

COM DEV International Ltd.

COM DEV, “Canada’s largest exporter of equipment for communications satellites,”¹ supplies products for several military satellite systems that are fundamental to the “missile defense” program. COM DEV was also a major subcontractor assisting MacDonald Dettwiler and Associates (MDA) on the Synthetic Aperture Radar (SAR) of Canada’s Radarsat-1. (Stay tuned for more on MDA, Radarsat and SAR in an upcoming issue of *Press for Conversion!*)

Interestingly, COM DEV was the only Canadian company to be thanked in the acknowledgements of U.S. Space Command’s 1997 *Vision for 2020* document, which outlined their determination to further dominate the militarization of space, including space-weaponization programs envisioned for “missile defense.” And, COM DEV’s support for “missile defense” was also demonstrated when it took a public stand promoting Canada’s political endorsement of this controversial weapons program.

The Canadian Defence Industries Association (CDIA) website provides “profiles” about its members. CDIA describes COM DEV as:

“one of the largest designer-manufacturers of microwave radio and other hardware subsystems for space satellites. It operates from facilities in Canada [Cambridge, Ontario and Moncton, New Brunswick] and the United Kingdom [Aylesbury, Buckinghamshire], designing and manufacturing advanced products and subsystems that are sold to major satellite prime contractors for use in communications, space science, remote sensing and military satellites and spacecraft.”²

The CDIA’s description of COM DEV had a list of “keywords” that included a dead giveaway, the term: “Missile Defense.”

COM DEV’s 2004 annual report to stockholders was also blunt enough to mention “missile defense” in a telling list of “uses” for COM DEV’s military/space products. Oddly enough, however, this list of “uses” also includes the “verification of arms content treaties.”⁴ Presumably, by “arms

content treaties,” the writers of COM DEV’s annual report actually meant to say “arms control treaties.” Although *Google.com*, the internet’s premier search engine, is able to scan the contents of more than eight billion web pages⁵, it could not locate a single source, besides COM DEV’s website, that mentions the phrase “arms content” treaties.

Since COM DEV was able to make such an obvious error, it is likely that the company’s brain-trust is quite oblivious to the fact that these two “uses” of their products are totally contradictory. The design and production of “missile defense” weapons systems was, after all, prohibited for 30 years by that cornerstone of all arms control treaties, the 1972 Anti-Ballistic Missile Treaty. It was President George W. Bush’s pursuit of the “missile defense” weapons program that precipitated the American administration’s abrogation of that treaty in June of 2002.

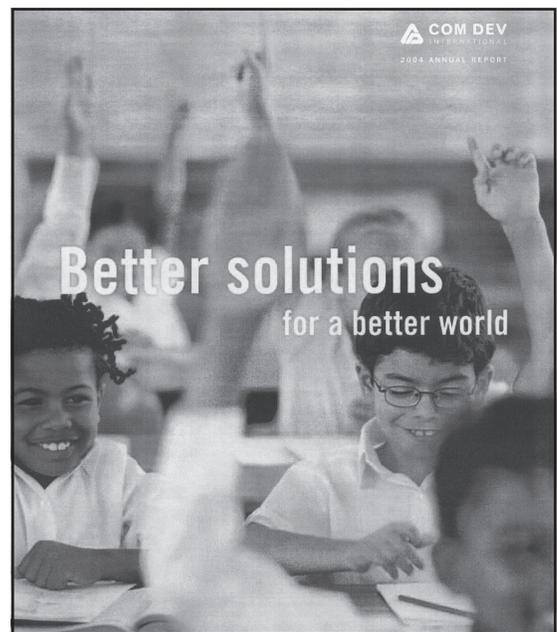
This same COM DEV report is happily entitled “Better solutions for a better world.” Its cover is emblazoned with a heart-tugging photo of beautiful, smiling children in a multiracial classroom. The document conveys to shareholders much general information about the company’s various noble efforts to supply “space and defence contractors throughout the world with [satellite] components and subsystems.” Of course, all this is purportedly done, not just for profits, but in the name of such charitable causes as:

- Integrated defence systems
- Peacekeeping support



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www.comdev.ca/pdf/ar_2003.pdf

The cover of COM DEV’s annual report for 2004 is emblazoned with a heart-tugging photo of beautiful, smiling children in a multiracial classroom. It lists “missile defense” as a use of COM DEV products and in a glaring puff of self-congratulation, proclaims: “We are truly making the world a better place.”

