

Joint Forum of the Canadian Pugwash Group and Science for Peace "Creatively Advancing the Nuclear Abolition Agenda."

1 October 2005

Overview of the day's proceedings

The Forum consisted of four invited talks¹, followed by three parallel workshops, and a plenary at which the results of the workshops were discussed among all those present. The first talk was presented by **Dr Andrew Bone** on **The Russell–Einstein Manifesto and the Origins of Pugwash**.

Contributions of Russell and Einstein resulting in the Russell-Einstein Manifesto of 1955, led to the formation of "The Pugwash Conferences on Science and World Affairs" which started in 1957. Andrew Bone's talk celebrated the 50 years since the R-E manifesto was signed, and the hundredth anniversary of Einstein's truly remarkable year of groundbreaking advances in Physics, 1905.

Three keynote presentations provided expert input and were introductory to the three workshops that followed:

- 1. Mark Leith: Nuclear Weapon-Free Zones, Canada and Disarmament;**
- 2. Robin Collins: Unacceptable Risk: Launch on Warning Policy;**
- 3. Sarah Estabrooks: Nuclear Terrorism and the International Response**

The May 2005 Non-Proliferation Treaty Review was notably unsuccessful in making progress on the nuclear abolition agenda. The forum topics were chosen specifically because they were not a significant part of the NPT Treaty Review agenda. Nevertheless, these are highly relevant to potential relief of the the present dangers posed by nuclear weapons. On the matters of nuclear weapon-free zones (NWFZ) and Launch on Warning (LoW), it was felt the peace movement might make some progress despite the total lack of progress in the Committee on Disarmament in Geneva on nuclear disarmament, and despite the deplorable violations of the NPT, most significantly by the five original nuclear powers.

No votes were taken in the course of the workshops. Nevertheless, the rapporteurs and editors of this report sensed unspoken consensus on many points.

Canada as a nuclear weapon-free zone

Facilitator: Shirley Farlinger; Rapporteur: Metta Spencer

Mark Leith referred to the "Conference of States Parties and Signatories to Treaties that establish Nuclear Weapon Free Zones", which was hosted by Mexico in Mexico City prior to the NPT Review Conference 2005, and attended by a delegation of Mayors for Peace. [This initiative of Mexico would indicate that interest in NWFZs is far from dead and that Canada could do well to make use of any momentum produced by the Mexicans. Further comments on the Mexican Conference can be found in *Disarmament Diplomacy* Autumn 2005, pp.6-7.]

Consensus of the workshop can fairly be said to have been reached on the following points:

The NWFZ is only a small step toward nuclear disarmament, but it is a useful step and therefore important.

In particular, it is important that Canada become a NWFZ. To this further this end, formation of a Working Group of SfP and CPG is recommended. In this context, Beverley Delong, CPG member, is researching the changes that would be needed in Canadian law to bring this goal into effect.

¹ These papers, available as separate documents, are part of this report.

It was reported that New Zealand peace activist Alyn Ware says UN Security Council Resolution 1540 (2004) can be used to get government action. It requires states to take domestic measures to prevent proliferation of nuclear weapons (as well as chemical and biological weapons), which can be read to mean both horizontal and vertical proliferation (i.e. increased weapons possession, deployment, and development). Actions mandated under Resolution 1540 include implementing "multilateral treaties whose aim is to eliminate or prevent the proliferation . . . all member States to implement fully the disarmament treaties and agreements to which they are party." The Security Council called on all states to report on the steps they took or intend to take. Alyn Ware should be consulted on how Resolution 1540 can be turned to the advantage of the proponents of Canada as a NWFZ.

The fact that NWFZs are mentioned and encouraged in the Treaty on Nuclear Non-Proliferation (the NPT) in theory implies nuclear-weapon power approval of such zones, even though opposition may be encountered, as when New Zealand (NZ) declared itself a NWFZ, denying use of its ports to US naval vessels. [US naval vessels are forbidden to declare whether they carry nuclear weapons and are thus refused entry to NZ ports in the absence of a declaration that they do not carry such weapons.]

