateral negotiations have already begun regarding these crucial issues, such as the proliferation of nuclear, chemical and biological weapons, and missilelaunching techniques. So far, however, their success has been limited owing to the lack of political will or the conflicting interests of the various parties involved. It is urgent that we make further efforts to display a strong political will.

In this belief, Canada plans to promote a World Summit on Instruments of War and Weapons of Mass Destruction in the coming months. This summit would become a showcase for a new political consultation. It would aim to develop a strict plan of action that would result in the adoption by 1995 of an integrating framework for systems ensuring the non-proliferation and control of weapons, including conventional weapons...

If this war is to have any meaning, it must serve to build peace. It is on our ability to build this peace that we will be judged. We are aware of this, and Canada does not intend to spare any effort to meet this extraordinary challenge.

# Clark: We Have an Obligation to End the Mid-East Arms Race

The following are excerpts from a speech delivered by Secretary of State for External Affairs Joe Clark at a luncheon hosted by the Calgary Chamber of Commerce on March 1.

Opportunity seldom arises without risk. And just as [the Gulf] War gives rise to a new opportunity — and obligation — to build an order based on law, so too it gives rise to risks we must confront with candour and conviction.

Those risks are real. There is the risk arising from deep popular resentment in the Arab world to yet another perceived intrusion by outsiders in their region. There is the risk of tension between the Arab states themselves, some of whom are with the Coalition, others of whom are not. There is the risk of continued enmity between Israel and her neighbours... There is the risk that security will be sought in...solutions that will not work in the future any more than they have in the past — the solutions of rearmament, of the endless pursuit of an always elusive balance of power. There is the risk that the United Nations will not be shored up, but will be shunned, treated as a cloak of convenience, a figleaf for national preference disguised as global principle.

We must act now to reduce those risks. That task will not be easy. Many of these problems exist not because of neglect but because of genuine difficulty. The solutions will be gradual. Many will be long-term. But we must start on that road now or history will judge our accomplishments in the Gulf as minimal—another opportunity missed, another challenge in which we failed.

Let me start with the principles of peace. I believe four apply.

First, peace will only be built if it involves the nations of the region itself...

Second, peace must be just and fair. The United Nations and international law have provided for recourse to compensation for aggression. But victory must not become a vendetta.

Third, a durable peace will require addressing the full spectrum of problems that plague that region. That

means dealing with other conflicts — including the Arab-Israeli conflict. That means addressing the symptoms of conflict — the proliferation of weapons of mass destruction, the arms trade, the constant chase for spheres of influence. And that means addressing underlying causes of conflict — the uneven distribution of wealth between and within societies, the lack of economic cooperation between countries and the fragility of political systems that need greater popular participation.

Fourth, and finally, peace requires the UN. After August 2nd, the world came to the UN to reverse aggression peacefully. After January 15th, when the search for peace had failed, the members of the UN resolved to reverse aggression through force. And now that victory is at hand, the members of the UN must use that organization to build a peace that works.

On February 12th, the Prime Minister put forward elements of a package of proposals which we believe begin to convert these principles to practice. We are exploring those actively — with the United Nations, with our Coalition partners, and with others inside and outside the region. I will not repeat them here. But I do wish to focus and expand on one of them: the obligation to end the arms race.

For 45 years the search for security in the Middle East has been pursued largely through the avenue of arms. That search has failed. It has been folly. Despite billions and billions of dollars spent on arms — what have we seen? We have seen five wars between Israel and her neighbours. We have seen Lebanon reduced to rubble.

And we have this war, a war in which 75 percent of the arms in the arsenal of Saddam Hussein came from the five permanent members of the UN Security Council, who are mandated to uphold international peace and security; a war in which dozens of companies in the West helped give Saddam the capacity for chemical warfare; a war in which the costs to the Coalition of this conflict far exceed any profits that have gone into

Swiss bank accounts or national treasuries; a war in which our soldiers are shot at by guns that Coalition governments sold to Iraq.

Twenty-eight nations supplied both Iran and Iraq during their eight-year war. Between 1984 and 1988, the dollar value of major weapons exports to Iraq was higher than to any other country in the developing or developed world. During that same period, Middle Eastern countries occupied five of the top six spots as destinations for arms. The Middle East—much of it underdeveloped—has spent a larger portion of its gross national product on arms than any other region in the world.

And there is a worrying parallel phenomenon — the growth of new suppliers in the developing world, many of whom put few restrictions on their arms exports. Between 1984 and 1988, 99 percent of Syria's arms exports went to countries at war. Eighty-six percent of Egypt's exports and 40 percent of Brazil's also went to states in conflict.

This is all insane. It must end. If it does not — if the world continues to treat this region as an auction block and not a tinder box, we will have failed. The UN has imposed an arms embargo against Iraq. When this war is over, the UN must become engaged in a serious effort to control the sale of arms, not only to Iraq, but to that region and others. The difficulties here are enormous:

- 1. Every country is entitled to defend itself. But when does prudent defence become destabilizing offence? How much is enough?
- 2. Although arms can contribute to conflict, arms are also a symptom of conflict. Countries have real security problems to address. How can arms be reduced when unresolved conflicts persist?
- 3. Although Canada's economy depends comparatively little on arms exports, the economies of others are heavily dependent. How can they be convinced to accept more effective control and restraint?

- 4. Restrictions to the arms trade must not be seen as a discriminatory strategy perpetrated by the North against the countries in the South. We must all build down.
- 5. When is a weapon defensive or offensive? What makes a weapon stabilizing or destabilizing? Who decides? Who interprets?
- 6. The distinction between military and non-military goods is becoming increasingly blurred. Often they are indistinguishable. Chemicals used in plastics and fertilizers can be chemicals used in weapons. How can restraint in the arms trade be secured without also restricting trade generally?

Those difficulties demand prudence and caution. But they do not remove the requirement to act. In order to give political energy to negotiations now underway and to launch new initiatives where needed, the Prime Minister has proposed a World Summit on the Instruments of War and Weapons of Mass Destruction to be held under UN auspices... We will pursue this with

vigour in the weeks and months ahead. We will also be looking at ways to prevent the use of environmental spoilage as a weapon of war as practiced by Saddam Hussein in his deliberate pollution of the Gulf.

As part of our initiative to address the arms control problems thrown into relief by the Gulf War, I am announcing today that Canada will take the following additional

First, we will propose that the countries who are signatory to the Conventional Forces Agreement in Europe undertake not to export arms affected by that agreement to countries outside Europe. The residue from the Cold War in Europe should not become the raw material for wars elsewhere.

Second, Canada will move immediately to increase the number of precursors for chemical weapons on our Export Control List from 14 to 50, in order to restrict the possibility of Canada

being used as a source or conduit for components of chemical arms.

And lastly, I am releasing today, for the first time ever, a *Report on the Export of Military Goods from Canada...* That report is intended to demonstrate Canada's strong commitment to greater transparency in the arms trade, a

# Difficulties in controlling the arms trade do not remove the requirement to act.

transparency that is needed so the world knows what the traffic in arms is.

These initiatives will not, in and of themselves, address the arms trade challenge. Canada's share of the world arms trade is minuscule. Action — concerted action — is required by others, especially those whose policies and practices are less restrictive than our own. But they contribute — and I believe they indicate our firm commitment to moving from hope to action...

# Canada Releases Annual Report on Military Exports

steps.

Following up on a commitment made by Secretary of State for External Affairs Joe Clark in his address to the UN General Assembly on September 26, 1990, Canada released in March its first Annual Report on the Export of Military Goods from Canada.

The report lists in tabular form the dollar value of Canadian military exports according to country of destination and Export Control List (ECL) item number. A summary table showing the breakdown of exports to "NATO (except USA)," "Other OECD" and "Others" is also included.

Canada closely controls the export of military goods and technology to countries that pose a threat to Canada or its allies, countries involved in or under imminent threat of hostilities, countries under UN Security Council sanctions, and countries with a persistent record of serious human rights violations, unless it can be demonstrated that

there is no reasonable risk that the goods might be used against the civilian population.

Military goods are defined in Group 2 (Munitions) of Canada's ECL as goods "specifically designed or adapted for military use." The goods controlled on the ECL are similar to those on the International Munitions List used by the Coordinating Committee for Multilateral Strategic Export Controls (COCOM).

The report was tabled in Parliament on March 6 by Mr. Clark and presented to the UN Secretary-General by Ambassador Yves Fortier. It will be circulated as an official document to all UN member states under UNGA 46 item 60(b) — General and Complete Disarmament, International Arms Transfers.

Canada's intention in releasing the report is to promote greater transparency in international conventional arms transfers by making reliable information about arms exports widely available. As Mr. Clark told the General Assembly in September, "Canada believes that it is important to make arms transfers and procurement as transparent as is prudent and practical. Transparency builds confidence and is a recognition of the obligation we all have to the common interest." Canada hopes that as a result of its initiative, other countries will soon issue similar reports.

Canada is represented on the UN Group of Governmental Experts currently carrying out a study of ways and means of promoting transparency in international arms transfers. We look forward to examining the Group's report, which will be submitted to the General Assembly in the fall of 1991.

Copies of Canada's first *Annual Report* can be obtained free of charge by writing to the Export Controls Division, EAITC, 125 Sussex Drive, Ottawa, Ontario, K1A 0G2.

# Canada Increases Chemical Controls

Although the 1925 Geneva Protocol prohibits the use in war of chemical and biological weapons, it does not prohibit their production and stockpiling. This gap has been partially filled by the 1972 Biological and Toxin Weapons Convention, which completely bans biological and toxin weapons. In addition, negotiations have been underway since 1984 at the Conference on Disarmament to achieve a comprehensive ban on chemical weapons (CW). Canada plays an active role in these negotiations and, although certain problems remain, we are optimistic that the desired result is achievable in the not-too-distant future.

