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CANADA AND THE MISSILE DEFENCE DEBATE

By /par Maj Wayne Smit

ABSTRACT

This paper deals with the United States (U.S.) commitment to deploy a ballistic missile defence system in the 2004-05 timeframe, and furthermore, that the Canadian government will be faced with a decision to participate in that endeavour. As a precursor, it covers the early history of ballistic missiles and evolution of missile defence systems. It briefly reviews the history of Canada-U.S. defence relations from a continental perspective, primarily through the North American Aerospace Defence Command (NORAD), and the impact of Canada's geographical proximity to the U.S. The paper then situates the global threat posed by ballistic missile proliferation, with particular focus on 'states of concern', as well as 'non-state actors'. Having assessed the threat as genuine, it then examines the impact that non-participation in missile defence could have on Canada, from the political and military perspectives, as well as that of Canadian sovereignty. The paper suggests that there could be serious repercussions in each of these respective areas, with a more damaging effect on the overall Canada-U.S. relationship. Accordingly, on the balance of evidence presented, this paper concludes that Canada must participate in the U.S. missile defence program.

Introduction

At the North American Aerospace Defence (NORAD) Command facility in the Cheyenne Mountain Operations Center (CMOC), a red doughnut-like symbol glows on a spot in North Korea, indicating the launch of a single missile. The missile has been detected high above the earth by infrared sensors on United States (U.S.) satellites. Symbology appears on the viewing screen in the CMOC indicating the time, place of launch and type of missile. Shortly thereafter additional symbology appears on the screen indicating the missile's general direction out over the Pacific Ocean toward the west coast of North America. The projected point of impact is determined as Seattle, Washington, with an estimated flight time of just under 30 minutes. The missile's trajectory will bring it over the west coast of Canada, in the vicinity of Vancouver. U.S. National Command Authorities are promptly alerted to the inbound missile, and authority is sought to engage and destroy it. Authorization is given to the NORAD Commander and ground-based interceptors are launched from a missile defence site in Alaska. The incoming missile is successfully intercepted in its mid-course phase of flight and destroyed prior to reaching the North American landmass. In the political aftermath that ensues, North Korea steadfastly claims that the launch was accidental.[1]

For almost half a century the U.S. has sought to implement a ballistic missile defence system to protect itself from a nuclear intercontinental ballistic missile (ICBM) strike. Traditionally the threat was the massive nuclear ICBM arsenal of the Soviet Union, and to a lesser degree the People's Republic of China. While those countries still

[1] This hypothetical scenario was borrowed in part, from the introduction to the book by Bradley Graham, *Hit to Kill –The New Battle Over Shielding America From Missile Attack*, (New York: Public Affairs, 2001), pp xxi - xxii. A very similar scenario was also observed when visiting the CMOC on the recent CSC Defence of North America FSE.

pose a prospective threat, the current list of potential aggressors includes the likes of North Korea and Iran, as well as Syria and Libya.[2]

In 1983, U.S. President Reagan launched the Strategic Defence Initiative (SDI), or 'Star Wars', as it was more commonly known. The concept envisaged building a leak-proof space shield over the U.S. that would render nuclear weapons "impotent and obsolete". An offer to participate in the program was extended by the U.S. to Canada, which would have extended the protective missile umbrella over Canada.

In response, the Canadian government of the day, led by Prime Minister Brian Mulroney, chose what has been described as a minimalist approach – "permitting industry involvement without official government involvement."[3] Described in another manner, Canada chose to "participate without participating", and managed the policy dilemma without damaging its bilateral relationship with the U.S. In the end, Canada's policy dilemma would be resolved as SDI eventually lost its momentum due to concerns about its technological feasibility, multi-billion dollar costs, the collapse of the Soviet Union, and the end of the Cold War.

However, some twenty years later the issue of a U.S. missile defence system has re-emerged. Upon entering office in 2000, the Bush administration was quite clear on its intentions to further missile defence. According to President Bush, it was time to move beyond the old paradigm of "mutually assured destruction". Moreover, in order to achieve success it was necessary to "move beyond the constraints" of the ABM Treaty.[4]

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[2] Canada, *Standing Committee on National Defence and Veterans Affairs*, 4 May 2000.
[3] James Fergusson, *The Axworthy Legacy – National Missile Defence, Homeland Defence, and Outer Space: Policy Dilemmas in the Canada-US Relationship* (Toronto: Oxford University Press, 2001), p 241.
[4] Tim Youngs and Claire Taylor, *Ballistic Missile Defence* (London: House of Commons Library, 2003), p 23.

