

**THE**  **BRUNSWICKAN** •

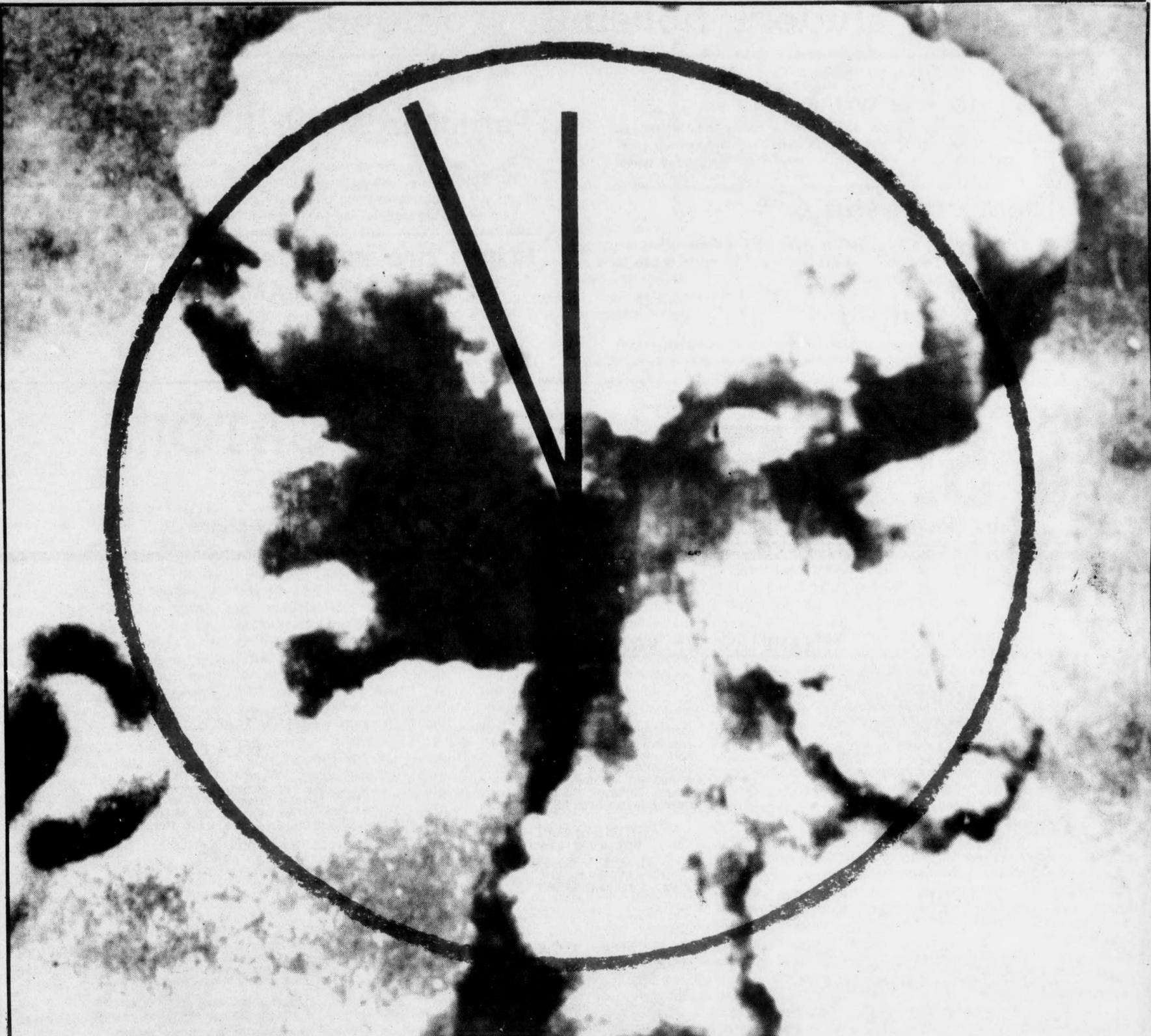
FROM UP THE HILL

CANADA'S OLDEST OFFICIAL STUDENT PUBLICATION

AUGUST 6, 1985

SPECIAL DISARMAMENT ISSUE

16 PAGES FREE



“Never before in human experience had we been placed on the narrow edge between catastrophe and survival.” -Javier Perez de Cuellar, Secretary General of the United Nations



## CANADIAN HOMELOCATORS

# NEED A HOME?

Canadian Homelocators can help solve your student housing problems **FAST**

### How do we work ?

Since our goal is to locate you fast, we will supply you with listings of properties that fit your particular needs and preferences. Each individual property carries its' own description designed to speed up the renting process.

### About our listings ?

We carry an active list of over 200 different houses, townhouses, duplexes, apartments and farms in Fredericton and a 60 mile radius

### Cost to you

We have a small service charge - which entitles you to shop around until completely satisfied, no matter how many vacancies you look at.

### Particular Needs ?

By this we mean type of dwelling, number of bedrooms, price range you require, area you desire, furnishings, facilities for pets etc. We can also supply you with information about little extras such as parking facilities, air conditioning, fenced yards etc.

### When are we open ?

**Six Days A Week 10 A.M. - 8 P.M.**

There is no appointment necessary so just drop by at your convenience. Several rental counsellors are on hand at all times. If you have any questions we can answer them for you. Fast & Efficiently!

# \$5. OFF

SERVICE CHARGE WITH THIS COUPON

## HOMELOCATORS

97 YORK STREET

(506)455-1082

Major Credit Cards taken by phone

### EXAMPLES OF MAXI SERVICE ADS

#### STILL SEARCHING?

We have the home for you! We rent houses, townhouses, apartments, flats, condos in all areas, sizes & prices! Families, students & executives our speciality. fee.

OVER 1400 CONFIRMED VACANCIES  
Call The Experts Now!

#### Canadian Homelocators

623 Bloor St. W., Toronto  
3159 Dufferin St., Toronto  
71 Dundas St. W., Mississauga

**275-2911**

OPEN 7 DAYS A WEEK TILL 9PM

#### MOVING SHORTLY?

Get your August-September-October selection of homes today. Over 1,000 to choose from. All areas, prices, sizes, plus new ones by phone daily!

G.D. HOMELOCATORS—WINNIPEG  
7days 244 1/2 Main St. 947-0451  
OFFICES ACROSS CANADA

#### STOP LOOKING

We have it. Between 600 and 700 vacancies LISTED DAILY houses, duplexes, apts., townhouses, farms. All areas, sizes and prices, furnished and unfurnished for immed. and future occupancy. Children and pets a speciality. Open 7 days a week till 9 p.m.

#### HOMELOCATORS

PHONE 947-0451

232 MAIN BETWEEN  
PORTAGE AND BROADWAY  
A MOVE IN THE RIGHT DIRECTION

ATTENTION: Homelocators has the home for you, we carry houses, town houses, flats, uppers, lowers, and farms. All areas, sizes and prices, money back guarantee. 3221 Bailey & 250 Delaware, 838-4536. Homelocators Fee.

#### CANADA'S LARGEST AGENCY

#### BECAUSE!!

#### WE ARE THE BEST

We rent houses, duplexes, apts. & farms in Calgary & 60 mile radius.  
Call 9 a.m. to 9 p.m. all 7 days  
1609 Centre St. Nth. (fee)

#### HOMELOCATORS

276-9791

Phone orders taken by credit card

#### STOP LOOKING!!

Homelocators have the rental for you! Houses, farms, duplexes, townhouses, apartments! All sizes, prices, areas! Kids, pets, O.K.