During the last few years, however, Canada and others have had to address the problem of what can be done immediately to stop the proliferation of CW in view of an increased interest on the part of some countries - most notably Iraq — to acquire them. There have been few means at our disposal to ensure that chemicals having legitimate and widespread commercial applications would not be diverted to the production of CW. Nevertheless, there has been growing international support for the view that the available means be exploited and improved as much as possible to present additional obstacles to proliferation.

Since 1985 Canada has participated in the 20-member, informal "Australia Group," in which countries examine ways to harmonize their national policies in addressing their common concern about CW proliferation. As a result, Canada controls the export of 14 chemical precursors under Item 5301 of the Export Control List. At the last meeting of the Australia Group, the majority of participants — including Canada — agreed that all 50 identified CW precursors should be under strict export controls. Canada has drafted the necessary regulations and expects to have controls covering the additional chemicals in place by May 1991.

Most of the 50 identified chemical weapon precursors are not manufactured in Canada. There will thus be minimal direct impact on Canadian trade as a result of these added control measures. From a Canadian perspective, the primary reason for maintaining controls over all identified chemicals is to ensure that such chemicals produced elsewhere are not exported from a country of manufacture through Canada to a third country.

For further information, contact the Export Controls Division of EAITC at 613-996-2387 and request the pamphlet entitled "Chemical Weapons: Be Vigilant."

# Quo Vadis Open Skies?

The changes that have occurred in Europe since the Open Skies negotiations began in February 1990 have made the successful conclusion of a treaty more relevant than ever. As was recognized in the communiqué of the 22 leaders who signed the CFE Treaty in November 1990, Open Skies has an important role to play in reducing misunderstanding and mistrust in the new, multipolar Europe.

Unfortunately, differences over the Soviet interpretation of the CFE Treaty (see "CFE Update") have made progress on arms control difficult in recent months. Nonetheless, the NATO

allies continue to discuss outstanding issues of the Open Skies negotiations during regular, high-level consultations in Brussels. Their goal is to identify possible compromises that might be tabled once the negotiations resume in earnest. At the same time, it is recognized that the Soviet position will have to undergo fundamental changes before a truly "open" Open Skies regime can be achieved.

Canada remains committed to achieving an Open Skies treaty, which would provide for regular, short-notice overflights of participants' territory using unarmed surveillance aircraft.

# Conference Looks at Strengthening the BTWC

A conference held from February 6 to 8 in Noordwijk, the Netherlands, brought together officials, defence scientists, disarmament experts and academics to explore ways and means of strengthening the 1972 Biological and Toxin Weapons Convention (BTWC). The conference host the Government of the Netherlands sought a free-ranging discussion of ideas for improving the confidence-building measures that are presently politicallybinding on parties to the BTWC. In addition, it encouraged participants to consider further confidence-building measures that might be adopted at the Third Review Conference of the BTWC, to be held in Geneva from September 9 to 27. Legally-binding verification measures, which the BTWC lacks, were also discussed.

The conference was, in the best sense of the word, a "brainstorming" session, in which participants put aside official positions to remain receptive to new ideas that might provide the basis for further policy development in the run-up to the Review Conference. The unstated assumption of all present was that opportunity exists to strengthen the BTWC from within — that is, not through the potentially divisive procedure of treaty amendment but through expanding existing provisions or adding, through agreed protocols or politically-binding declarations, further commitments to transparency and confidence-building.

Canadian participation at the conference was led by Ambassador for Disarmament Peggy Mason. The following are excerpts from the informal Canadian discussion paper presented there, which does not necessarily represent the official Canadian position.

The objective of confidence-building in the context of the BTWC is to dispel doubts about the aims of research for permitted purposes on biological and toxin warfare agents and to ensure that such warfare agents are not being developed for offensive purposes...

While openness is the surest means to begin the process of confidence-building regarding military-related activities, the straightforward exchange of information may not in itself be sufficient. We will have to accept that some form of onsite inspection is required to bolster such exchanges by providing the initial means of establishing the accuracy of such information and helping to clear up any potential ambiguities resulting from different interpretations of the same data. This means that we may have to consider much more intrusive and, in some cases, "challenging" instruments and procedures of arms control and disarmament verification...

Similarly, we require further thought on developing a regime that is not simply a forum in which one lodges complaints about alleged non-compliance, but one in which we can go further to take concrete steps in actually resolving doubts about compliance...

We need to recognize that extending the scope of current CBMs and future verification measures to embrace research activities at all centres at which there are Biological Safety Level BL4 and BL3 containment units may not in fact capture all those centres at which work is being done on the micro-organisms of concern for the Convention... [H]ighly lethal work on toxins is being done mainly in chemical, and not such "specialized" microbiological contain-

ment laboratories. Even those research centres specializing in protection and prophylaxis do not always have the bulk of their work directed against biological weapons per se. Perhaps we might consider declarations that list *all* facilities considered to be at the BL4 or BL3 containment levels, since not all countries subscribe entirely to World Health Organization guidelines.

It may be the case that on-site inspection would have to be complemented by the exchange of scientists or permanently-placed foreign scientists at declared facilities... Also, in the area of information exchange, there could be a declaration of listings of bacterial and viral cultures and toxin stocks held in declared facilities. In addition, one could ensure that there is a full exchange of publications, including in-house ones, between declared laboratories. States should provide details of national BW defence programs. Further, there could be, as some have suggested, an exchange of information on national regulations concerning health and safety at labs and facilities handling pathogenic organisms, genetically-manipulated organisms, or toxins...

We may be reaching that stage in the maturation of the BTWC...where we should consider concrete measures to improve adherence and support. There could be incentives to join and disincentives to remain apart. This would involve

considering what concrete measures might be undertaken to improve scientific and technical cooperation between and among states parties for peaceful purposes. The flip side of this is that export controls on BW-relevant technologies may have to be considered in introducing a greater inducement for adherence to the Convention.

More controversially, one might look at whether thresholds or limitations could be imposed (and effectively verified) to give quantitative boundaries to activities involving development and production of agents or equipment for prophylactic or protective purposes....

Clearly there is room for carrying out national trial inspections, much along the lines of those that have been carried out in the context of the CW negotiations. What might be particularly promising in monitoring declared facilities is the use of "audit trails" similar to those used in the pharmaceutical and other industries. This could prove to be a less intrusive, but nevertheless effective, means of confirming that only permitted activities were occurring at the inspected facility...

Over the next few days we will undoubtedly hear a variety of proposals for strengthening the confidence-building aspects of the BTWC. Some will argue that the only way to really strengthen confidence is to negotiate a detailed, intrusive and tough verification



Participants at the Netherlands conference on the BTWC. Canadian representatives Ms Mary Ellen Kennedy (Health and Welfare Canada), Mr. John Barrett (EAITC) and Ambassador Peggy Mason are seated on the table, first through third from the left.

# MTCR Partners Meet in Tokyo

From March 18 to 20, Canada participated in a meeting of the Missile Technology Control Regime (MTCR) partners, held in Tokyo. The regime, which aims to limit the transfer of missile equipment and technology, was established in 1987 to address concerns over the proliferation of missile systems capable of delivering nuclear weapons.

Recent events in the Persian Gulf have emphasized the need for mechanisms such as the MTCR, and the Tokyo meeting provided an ideal opportunity to review the effectiveness of the regime. Canada recommended that the meeting focus on two points: reviewing the Equipment and Technology Annex with a view to expanding its scope and making it more stringent; and determining which additional countries might be encouraged to adhere to the export guidelines.

The Equipment and Technology Annex presently addresses those items that could assist in the delivery of nuclear weapons. Canada believes that the Annex might usefully be amended to account for the differing parameters (distance and payload) necessary for the delivery of chemical and biological weapons.

The MTCR began with seven participants: Canada, France, the Federal Republic of Germany, Italy, Japan, the UK and the US. Since 1987, nine additional countries have announced their adherence to the regime's guidelines: Australia, Belgium, Denmark, Luxembourg, the Netherlands, Norway, New Zealand, Spain and — most recently — Austria. The current partners will continue their efforts to increase the number of participants and to investigate ways in which to involve less-developed countries.

MTCR partners considered the Tokyo meeting a success. They reaffirmed their commitment to strengthening and expanding the regime to better address the problem of missile proliferation. The partners are expected to meet next in Washington this fall.

The MTCR remains an integral part of Canada's network of non-proliferation mechanisms and Canada is committed to active participation in the workings of this group.

protocol for the BTWC, and that the goal of the Third Review Conference should be to gain the mandate to begin the negotiation of such a protocol. Perhaps making the existing confidence-building process politically-binding would be desirable. We shall listen to all these arguments with an open, and in some cases, sympathetic ear. We shall also want to see where the experience gained in the negotiation of the chemical weapons convention might usefully be applied to our deliberations over the next days on strengthening the Biological and Toxin Weapons Convention.

However, we should not neglect the smaller, perhaps less dramatic, measures that can be taken in the near term to continue setting out and improving the basic foundation of confidence—namely, greater transparency through information exchange... Requir-

ing all parties to give explicit annual notices, even if there is nothing to declare, would be such a small, but useful step. Perhaps there are simple ways we can suggest for removing potential ambiguities from the information already provided in declarations.

Nevertheless, in the pursuit of additional information to support and enhance the objectives of the Biological and Toxin Weapons Convention, we should not, as some of our British colleagues have mentioned elsewhere, become "swamped in a sea of marginal and irrelevant material." In considering new confidence-building measures, we should remain focused on activities that are "directly related" to the objectives of the Convention — i.e., those associated with legitimate defensive research on biological agents and weapons.