- Enabling deployed military personnel to communicate with home
- Homeland security
- Averting potential terrorist attacks⁶

Finally, in a glaring puff of self-congratulation, the report proclaims: “We are truly making the world a better place.”⁷

Another way in which COM DEV is “making the world a better place,” at least for those building “missile defense” weapons systems, is by contributing to the fastest and most secret Military Satellite Communications system (MILSATCOM).

MILSATCOM

In a 2002 “working paper” called “Canada and nuclear weapons: Canadian policies related to, and connections to, nuclear weapons,” Project Ploughshares’ researcher Bill Robinson mentions COM DEV on a list of “Recent Canadian Suppliers for U.S. Nuclear Weapon Support Systems.” COM DEV made it to this list due to its exports of “electro-mechanical switches” for “Advanced Extremely High Frequency [EHF] Milsatcom” payloads.⁸



Advanced EHF MILSATCOM:

In 1999, Canada signed a Memorandum of Understanding with the U.S. Department of Defense on bilateral efforts to develop Advanced Extremely High Frequency Military Satellite Communications. Since then, the Liberal government has allocated at least \$554 million towards this technology

which is essential for fighting nuclear war and for using "missile defense" weapons systems. COM DEV is a leading producer of components used for AEHF MILSATCOM.

Besides this product's role as a component within America's nuclear-war fighting infrastructure, COMDEV's Advanced EHF hardware for MILSATCOM also figures within the U.S. "missile defense" program. As the Pentagon has pointed out, it requires "super high frequency secure voice and high data rate transmissions" for a variety of purposes including

"worldwide military command and control, crisis management, relay of intelligence and early warning data, treaty monitoring, diplomatic and Presidential communications, and communications support for deployed tactical forces."⁹

Such speedy and secure relaying of "early warning data" is "especially crucial to the success of any U.S. missile defense system."¹⁰ As Marcia S. Smith, of the U.S. Congressional Research Service, states:

"Whether missile defense weapons ultimately are based in space or on the ground, a missile defense system would require satellites for early warning, communications and other functions."¹¹

How did COM DEV come to be such a world leader in advanced EHF MILSATCOM? In a pattern that repeats itself again and again, a big part of the answer to this question has to do with Canadian government funding. When COM DEV received a contract from the Hughes Space and Communications Co. in 1999, it credited its expertise in

satellite communications to years of "research and development work completed under three [Canadian] government programs devoted to advancing satellite communications:

- the Canadian Space Agency [CSA] /Communications Research Centre - International Mobile Satellite Communications Program;
- the [DND] Department of National Defence's EHF MILSATCOM Technology Development IF [infrared] Receiver and Channelized Downconverter program; and
- the CSA/CRC [Communications Research Centre] Advanced SATCOM program."¹²

Of the three, above-mentioned Canadian government programs that supported COM DEV's efforts, DND's program on "EHF MILSATCOM" is most directly relevant to "missile defense" technologies. A DND media release, from the previous year (1998), gives further details on government efforts to assist MILSATCOM R&D among Canadian corporations. It notes, with regards to DND's "co-operative agreement with the U.S. Department of Defense" on military satellite communications, that both governments

"recognize the development of advanced technology as an important part of the co-operative agreement. *The development of unique Canadian technology will demonstrate Canada's commitment towards a co-operative agreement on MILSAT-*

*COM, and will position Canadian industry to be more competitive in the military satellite-communications markets."*¹³ (Emphasis added)

The Canada-U.S. "co-operative agreement on MILSATCOM" referred to by COM DEV is mentioned in a Canadian Treasury Board Report on DND: "On 25 August 99, Treasury Board granted preliminary project approval for the Protected MILSATCOM Project. Treasury Board also provided expenditure authority for the implementation of Phase I at an estimated cost of \$254 million and granted approval for the Department of National Defence to enter into a MILSATCOM MOU [Memorandum of Understanding] with the U.S. Department of Defense. The MOU was signed 16 November 99."¹⁴

This Treasury Board report also mentions the all-important "Industrial Benefits" that drive such projects. It notes that DND "will work with Canadian industry to optimize opportunities for Canadian content."¹⁵

In November 2003, the Treasury Board approved spending an additional \$300 million on Phase II of this project. It is expected to be completed by the summer of 2014.¹⁶ How much of the \$550 million, already allocated by the Canadian government to this particular military-satellite communications project, will end up in COM DEV's accounting books is unknown. We do know, however, that thanks to Canadian government support, COM DEV has played an important role in developing a "unique Canadian technology" for this project. This COM DEV product, called "Beam*Link," is hyped as something that will "increase the useable bandwidth of military communications satellites by about 30 per cent."¹⁷