Hamilton, 819 King St. E. 544-7943  
Burlington, 3018 New St., 637-5691

Chargex Phone orders accepted.  
Money Back Guarantee Available

A MOVE IN THE RIGHT DIRECTION

## Hiroshima Aug 6, 1945 - may it never be forgotten

### WW II: Atomic Bomb Victims Suffered Greatly



By MICHAEL BENNETT

Injury by exposure to an atomic bomb first occurred in August of 1945 at Hiroshima and Nagasaki, and its effects are still in evidence.

Never before had human beings experienced large-scale radiation and blast which, together with radioactivity, caused the deaths of 140,000 in Hiroshima and 70,000 in Nagasaki.

These miserable events were the first and only examples of heavy lethal and momentary doses of whole body irradiation. These heavy doses were the main reason for the poor repair, the prevalence of infection, and the extremely high mortality in atomic bomb injury.

The atomic bomb not only brought tragic and horrible injuries to the exposed but also hindered the basis for the reparative and regenerative processes of the living body.

The greatest number of casualties occurred immediately after the explosion to the end of the second week. At this early stage, about ninety percent of the fatal cases died. Those who survived for several days after the explosion complained of painful thermal injury.

Flash burn of the skin caused by the heat rays was found in those persons exposed within 3.5 kilometers of the hypocenter in Hiroshima, and in those within 4 kilometers in Nagasaki. Flash burn is a primary thermal injury caused by the direct action of heat rays upon the human body.

Secondary thermal injury (such as scorched burns, contact burns, and flame

burns) was brought about from fire caused by atomic bomb thermal rays.

Photos taken of the survivors show horribly charred individuals. Scorched arms were held tensely, as if the slightest movement resulted in excruciating pain. Even those victims whose facial features were unrecognizable displayed a look of fear and agony.

In many people skin became loosened and dropped down in flaps. Demarcation and falling-off of burned necrotic tissue was also evident.

In addition to thermal injury, the high mortality was due in part to injuries caused directly by the blast and secondary injuries caused by destruction of buildings. Hearing loss, bruises, lacerations, fractures, dislocations, and cut wounds were reported. Large flying fragments and shattered glass pierced blood vessels and peripheral nerves. With the fall of individual resistance following radiation injury, the wounds became infected and frequently gangrenous.

Further suffering was caused by radiation illness. Early symptoms included nausea, abnormal thirst, loss of appetite, fever, diarrhea, and general malaise. By the second week, some victims experienced removal of hair by the roots, purpura (the appearance of red spots on the skin), and blood-stained stools, urine and sputum. There was a tendency to spontaneous bleeding in many patients. Nasal bleeding and uterine hemorrhage were often hard to stop, causing great loss of blood.

The victims were also injured by secondary radiation illness caused by con-

tamination from fallout. Various symptoms increased right after rainfall.

Another consequence of exposure to the atomic bomb was the disturbance

of reproductive function. Men were found to have decreased sperm counts and women experienced menstrual disorders. Moreover, there were reports of pregnancy disorders and abnormal deliveries.

Unborn children were affected by the atomic bombings. Microcephaly (small size of the head) is one of the ill-fated after effects of exposure in utero to the atomic bomb attack and was frequently accompanied by mental retardation. Furthermore, exposure in utero and during infancy adversely affects growth and development. To this day, surveys and studies are being made on chromosome abnormality and gene effect in the survivors and their children.

In the long term, the exposed were very likely to develop keloids, leukemia, anemia, other blood disorders, cataract, thyroid cancer, lung cancer, breast cancer, salivary gland cancer, and other cancers. Since it is impossible to forecast when and what kind of disease will appear in the exposed, the continuing health of survivors as they age is of concern to medical authorities.

It can be said that no one who was exposed to the atomic bomb will ever be relieved of its consequences.

SOURCE: The Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki.

### Scientists say no to Star Wars

reprinted from Issue 25, (Summer 1985) of the Nuclear Free Press

Article written by Derek Rsmussen

For the first time in Canadian history, large numbers of scientists and engineers have publicly refused to participate in a military research programme.

In May, Canadian scientists and engineers opposed to U.S. Strategic Defense Initiative (SDI or Star Wars) compiled three petitions and presented them to the Canadian government. Two of the petitions included a pledge of non-co-operation with Star Wars research.

Forty members of the University of Toronto computer science department signed the first petition, which said Star Wars was too complex and would not work. Other scientists opposed to Star Wars who did not sign the petition pointed out that even if the system could work it would be immoral and should be opposed. The first petition said nothing about scientists joining Star Wars research.

The second petition, involving McMaster University engineers and scientists, was signed by 605 staff and graduate students, included university president, Alvin Lee. "That's one third of the engineers and scientists at McMaster," said chemistry professor Adam Hitchcock, one of the petition's initiators. "That's pretty good

considering we only circulated it for three days." The McMaster petition described President Reagan's Star Wars programme as an escalation of the arms race which would violate both the 1972 Anti-Ballistic Missile (ABM) treaty between the U.S. and the U.S.S.R. and Canada's previously stated opposition to an arms race in space. McMaster scientist met during a public discussion of the University's possible participation in Star Wars and decided "we didn't want any part of it," said Hitchcock. The section pledging non-co-operation with the research was added, said Hitchcock, "to express abhorrence of the programme."

Seven hundred and forty-nine scientists and engineers from several Canadian universities signed the third petition, which originated at the University of British Columbia. Among those who signed were faculty from U.B.C., University of Toronto, University of Waterloo, McGill University, Universite de Quebec a Montreal and other universities. This petition said that the U.S. space weapons initiative would be de-stabilizing and that it would start a new arms race. The signatories asked Canada not to join in research for the programme and warned that, if it does, "we will not co-operate."

One media report,

however, has alleged that Canada is already involved in Star Wars research. On March 29 the *Globe and Mail* disclosed that Canadian research on high energy lasers, financed by the U.S. Air Force and the Canadian government, may be used in the American Star Wars plan. The research, which would lead to the development of X-ray lasers, is underway at the University of Toronto's Institute of Aerospace Studies. Paul Stares, a space weapons analyst at the Brookings Institute in Washington, told the *Globe*: "Any sort of research in this area that increases our understanding of the dynamics of X-ray lasers or the control of them could have direct military application ... If they are funding this type of research, they must be thinking of using it." The University of Toronto physicist responsible for the research, Raymond Measures, acknowledged that his work "could certainly make the Strategic Defense Initiative (Star Wars) possible."

Some peace activists interviewed last week said that they were disappointed with "all the noise about Star Wars." By focusing on "potential research for a potential weapon" in the 1990s, they said, scientists are diverting attention from ongoing research and the deployment of

## Multilateral disarmament efforts needed

By MIKE MacKINNON  
Brunswickan Staff

*"More arms do not make mankind safer, only poorer."*  
Brandt Commission

The opening quote touches on two major issues we as Canadians and citizens of this world face. One is the grave economic situation in Canada and elsewhere (particularly the Third World); the other, the ever increasing threat of nuclear war due to a massive build-up in the nuclear arsenals of the superpowers. One is not exclusive of the other. It is imperative that the nuclear issue be resolved now.

E.P. Thompson, in "A Letter to America", stated:

*"...In Eastern Europe there are profound pressures for peace...as an intrinsic part of the European campaign, the demand for an opening of the societies of the East to information, free communication and expression and exchange of delegations...will be pressed on every occasion..."*

This underlines the impor-

tance of reaching Eastern audiences. The disarmament movement cannot be a one sided effort, with the balance of pressure coming from us in the West. Effort must be made to include those of the East in this important campaign because both sides must reduce their arsenal of nuclear weapons and the tension that currently exists.