# **CFE Update**

# Follow-on stalled over Soviet interpretation

When the Treaty on Conventional Armed Forces in Europe (CFE) was signed on November 19, 1990, it was anticipated that by early 1991 representatives would have diligently resumed their task of negotiating followon improvements to the European conventional armed forces regime in accordance with Article XVIII. Instead, forward movement is stalled as 21 signatories question the actions of the USSR, which has adopted an unexpected interpretation of the Treaty text, specifically Article III, the so-called "counting rules" article.

One of the most important outcomes of the Treaty is the establishment of national limits, which signatories agreed to place on the battle tanks, armoured combat vehicles, artillery, combat aircraft and attack helicopters they will maintain within the Treaty's zone of application, namely the Atlantic to the Urals region. Article III is key to identifying the equipment that is subject to the Treaty's limits. It clearly states that all Treaty-limited equipment (TLE) must be counted, except for those pieces falling within the seven areas of exclusion (e.g., museum collections, short-term transit, in production, etc.).

Despite the clear meaning of Article III, the USSR claims that CFE limitations and counting rules do not apply to TLE held by the ground defence forces it subordinates to the Navy and to the Strategic Rocket Forces. This is equivalent to demanding that the USSR be permitted to hold more than 5,400 pieces of equipment in excess of the allocations negotiated with the other Treaty signatories. Canada and the other signatories cannot accept this post-signature demand and are requesting the USSR to adhere to its Treaty undertakings. As proof of the foresight that negotiators had in concluding the CFE Treaty, the Joint Consultative Group is already serving as a forum in which states can make their positions on this problem known to the USSR.

# Symposium Examines European Verification Issues

The CFE Treaty, signed in Paris on November 19, 1990, constitutes the most significant multilateral arms control and disarmament agreement to date. This Treaty and the Vienna Document on confidence- and security-building measures, signed at the same time, provide the foundation for a radically-changed European security framework.

As Treaty provisions are implemented, with all the definitional and procedural problems likely to arise, followon negotiations will continue in Vienna

(a) The Confidence- and Security-Building Measures (CSBM) negotiations: all 34 CSCE participating states have agreed to continue negotiations in accordance with the mandate of the Madrid and Vienna CSCE follow-up meetings with the objective of building on and expanding the results already achieved in the Stockholm and Vienna Documents.

(b) The Open Skies negotiations: a solid basis for an Open Skies agreement has been developed by the work ac-

complished at the Ottawa and Budapest Conferences in 1990. The signing of the CFE Treaty has simplified the negotiating landscape and increased the attrac-

tiveness of an Open Skies agreement. Nevertheless, the two regimes are qualitatively different. Open Skies is and must remain a confidence-building measure while aerial inspection should be geared to detecting and identifying armaments in the context of the CFE Treaty. There is a good deal of overlap, however, and any attempt to elaborate the two regimes (CFE aerial inspection and Open Skies) should strive to avoid duplication.

With these developments in mind, York University's Centre for International and Strategic Studies was invited to host the Eighth Annual Ottawa Verification Symposium from March 6 to 10 as part of EAITC's Verification Research Program. Entitled "Towards Helsinki 1992: Arms Control in Europe and the Verification Process," the Symposium focused on the conventional arms control process at the outset of the resumption of the CFE IA, CSBM and Open Skies negotiations, in a manner that permitted the participants to draw upon existing experience to identify areas of commonality (to facilitate agreement) and areas to be considered (particularly in the negotiating process). The Symposium brought together 44 government, industry and academic experts from six countries including the USSR, as well as from two international organizations. The proceedings should be available from the Centre for International and Strategic Studies this summer.

# CFE follow-on talks, CSBM negotiations and Open Skies negotiations provide the focus for verification leading to the 1992 CSCE Helsinki follow-up meeting.

with the same mandate and with the goal of building on the CFE Treaty. The 22 state parties will seek to conclude this second round of negotiations no later than the follow-up meeting of the Conference on Security and Cooperation in Europe (CSCE) scheduled for Helsinki in March 1992.

While the objectives for the follow-on — or CFE IA — negotiations include agreement on additional (unspecified) measures aimed at strengthening security and stability in Europe, the CFE Treaty itself identifies areas for further negotiation relating to:

- personnel strength (Article XVIII) —
  developing measures to limit the personnel strength of armed forces
  within the area of application; and
- aerial inspection (Article XIV) —
   achieving a regime that will provide
   procedures for conducting an agreed
   number of aerial inspections within
   the area of application.

Two other negotiations will have an effect on the CFE arms control agreement(s) and requisite verification process as the CSCE follow-up meeting approaches:

# NATO Information Director Visits Ottawa

NATO's Director of Information and Press. Dr. Erika Bruce, a Canadian, visited Ottawa on February 5 to promote NATO Information Program activities. In her meetings with EAITC and National Defence officials, Dr. Bruce carried a strong message of encouragement for Canadians to take advantage of the many opportunities offered under NATO's Information Program to learn more about the Atlantic alliance and its evolving role in the new Europe. Activities such as the Visits, Speakers and Fellowships Programs have been particularly effective in promoting public interest in NATO and security issues both in North America and Europe.

Dr. Bruce also shared her enthusiasm for NATO activities designed to enhance cooperation and friendship with the newly-emerging democracies of Central and Eastern Europe and the USSR. Information Program initiatives such as the Democratic Institutions Fellowship Program and the April 1991 Prague Seminar on the Future of European Security have been immensely successful in achieving this goal. Dr. Bruce expressed optimism that Canada would continue to play a leading role in promoting NATO outreach to its former Warsaw Treaty adversaries.

For further information about NATO Information Program activities, contact the Defence Relations Division, EAITC, 125 Sussex Drive, Ottawa, Ontario, K1A 0G2.

# Canada-Netherlands Trial CFE Inspection: Exercise UMBRELLA HANDLE

From January 29 to February 1, a Canadian inspection team conducted a trial inspection of military facilities in the Netherlands under the provisions of the Inspection Protocol of the Treaty on Conventional Armed Forces in Europe (CFE). Dubbed UMBRELLA HANDLE, the inspection was the second of two trials conducted jointly by Canada and the Netherlands to develop inspecting and hosting procedures and to train personnel. The first, ACID BREW, a trial chemical weapons inspection of the Canadian Forces base in Lahr, Germany, took place in November 1990.

To derive maximum training benefit and to test the Treaty for areas of ambiguity or potential difficulty, both nations agreed in advance to follow the Inspection Protocol closely, including adhering to in-country and inspection-site time constraints. The nine-person Canadian team was headed by L.Col. Charles Oliviero, Senior Arms Control Staff Officer at Canadian Forces Europe head-quarters. The team members — all of whom were graduates of the Canadian Forces On-Site Inspector Course described in the Winter 1990/91 *Disarmament Bulletin* — were drawn from National Defence headquarters, EAITC and the Lahr arms control staff. Three Ottawa-based observers evaluated the Canadian team's preparations and inspection technique from a national perspective. The Netherlands escort team was comprised of 14 army and air force officers led by L.Col. Jos de Waart. The inspection group was joined by military observers from the nine Western European Union nations.

The inspection involved the confirmation of Treaty-limited equipment (TLE) holdings at two sites selected by the inspectors: an air force base and an army casern with training area. Each of these environments provided unique challenges. For example, the air base visit involved the sequential inspection of two fighter aircraft squadrons, with the second unit being examined at night. The army unit inspection included a helicopter flight to verify equipment deployed in the large training area. The inspection concluded with an extensive debriefing involving the two teams, observers and national representatives. The participants concluded that, in general, the Inspection Protocol provides a suitable framework for on-site inspections. Both Canada and the Netherlands expressed full satisfaction with the inspection.



Inspection of self-propelled artillery at the Van Steveninck army casern in the Netherlands.

Canadian Forces photo

# Disarmament Fund Projects

The following recently-completed projects were assisted by a grant or contribution from EAITC's Disarmament Fund.

Over 200 academics, policy-makers and others from Europe and North America gathered in Quebec City on October 4 and 5, 1990 to discuss "The Germanies in a New Europe." This 22nd annual meeting of Laval University's Centre québécois de relations internationales (CQRI) examined economic, political and security issues related to the integration of Germany. Papers presented at the meeting will be published in a special issue of CQRI's Choix. For further information, contact the CORI at Local 5460, Pavillon de Koninck, Université Laval, Ste-Foy, Quebec, G1K 7P4.

"Canadian Perspectives on Maritime Strategy" is the name of the latest in the Canadian Centre for Arms Control and Disarmament's Issue Brief series. It offers comments on the US Navy's maritime strategy by Commander (ret'd) Peter Haydon of Halifax, Rear Admiral (ret'd) Fred Crickard, Research Associate with Dalhousie University's Centre for Foreign Policy Studies, and Dr. Douglas Ross, Director of the Centre for International Studies at Simon Fraser University. Issue Brief 11 can be ordered from the Canadian Centre for Arms Control and Disarmament at 151 Slater Street, Suite 710, Ottawa, Ontario, K1P 5H3. The price is \$5.50 (50 percent discount for members).

The second edition of *The Canadian Peace Educators' Directory*, edited by Wally Heinrichs and Rob Macintosh, is now available. The *Directory* provides detailed listings of 350 Canadian and international organizations concerned with formal education about peace and global issues. To order, contact The Pembina Institute for Appropriate Development, P.O. Box 7558, Drayton Valley, Alberta, TOE 0M0 (tel. 403-542-6272; fax 403-542-6464). The price is \$25.00.

