

BULLETIN

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President's Remarks

BY HELMUT BURKHARDT

Science for Peace, in its wisdom, has made me its President. It will be a formidable challenge to do justice to this office that was held by Eric Fawcett, Anatol Rapoport, George Ignatieff, Derek Paul, Terry Gardner, Mel Watkins, and many other distinguished advocates of peace, justice, and sustainability.

Fortunately, I have an experienced Executive on my side. With the help of Metta Spencer (VP), Paul Hamel (Secretary), Nina Seahra (Treasurer), Carolyn Langdon (Executive Director), Terry Gardner, Chandler Davis, Mel Watkins, John Valleau, and Joe Vise (members) we can activate Science for Peace to fulfil its mandate. However, we shall need the support of our responsible Board, and we rely on the initiatives of each individual Science for Peace member, and the advice of our Advisory Council.

As an interdisciplinary organization, Science for Peace has the mandate to look at the full spectrum of issues facing Canada and the World: ecological sustainability, peace and social justice, and individual rights and duties. That is a tall order, and one might question the wisdom of such a wide-angle view of the world. Are we going to lose depth in spreading our efforts that wide?

I believe, Science for Peace has the brainpower to ask all the pertinent questions that need to be asked, and it is part of our task to avoid tunnel vision. The specialists, who have the in-depth knowledge of partial truths, play a

different role in our society. Together, specialists could supply the answers to the wide range of questions.

In my vision, the mandate of Science for Peace is to pool the scattered knowledge of academia and use it to design policy options, and to disseminate our conclusions to politicians, business leaders, educators, and the public.

The integration of knowledge, and the design of solutions can be done in Science for Peace working groups. In order to address all the high priority issues, we need to establish more working groups. The expansion of working groups' activity can be achieved by the use of the Internet, which allows for national and global input. Our plan is to

approach all Canadian Universities to encourage their faculty to become members of Science for Peace, and to contribute to our knowledge, integration and application project.

From the Editor

BY R.M. BAXTER

Earlier this year it was reported that the Federal Government was proposing to establish something called the Institute of Comprehensive Medicine in Hamilton. If the purpose of this will be to evaluate the various drugs of plant and animal origin that are appearing in increasing numbers on the shelves of supermarkets it will clearly be useful.

However it seems that it will also be devoted to everything from ancient quackery to the latest New Age nonsense. At a time when all levels of government have been reducing the funds available for medical treatments of established efficacy to the point where lives may be endangered, to

squander resources on such dubious practices seems to me irresponsible in the extreme. From a wider perspective, this represents an instance of an increasing tendency to reject reason and science in favour of superstition and general looniness, which I find deeply disturbing. Does anyone else in Science for Peace share my concern about this? Is this a matter in which we should become involved?

Best wishes to everyone for happy holidays, and an auspicious beginning to the new year, the new century and the new millennium.

Franz Blumenfeld Peace Foundation, Annual Report

BY FRANK CUNNINGHAM

This report covers the period from January 1, 1999 to December 31, 1999.

Status of the Fund as of December 31, 1999

Equity in the fund was \$53,788.55, down \$3,096.15 from December 31, 1998. During this period we received one donation of \$100.00 from Derek Paul.

Financial Transactions during the Period

April 23: \$400.00 to Voice of Women for a public education panel on women and security.

April 23: \$1,000.00 to Voice of Women for their Culture of Peace project.

June 15: \$500.00 to Reel World Productions for a documentary on children in Nicaragua affected by the Contra

war.

June 15: \$500.00 to Chesmak Farhoumand-Sims to attend a peace conference in Geneva.

September 17: \$1,000.00 to the Pacific Campaign for Disarmament and Security for a project to document and publicize the new militarism in the Asia-Pacific countries.

December 3: \$500.00 to Voice of Women for a training session on legal tools for NGOs.

December 3: \$500.00 to the Peace Research Institute (Dundas) to prepare a summer school on the culture of peace.

December 3: \$1000.00 to the Women's International League for Peace and Freedom to help reprint and distribute a second edition of their pamphlet on globalization.