Besides directly financing contracts for this work, Canada's government has several other ways to boost domestic military corporations. For example, Defence Research and Development Canada (DRDC), employs full-time military scientists at its facilities across the country. These publicly-paid scientists work hand-in-glove with their colleagues in private-sector military industries to invent countless new military technologies. The rights to these publicly-funded inventions are, as of-

ten as possible, transferred to Canadian businesses so that they can profit from exports, primarily to the U.S. military market.

For fiscal year 1998-1999, when COM DEV received its contract with DND for Beam*Link, DRDC's annual report noted that the rights to

"Beam*Link technology [was] transferred from DREO [Defence Research Establishment Ottawa] to COMDEV."¹⁸

When announcing their contract with COM DEV for Beam*Link, DND claimed that it had

"initiated the Canadian Military Satellite Communications project ... [to] acquire assured access to worldwide military satellite communications (MILSATCOM) to support CF [Canadian Forces] operations."

However, it is not that simple.

The DND media release also mentions two other underlying reasons for COM DEV's contract. These have to do with:

- (1) maintaining Canada's position as the top foreign supplier to the U.S. military-industrial complex and
- (2) Canada-U.S. negotiations regarding access to military satellites.

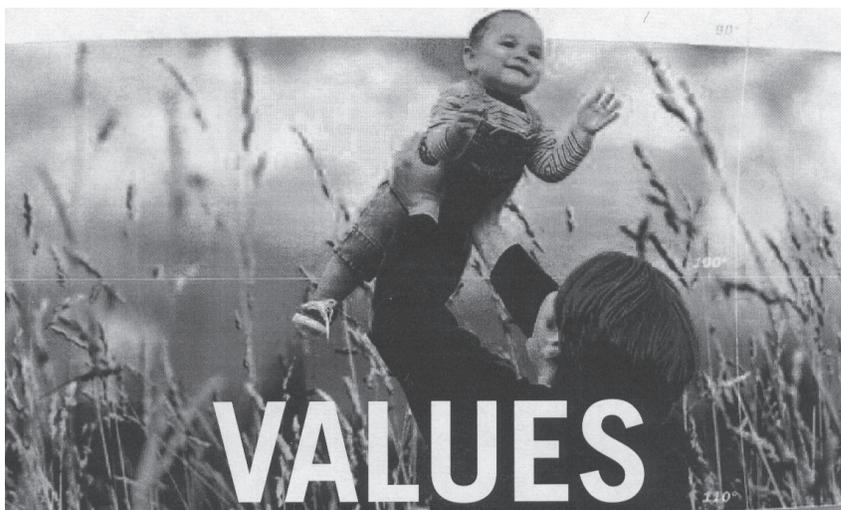
DND notes that its MILSATCOM contract with COM DEV's will:

"improve COM DEV's competitive position vis-a-vis future American military satellite communications contracts. If successful, this technology will improve Canada's ability to negotiate an agreement with the U.S. on access to future American military communications satellites."¹⁹

COM DEV also acknowledged the important role played by DND's military R&D agency, DREO, that was later renamed Defence Research and Development Canada (DRDC) - Ottawa:

"This \$8.6-million contract is one of several projects that...DREO of DND and COM DEV have collaborated on since the early 1980s to develop space technology for communications and surveillance systems."²⁰

So, as usual, decades of Canadian government funding for military R&D programs have been designed to help serve U.S. military needs. The same principal is true of Canadian military-equipment acquisition programs and even the stationing of Canadian troops



www.comdev.ca/pdf/ar_2003.pdf

**"OUR VALUES ARE DEEPLY ROOTED
OUR PEOPLE BELIEVE IN WHAT WE DO**

Our corporate values are anchored by a desire to contribute something significant to society through the products that we make and our interaction with the community."

COM Dev's Annual Report 2004, page 12.

abroad. All too often, Canadian military research, spending and deployments are planned well in advance to cater to, and be subsumed under, the much larger international projects and operations that have their origins south of Canada's border.

This general framework under which Canadian military R&D establishments, military industries and armed forces tend to operate is certainly exemplified in the case of COM DEV's EHF MILSATCOM program. As usual, the Canadian government was ready and willing to play its part by helping to fulfil requirements dictated by the U.S. military.