Several steps can be taken in the West to initiate this new multilateral effort to rid the world of nuclear weapons. The goal of the following method is to involve those of the East in the disarmament movement. A quick glance at various actions that can be taken reveal that the key to the success of this campaign is communication. This communication is important because the Soviet Union is a nation of xenophobes whose history is one of being the target of conquest (as late as World War II they were intended victims of another nation's expansionist policy). In addition, Soviet citizens face a constant barrage of propaganda that criticizes the West harshly. As long as these peo-

ple continue to hold this image of Westerners there is little chance for the disarmament move succeeding in the East, and therefore in the West, as disarmament will not, and cannot, be a unilateral undertaking.

How does one communicate with those of Eastern nations? There are several options available. Amongst them are:

—Use the international airwaves to send messages. Get airtime on those radio stations, such as BBC overseas, the Voice of America, and Radio Free Europe, that can be received in Eastern countries. A "Radio Peace" effort can be established.

—Launch balloons from the West that can carry messages of peace to those in the East. This can become a very important symbolic gesture.

—Give media coverage to peace activism in the East, work through organizations such as Amnesty International to free prisoners of conscience, and take up the protest world wide.



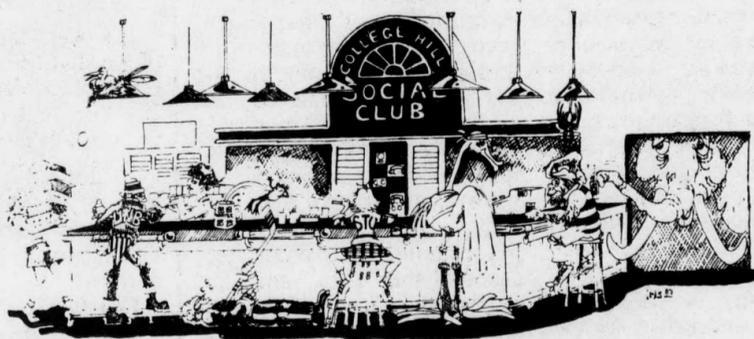
—Arrange NATO-Warsaw pact exchanges so that soldiers from the East and West can meet.

—Ensure pressure is applied to both the East and West and monitor the results. Make adjustments wherever necessary.

It is important that, above all, the idea of brotherhood underly all messages that we of the West communicate to those of the East. We can encourage Eastern leaders to tolerate

pacifism, point out to Eastern citizens that there are tremendous economic gains to be realized through disarmament, show that the reductions targets will be balanced, help all people of the world realize that nuclear weapons can be eliminated, and ensure those of the East that the peace movement is very active in the West (to allay any fear of being a plot of Western governments). Once again, I stress the very important point that this must all be done with the underlying theme of brotherhood.

## The Staff and Management of the



## COLLEGE HILL SOCIAL CLUB

welcome all students to the campus.

HOPE YOU HAD A GREAT SUMMER  
Come back and see us soon

# EDITORIAL

## Faltering wisdom

The great thinker Bonar Law once said: "There is no such thing as inevitable war. If war comes it will be from failure of human wisdom." On the 40th anniversary of nuclear devastation in Hiroshima it would be appropriate to seek the wisdom that has guided us from that fateful day to our present state of ignorance and potential armageddon.

It is now, in our time, that a generation of men and women, so lavishly endowed with genius must compel the leaders of this world to seek wisdom in past mistakes and search for a "deterrence" based on a mutual desire for peace — not power.

Many people believe that the current threat of nuclear war is based on fear, a Machiavellian philosophy that we must build huge walls to protect us from the enemy, whomever they may be, and defend ourselves so extensively that no power will attack in "fear" of huge losses. This attitude, based more on paranoia than wisdom has served the super-powers well, it has also brought us to the brink of nuclear war.

I do not believe that men and women driven by fear can seek a just and lasting peace, nor can our super-powers ignore the fact that "the walls" we have built are becoming more "offensive" than the "deterrence" we were led to believe they would be. The "wisdom" that nuclear weapons are a security blanket which benefit only those who own them, it does not ensure peace and stability.

As we digest the flow of information confirming the enemies of our democratic tradition more often than not we see only the weapons and leaders, we seldom attempt to understand the vast differences in experience and tradition that separate us. It is in this area that wisdom is most needed. If we continue to concentrate solely on "weapons reductions," "de-escalation," "Limited arms talks" and "Unilateral restraints," we are only serving to postpone further confrontations. Weapons are the instruments of destruction but it is ideology, power and fear that must be overcome to ensure a lasting peace. Albert Schweitzer, a man of infinite wisdom knew that human nature brought us to distrust those whom we do not know and that the "walls" we have built only serve to block a potential understanding or common bond. As he once said; "We wander through life together in semi-darkness in which none of us can distinguish exactly the features of his neighbour. Only from time to time, through some experience that we have of our companion, or through some remark that he passes, he stands for a moment close to us, as though illuminated by a flash of lighting. Then we see him as he really is."

The wisdom of Albert Schweitzer is not enough to bring peace but it can lead us to a better understanding of each other. If we choose to see only the enemy, then he/she will thus only see us as the enemy. For peace, if that is what we truly desire, we should forever conduct ourselves towards our enemy as if he were one day to be our friend.

Some may say this is "utopian idealism" or "Liberal drivel" but it must be understood that the leaders who have driven us to the brink of destruction are also those who refuse to seek not a viable solution but only a temporary deterrent. It is difficult to believe that persons motivated by fear and power can justify peace when they spend their lives putting it in jeopardy.

I too fear Soviet expansionism, policies of de-stabilization and the spread of communist ideology. We must always fight against these principles but fight by proving ours the better system. We cannot travel the globe brandishing the sword of justice, with reckless abandon, more bent on anti-communism than a true and just society. It is in this area that both super-powers have alienated the rest of the world. The "Nuclear" threat has turned the U.S. and the Soviet Union into the most menacing and potentially volatile war machines mankind has ever seen. The irony being that their awesome power makes the rest of the world a potential battle ground. Just as the Americans bombed Hiroshima to bring "lasting" peace to the world, so too can either super-power once again drop nuclear weapons, but this time with no hope for mankind, let alone peace.

In the tenth century, Foreign Ambassadors used to be called to Constantinople in order that they might be impressed with the military splendor of an all-powerful empire. There were, as Harold Nicholson once described: "Interminable reviews at which the same troops emerging from one of the gates entering by another, came round and round again carrying different kinds of armour. In order to dazzle ... [by]- glamour and mystery, mechanical devices caused the lions on the steps of [the emperors] throne to roar terribly."

By 1985, one has the feeling that both the American and Soviet empires, like that of Byzantium, are also held together by smoke and mirrors. Not that firepower is not available — rather, the real question would be whether the nuclear capacity will ever be used to serve extended global commitments?

If, as both superpowers outline nuclear weapons are to act as a deterrent to war then what potential for conflict exists? Let us consider Adolf Hitler. As the world stood by this madman built a virtual war-machine, unopposed and impervious to foreign pressures. The world was afraid of a possible confrontation and thus allowed Germany's huge build-up. By the time the allies took action war was once again upon us and destruction reigned supreme. It is simple to draw a parallel between Hitler and the arms race. The proliferation of nuclear arms has progressed virtually unharnessed, the world has sat by in fear of conflict and confrontation with the superpowers, and thus accepted its imminence. Unlike Hitler however the potential still exists to reverse the trend toward destruction. As you will find outlined in the pages of this special **Brunswickan** edition, many groups and individuals are taking action, seeking to increase our wisdom and draw on our support. It is a massive undertaking to mobilize public support but it is based on a belief in principles of all humanity, the right to live in peace, free of fear and destruction.

Rick Hutchins  
Editor-in-Chief

...Mugwump  
Journal...

Cal Johnston  
Managing Editor



c.1985 Daily Mirror - UK

by Calum Johnston  
Managing Editor

It's past ten-thirty on Friday, August 2. My name is Calum Johnston, the Brunswickans Managing Editor, and I have to write the Mugwump Journal before the nuclear-powered sandman gets me.