# Disarmament Fund Update

Grants and Contributions from the Disarmament Fund, April 1, 1990 - March 31, 1991

CONTRIBUTIONS					
		Peace Education Centre of British Columbia, Vancouver — 1990 "Youth for Global Awareness Conference"	\$3,000		
	2.	John Guy, University of Calgary — participation in the Ninth European Nuclear Disarmament Convention	300		
	3.	Science for Peace, Toronto Chapter — University College Lectures in Peace Studies	1,000		
		Parliamentary Centre for Foreign Affairs and Foreign Trade, Ottawa — conference on "The Changing Soviet Union: Implications for Canada and the World"	10,000		
	5.	Centre québécois de relations internationales, Laval University, Sainte-Foy, Quebec — conference on "The Germanies in a New Europe"	5,000		
	6.	Mouvement Option Paix, Hull, Quebec — publication of a special issue of the magazine Option Paix	1,000		
		Canadian Centre for Arms Control and Disarmament, Ottawa — symposium on nuclear weapons testing	10,000		
		Canadian Centre for Arms Control and Disarmament, Ottawa — conference on "Canadian-Soviet Arctic Cooperation"	5,000		
		Charles Van Der Donckt, Sainte-Foy, Quebec — research on "The Naval Arms Race in South-East Asia: Regional and Strategic Implications"	5,000		
		Peter Brogden, Ryerson Polytechnical Institute, Toronto — workshop on "Technology for Arms Control Verification in the 1990s"	11,155		
	11.	Political Studies Students' Conference, University of Manitoba, Winnipeg — conference on "In Defence of Canada: Constitutional, Economic and Security Dimensions"	6,000		
	TO	TAL OF CONTRIBUTIONS	\$57,455		
GRANTS					
	1.	Stornoway Productions Inc., Toronto — production of a documentary on UN peacekeeping	\$10,000		
	2.	Albert Legault, Laval University, Sainte-Foy, Quebec — research comparing the arms control regimes of outer space and chemical weapons	6,000		
	3.	Alex Morrison, Toronto — study of the verification issue at the United Nations	5,000		
	4.	United Nations Institute for Disarmament Research, Geneva — verification research	25,000		
	5.	United Nations World Disarmament Campaign Voluntary Trust Fund — communications activities	25,000		
	6.	Centre for Foreign Policy Studies, Dalhousie University, Halifax — conference on "Maritime Interests, Conflict and the Law of the Sea"	10,344		
	7.	United Nations Department for Disarmament Affairs, New York — television documentary on chemical weapons	10,000		
	8.	Canadian Centre for Arms Control and Disarmament, Ottawa — symposium on nuclear weapons testing	5,000		
	9.	Canadian Centre for Arms Control and Disarmament, Ottawa — conference on "Canadian-Soviet Arctic Cooperation"	5,000		
	TO	TAL OF GRANTS	\$101,344		
	TO	TAL OF GRANTS AND CONTRIBUTIONS	\$158,799		

# About the Disarmament Fund

The purpose of EAITC's Disarmament Fund is to encourage Canadian research and information-dissemination activities in the arms control and disarmament field.

The recipient of a Disarmament Fund grant or contribution can be a nongovernmental organization (formal or informal), an academic or public interest group, or an individual. The Disarmament Fund will assist in defraying the costs of a project only if it can be determined that the project will promote a balanced discussion of arms control and disarmament issues. A balanced discussion is one that takes into account or reflects the various—sometimes opposing—knowledgeable viewpoints on the subject of arms control and disarmament.

For the fiscal year 1991/92, \$45,000 is available in grants and \$66,000 is available in contributions, for a total of \$111,000.

To receive further information and an application form, contact the Disarmament Fund Secretary, Arms Control and Disarmament Division, EAITC, 125 Sussex Drive, Ottawa, Ontario, K1A 0G2.

# PTBT Amendment Conference Concludes Without Amendment



Seated at the podium at the opening of the PTBT Amendment Conference, from left to right: UN Secretary-General Javier Perez de Cuellar; President of the Conference Ali Alatas, the Foreign Minister of Indonesia; and Secretary-General of the Conference Sohrab Kheradi.

UN photo 177195

By Ms Peggy Mason, Ambassador for Disarmament

Parties to the Partial Test Ban Treaty (PTBT) of 1963 met at United Nations headquarters in New York from January 7 to 18 to consider a proposal to amend the Treaty to convert it into a comprehensive test ban treaty (CTBT). The PTBT prohibits all parties from conducting nuclear weapon tests in the atmosphere, in outer space and underwater, but allows testing underground. The proposed amendment would prohibit testing in all environments, including underground.

The Amendment Conference was convened at the request of one-third of the parties, as is required by the Treaty. The initiative reflected frustration on the part of many at the slow pace of progress towards the CTBT goal in other fora. However, numerous state parties, including Canada, initially expressed reservations about the value of holding such a conference. These reservations reflected several concerns, not the least of which was the fact that two of the three depositary states, all of whom enjoy a right of veto over any amendment, firmly opposed the proposed amendment and made clear that they would vote against it if it were pressed to a vote.

Despite our initial concerns, Canada was among the first Western countries to announce that it would attend the Amendment Conference and participate in its work in a constructive manner. As Ambassador for Disarmament, I headed the Canadian delegation to the Amendment Conference. The delegation of five included an expert on seismic verification and an advisor from a non-governmental organization.

In my opening statement to the Conference, I reiterated Canada's firm conviction regarding the importance of a CTBT and explained how we believe that progress towards this objective can be achieved. Our delegation was active in

debate over verification requirements of an eventual CTBT, and a paper outlining the work that has been conducted in Canada in the area of seismic verification of a CTBT was circulated to the Conference.

The final week of the Amendment Conference was dominated by consideration of how to end the meeting, with some delegations favouring the reconvening of the Conference at a future date and others opposed to such a continuation of the Conference. Despite intensive negotiations, it was not possible to reach a compromise on this question that could command the support of all parties. Instead the Conference concluded with a vote on a draft decision which stated that participating parties agreed to mandate the President of the Conference to continue consultations with a view to achieving progress on unresolved issues, such as verification and compliance with a CTBT, and to "resuming the Conference at an appropriate time."

This decision was adopted by a vote of 74 in favour, two against (United Kingdom, United States), and 19 abstentions. The abstentions included Canada and most of our NATO allies, Japan, Israel, the former Warsaw Treaty Organization countries of Eastern Europe and the European neutral countries of Finland, Switzerland and Austria.

In our view, it is regrettable that this draft decision was pressed to a vote. Genuine progress towards the CTBT goal can only be achieved through processes that include all relevant parties, particularly those most directly involved, i.e., the nuclear-weapon states.

"Holding a vote cannot create agreement where there is none, nor can it remove the necessity of agreement if the process purporting to be agreed upon is to have any meaning at all."

A divisive vote tends to polarize positions rather than build on the common ground shared by all parties. Canada abstained on the draft decision for this reason and because the draft decision inaccurately stated that there was agreement where no agreement, in fact, existed. As I said in my explanation of vote to the Conference, "holding a vote cannot create agreement where there is none, nor can it remove the necessity of agreement if the process purporting to

be agreed upon is to have any meaning at all."

Despite the fact that the Amendment Conference was unable to conclude with a consensus declaration or decision, I believe that the exercise was not a waste of time. The Conference provided an opportunity for a thorough and focused discussion of the CTBT issue and, in that regard, clarified the positions of a wide range of states on the issue. The deliberations should facilitate the Geneva Conference on Disarmament's consideration of a CTBT at its current session, which began shortly after the close of the Amendment Conference.

Canada regards the Conference on Disarmament as the appropriate multilateral forum to address the CTBT issue. Unlike the PTBT (to which France and China are not parties), all five nuclear-weapon states are represented in the Conference on Disarmament and there is agreement among all members to continue to work towards a CTBT in that forum.

# Canada's Opening Statement to PTBT Amendment Conference

The following are extracts from the statement delivered by Ambassador for Disarmament Peggy Mason to the PTBT Amendment Conference in New York on January 10.

Prime Minister Mulroney has indicated the conclusion of a CTBT as one of six fundamental Canadian arms control and disarmament objectives. Canada's co-sponsorship of an annual United Nations General Assembly resolution entitled "Urgent need for a CTBT" reflects the priority that my government attaches to this issue...

Canada has traditionally viewed a ban on nuclear testing as an important means of stifling the development of new weapons that might have a destabilizing effect on international security. Not all new weapons and systems have such a negative impact. Nonetheless, as we experienced during the Cold War, an unbridled competition among nuclear-weapon states to develop new weapons breeds suspicion and uncertainty and detracts from efforts to achieve nuclear disarmament.

Fortunately, the nuclear arms race, particularly in the context of the United States and the Soviet Union, is of a less alarming nature today than just a few short years ago. To their credit, the superpowers have embarked on a course of intensive negotiations which has led to the precedent-setting INF Treaty and, we expect, they will soon conclude a START treaty that will substantially reduce their arsenals of long-range nuclear weapons.

The United States and Soviet Union have committed themselves to follow up the implementation of a START agreement with negotiations on a START II treaty that would see further cuts to their stocks of strategic nuclear weaponry, and to hold broad discussions on enhancing strategic stability. Equally encouraging is the commitment of the two sides to commence negotiations in the very near future on short-range nuclear forces. Bilateral negotiations on nuclear disarmament have thus acquired considerable momentum. This process promises to continue to diminish and, we hope, permanently remove the threat of nuclear annihilation that for years loomed as a result of the confrontational atmosphere that was characteristic of the Cold War.