This typical pattern of behaviour is amply revealed in a 2002 Technical Paper published by the Ottawa section of the Canadian government's military research agency, DRDC-Ottawa. Its authors explain:

"The requirement for greater bandwidth in military satellite communications systems has resulted in research for systems that can be used in the Extremely High Frequency (EHF) band. To support this requirement, the Department of National Defence has sponsored the development of unique Canadian technology under the Canadian Military Satellite Communications project. *This is part of the Canadian commitment to the U.S. Advanced Extremely High Frequency (AEHF)*

Military Satellite Communications project."²¹ (Emphasis added.)

A related COM DEV success story is highlighted in "Global Space Sector Market Trends and Drivers," the 2002 report of the Canadian Space Agency (CSA). Canadian readers are supposed to be impressed to learn that:

"In May 2002, COM DEV Europe won a contract valued at US\$9.5 M [million] from TRW Inc. to supply the Beam Select Switch subsystem for the first two satellites of the AEHF program."²²

What this CSA blurb does not reveal however is that this military contract won by COM DEV's UK subsidiary with TRW Inc., the world's fourth largest "missile defense" prime contractor, was for switch subsystems that are an important part of the "missile defense" architecture known as AEHF MILSATCOM.

"Missile Defense" Clients

Of course, TRW Inc. is not the only prime contractor for "missile defense" weapons systems that relies upon COM DEV for subsystems. COM DEV technology is, after all, aboard

"more than 150 satellites in orbit...and the company has supplied payload subsystems to 67 international space programs."²³

Among COM DEV's leading clients are many top, war-profiteering industries that, as always, euphemisti-

cally call themselves “defense contractors.” Among these military clients are several that have happily cashed in on the bonanza resulting from efforts to design and develop weapons for so-called “missile defense” systems. For instance, COM DEV documents²⁴ reveal that its top clients include the following “missile defense”-linked firms:

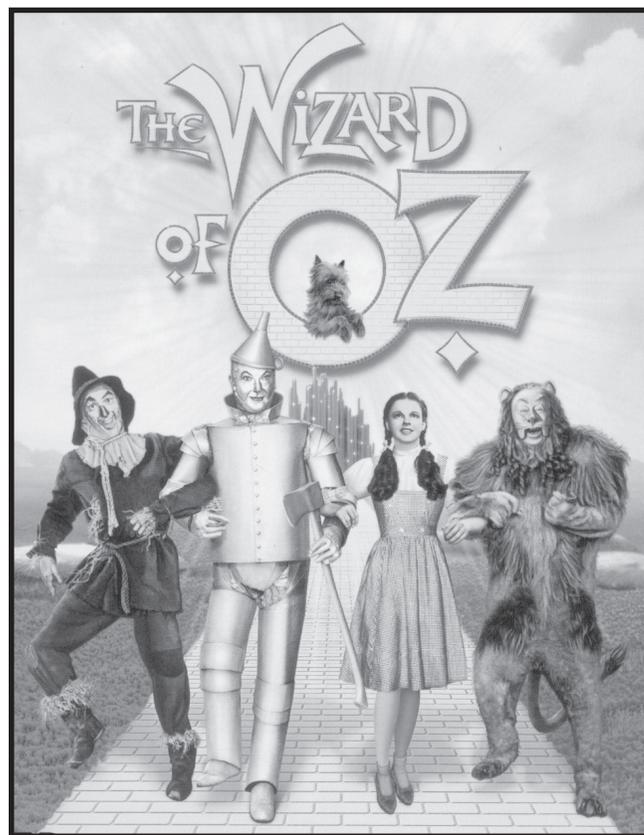
- ◆ Alenia
- ◆ BAE Systems
- ◆ Boeing
- ◆ European Aeronautic Defence and Space
- ◆ Hughes
- ◆ Lockheed Martin
- ◆ Orbital Sciences
- ◆ Space Systems Loral
- ◆ TRW

Standing out on this list of COM DEV’s main clients are three of the so-called “Big Four” prime contractors that are overseeing much of the “missile defense” weapons program, namely, Boeing, Lockheed Martin and TRW.

Conflicting Visions

Vision for 2020 is the bible of those who are working day and night to militarize space. This influential, U.S. Space Command document is at the centre of “missile defense” propaganda efforts. It foresees a world, in the not too distant future, where “missile defense” weapons have become a reality and where America is without peer in its control of space as the “high ground” to wage and win war. (See page 17 of the previous issue of *Press for Conversion!* for numerous quotations from this SPACECOM document.)