Systematic efforts toward making Canada a NWFZ had been applied in the early 1980s (c.1981) without achieving that aim. This was likely due to the close military relationship between Canada and the USA during the Cold War. The fall of the Soviet empire might well have signaled the moment for Canada to declare itself a NWFZ, but that did not happen, there having been no campaign at that time.

The present relatively friendly relations between Canada and Russia at this time should make an appropriate setting for Canada as a NWFZ.

Noting the peace movement in NZ had worked systematically for two-to-three years to persuade parliamentarians that they should vote to make NZ a NWFZ, it was felt that at least that much effort would be necessary to convert Canada to a NWFZ. The way to achieve this, it was suggested, was to have a Working Committee in Ottawa, formed from several existing peace groups, that would systematically approach parliamentarians, one, two or three at a time, perhaps through lunch meetings, to carry out this ground work. It was noted that several members of CPG are strong workers in the field of nuclear disarmament and that SfP has a small Working Group on Nuclear Abolition. Other groups also have experts on nuclear disarmament matters.

Even though it was suggested that the new, Working Committee toward Canada as a NWFZ should be based in Ottawa, it was felt that other branches of this Committee in other areas, e.g., Toronto, could be valuable so as to contact MPs in their ridings.

There was also a suggestion of Canada participating in the negotiation of a NWFZ between countries of Central America, and of the Caribbean (where such countries are not already signatories to the Treaty of Tlatelolco). No specific recommendation was forthcoming, though we sensed a consensus that Canada as an independent NWFZ should take priority, and the larger NWFZ could follow in due course. A new NWFZ treaty can take some years to negotiate, sign and ratify by the States Parties. Another, simpler process would be for Canada to sign on to the Treaty of Tlatelolco, which has been in force for many years, but to do so after it has declared itself a NWFZ independently.

Canada could declare itself a NWFZ, but would have to consider the constraints imposed by its membership in NATO. Canada has for some years tried to turn NATO's nuclear policy around, and is slowly acquiring support for this position. Germany and Belgium have this year requested the removal of US nuclear weapons from their soil (see background documents).

NORAD, the NORTH American Air Defence agreement, is a major obstacle to Canada's declaring itself a NWFZ. Nevertheless, the purpose for which NORAD was originally devised

changed at the fall of the Soviet empire, so that it is now long past time for Canadian civil society to examine NORAD².

Mayors for Peace and Cities as NWFZs.

It was pointed out that the condition, NWFZ, does not mean the same in different cities, though the declaration of its being a NWFZ does carry restrictions that can be enforced in each specific case. However, ports are under federal jurisdiction in Canada, so that cities as NWFZs cannot prevent the entry of ships bearing nuclear weapons into their harbours; nor can they prevent overflights. Municipalities in Canada are furthermore the creatures of provincial governments. Thus when a city that has declared itself a NWFZ is forced to absorb a suburb or region that has not, it can lead to contradiction, if the absorbed suburb has industry forbidden by the former city. Thus, while cities as NWFZs may play a useful role in pushing the world toward nuclear disarmament, they could not restrict altogether the presence of nuclear weapons in Canada, even if every municipality had declared itself nuclear-weapon free.

This workshop also provided useful ideas beyond the confines of NWFZs (see addenda)

Launch on Warning

Facilitator: Joanna Santa Barbara; Rapporteur: Cameron Harrington

The objective of the background paper and the paper presented at the Forum by Robin Collins was to alter the nuclear policies of the US and Russia that support Launch on Warning (LoW). This is a system whereby “retaliatory” nuclear missiles are launched when there is detection of an incoming nuclear missile attack, but before a detonation confirms the suspected attack is real. One aspect of this current policy is that it is possible for a retaliatory launch to take place in response to a false warning. In this sense, LoW could in certain circumstances be *the* pre-eminent risk that would lead to nuclear war on a large or small scale. It was understood that shifting to the preferred policy of Retaliatory Launch only after Detonation (RLOAD) is directed at military audiences that still adhere to nuclear deterrence doctrine.