These developments, in my delegation's view, are most welcome and Canada urges both sides to persevere in their efforts to negotiate further deep cuts in their nuclear arsenals. However, these historic achievements do not obviate the need for a CTBT. The nuclear arms race cannot be definitively ended as long as states continue to develop and deploy, in an unregulated fashion, new nuclear weapons. A CTBT would make a significant contribution in this regard.

In addition to impeding the nuclear arms race, a CTBT would make a significant contribution towards discouraging the horizontal proliferation of nuclear weapons. Conducting nuclear tests is an important element in any state's efforts to achieve a nuclear weapons capability. The conclusion of a CTBT with widespread, if not universal adherence, would represent an additional pillar of the international nuclear non-proliferation regime. In a world where a number of non-nuclear-weapon states have yet to forego the nuclear weapon option in any binding international instrument, the value of a CTBT in this regard is, in Canada's view, significant.

Concern for the environmental effects of nuclear testing played a decisive role in the negotiation of the Partial Test Ban Treaty. Underground testing does not represent the same hazard of radioactive fallout as did atmospheric testing. Nonetheless, in an era when all citizens of our planet must be aware of the hazards and irresponsibility of contaminating our environment, this aspect of nuclear testing is one that cannot be dismissed. Nuclear testing in unusually fragile environments raises particular concern. The conclusion of a CTBT is the only way to remove categorically this potential environmental threat.

Canada, like many other countries, has regretted that progress towards the goal of a CTBT has, for a number of years, been very slow and painstaking.



Ambassador for Disarmament Peggy Mason.

This has reflected very different approaches on how efforts should proceed towards this goal and on the appropriate timing for the implementation of a CTBT.

While progress towards a CTBT has been elusive for many years, Canada believes that recent developments offer reason for hope that the process is on track and that significant progress on reducing and ultimately banning nuclear tests is within our reach in the foreseeable future.

ately follow up their commitment to negotiate further restrictions on nuclear testing with the final goal of a comprehensive ban on nuclear testing. Canada urges the two states concerned to negotiate further limitations on their respective nuclear testing programs, which could include both limits on the number and yield of tests as intermediary measures on the road to the conclusion of an effective and verifiable CTBT at an early date.

Being a crucial issue of relevance to

the entire international community, it is appropriate that efforts also be made in relevant multilateral fora to advance

Step-by-step approach is most realistic means of achieving progress towards CTBT goal.

Canada has long advocated a step-bystep approach as the most realistic means of achieving meaningful progress towards the CTBT goal. In our view, such a process allows, and indeed fosters, mutual confidence among the parties, and offers concrete experience on key issues such as compliance and verification that are crucial to the implementation of an effective CTBT.

The mechanism for such a step-bystep process has been in place since 1987 when the United States and the Soviet Union agreed to initiate "fullscale, stage-by-stage" negotiations on nuclear testing. These negotiations, as a first step, have succeeded in concluding verification protocols to the Threshold Test Ban Treaty of 1974 and the Peaceful Nuclear Explosions Treaty of 1976. The protocols were signed at the Washington presidential summit in June 1990 and Canada welcomes the fact that the ratification process of these treaties has now been completed, allowing them to be brought into force.

In Canada's view, the ratification of the 1974 and 1976 treaties provides a solid base upon which negotiations on further testing restrictions can be built. In this regard, the Secretary of State for External Affairs, the Right Honourable Joe Clark, in his statement to the 45th session of the United Nations General Assembly last September, expressed Canada's belief that the United States and the Soviet Union should immedi-

towards the CTBT goal. Canada was pleased that the Conference on Disarmament, after a lengthy hiatus, succeeded in establishing an ad hoc committee during its 1990 session on the subject of a nuclear test ban. This development represents a breakthrough as it opens the door to substantive consideration of issues related to a CTBT. Although time was limited, the 1990 CD session engaged in useful preliminary work on the issues at hand. Canada looks forward to the reestablishment of this ad hoc committee, with the same mandate as in 1990, at the beginning of the CD's 1991 session, with a view to carrying forward the initial work undertaken last year.

The Conference on Disarmament has also undertaken important work over a number of years in verification of a CTBT, particularly in the area of seismic verification. The Group of Scientific Experts, in which Canadian representatives have been active, has made commendable efforts in fulfilling its mandate, given by the Conference on Disarmament in 1976, to devise a conceptual design for an international seismic data exchange system. The excellent work of the Group of Scientific Experts with the support of a wide range of technical experts around the world will, we believe, play a central role in the verification regime of a CTBT.

The Partial Test Ban Treaty of 1963 marked an important achievement in

multilateral arms limitation and disarmament negotiations. This Treaty effectively ended atmospheric testing by the three nuclear-weapon signatories and set a norm — that of limiting nuclear testing to underground explosions — that is now adhered to by all five nuclear-weapon states. Furthermore, the preamble of the PTBT clearly reflected the yearning of the international community for a complete ban on nuclear testing and the nearly 120 parties to the Treaty have, in signing the Treaty, committed themselves to seeking this goal.

Those states party to the PTBT that called for the convening of this Conference have proposed that a CTBT be concluded by means of an amendment to the PTBT. Canada has consistently held the position that the conclusion of a CTBT has not yet been achieved because of fundamental differences among the international community over the appropriate process to achieve such a treaty, as well as over timing. These fundamental differences have constrained the work of the Conference on Disarmament and the bilateral negotiations on this issue and will similarly affect our consideration of a CTBT at this Conference.

However, despite the challenging nature of the task at hand, the Conference on Disarmament is now addressing this issue in a serious way. Canada believes that with the cooperation of the parties concerned, the CD, as well as the bilateral process, will succeed in overcoming the hurdles that stand in the way of concluding an effective CTBT...

Canada hopes that our collective efforts over the next week and a half will provide impetus to the Conference on Disarmament in its consideration of the nuclear test ban item. This, in our view, is the appropriate forum for multilateral work in pursuit of a CTBT. A serious and constructive approach by all delegations to this Conference can, in Canada's view, produce results that will enhance and expedite the work of the Conference on Disarmament on this issue. Canada will seek to ensure that our deliberations produce such a positive outcome.

# B.C. Consultative Group Members Discuss Naval Arms Control

British Columbia members of the Consultative Group on Disarmament and Arms Control Affairs met with Ambassador for Disarmament Peggy Mason in Vancouver on February 11 to discuss a range of arms control and disarmament issues. In addition to Consultative Group members, the meeting included a number of others from the province who are knowledgeable about and interested in arms control and disarmament issues, as well as officials from EAITC and DND.

Consultative Group meetings provide an occasion for informed debate among people who approach current arms control and disarmament questions from very different perspectives. They also offer government representatives a chance to hear the most persuasive arguments in favour of and against various policy alternatives.

The Vancouver consultation focused in particular on naval arms control and disarmament. Participants listened to presentations by Ms Patti Willis (Resource Coordinator, Pacific Campaign to Disarm the Seas, Denman Island), Vice-Admiral (retired) Nigel Brodeur (Chairman, Defence Associations National Network Pacific Region, Victoria) and Dr. Douglas Ross (Director, Centre for International Studies, Simon Fraser University, Burnaby).

Ms Willis called on Canada to take an active, visible role in promoting naval arms control and disarmament (ACD). She argued that the US and the USSR are engaged in an unrestrained naval arms race, which inherently increases the risk of war at sea. Some naval ACD measures could reduce the likelihood of inadvertent conflict.

Ms Willis observed that lack of political will on the US side is a larger obstacle to naval ACD than any technical difficulties. She was somewhat encouraged by recent developments and suggested that naval ACD is becoming more a question of "when" and "how" rather than "if."

Ms Willis recommended a number of steps that Canada could take to further

the cause of naval ACD. These included, among other things:

- making naval ACD one of the government's stated priority arms control and disarmament objectives;
- encouraging the expansion of present incidents-at-sea agreements to include sub-surface activities, and encouraging the multilateralization of such agreements;
- working with other countries that have proposed the regulation of nuclear-powered vessels;
- promoting naval confidence-building measures in the CSCE context, including an exchange of information on naval forces, notification and observation of naval exercises, and a dialogue on naval issues;
- encouraging the US to reevaluate its maritime strategy and to end its policy of neither confirming nor denying the presence of nuclear weapons on naval vessels;
- encouraging the US and the USSR to agree to reduce further and eventually eliminate potential first-strike naval nuclear weapons, to agree to a ban on

all long-range nuclear SLCMs, and to agree to limits on attack submarines; and

 encouraging the development of a regime to control submarine technology, along the lines of the existing MTCR.

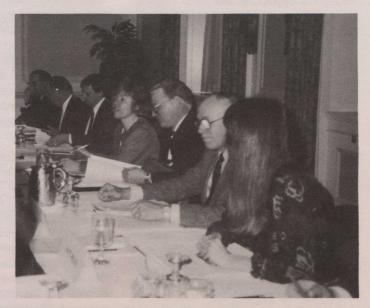
V.Adm. Brodeur offered a historical perspective on the development of the Canadian Navy and inter-war arms control efforts, from which he drew lessons for present-day would-be naval arms controllers. He noted that the Canadian Navy has

long been involved in non-military activities, and that the need for future Canadian maritime forces will be governed largely by unforeseen events over which Canada may have little or no control. He further opined that in future the Navy will probably require more, as opposed to fewer, forces.

In V.Adm. Brodeur's view, the interwar Washington and London Conference treaties were unsuccessful because they failed to limit the submarine and failed to prevent the rise of Germany and Japan as naval powers. He drew these lessons from the experience:

- any Pacific naval ACD measures must be equitable and binding on all Pacific Rim nations;
- those who lack the naval qualifications and experience to do so should avoid indulging in the "numbers game"; and
- nations must not fail to adequately address submarines and naval industrial capacity when considering naval ACD measures.