Eric Fawcett, 1927-2000

BY DEREK PAUL

Born and brought up in Lancashire, Eric went to Clare College, Cambridge, following military service in the Royal Navy. He read Natural Sciences, choosing physics for his final year, and continued on at Cambridge to obtain a PhD in experimental physics — the physics of metals — in 1954, under the supervision of Brian Pippard (later, Sir Brian Pippard). Eric's dynamic career took him from Cambridge to the National Research Council in Ottawa, and then to the Royal Radar Establishment, Malvern, the Bell Telephone Labs, Murray Hill, New Jersey, and to the University of Toronto as full professor in 1970. From the University of Toronto he made extended visits to at least thirteen other universities and institutes all over the world for the purpose of scientific collaboration. After retirement in 1993, the collaborative research received even more emphasis for some years.

While Eric's 150 excellent scientific papers are well known to specialists internationally, he will be more widely remembered in Canada for his role in stimulating public consciousness of the dangers of war waged with weapons of mass destruction. He was at one time or another a participant in, or a board member of at least 10 peace organizations, including the International Network of Engineers and Scientists and the International Peace Bureau. In 1980 he became a participant in the Pugwash Conferences on Science and World Affairs, which shared the 1995 Nobel Peace Prize with its president, Prof. Joe Rotblat.

In 1981 Eric played the central role in founding Science for Peace and served as its first President (1981-4), as Vice-President (1990-2, 1997-8) and President (1995-7), and in various key roles all other years. Outstanding among the achievements of the Working Groups of Science for Peace was the "Toronto Declaration" which set out general ethical considerations for scientific research. The Declaration has been widely circulated in Europe and helped some universities in Canada to formulate their ethical guidelines policies. Eric was also co-founder of the Canadian Committee of scientists and scholars, which has the objective of defending and promoting the Universal Declaration of Human Rights. Despite Eric's extraordinary level of activity in the public domain since 1980 his scientific research continued undiminished.

From the 1980s Eric extended his writing and editorial work into new fields. For instance, in 1994-5 he co-edited, with Hannah Newcombe, the important book, "United Nations Reform: Looking Ahead After Fifty Years" (Science for Peace, Dundurn series, 1995).

Especially throughout the 1980s Eric kept in close contact with leading Jewish physicists who had been fired from their research institutes or universities in the Soviet Union, and were treated as dissidents by their government. He and others, at some risk to all concerned, helped these scholars to keep up with current research by organizing seminars in cramped apartments, knowing that KGB agents were constantly surveying all comings and goings. He was willing to participate in any conference that might reduce international tensions and/or lead to an abatement of the nuclear arms race, and he several times went to Moscow to that end.

After a short and valiant struggle with cancer, Eric died peacefully on 2 September 2000. He is greatly missed by all his friends and colleagues and we extend our heartfelt condolences to his family.

In 1954 Eric married Pat, his close friend throughout his Clare college years. Their wedding marked the start of 46 more years of wonderful companionship and love. Pat survives him, together with their three children, Clare, Andrew and Ruth, and four grandsons — all testify to the excellent personal qualities of their beloved parent or grandfather.

Highlights from the Science for Peace Annual General Meeting

BY PAUL A. HAMEL

The Annual General Meeting of Science for Peace was held on Saturday, May 27, 2000, presided over by outgoing President Mel Watkins.

Mel thanked all present for asking him to head Science for Peace despite his lack of scientific background. He also stated that throughout his tenure as President, he became more aware of the wide range of activities undertaken by the many members of Science for Peace. Certainly in his mandate, Nuclear Weapons Abolition was still one of the foremost issues requiring his efforts. This has become even more relevant as the USA continues to push for the development of a National Missile Defence system. In this regard and in the context of nuclear weapons abolition, Mel pointed out a number of important events and initiatives undertaken during his tenure. In particular, the joint conference with the Pugwash group chaired by Senator Douglas Roche, resulted in a strong statement opposing Canada's participation in these activities.