Instead of mugging some wumps, I'd like to tell everyone how this special issue of the Bruns came to be. After our Grad Issue was published, we found that we could cover the costs of printing a 16 page issue with the ad revenue. During the academic year, about one-third of our operating budget comes from the SRC, but with summer here the Brunswickan found itself over-budget.

This being the case, when the idea of a Grad Issue came up, we had to be very careful to cover the costs with ads. This meant cutting down on pages, recycling old border tape, and delivering around the campus and the city ourselves. We received positive feedback and found the whole experience worthwhile.

After one success, you try for another. We feel that this issue is most definitely a success. The possibility of a nuclear holocaust is one that many of us feel very strongly about.

In putting the paper together, there is no better staff. Thanks must go out to Michael MacKinnon, Cynthia Davis, Kaye MacPhee, David Mazerolle, Corinne Boone, Kristine Hiew, Michael Bennett, "irls" Smith, Covered Bridge Printing in Harland who did an excellent job of printing our Grad Issue on very short notice and agreed to print this one as well (Thanks, Stewart), and, of course, our Editor-in-Chief, Little Ricky Hutchins.

I sincerely hope that the paper you hold in your hands will make you think about where the world is headed, and if this Brunswickan makes one person ask their M.P., MLA, or their city council to take a stand on nuclear weapons and their proliferation throughout the world, I would think that all the time and effort put in to this issue had been worthwhile.

Let us never forget that forty years ago, on August 6, thousands of people were killed in what the American Nuclear Energy Commission refers to as "test number 2".

It's been suggested by more than a few people around the office that the "irls" cartoon is perfect as a poster, a placard for a peace demonstration, or just tacked onto a streetpost. If anyone out there has a few moments to spare, weurge you to do so. When people know of a problem they can work it out, as UNB's world disarmament organization (WORD) says, "Peace through Education".

Phil Bonin of Beaver Foods is leaving us, probably for a sun-drenched island, and before he goes we at the Brunswickan would like to thank him for helping to make our past Bruns parties successful. Farewell Mr. Bonin, and we wish you good luck wherever you go.

On page 11 of this issue there is notice of the "Celebration of Peace" to be held today, August 6th, on the green opposite the cathedral on Queen Street, from 5:30PM to 9:00PM. It's BYOP, bring your own picnic, and some of the entertainment will be provided by folk-singer, Stephen Peacock. A play by David Kilburn, called "In the Wake" will be presented and there will also be a literature display. From the Sussex branch of Project Ploughshares, Beth Powning will deliver the keynote address. For the children there is to be stories and instruction in origami, a Japanese art that is done by folding paper, in this case it will be crane making. Should it rain, the Celebration will be held inside the cathedral, and at dusk there will be a candle lighting ceremony. I urge everyone to attend and to bring your family and friends.

# Star Wars - the illusory umbrella

By MIKE MacKINNON  
Brunswickan Staff

*...the unleashed power of the atom has changed everything save our modes of thinking and thus we drift toward unparalleled catastrophes.*

Albert Einstein

Canada's stand on the Star Wars (or the Space Defense Initiative) has been ambivalent at best. Depending on who in the Mulroney government you talk to, Canada either supports SDI research wholeheartedly or is simply thinking about getting involved. Recently Joe Clark, Secretary of State for Foreign Affairs, stated he wanted to hear what Canadians had to say on this important issue. Canada should not become involved in any aspect of SDI research. Instead it should exhort both the United States and the Soviet Union to agree to a moratorium on space weapons research.

Support for SDI is based on the premise that it is possible to place in space a leak proof nuclear umbrella. It is highly unlikely, however, that such a system can be designed and im-

plemented. Assuming the U.S. was able to come up with a feasible design the chances of it actually being put in place are slim. The Soviet Union is not going to idly stand by and watch

Of course the argument that will immediately come to mind is something I have just said - namely that the Soviets may already have started their own research. This is one more reason why



NATO gain the nuclear advantage. It is either going to start its own research into SDI, something many believe to already be the case, or choose one of several other options. If they are unable to design a similar system that is just as effective the Soviets have several choices. One is to launch a pre-emptive first strike. Another is to drastically increase their nuclear arsenal so they can literally flood the skies with missiles, thereby reducing the effectiveness of a space based defence system. They could also launch a number of dummy missiles without nuclear warheads to overload the system.

Canada should push for a moratorium on this kind of research. Both the U.S. and the Soviet Union are threatening to escalate the arms race by taking nuclear war into space. As Hans Beite, Nobel Laureate, said -SDI threatens "a big new escalation" in the arms race, an escalation we can ill-afford in any arms race already out of control.

The world economy is in poor shape. SDI will only help to make it worse. Granted the research and eventual development of the weapons systems will create some jobs, but if the money put into this program was to be invested in civilian projects there would be a

greater number of jobs created. Research bears this out. In addition, money will have to be taken from already strapped areas of the budgets of those nations involved in order to support increased military spending. The only way to avoid such an occurrence would be to cut the money spent on missile research, something no nation is likely to do.

The belief that we can actually develop a leak proof umbrella will most certainly lead to a false sense of security. It will cause NATO leaders to become complacent and lethargic, loathe to spend money on other weapons systems when the public is already crying for reduced military spending. History is full of cases of just this sort of thing happening. SDI could easily become our Maginot Line in space.

One major stumbling block that SDI researchers will encounter is the software, or computer programming, necessary to run the system. This will require millions of lines of code. The chances of this being error free are non-existent — even a simple 30 line pro-

gram never runs the first time. How can such a large system be tested and errors eliminated. Once these one link new errors are going to arise. These won't be eliminated by testing because the testing can't be done.

There are legal aspects to this research as well. Canada's involvement could mean our aiding and abetting the U.S. in violating the Anti Ballistic Missile Treaty, Outer Space Treaty, Non-Proliferation Treaty, Partial Test Ban Treaty, UN Charter and several UN Declarations. Nations cannot act as if these treaties do not exist.

The final, most frightening aspect of this proposal is the tendency for those involved to begin thinking they can actually win a nuclear war. While MAD (Mutually Assured Destruction) is a dangerous defense policy, SDI would be suicidal. There is no way to win nuclear war.

As stated previously Joe Clark is asking for public input. Take advantage of this opportunity and state your opinion on Canada's involvement in SDI research.

## 25 YEARS

Helping Canadian Women in our  
SEARCH for PEACE and JUSTICE



Join us: Fredericton Voice of Women  
Box 24  
Fredericton  
For information call: 454-6410 or 454-5581



# CUSO is VOLUNTEERS, PROJECTS, TEACHING, and YOU!

CUSO sends skilled Canadians to work in developing countries.

CUSO supports self-help projects in developing countries.

CUSO teaches Canadians more about international development.