Following the terrorist attacks of 11 September 2001 on the U.S., the resolve to protect the homeland became more determined than ever. In releasing the U.S. National Security Strategy in September 2002, the Bush administration stated,

> We must be prepared to stop rogue states and their terrorist clients before they are able to threaten or use weapons of mass destruction against the United States and our allies and friends … Our response must take full advantage of … modern technologies, including the development of an effective missile defence system.[5]

While Canada has yet to be formally invited to participate in the U.S. missile defence effort, it is expected that "any positive indication by Canada would precipitate a U.S. proposal for bilateral cooperation."[6] Consequently, Canada again finds itself at a political crossroads with its neighbour and closest ally, faced with a strategic decision that will have serious foreign and defence policy implications for decades to come. It is the position of this paper that Canada must participate in the U.S. missile defence program.

In substantiating this point of view, this paper will begin by briefly reviewing the history of ballistic missiles and U.S. missile defence systems. The current U.S. missile defence program will then be examined, with a focus on establishing the capabilities of the proposed system. Next, the importance of missile defence to both North America, and indeed Canada, will be considered. And finally, rationale will be presented describing why Canada must participate in this endeavour, including some possible courses of action.

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[5] PBS Frontline, "Missile Wars: Timeline," [http://www.pbs.org/wgbh/pages/frontline/shows/missile/view/].

[6] Lieutenant-General George E.C. Macdonald, "NORAD and National Missile Defence: A Perspective of the Deputy Commander-in-Chief," *Canadian Military Journal,* Vol. 1 No.2 (Summer, 2000), p 11.

Ballistic Missile – A Working Definition

A missile is categorized as 'ballistic' if, once its fuel is expended on launch, it travels under the influence of gravity and air resistance. Modern ballistic missiles are launched on a precise trajectory that arcs up into the outer reaches of the atmosphere, or even space, and then descend to earth under gravity to their target. [7]

The Early History of Ballistic Missiles

The early history of ballistic missiles dates back to the Second World War and the German 'V rockets', which were used to attack England. While it was possible to counter the relatively slow and noisy V1 rockets, or 'buzz bombs' as they were known, it was virtually impossible to counter the ballistic V2's, which could reach speeds of 3500 mph and carried one-ton explosive loads.[8] After the war the Allies learned of German plans to build a larger two-stage rocket that might have been able to cross the Atlantic Ocean and attack North America. It was this revelation that first caused the Americans to consider defence from a future missile attack. [9]

As the Allied coalition split following the Second World War, a period of competitive missile development occurred between the U.S. and the Soviet Union. The Americans were convinced of the Soviet effort to develop long-rang ballistic missiles, including some capable of intercontinental flight. In response, the U.S. initiated two distinct programs. The first of these programs was intended to "match and surpass the expected Soviet effort," and saw the U.S. launch five long-range missile programs: Atlas,

[7] Tim Youngs and Claire Taylor, *Ballistic Missile Defence* …., p 9.
[8] About Inventors, "The V-2 Rocket," [http://inventors.about.com/library/inventors/blrocketv2.htm].

Titan, Thor, Jupiter, and Polaris. The second program involved a number of projects concerned with ballistic missile defence.[10]

American suspicions of Soviet missile development efforts would soon prove to be true, as in August 1957, U.S. radars tracked the test of a Soviet ICBM.[11] Just two months later, in October 1957, the Soviet Union launched its Sputnik satellite into orbit using a multi-stage rocket. This clearly demonstrated that the Soviets were capable of developing ballistic missiles with sufficient range to target the U.S. Indeed, intelligence estimates of the day predicted that the Soviets could deploy more than 500 such missiles by the end of 1961. [12]

U.S. Ballistic Missile Defence

The first U.S missile defence system, named Nike-Zeus, was a ground-based terminal defence system that consisted of radars and computers to detect an incoming missile and then directed an interceptor rocket to the target. Armed with a megaton-class nuclear warhead, the concept was that the proximity of the nuclear explosion would destroy the threat. However, the Nike-Zeus program never achieved operational status, as the system was considered to be technologically premature, and highly vulnerable to countermeasures and saturation.[13] As a result, the decision was taken not to deploy the Nike-Zeus system.

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[9] Bradley Graham, *Hit to Kill* …., p 3.
[10] Sanford Lakoff and Herbert F. York, *A Shield in Space – Technology, Politics, and the Strategic Defence Initiative* (Berkeley and Los Angeles: University of California Press, Ltd., 1989), p 55.
[11] K. Scott McMahon, *Pursuit of the Shield – The U.S. Quest for Limited Ballistic Missile Defence* (Lanham: University Press of America, 1997), p 14.
[12] Ibid, p 14.
[13] Sanford Lakoff and Herbert F. York, *A Shield in* Space …., p 56.

