

Canadian Participation in North American Missile Defence: A Cost-Benefit Analysis

By Alexander Moens and Barry Cooper

Introduction

In contrast to the ambitious Strategic Defence Initiative of the 1980s, the current US program to build ground-based missile interceptors in Alaska and California is a feasible and prudent response to the growing threat of missile and nuclear developments in North Korea and Iran. The United States is both able and by law committed to go-it-alone on missile defence. All the risks and nearly all the costs to build missile defences are borne by the Americans. Several countries including Japan, Denmark, and the United Kingdom

ACKNOWLEDGEMENTS

The authors wish to thank David Bercuson and James Fergusson for their helpful comments on an early draft of this *Alert*.

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Main Conclusions

A pragmatic cost/benefit analysis regarding Canadian participation in continental Ballistic Missile Defence (BMD) shows the following:

- participation in BMD will ensure that information is shared—both military-to-military information as well as information to guide policymakers in Ottawa in formulating Canadian defence and foreign policy;
- it is in Canada's interest to know what American plans are because the alternative is to remain an uninformed observer able only to react after the fact;
- participation in BMD means influence on early warning, detection, some deployment decisions, and the overall political-strategic goal of missile defence;
- participation in BMD does not mean Canada is responsible for the cost or for the outcome;
- the window of opportunity for the Government of Canada to make the correct choice, namely to participate in continental BMD, is closing very quickly; delay or a refusal to participate means sustaining a considerable reduction in Canadian sovereignty as well as Canadian self-respect.

have agreed to provide radar or information components to the program under these conditions. The main benefit Canada will derive from joining is the ability to have a voice in how North America will be protected against the missile threat. As one of Canada's premier experts on missile defence, Dr. James Fergusson, put it, not to participate "will relegate Canada to an uninformed observer of US strategic direction" (Fergusson, 2004).

Counter arguments about the program's effectiveness, costs, its impact on global arms control, and the weaponization of space do not detract from the fact that

particle beams. Rather, it constitutes a measured response to two acute threats that have come into existence since the end of the Cold War. First, during the 1991 Gulf War, Iraqi SCUD missile attacks on US forces in Saudi Arabia killed more than 20 American soldiers and posed a serious threat to Israel. The military and diplomatic vulnerability to missile attacks propelled the US government to establish a crash program in research, development, and deployment for theatre missile defences. The current PAC-3 Patriot system performed flawlessly in the second Gulf War and its longer-ranged Israeli counterpart (adapted from

defence plans are aimed at defeating rogue state attacks or rogue state attempts at nuclear blackmail directed at American forces abroad. In the May 2002 Moscow Treaty, Russia and America agreed to reduce their strategic nuclear missiles from over 6,000 to 2,200 by 2012, some 1,500 below the level of START II.

The Bush administration is working on a "layered" system that includes shooting down missiles as they are lifting off, during their long mid-course flight, and as they make their final approach to earth. Research includes fixed and mobile land-based as well as sea-based methods to destroy these missiles. The Missile Defense Agency (MDA) has not excluded preliminary research on space-based capabilities, but the current system is ground-based, not space-based. It does involve space-based infra-red warning satellites to provide information to the North American Aerospace Defence Command, NORAD. These satellites are networked with ground-based Ballistic Missile Early Warning radars and from there to the missile defence network where its radars are "cued" (told where to look) to find the missile warhead, which then tells the interceptor where to go to arrange the final collision.

One argument against ballistic missile defence from the perspective of the United States emphasizes the great cost and the unproven nature of the program. The costs are certainly high—hundreds of billions of dollars by most estimates. But how expensive would it be to rebuild San Francisco or Chicago? Second, it should be kept in mind that most weapon tests have a failure rate on the order of 50 percent during their long development period. This is true to date

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the United States has deployed a North American missile defence system. For the next several years, it is the only program there will be and Canada must join it or be left out. We may be able to influence it from the inside, but not at all from the outside. Participation is a matter of Canadian national sovereignty, and non-participation carries with it only costs, not benefits.

Policy Context

The current deployment of ground-based, mid-course missile interceptors and a robust R&D program in air and sea-based missile defence is not derived from Ronald Reagan's "Star Wars" vision of a fully protective shield over North America based on nuclear explosions in space, the "brilliant pebbles" program of thousands of kinetic-kill interceptors, or exotic lasers and

the PAC-2 system), the Arrow, has produced encouraging test results.