CUSO N.B. Representative  
Office  
Alumni Memorial Building  
U.N.B. Campus  
Fredericton, N.B.  
Phone: 453-3562



# Surviving the Nuclear Spread

By DAVID MAZEROLLE  
Features Editor

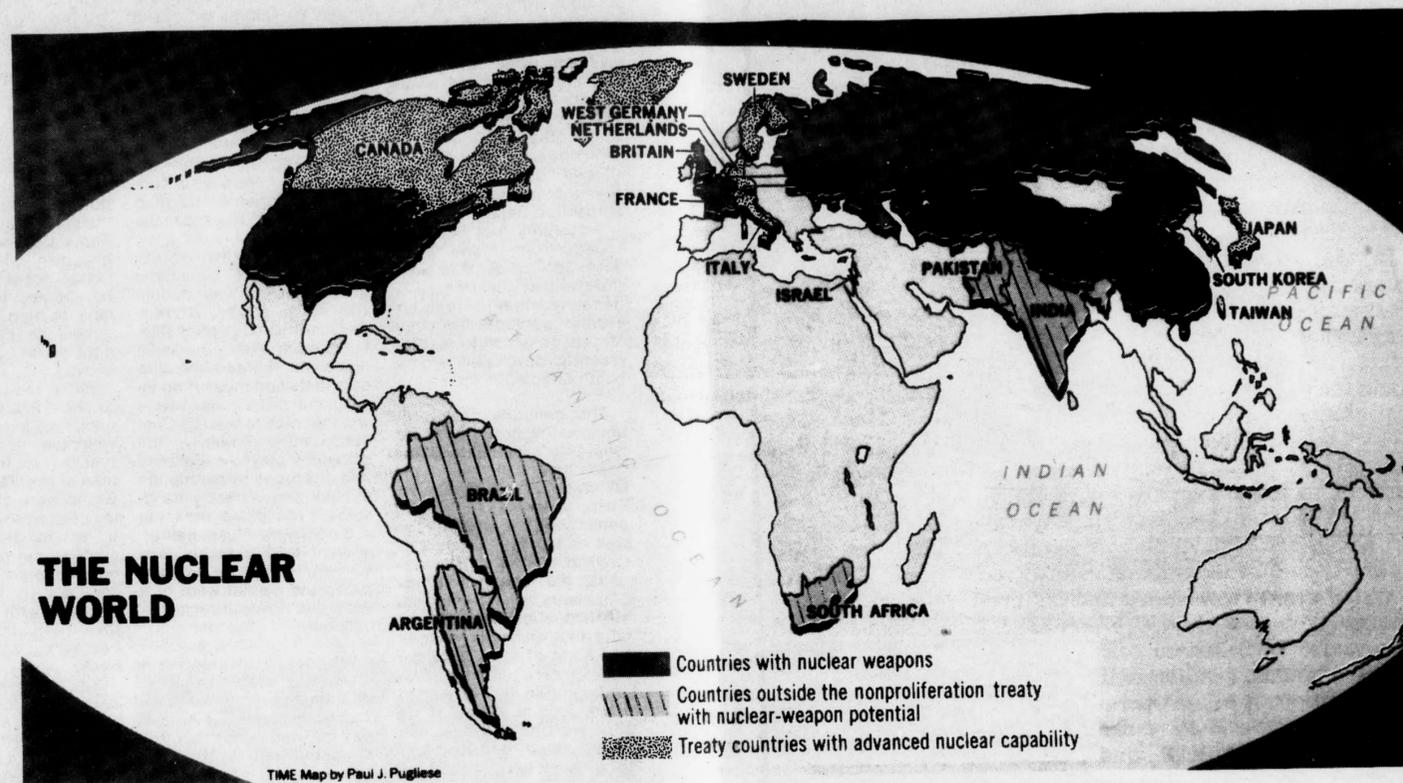
"Proliferation has already happened. The main problem of the late 1980's is not so much preventing the spread of nuclear weapons but making it survivable."

Those are the chilling words of a senior official of the Vienna-based International Atomic Energy Agency. Five countries formally possess nuclear weapons (the U.S., the Soviet Union, Britain, France and China) and other countries are ominously close: India's 1974 test explosion shows that it has learned to master the capacity to build them. Pakistan operates a "research center" and has been illegally buying high-tech equipment, all on the way to the Bomb.

It is the age of nuclear proliferation, and the power, knowledge and facilities to make nuclear weapons is coming into more and more unstable hands. Libya's Muammar Gaddafi's here-to-for unsuccessful bid for nuclear power — the stepping-stone to nuclear weaponry — is coming closer to a reality as he helps Pakistan toward their goal.

Nuclear weapons in the collective hands of any state are dangerous. The popular image of nuclear war results from the classic U.S.—U.S.S.R. conflict. The trouble may be, however, in the possibility of two smaller nations having a regional war turn nuclear. The devastation and radiation may cover an area much larger than the two combatants' countries. And, with the tradition of the superpowers to take opposing sides in regional conflicts, what guarantee is there that a small war can mushroom into a third world war? The Soviets and the U.S. are in agreement in this one area, deciding last November to meet twice a year "to come to an agreement before nuclear weapons spread to more and more countries that could involve us in a conflict," as a Soviet specialist said.

Nuclear weapon-making capability also makes terrorism of awesome proportions possible. The U.S. military has, since 1964, deployed the "back pack nuke," a bomb that one man can carry and can destroy dams, bridges and similar installations. It is also possible to make a 400-lb. bomb, capable of fitting into medium-sized car, that could destroy a medium-sized city.



An unstable regime like Gaddafi's, if they could steal or buy enough plutonium, could build a device slightly weaker than the one that leveled Hiroshima for a few thousand dollars. The horror is too close. According to *TIME* Magazine, June 3, 1985:

A new generation of nuclear powers, and would-be powers, is maturing. Known among experts as the "phantom proliferators, the countries are contributing the most significant uncertainties about the future of non-proliferation. The phantoms are India, Pakistan, Israel, South Africa and, to a lesser degree, Argentina and Brazil. All of them have mastered, or are well on their way to mastering, the skills to produce atomic explosives.

What to do? The United Nations is approaching a mid-life crisis that seems to be heading it toward a toothless dotage. The general population of Canada, to use one country as an example, has 58.6 percent

of its citizens believing the world is closer to a nuclear war, yet only four percent have taken part in a peace demonstration, and only two percent belong to a peace organization. If we are relying on our legislators to push for peace, we must make sure they have a clear mandate to move in that area.

Canada, to its credit, has advanced nuclear capability but is a signatory of the 1968 United Nations - sponsored Nuclear Non-proliferation Treaty. Canada also demands that any country which purchases any technology or supplies which could lead to a nuclear weapons production to open their facilities to the inspection of the International Atomic Energy Agency. Britain, Australia and Canada were the only countries to agree with the U.S. that inspection of a country's nuclear facilities in fact should be a condition of sale.

The Geneva-based Conference on Disarmament (CD) is the sole global multilateral

negotiating body dedicated to arms control and disarmament issues. Its membership stands at 40 and includes all five nuclear powers from all geo-political blocs: the East, the West and the Neutral/Non-aligned.

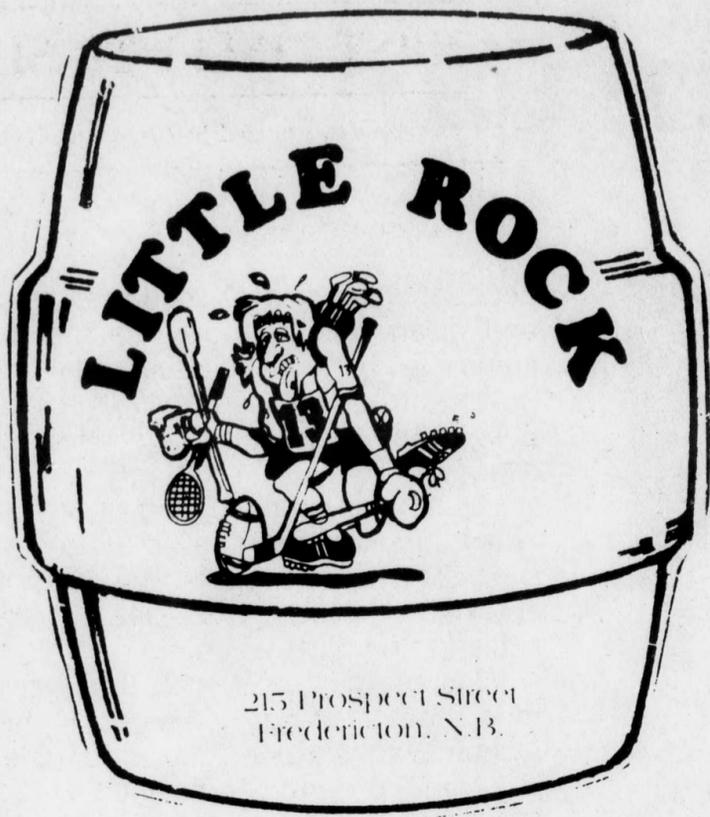
The CD has been working since 1980 on an interesting treaty that, if drafted properly, could become a powerful legal model for any kind of nuclear arms ban or treaty. Its subject: chemical weapons.