V.Adm. Brodeur concluded that efforts to abolish nuclear-powered sub-



At the Consultative Group meeting in Vancouver, from left to right: Col. Alain Pellerin, Director, Nuclear and Arms Control Policy, DND; R.Adm. Peter Cairns, Commander, Maritime Forces Pacific, DND; Dr. Douglas Ross; Ambassador Peggy Mason; Mr. Dennis Snider, Director, Arms Control and Disarmament Division, EAITC; V.Adm. Nigel Brodeur; Ms Patti Willis.

marines or to impose a moratorium on their construction or proliferation would be so strongly opposed by many nations that they would be doomed to failure. He argued that a similar fate would befall any measures seeking to exclude states from portions of the high seas. He thought that confidence-building measures involving meetings, the exchange of naval visits, and agreements designed to prevent incidents at sea

Southeast Asia, where a naval arms race is in progress.

Dr. Ross argued that desirable naval ACD measures would include:

- the denuclearization of ships and attack submarines and/or a ban on all
- a ban or deep cuts in counterforcecapable sea-launched ballistic missiles such as Trident II;

- a nuclearfree zone for parts of the Pacific, such as the Northwest:

reciprocal

anti-submarine warfare (ASW)-free zones;

- a variety of CSBMs such as the notification of naval exercises, exchanges between naval officer training schools, and agreements to prevent incidents at sea.

Turning to the potential Canadian role in naval ACD, Dr. Ross suggested that Canada should concentrate its diplomatic efforts on Tokyo and Moscow, perhaps encouraging the Soviets to opt for solely Arctic basing of their ballistic missile submarine fleet. In addition, Canada should promote transparency at sea by investing in satellite inspection and verification technologies. Although such activities would be expensive, Dr. Ross argued that the costs of doing nothing are also high. He also recommended that Canada oppose the offensive dimension of the US maritime strategy.

In the subsequent discussion, one participant echoed Dr. Ross's assertion that without naval ACD, countries will move to unilateral naval solutions involving increasingly sophisticated technology. It was suggested that emerging nuclear-weapon powers, in particular, will be interested in developing the submarine as a delivery platform. This participant argued that modern nuclearpowered submarines pose an enormous offensive threat and that many countries in both North and South have an interest in restricting access to submarine technology. He advocated movement towards a nuclear-powered submarine

control — i.e., non-proliferation regime.

Several participants observed that the initiative for naval ACD must come from the US and that Canada is not likely to have much influence on this issue. One participant argued that Canada is perceived by other Pacific nations, such as Japan, as playing a minimal role in the Pacific and therefore as having little right to a say in Pacific security matters. A number of participants agreed that the notion of credibility is important if Canada wishes to have a voice on naval ACD issues. It was suggested that to have credibility in the North Pacific, Canada must demonstrate commitment and risk in the region.

Some participants felt that Canada's greatest hope for influence on naval ACD issues lies in "nudging" the US to be more open to naval talks of one sort or another. Another participant argued, however, that Canada is not likely to be able to nudge the US very far and that attempting to do so could raise suspicions among other countries about Canada's commitment to naval ACD. It was suggested that Canada should instead take action on issues that benefit its maritime security but on which the US does not have a strong position. For example, Canada could conduct ecological surveillance of the oceans, making public every instance of suspicious activity it finds. Other suggestions included that Canada should spend the money necessary to improve maritime transparency in all areas, and that it should use the UN as the primary vehicle for promoting naval ACD.

One participant suggested that naval ACD is going to be a long, incremental process, beginning with simple CSBMs and political solutions to regional disputes. A couple of participants questioned whether naval forces could be dealt with in a vacuum, given Soviet suggestions that future CFE and START agreements will be dependent on the inclusion of naval forces, and given Soviet efforts to circumvent the CFE Treaty by transferring Treaty-limited equipment to naval units. It was suggested that we may see a hiatus in meaningful ACD at any level until naval armaments are dealt with.

## Credibility important if Canada wishes to have a voice on naval ACD issues.

were worth pursuing. In addition, he saw potential in an "open seas" transparency measure.

In his presentation, Dr. Ross noted that there has been a significant pulling back from confrontation in recent years in the Pacific. US and Soviet forces have been shrinking through modernization and this trend is likely to continue, although it has not been matched by reduced defence spending by other countries in East and Southeast Asia. While an early start to naval arms control negotiations would be desirable, strong US opposition to formal negotiations makes the early prospect of significant naval ACD highly unlikely.

According to Dr. Ross, naval ACD would be beneficial in terms of lowering the costs of naval development, reducing the risk of inadvertent war caused by the deployment of new systems capable of surprise attack, and stemming the proliferation of new naval warfare technologies to third countries. In Dr. Ross's view, the US is turning away from a closing "window of opportunity" to stabilize developments in the Pacific through naval ACD. There is a need for collective security arrangements and reciprocal naval confidence- and security-building measures (CSBMs) to prevent a rush into unilateral improvements in naval technology. Dr. Ross said that Canada's proposal for a North Pacific Cooperative Security Dialogue is a step in the right direction, although its prospects for success seem limited. He suggested that there is also a need for regional security arrangements in

A number of participants argued that Canada should refuse to accept port visits from nuclear-armed or nuclearpowered ships, and that government plans to deal with potential nuclear accidents in Canadian ports are ineffective. One participant suggested that DND is well-prepared for accidents, but does not have sufficient decontamination units to handle the probable number of casualties. It was recommended that the government either provide the civilian protection and response capabilities needed, or stop the ships from coming into Canadian harbours. This led into a discussion of the likelihood of a nuclearrelated accident, with some suggesting the risk is high while others suggesting it is extremely low.

A number of other topics were also discussed at the meeting. Comments on each are summarized below.

#### World Summit

A number of participants voiced approval of the Canadian proposal for a World Summit on Instruments of War and Weapons of Mass Destruction and of the general Canadian outline for posthostilities activities in the Gulf region. It was suggested that Canada might also want to support the concept of humanitarian ceasefires (for immunization and other civilian relief purposes) in the Gulf War and other conflicts.

# Chemical and biological weapons control

One participant noted that as chemical and biological weapons technologies have ready civilian applications, industrialized countries cannot easily deny these technologies to the Third World. He suggested that to make verifiable chemical and biological weapons agreements more attractive to developing countries, any proposed international inspectorate should deal with health and environmental, as well as proliferation, concerns. For example, an inspecting agency could provide advice on safety and security issues and procedures.

## Missile technology control

The overlap between the technologies required for missile and satellite development was noted, along with its implications for a potential NorthSouth divide on control issues, as evidenced by Indian concerns about the implications for commercial secrecy of an intrusive verification regime. It was suggested that states such as India are not prepared to accept another two-tier system like the non-proliferation regime in the area of missile technology control.

#### Arms transfers

It was suggested that there is hypocrisy in Canada's encouraging others to restrain their arms exports while we continue to subsidize weapons production and participate in arms exhibitions. Some participants recommended that Canada stop exporting arms completely (or stop, at minimum, exporting arms to the Middle East).

It was suggested that Canada use the "Group of Seven" industrialized countries or OECD or other forum, possibly East-West, to organize a discussion on the control of conventional arms transfers prior to the World Summit.

#### CTBT

One participant argued that Canada's policy towards the PTBT Amendment Conference was inconsistent with our stated goal of achieving a comprehensive nuclear test ban treaty (CTBT).

Another participant made the following recommendations for Canadian action on a CTBT:

- strongly support constituencies in the US that are pressing for early negotiation of a CTBT;
- further develop our step-by-step
  policy by defining the number and
  upper yield of tests to be negotiated
  in future steps, with reductions each
  year to a target date for eliminating
  all testing. This position could be
  presented in a working paper to the
  CD's ad hoc committee that deals
  with nuclear testing issues; and
- actively assist the President of the PTBT Amendment Conference in his mandate to conduct consultations and to resume the work of the Conference at an appropriate time.

# Approaches to security and arms control

Several participants argued that prospective arms controllers should not

look at weapons in the abstract but should also consider the underlying security concerns that lead countries to accumulate weapons. It was suggested that a variety of bilateral and multilateral political agreements must be in place before arms control has a hope of being successful. In this regard, Canada's approach to post-war activities in the Persian Gulf and general proposals for cooperative security were welcomed. It was noted that nongovernmental organizations have advocated similar ideas for years.

One participant opined that NATO's success has been due to the fact that it is a political, as well as military, body, that it has worked through consensus, and that it has operated under the UN umbrella. NATO could thus perhaps serve as a model for other regional security arrangements. Others disagreed, arguing that NATO has been successful in exporting its wars over the past forty years. It was also suggested that NATO's success has had much to do with the wealth of the countries involved, thus the alliance may not be a useful model for other regions.

It was suggested that Canada's arms control efforts are close to being counterproductive. Rather than act as if the norm is to have weapons and to solve conflicts by resort to violence, Canada should instead try to change the norm, so that weapons and resort to violence are regarded as unacceptable.

Several participants argued that true security cannot be achieved through armaments. It was suggested that disarmament is a mechanical process and that arms controllers should broaden their view to look at issues of peace and justice.

#### Arms and the environment

Some participants expressed concern about the potential for environmental disaster as a result of the Gulf War.

In addition, it was suggested that Canada should put the issue of the environmental consequences of preparations for war and of war itself on the agenda of the UN Conference on Environment and Development, to be held in Brazil in June 1992.

# 1991 UNDC Starts With Fresh Slate

The United Nations Disarmament Commission (UNDC) will hold its 1991 substantive session from April 22 to May 13 at UN headquarters in New York. The UNDC is a deliberative body established in its present form in 1979 to give in-depth consideration to a select number of disarmament-related issues.