There were three major missile defence programs initiated after Nike-Zeus: Nike X, Sentinel, and Safeguard. In essence, Nike X was an improved version of Nike Zeus, while Sentinel "was an outgrowth of Nike X", and Safeguard was merely Sentinel renamed, albeit with its focus changed from "defending the country as a whole against a minor missile attack to defending only U.S. retaliatory forces, particularly ICBMs, against a major missile attack."[14] A decision was taken by the U.S. Congress to deploy Safeguard in 1969, however, it would eventually be cancelled because of operating cost concerns and the Soviet move to install multiple independent re-entry vehicles (MIRVs) on their missiles.[15]

The advent of the Anti Ballistic Missile (ABM) Treaty in 1972, which was concluded as part of the Strategic Arms Limitations Talks (SALT), signalled an important turning point with U.S. missile defence programs in general. The provisions of the ABM Treaty prevented either the U.S. or the Soviets from deploying a "full territorial defence or laying the ground work for such a defence." Consequently, the U.S. posture became oriented toward the concept of deterrence through mutual vulnerability, more colloquially expressed as mutually assured destruction (MAD). [16]

It was not until 1983, under President Reagan, that the next version of a U.S. missile defence system would emerge, in response to increased tension in U.S. and Soviet relations. The Strategic Defence Initiative (SDI), envisaged creating a "comprehensive land and space-based strategic defence against ICBMs and similar submarine launched

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[14] Ibid, p 62.
[15] Bradley Graham, *Hit to Kill,* …., p 12. *From* start to finish the Safeguard program absorbed $5.5 billion, excluding the cost of developing and building nuclear warheads. In addition to the cost, it was felt that the introduction of MIRV technology to Soviet ICBMs would overwhelm the Safeguard ABM system.
[16] Ibid. pp 10-12. Under the ABM Treaty the U.S. and Soviets agreed to a five-year freeze on strategic launchers and were restricted to two antimissile complexes each. The U.S. chose to protect the missile base

ballistic missiles."[17] From the outset SDI proved to be highly controversial, given widespread views that it would destabilize arms control agreements and thus serve to spark a new arms race: these arguments are still being utilized against the current U.S. missile defence program. While SDI proved unsuccessful, attempts to salvage the program by scaling back its concept of operations signalled an impending shift in the U.S. mindset.

In the late 1980's, U.S. missile defence policy gradually began to move toward countering an accidental or unauthorized launch of a limited number of ballistic missiles. In 1988, a missile defence concept known as the Accidental Launch Protection System (ALPS), was proposed. While ALPS never gained any political momentum, its ideas were eventually amalgamated into a follow-on proposal initiated by President Bush Sr in 1991, which was officially dubbed Global Protection Against Limited Strikes (GPALS). GPALS was intended to "offer protection to U.S. territory, U.S. forces abroad and allies against modest nuclear attack."[18]

Clearly GPALS was a major shift from SDI in that the focus was no longer a missile defence system designed to afford total protection against a massive first strike. Geographically the missile defence envelope under the GPALS concept was extended to include U.S. forces in regional conflicts, as well as allies deployed with U.S. forces. In this regard, the GPALS concept is extremely important as there is significant correlation with the currently proposed U.S. missile defence program.

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near Grand Forks, while the Soviets opted to retain the *Galosh* missile defence system that they had built around Moscow.

[17] Anthony H. Cordesman, *Strategic Threats and National Missile Defences – Defending the U.S. Homeland* (Washington DC: Praeger Publishers, 2002), p 185.

[18] Ron Huisken, *ABM vs BMD – The Issue of Ballistic Missile Defence* (Canberra: Strategic and Defence Studies Centre, 2001), p 6.

While the GPALS program was eventually cancelled under the Clinton Administration,[19] enough political pressure was brought to bear to keep missile defence research alive. In response to the growing ballistic missile threat assessment, President Clinton signed the National Missile Defence Act into Law in mid-1999. The Act committed the U.S.

> To deploy as soon as technologically possible an effective National Missile Defence (NMD) system capable of defending the territory of the United States against limited ballistic missile attack (whether accidental, unauthorized, or deliberate). [20]

In the end however, President Clinton deferred a decision on authorizing the Pentagon to proceed with a missile defence deployment.[21]

The Current U.S. Missile Defence Program

The current U.S. missile defence proposal under President Bush plans to deploy a multi-layered land and sea-based system, with initial deployment scheduled for the 2004-05 timeframe. It is important to note that "initial capability will build upon the technologies developed and tested to date and serve as a starting point for fielding improved, multi-layered defence capabilities by the end of 2010." What this means is that there will be an evolutionary approach to the development and design of the system, which in essence translates to no final or fixed architecture. [22]

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[19] Bradley Graham, *Hit to Kill* …., pp 22-23.
[20] Tim Youngs and Claire Taylor, *Ballistic Missile Defence* …., pp 18-19.
[21] Centre for Defence Information, *National Missile Defence – What Does It All Mean?* (Washington DC: Centre for Defence Information, 2000), p 4. President Clinton cited the following concerns for deferring a decision on NMD deployment: the status of the technology (tests had only scored 1 hit in 3 tries); the refusal of the Russians to modify the ABM Treaty to permit deployment of a NMD system; and the reluctance of U.S. allies – especially those on whose territory early warning radars would be sited – to endorse NMD unless the ABM Treaty were modified, thus preserving strategic nuclear stability.
[22] Tim Youngs and Claire Taylor, *Ballistic Missile Defence* …., p 31.