This section is grouped into three subsections, each comprising a major theme.

Theme 1. Tangible steps toward challenging the policy of LoW and replacing it with RLOAD. While no votes were taken, there was implicit consensus on most or all of the following recommendations:

Actively engaging the groups involved in promoting elimination of Launch on Warning. Canadian Pugwash Group (CPG), Science for Peace (SfP) and Canadian Network to Abolish Nuclear Weapons (CNANW). For instance, CNANW's member organizations could engage this policy issue as a project.

Examining the robustness of the proposal to eliminate LoW, using expertise such as was clearly present at the Forum.

Coordinating a forum, debate, or roundtable in order to engage broad governmental, academic, and NGO communities in this issue.

Fundraising for any of the above, in consultation with specialists on the issue(s).

Exploring the potential involvement of the Department of Foreign Affairs and/or the Department of National Defence in the project.

² [Editor's note: the NORAD agreement was signed originally by John Diefenbaker soon after he became Prime Minister, on the assurances that his predecessor, Louis St Laurent, had studied it and was about to sign it when the election that put Diefenbaker into power was called. Diefenbaker thus signed without knowing the contents or details of the agreement. Since then the NORAD agreement has been treated as a purely military matter by successive governments, it has frequently been modified and re-signed, and has never been aired publicly as any such important foreign-policy document should have been.]

Seeking funding from these government sources.

It was agreed that seeking assistance from the Mayors for Peace organization, for example, in our proposal to eliminate the policy of LoW and replace it with RLOAD could lend legitimacy and their network of support would be useful.

Creating a shortlist database of potential allied organizations that could be used for reference and other support.

Involving media channels, such as TVO with its program “Diplomatic Immunity”, to introduce the issue to the general public. This was seen as essential. No concrete steps were discussed on how to effectively implement this recommendation.

Theme 2. Understanding the importance and tackling the implications of Launch on Warning, and the specific implications of implementing RLOAD, particularly its effects on the prospects of nuclear abolition.

It was emphasised that the move to implement RLOAD in replacement of LoW may have little impact on deterrence policy. It was agreed that this fact should not hinder our advocacy of the policy shift. Indeed, the military may be interested in RLOAD because of its limited or nil effect on deterrence, in addition to its prevention of nuclear war from a false warning.

A broad discussion question was raised that asked whether reducing the risk of nuclear war works towards our agreed goal of nuclear abolition. Some noted that awareness is raised and thus gets the ball rolling. However, no broad consensus was raised on this particular aspect of the issue.

It was suggested that small successes are necessary to keep advocates engaged and motivated. Successes also aid in enhancing abolitionists’ credibility and reputation.

RLOAD is complementary to, but quite different from, other efforts at reducing nuclear dangers, such as de-alerting.

Theme 3. Role for individual activists and or groups, and the role of Canada in convincing the US and Russia to end LoW, replacing it with RLOAD.

While LoW is a policy primarily of the USA and Russia, there is a potentially important role for Canada, as a member of NORAD, in advocating in favour of RLOAD replacing LoW.

What would be the best and most effective methods to convey the argument to end LoW to Canada's military establishment?

Should Canada act independently, or in conjunction with NATO countries toward elimination of LoW?

Canada might play a leading advocacy goal within NATO on the subject. No substantive discussion of how it may do so was undertaken, however.

It was determined that some individuals within the Canadian government have shown some interest in eliminating LoW. It was agreed that those within the group who maintained contact with government officials actively engage in dialogue and advocate for a sustained leadership role to be adopted by Canada.