Whereas nuclear bombs are mankind's most devastating weapons, chemical weapons are close to its most horrible. Nine hundred thousand deaths in the First World War — ghastly, choking, agonizingly slow deaths — attest to its gruesomeness. They represent none of the "morality" of war that we, as civilized humans, like to maintain in our conflicts. The need, then, for a chemical weapons ban has been established, and since evidence shows they were used in the ongoing Iran-Iraq War and possibly in Afghanistan and Southeast Asia, the CD feels an immediate need for a convention.

As Douglas Roche, Canada's Ambassador for Disarmament, explains, the negotiation of a chemical weapons convention is of four-fold importance:

- it would represent a disarmament treaty and not merely an arms-control measure;
- it would be an effective non-proliferation treaty;
- it would be a comprehensive treaty that would ban development, production, stock-piling and the transfer of chemical weapons with the provision for the destruction of stockpiles and production facilities and appropriate verification;
- a chemical weapons convention would be a law-making treaty with far-reaching legal implications.

Its objectives then, are much the same as a nuclear-weapons convention and serves as a great practice attempt for the drafting of a nuclear treaty. It appears as a heartening step toward the day when different world states (a rather abstract and human-made distinction anyway) can agree that some weapons, some forms of aggression, are just to immoral to be allowed existence.



*“Where*

*Good Friends*

*Meet”*

### SPECIAL EVENTS

**Wednesday Night is Men's Night**

**Thursday Night is Ladies' Night**

**Friday - Twin Fillets \$4.95**

**Saturday - 10 oz. BBQ Rib Steak  
ONLY \$2.99**

**Kitchen closes at 11 PM**

**Live DJ and Dancing til 1 AM**

**The Little Rock  
215 Prospect St.**

## LEAST LIKELY TO SURVIVE

*Homo Sapiens*

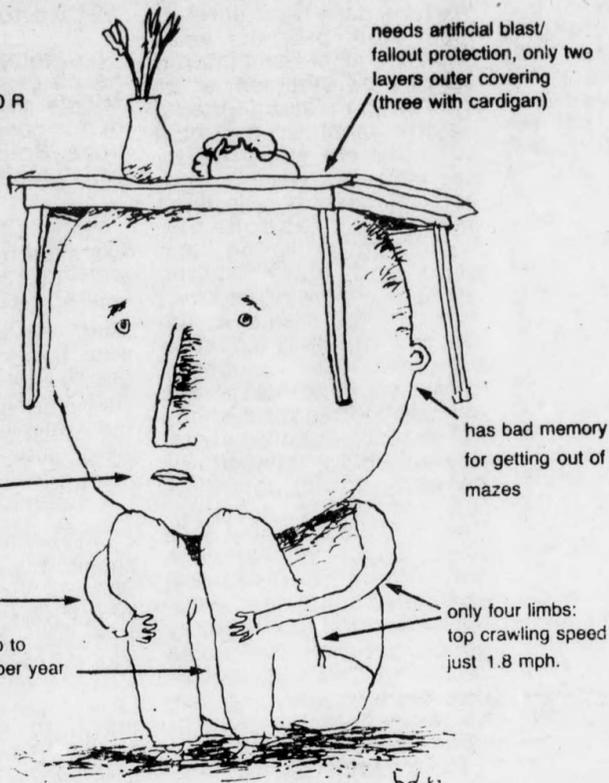
50,000 years' evolutionary survival

survives only 400 R radiation

can eat only uncontaminated foodstuffs

soft outer shell

produces up to 6 offspring per year

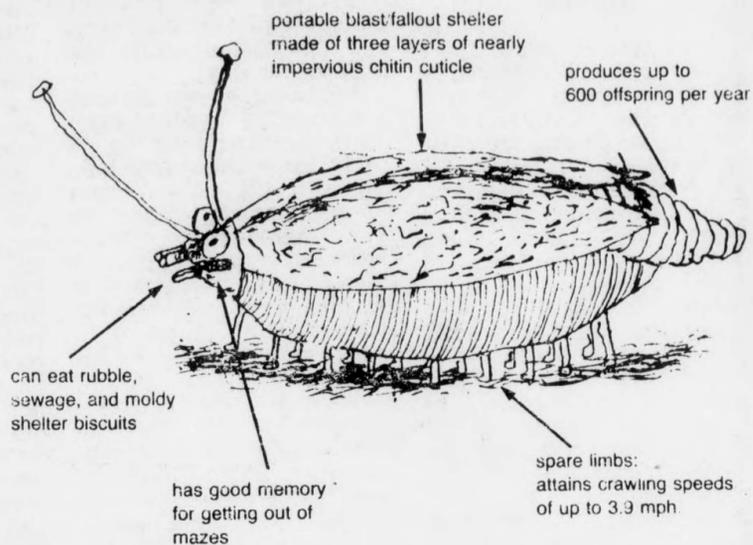


## MOST LIKELY TO SURVIVE

*Orthoptera Blattaria (cockroach)*

350 million years' evolutionary survival

survives 10,000 R of radiation



## Reflections on the arms race

By CYNTHIA DAVIS

What does it mean to live in the shadow of nuclear weapons and the rapidly escalating arms race? As a Canadian does it affect my life differently than it does a person living in a developing country? I believe that my life is affected differently and that I have a different perception than the "Third World" woman.

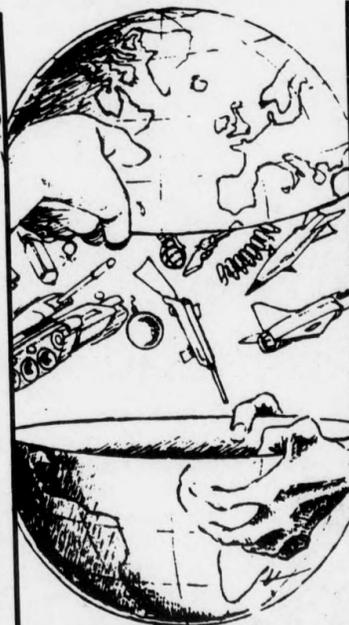
I guess that my primary concern as a Canadian is the threat of nuclear war or accident which could entail the destruction of everything and everyone that I have known and of my whole way of life. However, there is another way in which I am affected by the arms race.

The production, use and sale of armaments and the production of components of nuclear weapons system

s are examples of government policies that bolster my standard of living. Because we control and/or consume many times our share of the world's resources, we are financing our way of life at the expense of those people who live in the developing world. If we could reduce our military budgets, our demand for resources would also be reduced. These resources could then be used for more humane purposes and distributed in a more just way.

It would benefit my counterpart in a developing country if the goal of reduced spending for military purposes was achieved and coupled with a more equitable distribution of goods.

Canadian spending for military purposes in 1984 will be about \$9.6 billion. World military expenditures will be about \$700 billion. This is more than the total income of 1.5 billion people living in the 50 poorest countries in the world. Of course, these huge numbers are meaningless unless we remember that everyone of those 1.5 billion is a human being whose needs are emotional and spiritual, as well



family planning strategies and of education are all problems that can be dealt with now — if we want to deal with them. For example, by sacrificing one jet fighter we could finance the setting-up

of 40,000 village pharmacies. The technology exists and if the money and resources spent on military programs could be diverted into alternative life-saving programs, Canadians would be taking part in creating a different, and better, world.