Recent years saw the agenda of the UNDC expand and consideration of a number of items stall as a result of profound differences of approach among participating members. Alarmed that the UNDC risked losing its relevance to multilateral disarmament altogether, following the 1989 session many countries urged the implementation of reforms to revitalize the institution. This culminated in agreement on a set of reforms, approved by consensus, that were brought into effect at the 1990 session. Primary among these was the decision to conclude all outstanding items at the 1990 session so that the UNDC could begin anew in 1991 with a clear slate. To the credit of its members, the UNDC lived up to this commitment and terminated at the 1990 session its consideration of all carry-over items.

As agreed in the reform package, beginning with the 1991 session the UNDC will limit the number of items on its working agenda to four. One of these, "Objective information on military matters," received preliminary consideration at last year's session and will be examined in greater depth this year. Canada, like many other countries, was very satisfied with the initial discussion of this subject under the chairmanship of Austria, and is optimistic that the UNDC's eventual conclusions on this item will be of value.

Three new items appear on the 1991 working agenda. The item entitled "Regional approach to disarmament within the context of global security" will offer an unprecedented opportunity — in a global, multilateral forum — to thoroughly examine issues of regional disarmament, including, no doubt, confidence- and security-building measures.

The item on "The role of science and technology in the context of internation-

al security, disarmament and other related fields" will provide a forum for debate of an important issue that has yet to receive in-depth consideration at the multilateral level. Under this subject, it is expected that the issue of modernization of weapons systems and its impact on the international security environment will be examined.

The final item on the 1991 working agenda is entitled "Process of nuclear disarmament in the framework of international peace and security with the objective of the elimination of nuclear weapons." Nuclear disarmament has been considered at length in the past by the UNDC and has been an issue on which progress has proved to be most difficult. This divergence of views at the multilateral level has continued despite unprecedented progress in nuclear arms control at the bilateral level.

The Canadian delegation to the 1991 UNDC session will be headed by Ambassador for Disarmament Peggy Mason. Canada views the session as an opportunity to solidify the gains made last year at reinvigorating the UNDC, and looks forward to participating actively in discussions on all items.

# **NIAG Study Status**

By Dr. F.J.F. Osborne. Dr. Osborne, a space consultant with Spar Aerospace Limited of Montreal, is Deputy Chairman of the NIAG study group. This article is extracted from a presentation given at the Eighth Annual Ottawa Verification Symposium in March.

### Background

The NATO Industrial Advisory Group (NIAG) study on conventional disarmament verification originated as an industrial initiative proposed to NIAG for submission to NATO (see Fall 1990 *Disarmament Bulletin*, p. 15). The study proposed the development of a comprehensive data base of technologies presently available or projected to be so within the NATO partners and applicable to conventional arms control and verification.

The study is the responsibility of and directed by a Study Management Group, with representatives of the industries of the participating nations. Work is divided amongst five study teams, dealing respectively with: (1) Integrated Systems Requirements; (2) Integrated System Design; (3) Space Technologies; (4) Aerial Technologies; and (5) Land Technologies. The study was initiated in late May 1990. First total report integration is to take place in April 1991.

# Integrated requirements

The study is unusual for NATO in that, as an industrial initiative, the work did not respond to a NATO requirements document, nor was there a single clear sponsoring group within NATO. Consequently, Team 1 was charged with developing the study requirements to be used by the other teams, which it did by studying arms control treaties under discussion and/or negotiation. This team also had to develop general technical specifications regarding the needs, the time scales of verification and processing, the confidence levels required, the definition of militarily-significant deviations, and related matters.

## Integrated systems

Team 2 was charged with developing the verification system concept. Thus Team 2 interpreted the requirements of Team 1 in terms of general technologies applicable, or of potential interest, and assigned responsibilities for the requirements across the technology teams. Because the study involves not only present capabilities but also those projected as available a decade or more from now, it was anticipated that alternate total systems configurations would be available, depending on the actions allowed by the treaties of differing eras.

As the study progressed, it was found that the technological assessments could be made against a set of six generic problems. These were: to monitor infrastructure; to monitor Treaty-limited equipment (TLE) parking areas; to

count items that might be TLE (including look-alikes, etc); to count identified TLE; to assess traffic flow; and to detect new installations.

## Space technology

The Space Team examined the imaging instruments appropriate to its assigned verification tasks and projected the capabilities of instruments. These sensor performance data were developed into scenarios by combining them with orbital considerations and data on spacecraft buses and launch vehicles. It must be noted that neither the "national technical means" of the superpowers nor the military programs of any nation were considered in the course of the study.

To develop cost data regarding operations and data processing, it was found necessary to postulate a generalized architecture for the system as a technical assumption. Since in any reasonable configuration the space system was data-intensive, a portion of the capability was communications. Thus, consideration was given to support of the communications requirements of the entire verification system including such aspects as onsite inspection (OSI) and the verification data dissemination.

## Aerial technology

The Aerial Team's approach was somewhat similar, but the presently available technologies and platforms are demonstrably a better match to the assigned problems. The conclusions of Team 2 were an early indication of an ability to support an Open Skies regime.

## Land technology

The Land Technologies Team had the greatest diversity of operations and thus potential for innovation. As indicated above, the overall study encompassed treaty data validation, TLE destruction or disposal confirmation, and compliance monitoring, all of which are or can be addressed by terrestrial procedures.

Many of the technologies in respect to portal/choke-point monitoring, perimeter or line monitoring and area surveillance are drawn directly from well-developed civil technologies. In the early stages of the Land Team's activity, working definitions had to be developed for OSI, with both visiting and hosting aspects of OSI operations being considered.

The Land Team was also charged with considering "tagging" technologies, because this is a highly cooperative and potentially intrusive operation similar to OSI. The definitions used in the study included cooperative signature enhancements on TLE as well as various transponding and/or otherwise readable identifiers.

The problems of TLE disposal were treated in some detail to determine the

optimum approach to validation of "disablement" or "disposal." This emphasis is, of course, a result of the immediacy of CFE I and the recognition of the high costs and environmental problems of effective disposal.

#### Conclusion

Although it is not appropriate to speculate on the final study conclusions and recommendations, it is clear that present and projected technologies available to NATO can be applied to the verification of conventional armament agreements, improving the effectiveness of the arms control process within a treaty environment.

# Study on the Future of Verification

A new climate of East-West cooperation on security-related matters has emerged as the hallmark of recent years, resulting in a number of arms control and disarmament agreements. The process of verification cannot help but be affected by these developments; this will continue throughout the decade. However, exactly how current trends in arms control are likely to evolve and affect verification remains to be seen.

A recently-completed Canada-US research project explores this issue in depth. The genesis of the project — which was funded by EAITC's Verification Research Program — was the desire to examine the requirements, challenges and opportunities likely to face the verification process in the 1990s. Four distinguished scholars — two Americans (Ambassador Sidney Graybeal and Dr. Patricia McFate) and two Canadians (Dr. George Lindsey and Mr. James Macintosh) — were invited to:

- identify trends with respect to the verification of arms control and disarmament agreements (including confidence-building), both bilateral and multilateral;
- outline how these trends may be expected to evolve to the year 2000;
   and

 suggest profitable areas for further research in the field.

The resulting report, entitled "Verification to the Year 2000," represents an innovative, insightful and rigorous attempt to examine developments over the next ten years with respect to verifying arms control and disarmament agreements in both the bilateral and multilateral fields.

This report is also a significant example of Canadian-American cooperative research in verification. The Verification Research Program has, in the past, undertaken projects on a government-to-government level with several other countries including the US. This project, however, is one of the first in which representatives from Canadian and American industry, academia and government have come together under the auspices of the Program.

"Verification to the Year 2000" is being published as the fourth major study in EAITC's *Arms Control Verification Studies* series and will soon be available for distribution to specialists in the field. It should provide useful guidance for what promises to be an exciting decade in international security and arms control verification.

# Focus: On the Arms Trade

Focus is designed primarily for secondary school students. We welcome your comments and suggestions for future topics.

The Gulf War has made a lot of countries stop and think twice about the arms they are selling around the world. Many of the weapons used by Iraq during the War were supplied by the five permanent members of the Security Council — China, France, the UK, the US and the USSR - three of which fought in the coalition against Iraq. This shows one of the dangers of the arms trade for suppliers: that the arms you supply might one day be used against you. But there are other dangers of the arms trade for suppliers, recipients and the international community as a whole. This is why Canada has proposed that there should be more controls on the arms trade.

### What is the arms trade?

There is no one, accepted definition of the arms trade. We can, however, say this about it.

- 1. The arms trade involves conventional weapons and other conventional military equipment (such as bullets, guns, tanks, and submarines), not weapons of mass destruction (such as nuclear, chemical and biological weapons).
- 2. The arms trade also involves components of conventional weapons and military equipment, as well as services and knowledge directly related to the production or operation of conventional weapons. This means, for example, that an American instructor training fighter pilots in Saudi Arabia would be considered part of the arms trade.
- 3. The arms trade involves weapons designed to be used by regular or irregular (such as rebel) military forces. This means that guns bought for hunting or collecting are not considered part of the arms trade.
- 4. Trade takes place when control over the equipment, services or knowledge is transferred to a recipient that is not a national of the supplier

country. The recipient is usually — but not always — located outside the supplier country. For example, it is not considered trade when the Department of National Defence sends weapons from Canada to Canadian forces in Germany. It would, however, be considered trade if DND bought weapons for those forces from a German company.