Nuclear Terrorism

Facilitator: Adele Buckley; Rapporteur: Steven Staples

Four different forms of possible nuclear terrorism³ were discussed:

- A. Nuclear Weapons (stolen)
- B. Nuclear Weapons (built clandestinely)
- C. Attack on nuclear facility (e.g. power plant)
- D. Attack using radiological material (e.g. dirty bomb)

The primary inhibitor of any of these forms of nuclear terrorism is control of access to nuclear materials. There has been little public awareness/interest in the Global Partnership Program, formed in 2002 by the G8 countries committing them to a set of non-proliferation principles, and also to funding of threat reduction in Russia. At the present rate of elimination, it will take 20 years to rid former USSR of HEU (Highly Enriched Uranium). Some 1700 tonnes of HEU are held in the world's stockpiles and the threat reduction method involves a private contractor gradually delivering it for nuclear reactor fuel.

“Agent denial”, an American terminology, is not viable because the probability is near zero of finding strikers before they attack. “Capability denial” implies control of material for non-state actors, in addition to prevention of states acquiring nuclear capability. These policies are the stated American response to nuclear terrorism.

Participants queried whether there is evidence of terrorists trying to use⁴ these weapons? We recalled that Sarah Estabrooks had informed us that the International Atomic Energy Agency has recorded more than 662 cases of attempts to traffic nuclear or radiological materials.

Security of all nuclear materials is of importance, whether it is to secure it from terrorists or for public safety. A question posed was: What does the threat of nuclear terrorism mean to nuclear power – since these are linked? As a long term protective measure, we need to teach people (especially young people) about the nuclear cycle. There have been class action suits by children that could potentially have been informed and supported by the peace movement.

Through networking internationally, we may assist in revealing the “nuclear secrets” of nations. Are terrorists any worse than many national leaders, of both Nuclear Weapons States (NWS), and undeclared NWS?

Strategies for moving forward

We can examine the existing Global Partnership Program and evaluate Canadian progress in furthering the Program. We can then propose means to expand and improve it.

Nuclear abolition requires new thinking about the legality/legitimacy of war. A lot of people are profiting from war – that's why we have so much of it. We should focus on conversion of defence spending/industry to civilian uses. Public perception of nuclear threats differs from actual risk – nevertheless, can this be used to promote abolition agenda? We miss the boat by targeting only governments, when we should be targeting citizens/voters.

Nuclear terrorism discussion could lead to

- improved control of conventional arms,
- argument against nuclear power generation without total safeguards, including off-site waste storage

³ Most participants hold the opinion that the nuclear threat perpetrated by the nuclear weapon powers enormously outweighs all imaginable threats by non-state actors. However, the discussion of this Working Group is confined to the nuclear terrorism that may be enacted by non-state entities.

⁴ Editor's Note: Graham Allison's book, *Nuclear Terrorism*, (Henry Holt and Co., 2004) says that while nuclear weapons fit Al Qaeda's philosophy and cause, most experts doubt that it has acquired or assembled a nuclear weapon, and is as yet only at the beginning of the road to acquiring the capacity to conduct a nuclear terrorism attack.

- a general critique against nuclear weapons

A suggestion that Pugwash should commission a paper on the “right and wrong” ways to discuss nuclear terrorism was well received. .

Summary and consensus on nuclear terrorism

All consequences of nuclear terrorism are significant and very serious, and non-state actors represent a real threat. However, broadly generalizing, consequences could be rated as follows:

Nuclear weapons = lower likelihood with higher consequences.

Radiological weapons= higher likelihood with lower consequences.

Overall, the group expressed two viewpoints, not necessarily mutually exclusive.

Viewpoint A:

Concern over “Nuclear Terrorism” can be dangerous, and could lead to

- scaremongering over the bogeyman of “nuclear terrorism.” (which should be avoided)
- creating self-fulfilling prophecies, and a nuclear terrorism “band-wagon.”

Viewpoint B:

Concern over “nuclear terrorism” can be useful, because such discussion could lead to

- improved control of conventional arms,
- argument against nuclear power generation without comprehensive threat protection,
- a general critique against nuclear weapons.
- eventual nuclear abolition.