People in the "Third World" can't begin to cope with their serious economic and social difficulties unless they are helped by us to achieve a basic minimum standard of health. We haven't paid attention to what is happening to the majority of people in our world and have selfishly clung to a wasteful and inequitable economic system, blindly pursuing military "security" at all cost. Unless we decide to change things our world will remain a very different one from that inhabited by the majority. Until we decide to change things we will have cast aside our responsibility as humans and condemned millions to poverty and death.

as physical. The quality of that person's life is important, as well as how long she lives. The destitution which we allow to exist in developing countries, by using scarce resources to promote our militaristic policies, is so complete that it amounts to silent, albeit unintentional, genocide.

This is the reality that a person in a developing country has to live and die with. Lack of clean water and clean air, of basic medicine and vaccines, of humane

CELEBRATION  
OF PEACE



HIROSHIMA DAY  
PICNIC ON THE GREEN  
OPPOSITE CATHEDRAL

TUES. AUG 6<sup>th</sup>  
5:30 PM — 9:00 PM

# Talking peace; selling war

reprinted from: *The CUSO Journal*, June 1984

*In Ottawa, in March two conferences were being held simultaneously. One was talking war. The other was talking peace.*

*The timing was not coincidental.*

For several years, there have been resolutions passed at the annual meeting of the Canadian Council for International Cooperation (the umbrella organization for some 95 Canadian organizations involved in international development) calling for action on the issue of disarmament. Finding a means for dealing with these resolutions proved difficult, but this year the CCIC Board of Directors hit on a solution: they decided to hold a conference on the development and disarmament to coincide with the 21st High Technology Industries' Export Conference held in Ottawa by the Defence Programs Branch of the federal department of External Affairs. The annual Hi-Tech Conference helps promote the sale of military-related equipment, and is intended primarily to expose Canada's trade commissioners from around the world to a wide range of

military products available for export by Canadian corporations. The 400 people attending this year included many of the country's top hi-tech executives whose companies supply components for weapons' systems, along with 65 Canadian trade commissioners from postings around the world. Dark suits and briefcases were the order of the day.

The two conferences took place within blocks of each other. While those at the Hi-Tech Conference were talking war, 120 people from across Canada, many of them representing international development organizations, were at the Disarmament and Development meeting listening to internationally known speakers like Commonwealth Secretary-General Shridath Ramphal and Swedish disarmament champion Inga Thorsson. The theme was the immorality of the arms race.

"The purpose of the conference was to point to the fact that the federal government was promoting trade of military-related products and to assist CCIC member-organizations in understanding the link between development and disarmament", says Ken Shipley, a member of the CCIC Board

of Directors and also one of CUSO's four representatives at the conference.

The conference was also designed to give an indication to the government that public opinion is changing with respect to the arms race. "The speakers at the conference presented strong arguments that the arms build-up is ill-advised, counter-productive and is courting disaster", Ken points out. "The CCIC conference drew attention to the contradiction of the government talking peace on one hand while promoting the sale of war on the other. Decisions about the allocation of public funds, including military expenditures, are made by politicians. Politicians, practising the art of the possible, tend to note which way the group is going and then rush to the front and yell: 'Follow me, your leader'."

In addition to sponsoring four delegates to the conference, CUSO also provided some funding to help with organization. Why was CUSO so concerned about disarmament?

As Ken points out, it is projected that total global international development assistance over the next five years will equal world

military expenditures over the next four days.

"Clearly, things are badly out of whack," he says. "CUSO is now 22 years old. We have done good development work over the years and have grown and improved as a development agency. Yet, the disturbing thing is that most of our host countries are worse off today than they were in 1961, both relatively and, in most cases absolutely. Something is wrong, and more and more leading thinkers are laying at least some of the blame at the feet of the military-industrial complex.

"Money and resources devoted to militarization are not available for civilian purposes. Military expenditures generally do not contribute to the productive capacity of the domestic economy. This is particularly critical when Third World countries feel compelled to spend increasing amounts on military goods, but the view is also becoming more prevalent that military spending has contributed to the present world economic crisis."

As a result of the conference, CCIC is investigating various follow-up actions intended to promote more public awareness of the issue and

improve the links both nationally and internationally between development and peace-oriented groups. One idea is a national conference to build a coalition

of development, labor and peace groups; another is a Middle Powers conference of non-government organizations. Both ideas are in the early stages of discussion.

A more concrete idea that was explored in conjunction with Project Ploughshares was a 1984 Elections' Campaign: group action to ensure that every federal candidate was asked for his/her views on disarmament and the question would be raised at every public election meeting.

Meanwhile, Ken is urging those involved with CUSO and all supporters of international development to write to Prime Minister Mulroney and their Member of Parlia-

ment to protest Cruise Missile Testing in Canada and outline their support for disarmament. CUSO has also put together an information package for cooperants overseas.

## PROJECT PLOUGHSHARES

...Swords into Ploughshares...



"and they shall beat their swords into ploughshares"

The Fredericton group meets the 2nd Thursday of each month at

Contact people:  
Bill Randall 455-8831  
Shirley Tapley 455-8475

The St. John group holds business meetings every second Thursday at 7 p.m. at Centenary Queen Square United Church. Education meetings are held the fourth Thursday of every month at 7 p.m. at Portland United Church.

Contact people:  
Judith Minert 642-5113  
Debbie Killam 652-2899

...the accumulation of weapons, particularly nuclear weapons, today constitutes much more threat than a protection for the future of mankind... the time has come... to seek security in disarmament.

Final Report of the 1978 United Nations Special Session

# The medical consequences of nuclear War

By M. KAYE MacPHEE  
Brunswickan Staff

The following data is a compilation of articles provided by Bail Higgins, Project Ploughshares, Saint John, N.B.

**NOTE:**  
1 megaton = 1,000,000 tons of TNT  
Hiroshima bomb = 12,500 tons of TNT

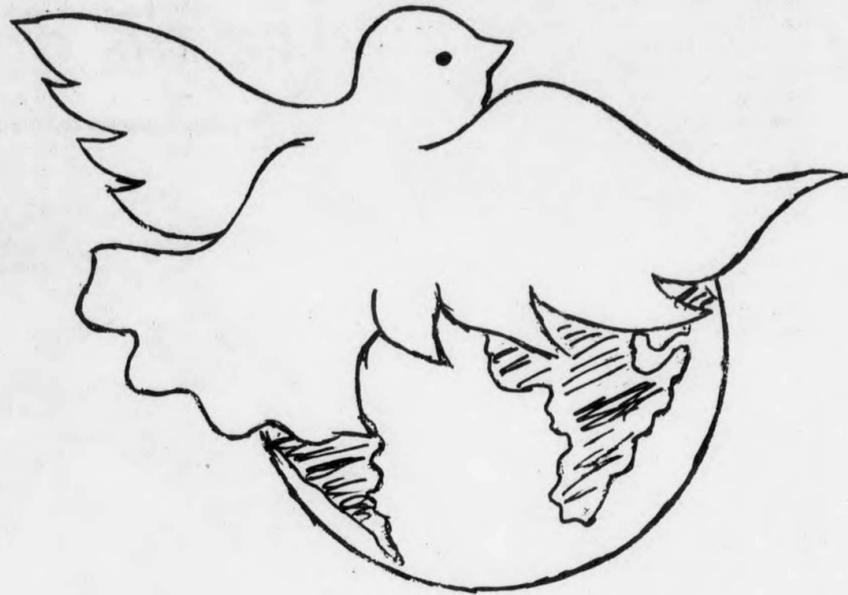
The medical consequences of nuclear war have long been topics of concern for physicians and lay people, though few really understand the facts of nuclear warfare and its ramifications.