5. Trade can be between governments, companies, groups or individuals.

# How big is the arms trade?

The arms trade is hard to measure. Most countries don't publish statistics about how many arms they supply or receive. The countries that do publish statistics don't all use the same standards of measurement or define arms in the same way. Measures of the arms trade usually include only weapons and components, not services and knowledge.

It is estimated that the value of arms traded in 1988 was US\$49 billion. This is less than in previous years. The size of the arms trade rose throughout the 1960s and 1970s, reaching a peak in the mid-1980s. Although the size of the trade has dropped off since then, more sophisticated weapons are being traded.

The leading exporters (or suppliers) of arms are the USSR, the US, France, the UK, China and West Germany. These six countries alone accounted for almost 90 percent of the major weapons exported between 1985 and 1989.

The leading arms importers (or recipients) are India, Iraq, Japan, Saudi Arabia, Syria, Egypt, Czechoslovakia, North Korea, Spain, Turkey, Poland and Afghanistan. These 12 countries accounted for over 50 percent of the major weapons imported between 1985 and 1989.

The arms trade is thus fairly concentrated, with a small number of countries accounting for a large percentage of the trade.

# What is good about the arms trade?

People sometimes talk about the arms trade as if it were an entirely bad practice. However, there are some benefits to the trade — at least for suppliers and recipients — otherwise they wouldn't engage in it. There are also benefits for the international community.

### Security benefits

For recipients, buying weapons can increase a country's security by making the country more able to deter and defend against attack. Under Article 51 of the UN Charter, every state has the right to defend itself if an armed attack occurs. So every state also has the right to acquire the means necessary for such self-defence.

For suppliers, providing arms to a country may substitute for the supplier having to send its own forces to help defend allies, or may mean it can send less forces.

For the international community, the arms trade can make war less likely by helping to ensure there is a stable balance of forces among countries in a region.

### Political benefits

For suppliers and recipients, arms transfers help to cement good relations among friends and allies.

## Military benefits

Arms transfers help to promote the standardization of equipment between suppliers and recipients, making it easier for allies to share parts and cooperate in training.

Participating in the arms trade makes it easier for suppliers to maintain an arms-producing industry to supply their own armed forces.

#### Economic benefits

For suppliers, the arms trade creates jobs and provides a source of cash. In addition, it reduces the costs of producing weapons for one's own armed forces.

For recipients, importing arms makes it unnecessary to invest in expensive arms industries of one's own. For many developing countries, arms transfers are the easiest way to gain access to the advanced technology of the developed arms exporters. Sometimes this technology can be used in non-military ways. Furthermore, developed suppliers will often build infrastructure — such as roads, ports, airstrips and bridges — for developing recipients so they can use the weapons they have bought. This, too, benefits the civilian economy.

# What is bad about the arms trade?

Although there are benefits to the arms trade, there are also many draw-backs.

### Security drawbacks

For the recipient, acquiring arms does not always increase security. The supplier's weapons may not be suited to the terrain, climate or skills of the recipient. The supplier may learn important details about the recipient's armed forces that could be used against it in a war. In addition, acquiring arms can put the recipient out of balance with neighbouring countries and lead to a regional arms race. This, in turn, can make war more likely. This is a big drawback of the arms trade for the international community.

There are security drawbacks for suppliers as well. As was mentioned earlier, the supplier's arms could someday be used against it. As well, suppliers may be drawn into recipient's wars.

For all parties, the build-up of traded arms can make wars more deadly and make them last longer.

#### Political drawbacks

The recipient may have to change some of its policies to suit the supplier.

The arms trade can encourage the militarization of the recipient — that is, it can enhance the position of the military in society, giving it priority over civilian needs. Highly militarized societies are more likely to have repressive governments and human rights abuses.

The arms trade can lead to the presence of many foreigners in the recipient country (e.g., building infrastructure, providing training or technical support). This can cause strains in the recipient society.

### Military drawbacks

Filling foreign orders can leave the supplier short of weapons for its own armed forces. In addition, the weapons produced may be designed to suit the export market and not the supplier's forces.

The recipient can become dependent on the supplier for spare parts, ammunition and technical services.

#### Economic drawbacks

The supplier may become dependent on the international arms market which is highly competitive and unstable.

For the recipient, buying arms can lead to large debt loads. The weapons also absorb resources that could otherwise go to social and economic development.

# Controlling the arms trade

Since there are both benefits and drawbacks to the arms trade, the question to ask is not "what can we do to stop the arms trade?" Rather, it is "what can we do to limit the bad effects of the arms trade while preserving the good ones?"

Some controls on the arms trade already exist. Most countries have policies restricting the export of arms from their territories. Canada, for example, has very strict controls on its arms exports. We generally don't export arms to:

- countries that pose a threat to Canada and its allies;
- countries involved in or likely to soon be in a war;
- countries under Security Council sanctions; and
- countries whose governments have a persistent record of serious violations of human rights, unless it can be shown that there is no reasonable risk that the goods might be used against the civilian population.

Canada is not a major arms exporter. We account for less than one percent of the global arms trade.

Even though countries have their own controls, there is currently no international treaty or mechanism for the widespread control of conventional arms transfers.

Earlier this year, Canada proposed several measures to reduce the bad effects of the arms trade. We suggested that there should be a meeting of the major arms exporters, at which they could agree to pay more attention to the potentially harmful effects of their arms transfers, and to consult on situations where large or unusual build-ups of arms seem to be developing.

We also called for countries to make the arms trade more transparent, by exchanging information about their arms transfers. Right now, not much information is available about the arms trade. Reliable information about arms imports could prevent countries from overestimating the amount of arms their neighbours are receiving and could thus slow down arms races based on misperception. In this sense, transparency would build confidence, as discussed in "Focus" in Disarmament Bulletin 12 (Winter 1989/90). In addition, increased public knowledge about arms transfers might stop suppliers and recipients from carrying out some transfers because they fear a bad reaction. Transparency measures could also create a base of information for further study and control of the arms trade. Canada recently published a report of its arms exports, to promote transparency.

Canada has also called for the countries that signed the Treaty on Conventional Armed Forces in Europe (discussed in "Focus" in *Disarmament Bulletin 15*) not to send the arms they don't need because of disarmament in Europe to regions of tension or war.

# Obstacles to controlling the arms trade

The arms trade is not easy to control. Many recipients are suspicious of attempts to restrain arms exports. They argue that arms transfer controls make it harder for them to defend themselves

but do nothing to stop arms build-ups in countries that have developed their own arms industries.

A number of suppliers, as well, are not interested in controlling the arms trade. They see exporting arms as a way to make money and to help sustain their defence industries. Since a large number of countries make small arms and other unsophisticated weapons systems, recipients can always turn to them if the major suppliers stop supplying.

Effective arms transfer controls depend on countries agreeing on what is and is not an "arm" and on having border guards and customs officials trained to recognize such items. Many pieces of equipment — such as helicopters — have both military and non-military uses. Countries may import these so-called "dual-use" items for civilian purposes and then turn them to military use. In addition, the sale of arms is gradually being replaced by the sale of technology, which is harder to identify and control.

There is a small "black market" in arms. This illegal trade will likely increase if it becomes more difficult to legally trade arms.

### Conclusion

Since only about 20 percent of the arms produced in the world are traded, even a complete end to the arms trade would not prevent countries from acquiring too many arms. However, more controls on the arms trade would help to limit some of the drawbacks of the trade and thus would benefit suppliers, recipients and the international community. Controls on the arms trade would be most effective if they were combined with agreements to limit all arms — whether imported or produced locally — in a region, and with other measures to build confidence among countries and reach solutions to conflicts. These are the kind of measures that Canada is promoting in the Middle East. We hope that suppliers and recipients will learn the lessons of the Gulf War and move in the direction of achieving security with lower levels of weapons. More controls on the arms trade would be a useful part of this.



Canadian Forces personnel in the Persian Gulf fitting ammunition to the ship-board Phalanx air defence system. The Gulf War has made many countries take a closer look at controlling the arms trade.

Canadian Forces photo

## **Forecast**

A list of arms control and disarmament activities involving Canada, May through September 1991.

Ongoing: CSBM Negotiations, Vienna Ongoing: CFE IA Negotiation, Vienna

Ongoing: CFE I Joint Consultative

Group meetings, Vienna

April 22 - May 13: UN Disarmament Commission, New York

May 14 - June 28: CD in session, Geneva July 23 - September 9: CD in session, Geneva

**September9-27:** Third Review Conference of the Biological and Toxin Weapons Convention, Geneva

# Acronyms

ACD — arms control and disarmament ASW — anti-submarine warfare BTWC — Biological and Toxin Weapons Convention BW — biological weapons CBM — confidence-building measure

CD — Conference on Disarmament

CFE — Conventional Armed Forces in Europe

COCOM — Coordinating Committee for Multilateral Strategic Export Controls

CSBM — confidence- and securitybuilding measure

CSCE — Conference on Security and Cooperation in Europe

CTB(T )— comprehensive test ban (treaty)

CW — chemical weapons

DND — Department of National Defence

EAITC — External Affairs and International Trade Canada

ECL — Export Control List

INF — intermediate-range nuclear forces

MTCR — Missile Technology Control Regime

NATO — North Atlantic Treaty Organization

NIAG — NATO Industrial Advisory Group

NPT — Treaty on the Non-Proliferation of Nuclear Weapons

OECD — Organization for Economic Cooperation and Development

OSI — on-site inspection

PTBT — Partial Test Ban Treaty

SLCM — sea-launched cruise missile START — Strategic Arms Reduction

Talks
TLE — Treaty-limited equipment
UNDC — United Nations Disarma-

UNDC — United Nations Disarmament Commission

UNGA — United Nations General

UNGA — United Nations General Assembly

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