In its “Acknowledgements” section, *Vision for 2020* reads in part: “USSPACECOM and its Components wish to thank all the people and organizations whose invaluable assistance broadened our collective perspective, provided a continual reality check and helped us develop a plan to begin shaping our national



When Homes Not Bombs activists staged a satirical “Wizard of DREO” action to expose the Canadian government’s involvement in research and development of “missile defense” and space weapons, they were met by 200 police, RCMP, CSIS, a riot squad, a canine unit, a fire department crew, dozens of police vehicles, paddy wagons, a police aircraft and a “Cecil B. DeMille-style” camera wagon topped with a huge tripod and camera to film their every movement.

space capabilities and forces to meet the challenges of the next century.”²⁵

SPACECOM then lists 28 “military/civil organizations” and 48 corporate entities in the category of “commercial industry.” This second list is a veritable who’s who of top corporate players profiting from the militarisation of space and/or the production of “missile defense” systems. There is only one Canadian company on the list, “COM DEV Canada.”

The appearance of COM DEV on the “Acknowledgements” page of *Vision for 2020* has drawn the ire of some anti-war activists who oppose Canada’s involvement in “missile defense.” For several years, while many Canadian peace organizations willingly engaged in the question of

whether or not Canada should get involved in the so-called “missile defense shield,” an anti-war/anti-poverty network called Homes Not Bombs (HNB), was not falling for this deceptive game. Instead, HNB was pointing out, through articles, educational events and satirical direct actions, that Canada was *already deeply involved* in this U.S.-led weapons program, and this complicity should be stopped.

For instance, on November 9, 2001, HNB activists from across Ontario showed up at Defence Research Establishment Ottawa (DREO) to stage “The Wizard of DREO.” Fifty activists, many in costume for their farcical play about government involvement in “missile defense” and space weapons research, were met by “almost 200 police officers, RCMP and CSIS agents, riot squad backup, the full canine unit, a police airplane constantly flying back and forth overhead,... two ambulances,... one fire crew from the Kanata Fire Department,... dozens of police vehicles, police wagons, and a Cecil B. DeMille-style camera wagon with a huge tripod and large, almost old-fashioned looking camera to film the day’s activities.”²⁶

Two HNB activists were arrested for trying to inspect DREO, and the war technology research facility closed up shop the day. Besides, facing an overzealous security establishment determined to protect DREO, HNB also faced media apathy and the peace movement.

“The lack of media coverage was consistent with the lack of response from many corners of Canadian society to the news that a self-proclaimed ‘peaceful’ nation was involved in the development of the star wars system...as well as [in] plans to help institute the U.S. Space Command’s infamous *Vision 2020* document about conquering space...

The continued stance of most 'established' peace groups that we should lobby the federal government not to be involved in star wars when we [i.e., the government] already have made that commitment in physical terms, speaks to the psychosis of a country which is like a bump-covered carpet: so much dirt has been swept underneath the rug that you cannot walk across it anymore without falling over and then wondering why the ground wasn't level."²⁷

A few month later, during a non-violent action to unearth the dirt on COM DEV's role in "missile defense," "the folks at the Campaign to Demilitarize Canada, A Division of Homes not Bombs (HNB)" presented an "Open Letter to COM DEV." Their letter called upon company employees to "Get Out of Space Warfare, and Pledge Yourself to Stop Working for War." HNB's letter said:

"It is clear that COM DEV's work in satellite communications would be vital to achieving the goals of *Vision for 2020*."

HNB then cited this quotation from the infamous USSPACECOM document:

"Military satellite communications are key to achieving Dominant Maneuver on the future battlefield... Space-based surveillance, earth resource monitoring and missile warning capabilities enable warfighters to complete the common operating picture of the battlefield. Information products are disseminated directly to the point of need, even to the foxhole, bridge or cockpit. Products could be 'pushed' or 'pulled' depending on warfighter needs... Satellite navigation systems will allow for greater positional and timing precision in a new generation of 'fire and forget' weapon systems, while denying this advantage to our adversaries."²⁶

Unfortunately, the rational and impassioned pleas of Homes Not Bombs activists asking COM DEV employees "to Stop Working for War," fell on deaf ears. Apparently, the money from military contracts, including "missile defense"-related work, somehow outweighed the reasonable proposition housed in HNB's motto: "Canada

should build homes, not blow them up."