As was noted by many other members of Science for Peace, the contributions of Mel Watkins to Science for Peace were numerous, energetic and thoughtful. His leadership will be missed, although his continued participation in Science for Peace activities indicate that his formidable talents will still be of benefit for Science for Peace and, indeed, all Canadians.

A significant event of the day was the inauguration of the Hanna Newcombe Anatol Rapoport Award, newly established by Science for Peace. Through the establishment of this award, Science for Peace aims to acknowledge and encourage the endeavours of the younger generation to realize the goals of peace and justice. In practice the award will highlight the exemplary contributions of one member of this younger generation of peace advocates.

The award was presented to Dr. Samantha Nutt, MD, in recognition of outstanding commitment to and advocacy on behalf of women and children in regions of conflict. Dr. Nutt is the founder and director of the Canadian branch of War Child, an organization that ministers to children affected by war throughout the world. In her remarks to the AGM, Dr. Nutt explained that her work involves direct contact with children in many different countries, advocacy work in Canada and, of course, fund-raising. She spoke of the War Child initiated campaign to stop the sale and distribution of weapons, primarily the relatively cheap rifle, the AK47. She reminded us that since World War II, wars and the situations of children around the world have become steadily worse. She felt that the time had come to stop trying to change the world by working with those in power but to take the issues directly to the people.

Space: The Next Frontier for War?

Report from a Teach-in held October 14, 2000, in Toronto

"US Space Command - dominating the space dimension of military operations to protect US interests and investments. Integrating space forces into warfighting capabilities across the full spectrum of conflict."

That chilling quote comes from "Vision for 2020," a mission statement issued by the Pentagon's US Space Command. The cover of the statement depicts a laser weapon, aboard a US space vehicle, zapping a target on the earth below.

These electrifying facts were recounted by Karl Grossman, an award-winning US investigative journalist, to a teach-in on October 14, in Toronto sponsored by Science for Peace and other organizations. Grossman was the keynote speaker at the day's events. He depicted a nightmare scenario, in which the US plans to militarize space and use it to dominate the rest of the world indefinitely. "There is only a narrow window to stop these plans from

going forward", he said pointing out that Canada could, if it chose, play a very significant role in attempting to block this development.

Four other experts also took part and discussed, from various perspectives, the American space programme plans. They concentrated particularly on the political and strategic implications of the NMD, the US "National Missile Defence", a renewed version of Reagan's Strategic Defence Initiative (popularly known as "Star Wars"). The NMD can be seen as a first step in the Pentagon's plans to monopolize space militarily, and indeed the step by which they dare the rest of the world to object to these plans. NMD is crucial, because it jeopardizes arms control, and would certainly bring a halt to present moves toward nuclear disarmament.

NMD is a plan to enable the US military to intercept and destroy nuclear missiles headed for its territory. It involves a complex global system of satellites, radars, booster rockets and other equipment, all required to work together. Those championing the project say that it is one of the most complicated technical challenges ever undertaken.

Critics say NMD risks triggering an arms race so grave it will make the Cold War look like child's play, and that it violates basic international law set out in the 1967 Outer Space Treaty. This document, signed by 91 countries including the United States, declares that space should be kept free of weapons, a position to which the United Nations Secretary General, Kofi Annan, renewed his commitment last year. Grossman pointed out that Canada has repeatedly supported this position. The proposal would also violate the Anti-Ballistic-Missile Treaty (ABM); nuclear deterrence is based on this treaty, because ballistic missile defences (such as NMD) would make possible a preemptive "first strike" by their possessors.

The NMD isn't a sure thing yet. Two of three tests of the system have already failed and on September 1, 2000, President Clinton said: "I simply cannot conclude with the information I have today that we have enough confidence in the technology, and the operational effectiveness of the entire NMD system, to move forward to deployment." He then decided to leave the final decision on the project's future up to the new president. This means the NMD's future depends on the new president's position.