Addenda

The Forum provided useful recommendations that were of wider application than merely to the subject matter of the workshop:

The study documenting 160 laws regarding the protection of civilians, prepared for ICRC, should be examined.

Nuclear weapons are an addiction. The cure may have to be like the cure for smoking. Make it more difficult and less comfortable to be a nuclear-weapon addict.

The after-effects of nuclear bombing go far beyond the deaths and the long term medical problems.

An issue - How to get more people to become activists, or more active against war, etc. The production of serial dramas that depict activists as likeable people is a useful approach, and is being pursued by multibillionaire Jeffrey Skoll. A book on the subject of entertainment as a tool for peace is in press; Metta Spencer, *Two Aspirins and a Comedy* (Paradigm 2006). Another example of entertainment having a profound influence on the peace process is the novel *Lay Down Your Arms* by Bertha von Suttner, the first woman to win the Nobel Peace Prize. Von Suttner's novel was a great success as fiction and was translated into many languages. It also inspired the second Hague Conference for Peace (1906).

Nuclear disarmament is only a subset of that larger set of challenges. Some feel that the central focus of the peace movement should be the abolition of war.

Videos or DVDs for use in education were also mentioned and, as an example, "Genie in a bottle: Unleashed" a DVD made by two boys from Chicago, Stephen Sooter and Trace Gaynor.

Education, especially early education, is vital for peace.

Recommendations

1. Exchanges of peace activists, for example, between countries, can increase awareness of the dangers from nuclear weapons, and such exchanges are therefore to be encouraged.
2. It was noted that the Board of Directors of SfP had decided to revive its speakers' bureau, and it was suggested that a combined bureau of speakers from SfP and CPG should be formed, perhaps with other groups included as well, for example the Group of 78, and Canadian Physicians for Global Survival, the Canadian Voice of Women for Peace.
3. Education and assistance to youth.
4. Peace movement needs to summarize our information and reach out to thousands of non-profits, encouraging them to formulate policies on the issues. This will raise public awareness, demystify the topic and spread information.
5. Promote that Canada should become a NWFZ. Start by forming a Working Group of SfP and CPG.
6. Examine the robustness of the proposal to eliminate LoW, in consultation with specialists on the issue(s). Coordinate a forum, debate, or roundtable in order to engage broad governmental, academic, and NGO communities in this issue, and examine the robustness of the proposal to eliminate LoW, including fundraising, in consultation with specialists on the issue(s).
7. Those within the group who maintain contact with government officials of the Department of Foreign Affairs and/or the Department of National Defence should actively engage in dialogue and advocate for a sustained leadership role on LoW to be adopted by Canada.
8. Create a database of sympathetic organizations and individuals that would aid in organizing a specific advocacy campaign.
9. Examine the existing Global Partnership Program and propose ways to evaluate Canadian progress with program, and then expand and improve it.
10. Commission a paper on the "right and wrong" ways to discuss nuclear terrorism.

Documents circulated to participants in advance of the 1 October Forum

- 1) INESAP Bulletin 10 — "Steps Toward a Nuclear Weapon-Free World: Present and Future Nuclear Weapon-Free Zones" by Luis Masperi (Argentina).
- 2) Agence-Presses France, 3 May 2005 "Germany Pressures US over Nuke Removal."
- 3) Abolition Caucus, 15 July 2005 "Belgian House of Representatives asks withdrawal of US nuclear weapons."
- 4) Alan Phillips and Steven Starr "Eliminate Launch on Warning", an unpublished, revised version of an earlier paper published paper by the same authors.
- 5) Francesco Calogero "The risk of nuclear terrorism and how to decrease it" paper 2.3 presented at the Working Groups of the 55th Pugwash Conference on Science and World Affairs, in Hiroshima, Japan, July 2005.
- 6) Michael D. Wallace "Some Random Thoughts on 'Nuclear Terrorism'" preliminary draft for Annual Joint Forum, 1 Oct, 2005
- 7) John P. Holdren "Aiming for Zero: The Trajectory Toward a Nuclear-Weapon-Free World" 23 July 2005, Keynote Presentation in Honor of Sir Joseph Rotblat at the 55th Pugwash Conference on Science and World Affairs, Hiroshima, Japan