Second, in response to the growing threat of nuclear and missile proliferation in rogue states such as Iran, which boasts of a 2000-km range ballistic missile, and North Korea, which launched a three-stage rocket in 1998, the US Congress passed the National Missile Defense Act in 1999 with veto-proof majorities in both chambers. The act committed the United States to missile defense "as soon as technologically possible." The George W. Bush administration made missile defence a priority and increased its funding by 57 percent in fiscal year 2002 from \$5 billion to \$8 billion. Similar increases have continued in subsequent years. At the same time, the Bush administration has gone out of its way to assure large, near-peer nuclear powers such as Russia that American missile

for the current missile defence program as well. Though the challenge of hitting a proverbial bullet with a bullet, both flying in mid-course at some 38,000 km per hour is immense, based on the experience of developing programs to defend against short and medium range missiles such as the AEGIS destroyers or the Patriot system, ballistic missile defence is no longer an invention problem but an engineering problem. Money and time are likely all that are needed to solve it.

A second argument, which has been made in Canada as well as in the US, is that by building (or even by conducting research into) a ballistic missile system, the Americans will force others to do so as well, or compel them to increase their offensive arsenals so as to be able to overwhelm the defence. This was the logic of the Anti-Ballistic Missile Treaty. That treaty made sense, however, within the wider logic of the Cold War. Back then the strategy of mutual assured destruction (MAD) was developed in order not to conduct nuclear war. By the late 1960s both sides had sufficient second-strike capability to obliterate the opponent even if he successfully carried out a first strike. Under those conditions, a ballistic missile defence system might have introduced considerable instability by making it conceivable that the side possessing it might be able to win a preemptive nuclear war by eliminating a second-strike capacity.

Today neither side keeps their nuclear weapons on a hair-trigger launch alert. The logic of MAD no longer obtains, and neither do the destabilizing consequences of ballistic missile defence.

A Canadian Cost-Benefit Assessment

Since the inception of NORAD in 1958, Canada has formally participated not only in the shared task of air defence, but also in early warning on missile attacks. During the Cold War, Canada took part in continental air defences and also in the assessment of a potential Soviet nuclear bomber or missile attack. The decision to launch nuclear weapons in response would, however, be made by the US-only Strategic Command. The current willingness of the United States to allow Canada to participate in continental missile defence would

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not go beyond these parameters. Canada was neither pacifist nor neutral during the Cold War, and its participation in attack assessment and in policy on missile defence would not change Canadian status as a US ally. Nor would Canada's decision to participate spell a new departure in defence policy. In fact, Canada is already in partnership with the United States and in NATO in several theatre missile defence plans that include protection of Canadian personnel, including peacekeepers, abroad. Participation in continental missile defence would therefore entail a continuation of long-established practice.

Canada will not be responsible for launching the missiles that intercept any attack or for any future US decision to put related defensive weapons in space. Canada's participation in missile defence

does not mean it takes part in the US-only Space Command any more than Canada's established role in NORAD made or makes it part of Strategic Command, which, as noted above, controls the trigger on the American nuclear arsenal. Canada would no more be responsible for the weaponization of space than it would have been responsible for the US launching nuclear missiles in response to a Soviet attack.

There is, moreover, considerable confusion over what "weaponization of space" means and why Canada opposes it. For example, the prime minister has said he is

against it because "I don't believe space belongs to any country" (National Post, December 15, 2004). By the same logic, Canada should have no navy because the oceans belong to no country either.

Making Canadian participation in continental missile defence contingent on a guarantee by the US never to put weapons in space may appear to constitute occupation of some notional moral high ground. In fact its purpose seems to be to postpone a Canadian decision. In any case, missiles already travel through space. Thus, if any country launches a missile at North America it in effect places offensive weapons in space in a matter of minutes. Seen in this light, putting a defensive weapon in space to deter or neutralize a potential aggressor is a morally defensible course of action. Fur-

thermore, the defensive as well as the offensive weaponization of space is likely to occur over time just as weapons are already legal under the sea, on the surface of the sea, on land, and in the air. Given the development of integrated and networked military capabilities, it is prudent to predict that the deployment of weapons in space will eventually take place. If Canada insists on a ban on weapons in space before conducting negotiations on missile defence, and knowing it is a certain deal-breaker for the Americans, Ottawa will buy itself a clever way out, but at the high cost of not participating in its

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own defence. When space eventually becomes weaponized, Canada would then have to go back to Washington to look for help in protecting Canadian space assets. It would do so cap in hand and from a position of considerable weakness, or Canadian satellites would remain vulnerable to attack.

Canadians who rely on the media for information concerning ballistic missile defence, which is most of us, are also under the impression that the Missile Defence Agency is eager to have Canada join the team. Canadians, as do other human beings, like to flatter themselves, and this is an example of it. There is no reason to think that MDA has any pressing desire for Canada to join them. Canada will have to ask and will have to bring something of value to the table. Historically, Canadian territory has had geostrategic significance. This bargaining chip has been devalued

in recent years, and deploying space-based defensive weapons will effectively reduce it to zero.