But why would the US want to pursue a programme that threatens world stability, endangering the post-Cold-War peace we've been expecting? Grossman believes the answer can be found in US Space Command documents such as "Vision for 2020", and related reports on US space military operations. These documents lay out the American strategy in frank language. They explain that the United States should seek to rule space in the same way that the colonial powers, who came to global dominance in the 19th century, ruled the seas. "Nations built navies to protect and enhance their commercial interests," the document reasons. This is why NASA, created in 1958 as a civilian agency, and the US military are working together on shuttle missions, according to Grossman. It also explains why NASA uses plutonium nuclear power instead of solar power on space devices such as the Cassini probe: the US military is hoping for nuclear-powered devices in space. "Being an empire, being drunk with power, that is what I'm sorry to say my country is involved in," says Grossman. Sergei Plekhanov, a professor of political science in the Centre for International and Security Studies at York University, also spoke at the teach-in; he believes that this situation threatens an arms race even more dangerous than that of the Cold War. He has observed that American foreign policy makers seem to underestimate Russia's potential for challenging the West. While the Clinton Administration believes the Russians can be persuaded to accept the deployment of the NMD, and the Republicans criticize the Administration for even bothering to consider the Russian point of view, US policy-makers generally discount Russia as a major international actor. However discounting Russia's opinion of NMD is shortsighted and mistaken. If Russia's security is seriously challenged, its leaders may put their society and economy on a war footing. NATO's expansion eastward and war in Kosovo have already unnerved them enough to modify the country's nuclear posture. Because Russian conventional forces are in disarray, the Kremlin has begun to put greater emphasis on nuclear weapons. At this point, Russia continues to advocate cuts in its own and US nuclear offensive forces, but only on a condition that the ABM Treaty stays in force. "Losing Russia as a security partner may mean losing the world", warns Plekhanov.

Russia is not the only country that could see NMD as a good reason to build up a nuclear arsenal. While China is mainly concerned with protecting its own sovereignty interests and doesn't see the United States as a rival, the development of an extreme imbalance of military power could push the country to build up its own nuclear weapons, argues Julia Ching. Ching is a China specialist and a professor emerita. She argued that the NMD could encourage China to join an arms race. If the NMD puts today's world in such peril, then how can citizens

stop its implementation? It is up to the US allies, specifically Canada, to refuse to cooperate with the programme, says Grossman. He also sees a role for the United Nations.

Stopping a mega-project like this one is no easy feat, and putting an end to NMD today does not necessarily mean it will not resurface tomorrow, says David Parnas, the director of the Software Engineering programme at McMaster University and former long-term consultant to the United States Department of Defence, who also spoke at the teach-in. He described how, while working on contract for the Department of Defense, he witnessed his colleagues bidding on contracts they knew were not feasible, simply to obtain the valuable DoD contracts. He then saw how they worked on projects that were inherently flawed — even after programmes were halted by higher-ups. In one case, a programme Clinton killed resurfaced under another name. This type of system almost guarantees that projects like NMD will continue into perpetuity, he argues.

This means that the fight against NMD could be long and hard. According to Ann Denholm Crosby, a political science professor at York University who spoke at the teach-in, Canada might on the surface appear to object to military projects like NMD because of our vocal principled stance. But behind the scenes, our actions leave a lot to be desired. Not only has Canada refused to oppose NMD, but it has agreed to changes of the NORAD treaty that would allow us to participate in NMD without public consultation if the Canadian government felt so inclined. "The United States wants Canada to participate in the programme because it needs Canada's good name," she said. Canadians are afraid to oppose US wishes because they fear the political or economic repercussions. "Do we as Canadians want to be involved slavishly in the US's pursuits worldwide?" she asks.

But Karl Grossman is ever hopeful. He insists that the rest of the world has the power to stop the transformation of the heavens into a war zone and Canada, if it wants, has a possible leadership role to play in this fight. "Space should not, and cannot, be made an arena of war. I plead with you today to lead the United States into doing the right thing," he said.