These documents can be obtained in electronic form from the Science for Peace office, sfp@physics.utoronto.ca

Short bios of keynote speakers

Dr. Andrew Bone

Andrew Bone is Senior Research Associate at the Bertrand Russell Research Centre at McMaster University. He has an academic background in Modern British History and is part of a team of editors working on the Collected Papers of Bertrand Russell, a multi-volume critical edition of Russell's shorter writings. He has studied The Russell-Einstein Manifesto in Volume 28, Man's Peril, 1954-55, and the origins of the Pugwash movement in Volume 29 Détente or Destruction, 1955-57. He is presently working on Russell's pacifist writings from the 1930s. He received his B.A. from the University of Birmingham, and his M.A. and Ph.D. from McMaster University.

Dr. Mark Leith

Dr. Mark Leith is a practicing psychiatrist and teaches in the Psychotherapy Program of the Department of Psychiatry of the University of Toronto at Sunnybrook Hospital. He has appeared on television and radio and written for a number of periodicals including the Globe and Mail, the Toronto Star, the Canadian Medical Association Journal, Peace Magazine and the Canadian Jewish News related to issues of psychiatry and militarism. He is currently completing a book "Problem Solving Psychotherapy: A Practice Manual". His presentation on Nuclear Weapons Free Zones is drawn, in part, from his essay "To The Death: George Bush and the Addiction to War".

Robin Collins

Robin Collins has been active in peace and disarmament campaigns in Ottawa for over 25 years. He has been a steering committee member of the Canadian Network to Abolish Nuclear Weapons for several years, has served on the Mines Action Canada (landmine campaign) steering committee and board from 1998 to January 2004, and sat as co-chair and then chair from 1998 until November 2002. He was a primary drafter of the coalition's policy guidelines on cluster munitions and explosive remnants of war. Robin has been an executive committee member with the United Nations Association in Canada (National Capital Region Branch) since 1991, and newsletter editor for much of that period. He is a national executive committee member and the Council chair of the World Federalist Movement - Canada.

Robin has contributed articles on peace, nuclear disarmament, and defence-related topics to publications such as Peace and Environment News (Ottawa), Ploughshares Monitor, Peace Magazine and Mondial (WFM-C).

Robin's day job for more than 20 years has been in the electronics sector, primarily in the operation of equipment involved in the improvement and correction of integrated circuit designs. He has a BA in political science; his studies have focused on the public policy process. He is married, with two sons.

Sarah Estabrooks

Sarah Estabrooks received her Master's in history from the University of Toronto in 2000 and is working on a second Master's degree in political science at Wilfrid Laurier University. She worked as a Program Assistant for the Peacebuilding and Disarmament Programme of the World Council of Churches in Geneva from 2000 to 2001. Her focus was arms control and disarmament diplomacy, with a focus on small arms and light weapons. In fall 2001, she joined Project Ploughshares, based in Waterloo, Ontario, as a Program Associate responsible for programming on nuclear weapons and space security. She served as the NGO Representative on the Canadian delegation to the 2003 *Preparatory Committee for the 2005 Review Conference of the Non-Proliferation Treaty* and serves on the Steering Committee for the Canadian Network to Abolish Nuclear Weapons. Recent publications include, "Building a Culture of Accountability: Reporting by States Party to the Treaty on the Non-Proliferation of Nuclear Weapons" published jointly with Ernie Regehr, "Preventing the Weaponization of Space: Options for moving forward", and she has contributed chapters to the first two annual assessments of the Space Security Index project.

Canadian Pugwash and Science for Peace thank the speakers, facilitators and rapporteurs for their important contributions. Thanks are also due to Dr. Derek Paul for editing and overall preparation of this report.