About the only contribution Canada can make at present concerns defence against Iran because the track of an incoming missile from that country towards the eastern US seaboard overflies the eastern Arctic and eastern Canada. The existing launch site at Fort Greely, Alaska, could cover the Iranian attack path, but a better intercept location exists in northern Quebec or the Northwest Territories. That is about all Canada can offer. By refusing to allow interceptors in the north, the Canadian govern-

ment is buying into the misconception that the Americans want us so much that we can refuse them the only help we have on offer and they will still allow us to have a say on what they are doing. That misconception is very strongly entrenched. It is also a delusion.

The concern over debris in space as a result of a successful missile interception is a serious matter for all countries with commercial and military assets in space, including Canada. Missiles coming from North Korea or Iran aimed for Chicago or Seattle must pass over or through Canadian aerospace, whether there are Canadian-based interceptors or not. Their trajectory creates a responsibility in terms of Canadian defence and the assistance we are honour-bound to give to our defence partners. Canadians must weigh their concern over debris falling into Hudson Bay or Ungava, for example, against

the catastrophic impact of a missile reaching its target, whether an American or a Canadian city.

Apart from the erroneous Cold War assumptions noted above, the argument that Canada must not participate in a missile defence system because it will trigger a build-up in offensive nuclear weapons is also based on a significant overestimation of Canada's role in the arms control arena. Mutual assured destruction provided temporary stability between the Soviet Union and the United States during the Cold War because both governments were rational. Canada may believe that rogue states are ultimately deterrable, but the US does not. The fact is that Canada has no way to change entrenched American opinion on this point. Nor does Canadian participation betray our interests. If we believe rogues are deterrable, an added defence capacity against them will raise the bar for their offensive action even higher. It is not even a moral argument to seek a global strategic order in which democratic societies such as Canada and the United States would exist in a state of mutual assured destruction with oppressive dictatorships such as North Korea or Iran.

The Chinese government has been methodically expanding its defence budget and missile program for at least the last 10 years and has done so regardless of what the United States is doing on missile defense. In 2001, China had some 20-plus nuclear warheads that could reach US territory—a “robust” missile defense system that could intercept a dozen or more warheads would thus offer a counter measure, but could not overwhelm a Chinese attack. Thus the strategic logic of deterrence would apply to China today as it applied to

the Soviet Union in the past and to Russia today. In any event the probability of a nuclear confrontation between China and the US for the next several years looks about as low as it does with respect to Russia.

The argument that Canada should reject missile defence because it would be a waste of time and resources as terrorists are more likely to smuggle weapons of mass terror in suitcases, or rented trucks, or launch them from the hull of a nearby cargo ship is beside the point. Current US missile defense plans are not meant to replace nuclear deterrence, counter-terrorism, homeland security, or for that matter, modern conventional forces. Missile defense would not replace any existing system. Therefore, Canada's participation or non-participation does not affect any of these considerations. Missile defense is about plugging one hole in a range of vulnerabilities. The choice has been made by

the United States; our participation does not affect any of these tradeoffs.

Conclusion

Canada has a choice between a near free ride in missile defence with our input or without our input. Canada's decision to participate will not provoke an arms race or betray our defence or international security policy, or even our highly questionable position on weapons in outer space. It will not have an adverse impact on our friends or trading partners. It will likely afford a small boost to our defence industry. If we do not participate we will receive nothing. Ballistic missile defence will create a modest amount of goodwill in the overall bilateral relationship, and it will protect Canadian cities. In short, the costs—an incremental addition to the NORAD budget—are low, and the benefits are high.

FOR FURTHER READING, SEE

Fergusson, James (1999). *Dejà Vu: Canada, NORAD, and Ballistic Missile Defence*. Occasional Paper #39 (November). Centre for Defence and Security Studies, University of Manitoba.

— (2004). "Canada and Ballistic Missile Defence: What We Don't Know and Can't Know." Speech. Available at <http://www.fedcan.ca/english/pdf/fromold/breakfast-fergusson1104.pdf> (December 15).

Harvey, Frank P. (2004). *Smoke and Mirrors: Globalized Terrorism and the Illusion of Multilateral Security*. Toronto: University of Toronto Press, chs. 4-5.

Lindsey, George (2004). "Canada North American Security and NORAD." *International Insights*. Vol. 2, no. 3. CIIA.

Mason, Dwight N. (2003) "Canada Alert: Canada and Missile Defense." *Hemisphere Focus*. Vol. 11, no. 22. CSIS (June 6).

— (2004). "Canada Alert: Canada and the US Missile Defense System." *Hemisphere Focus*. Vol. 12, no. 1. CSIS (January 9).

National Post (2004). "Mushy on Missiles." Editorial (December 15): A14.

Spring, Baker (2004). *The Operational Missile Defense Capability: A Historic Advance for the Defense of the American People*. Backgrounder no. 1798 (September 22). The Heritage Foundation.