For example: one single 20 megaton bomb exploded at the ground level on a North American city would produce a fireball 2.41 kilometers in diameter and 11,000,000 to 16,000,000 degrees Celcius vaporizing everything. At 9.65 kilometers from the epicentre a silent heat flash moving at the speed of light would kill everyone and melt glass. Supersonic shock waves and wind would flatten buildings. At 16.09 kilometers there would be 50% dead or injured by direct heat and blast. Random spontaneous fires from

gas lines and oil storage tanks would coalesce into a firestorm of 2588 kilometers square, extinguishing life. Survivors would die of radiation up to 161 kilometers downwind. It is likely that 1,000,000,000 people would die in the early hours or days of the megadeath war.

After such an attack perhaps only 10% of the physicians in an area might be uninjured - one to 1700 acutely injured persons. If each physician spent only 10 minutes on each patient and worked 20 hours a day, it would take 14 days for each casualty to be seen for the first time. The task of caring for severely burned survivors would be immense. One extensively burned patient can require 100 or more units of plasma and extensive skin grafts; the complex medical facilities needed would be destroyed, and there would be millions of such patients in an attacked country.

And afterwards? Food, air and water would be contaminated. There would be millions dead - more than 150 million in an all out nuclear attack on the United States. Casualties in excess of 40 million are expected in



the United Kingdom where recent health service "plans" for survival included widespread shooting of casualties according to J. Gleisner, from the article entitled, "Controlling" the sick will mean shooting them".

(A common misconception is that Canadian cities would be little affected. It is not certain whether the small Canadian cities are targeted - but every American city with a population of at least 20,000 is. We would probably be affected by the airburst of antimissiles, possibly affected by inaccurate Soviet missiles and certainly severely hurt by the fall-out and secondarily by the immense social disruption to our south.)

A dust and nitrogen oxide injection into the atmosphere might modify the climate; perhaps severely and probably in the direction of cold. For two years or more there would be a 50% reduction in ozone in the atmosphere; there would be significant contamination of food crops for years to come. The complex effects of even minor climatic change, and severe disruption of the organization of civilization in North America, the world's bread basket, would almost certainly lead to worldwide famine in a world already short of food.

The Congressional Office of Technology Assessment projected that of the 18,000 hospital beds in and around Detroit, no more than 5,000 would remain relatively undamaged. Only 1% of the injured would be able to be accommodated. Not only would medical facilities be destroyed, but medical personnel would be among the

dead and wounded. After the nuclear blast at Hiroshima, 65 of the city's 150 physicians were killed outright, and most of the remainder were wounded. Of the 1,780 nurses, 1654 were dead or too badly injured to work.

It is clear that the vast numbers of severely burned and otherwise injured victims would be looking in vain to the surviving medical care professionals for treatment. The demand for treatment would rapidly surpass the sorely depleted supplies.

An example of the personnel and materials required to care for one patient suffering from third degree burns over 85% percent of his emphasizes the impossibility of caring for a city full of burn victims.

Howard Hiatt, M.D., F.A.C.P., Dean of the Harvard School of Public Health, has described such a case; admitted to a special burn unit a 22-year-old man received 281 units of plasma, 147 units of packed red blood cells, 37 units of platelets, and 36 units of serum albumin. He underwent six separate surgical procedures. And, despite these ministrations from a score of highly trained specialists, the patient died on the thirty-third day. A single nuclear blast would result in tens of thousands of similar severe burn injuries.

The health care system would be assaulted also by the need to provide short-term treatment for untold numbers of fractures, organs ruptured from excess pressure, hemorrhage, and other trauma from flying glass and debris and long-term treatment for the injuries from radioactive

fallout. The great majority of those exposed to radiation would die, either from central nervous system syndrome or from vomiting, diarrhea, hemorrhage, and septicemia. Some people would, however, survive to seek treatment for their stress, trauma, fatigue, and burns. They would suffer from contamination wounds, increased skin cancer, degenerative disease, accelerated aging, and increased incidences of infertility, congenital malformations, still births, neonatal deaths, and genetic disease.

Additionally, radiation-resistant strains of bacteria, fungi and viruses might multiply and mutate, spreading uncontrollable infestations leading to epidemics of such diseases as plague, hepatitis, polio, encephalitis, typhoid, and dysentery.

These facts argue that medical disaster planning for nuclear war is futile. There is no possible adequate medical response to a situation where hundreds of thousands of people would be injured and ill, most hospitals destroyed, most medical personnel killed, and most medical supplies unavailable. According to Dr. Hiatt nuclear war is "the great public health hazard of all time" and as such, its prevention is imperative. Dr. Ian Carr, professor of pathology at the University of Saskatchewan in Saskatoon agrees stating: "If the arms race is not halted nuclear war is almost inevitable. If we protest, we may survive; silence is quiescence in 1,000 million deaths. The prevention of the 'last epidemic' is medicine's and mankind's greatest challenge."

## Get involved

### More effort needed

By RICK HUTCHINS  
Brunswickan Staff

When one considers the issue of nuclear disarmament, it would seem logical that the urgency of this world dilemma would be sufficient to entice a large number of students to take action and voice their feelings. On the campus of UNB unfortunately it seems a "few" dedicated and concerned students have become the sole voice of discontent, and have organized themselves accordingly. The most vocal and consistently active group on campus is WORD (World Disarmament), a small group of dedicated believers. Without a much more supportive student body the efforts of such groups are minimized and their impact on the community lessened. We must, as a student body become more attuned to the magnitude of this issue. Groups such as WORD exist

in communities all across Canada and are constantly recruiting new members. It is not sufficient for a small vanguard of hard-working, peace protesters to change the policies of governments and political leaders. What we need is for more students to get involved. This week's edition of the *Brunswickan* is proof that there are a concerned number of students, willing to supply time and effort in the pursuit of more public awareness. Students can begin to show more concern by lobbying members of parliament and getting involved in some form of organization. Remember, belief in the evils of nuclear weapons is not sufficient to bring about change, what is needed is action and commitment. As students at UNB a much more unified voice should be heard and we must work together toward this end. Show your concern. GET INVOLVED.

WHO SAYS  
ITS LONELY  
AT THE TOP?



**NO  
MORE!**

# Fredericton!



St. John's has become the third provincial capital and the 67th Canadian municipality to declare itself a nuclear-free zone.  
"We are against war of any kind, but certainly against the tremendous devastation to the human race that nuclear war would cause," Mayor John Murphy said of city council's declaration two weeks ago.  
"We would resist any attempt to store or mount nuclear weaponry in this area." There are no reports of nuclear weapons ever being shipped through St. John's or stored in the city. Foreign warships armed with nuclear missiles are not known to have been in the city's port.  
The only nuclear missiles maintained by the U.S. air force inside Canada were removed last year from bases in New Brunswick, Quebec and British Columbia.



And yet, the damage was more than merely physical...



PETER ALLISON, YOUR CAMPUS REPS  
AND ALL YOUR FRIENDS

AT

## MOOSEHEAD

## BREWERIES

WOULD LIKE TO EXTEND THEIR WARMEST  
WELCOME TO ALL STUDENTS

WE HOPE YOU HAD A GOOD SUMMER AND LOOK  
FORWARD TO SEEING YOU ON CAMPUS IN THE  
FALL



Armie and all your friends at the  
Riverview Arms would like to extend a  
warm welcome to all new and  
returning students

We hope you had a fantastic Summer  
and look forward to seeing you this fall

WEDNESDAY - LADIES' NIGHT

THURSDAY - SUPER HAPPY HOUR



Don't forget

MY ROOM

is now open for private  
party bookings.

For more information call  
457-2020.

**RIVERVIEW ARMS**