Other participating Organizations: Greenpeace, Oakville Centre for Peace, Ecology and Human Rights, Peacefund Canada, Ontario Voice of Women, Blumenfeld Fund, Burlington Association for Nuclear Disarmament, Peace and Social Justice Committee (Quakers), Lawyers for Social Responsibility, McMaster Peace Studies, le Centre de Ressources sur la Non-violence, Hiroshima Day Coalition, and Physicians for Global Survival.

A full copy of the report was sent to members for whom we have an e-mail address. If you didn't receive a copy and are interested contact the office at 416-978-3606 or sfp@physics.utoronto.ca.

Millennial Forum

Last May a group of 1350 people representing various non-governmental organizations (NGOs) and society as a whole met for a week at the United Nations in New York at a "We The People Millennium Forum" to convey their views on the state of the world and what might be done to improve it to the Heads of States who were to hold a meeting at the UN in September at Special Millennium General Assembly.

Under six broad categories — peace, globalization, poverty, pollution, human rights, reforming the UN — the forum made detailed recommendations to the UN, to Governments, and to society as a whole.

This forum was almost totally ignored by the media. Mel Watkins, past president of Science for Peace attended the forum and prepared a report which was first published in Straight Goods, an on-line news source.

To view the report of the Millennium Forum, see www.un.org/millennium.

To find out more about the United Nations and Civil Society, visit www.un.org/partners/civil_society/home.htm.

Extraterrestrials Have Problems Too

A REVIEW BY R.M. BAXTER

Life on Mars by Donn Kushner, Childe Thursday, Toronto, 1998. 104 pp, ISBN 0-920459-45-5

The possibility of life on other planets is a subject that has interested me for many years, so I should make clear at the outset that anyone picking up this book expecting a treatise on astrobiology will be sadly disappointed. In a review of an earlier book by this author, "The Night Voyagers" (PM May/June 1996) I described it as a work of magic realism. The present book goes away beyond magic realism deep into the realm of fantasy, with a strong seasoning of irony.

The Martian organisms imagined by the author seem to be a kind of humanoid lichen, deriving energy for their vital processes from the photosynthetic activity of symbiotic algae growing beneath a layer of transparent skin on their heads. They are intelligent, much smaller in stature than their terrestrial counterparts but morally superior, and endowed with sense organs of a kind quite unknown to earthly organisms.

Two years before the time of the story one small community of Martians had an exciting experience. Thanks to their specialized sense organs they had received two hours of a television transmission from Earth. This included part of a cowboy movie, a number of commercials, and a news broadcast dealing with the 1973 war between Israel and Egypt. In their gentle innocence they understood very little of what they were seeing. In particular the idea of fighting and killing was totally alien to them. Their leader, a mysterious omniscient figure whom none of them had ever seen, although they could hear his voice, provided a fanciful interpretation, and told them the names of the individuals involved. They soon took pleasure in reenacting the events as games, and applied the names to themselves. Two inseparable friends adopted the names of Shmuel and Abdullah; others adopted the names of Indian scouts, cowboys, and other fictional or real individuals. They gave to their mysterious leader the name Red-Spotted Serpent, after a wise Indian chief in the cowboy movie.

The story begins as another exciting event is occurring. The second Viking Lander has just set down near them and has aroused much interest and speculation. Red-Spotted Serpent has warned them not to reveal themselves to the lander's camera and they have succeeded in doing so, otherwise the information transmitted back to earth would have been considerably more startling than it was.

As the story progresses we become aware that Martian life has not always been so idyllic. There are references to what are called the Catastrophes, the nature of which is gradually disclosed. At the same time the arrival of the Viking Lander and the likelihood of further human intervention raise fears for the future. The story ends with Red-Spotted Serpent (whose nature is eventually revealed)

speculating on how he may guide his people through the difficult times that may lie ahead.

I have only one criticism. In the cowboy movie that the Martians saw the author reports that the cavalry advanced to the strains of "The Stars and Stripes Forever". However Sousa did not compose this well-known march until 1897; surely what the Martians heard was "Garry Owen".

This amiable parable should provide a pleasant diversion to readers seeking temporary escape from the often far from amiable reality of life on our own planet.

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