Although it is possible that some COM DEV employees were moved by the HNB action, it appears that Peter Mabson, the corporation's vice-president of business development, remained completely unenlightened. He was later quoted in the *Globe*

and *Mail* urging Canada's government to make a speedy decision in favour of the "missile defense" weapons program. The article states that Mabson "said the danger in delaying a decision is that Canada may not get full benefit. 'You wait too long and you may support it and it doesn't matter.'"²⁷

References

- Canadian Space Industry Guide - COM DEV Ltd.
www.conveyor.com/space/org/forms/f-comdev.html
- Member Profile: COM DEV Ltd., Canadian Defence Industries Assoc.
www.cdia.ca/public/index.asp?action=profiles.
- Ibid.
- COM DEV Annual Report 2004
www.comdev.ca/pdf/ar_2004.pdf
- Google Advertising
www.google.com/ads/glossary.html
- COM DEV Annual Report, op. cit.
- Ibid.
- Bill Robinson, "Canada and Nuclear Weapons," *Ploughshares working paper 02-5*
www.ploughshares.ca/CONTENT/WORKING%20PAPERS/wp025.html
- Space Forces, Pentagon's Annual Defense Report, 1996.
www.milnet.com/pentagon/adr96/chapt_23.html
- "Current and Future Space Security, Military Programs: Satellites," Monterey Institute of International Studies
cns.miis.edu/research/space/us/mil.htm
- Marcia S. Smith, "U.S. Space Programs: Civilian, Military, and Commercial," Congressional Research Service Issue Brief, April 22, 2003.
www.spaceref.com/news/viewstr.html?pid=11050
- Media Release, "COM DEV Launches New Product with Hughes Contract," April 19, 1999.
www.comdev.ca/pressrel/1999/990419.html
- DND Backgrounder documentation, "DND Interest in Satellite-Communications Technology," October 13, 1998
www.comdev.ca/pressrel/1998/981013b.html
- Report on Plans and Priorities, 2001-2002, National Defence. Published by the Treasury Board of Canada.
www.tbs-sct.gc.ca/est-pre/20012002/ND-DN/nd0102rpp06_e.asp
- Ibid.
- Report on Plans and Priorities 2004-2005. Major Capital Equipment Projects, Status Report, July 29, 2004.
www.vcds.forces.gc.ca/dgsp/00native/rep-pub/ddm/rpp/rpp04-05/mcp_e.pdf
- DND backgrounder, op. cit.
- Defence Research and Development Branch, Annual Report, 1998-1999.
dsp-psd.pwgsc.gc.ca/Collection/D1-14-1999E.pdf
- DND media release, "National Defence and COM DEV International to Further Develop Satellite Communications Technology," October 13, 1998.
www.comdev.ca/pressrel/1998/981013a.html
- Ibid.
- Jack Litzenberger, Michel Clenet, Gilbert Morin and Yahia Antar, "Study of a Waveguide Antenna Implemented in Laminated Material" DRDC Ottawa Technical Report, December 2002.
cradpdf.drdc-rddc.gc.ca/PDFS/unc02/p518815.pdf
- Global Space Sector Market Trends and Drivers
gauss.gge.unb.ca/CSA.trends.2002.pdf
- Canadian Space Industry Guide, op. cit.
- a. Annual report 2000
www.comdev.ca/pdf/AR_2000.pdf
b. Annual General Meeting, 2002
www.comdev.ca/pdf/cdi_agm_2002.pdf
c. Media Release, "COM DEV Announces Results for the First Quarter of Fiscal 1999," March 11, 1999.
www.comdev.ca/pressrel/1999/990311.html
- Acknowledgements, *Vision for 2020*
www.fas.org/spp/military/docops/usspac/lrp/ack.htm
- "Homes not Bombs Closes Space Warfare Facility November 9," Nov. 9, 2001.
www.homesnotbombs.ca/dreoactionreport.htm
- Ibid.
- Open Letter to COM DEV from Homes Not Bombs, "Get Out of Space Warfare, and Pledge Yourself to Stop Working for War," February 1, 2002
www.homesnotbombs.ca/comdevletter.htm
- Simon Tuck, "Missile defence decision urged soon," *Globe and Mail*, May 12, 2003.
www.globeandmail.com/servlet/ArticleNews/TPPrint/LAC/20030512/RDFE/TPBusiness