The initial capabilities planned for deployment in 2004-05 include both sea and ground-based interceptors (GBI) capable of intercepting and destroying ICBMs during the boost and mid-course phases of flight using hit-to-kill technology. It will also consist of air-transportable Patriot Advanced Capability-3 (PAC-3) systems to intercept short and medium-range ballistic missiles. In addition, the system will comprise land, sea and space-based sensors, including existing early warning satellites, an upgraded radar now located at Shemya, Alaska, a new sea-based X-band radar, upgraded existing early warning radars in the United Kingdom (U.K.) and Greenland, and use of radars and other sensors now on Aegis cruisers and destroyers.[23]

In basic terms, it is envisioned that the system will work along the following lines. First, the satellites would detect a launch through the use of infra-red sensors and track the ballistic missile(s). The early warning radars then receive the tracking data from the satellites. Next, the X-band radars are utilized to discriminate between incoming real warheads and decoys. And lastly, hit-to-kill interceptors are then launched and, with target discrimination achieved, destroy the incoming warheads.

The proposed missile defence system is, as the name implies, strictly defensive in nature. Further, it is only intended to counter a limited ballistic attack from "rogue states, as well as against a small number of accidental or unauthorized launches of strategic ballistic missiles from other nuclear states."[24] Unlike SDI, it is not designed to defend against a large-scale ballistic missile attack, and Russia's strategic nuclear forces are still

[23] Ibid, p 31. It is important to note that the capabilities listed are initial only and may be improved over time.
[24] Desmond Ball, *Missile Defence: Trends, Concerns and Remedies* (Canberra: Strategic and Defence Studies Centre, 2001), p 4.

considered to be quite capable of overwhelming the system.[25] Therefore, it is difficult to accept any argument that the deployment of a ballistic missile defence system by the U.S. would present a destabilizing force to global nuclear non-proliferation or arms control and disarmament agreements, which are essential elements of Canadian foreign policy.[26]

However, the division of missile defence into the theatre and national spectrums presents somewhat of a dilemma in terms of Canadian foreign policy. On one hand Canada remains uncommitted towards support for missile defence from the national perspective, yet on the other hand it has openly declared support for the concept of theatre missile defence.[27] This discrepancy undoubtedly stems from the fact that theatre missile defence systems are considered non-strategic, and were legitimized under the ABM Treaty, although that treaty is now defunct.[28]

While this may be so, the likelihood that the components of theatre and national missile defence systems will become more intertwined in future conflicts is relatively assured. This was exactly the case in the 1991 Gulf War, when Defence Support Program satellites were used to detect and track Iraqi SCUD missile launches, with the data being fed into theatre from the CMOC and engaged by Patriot missile defence batteries.[29] Moreover, in Europe there are a number of national, multi-national and NATO-wide theatre missile defence programmes and exercises that are being pursued.[30]

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[25] Ron Huisken, *ABM vs BMD* …., p 36.
[26] Department of Foreign Affairs and International Trade, "US Strategic and Missile Defence Initiatives," [http://www.dfait-maeci.gc.ca/foreign_policy/usstrat-en.asp].
[27] Ibid.
[28] James Fergusson, *Canada and National Missile Defence* (Toronto: Canadian Institute of Strategic Studies, 2000), p 36. Note that a strategic missile is defined as one that has a range of over 2200 miles, or a velocity of greater than 3 miles per second. As long as TMD systems were not tested against such targets, they were permitted by the ABM Treaty.
[29] D.F. Holman Major-General (ret'd), *NORAD In the New Millenium* (Toronto: Irwin Publishing Ltd., 2000), p 62.
[30] Canada, *Standing Committee on National Defence and Veterans Affairs,* 4 May 2000.

In fact, burgeoning European theatre missile defence capabilities are expected to serve a more strategic role, and evolve over time such that Europe will eventually develop and deploy a strategic missile defence system.[31] Therefore, unless Canada extends its support for theatre missile defence to a national missile defence program, it could find itself politically isolated.

The Importance of Missile Defence to North America and Canada

The importance of missile defence to North America can be considered as relative to the assessed ballistic missile threat. Indeed, many would argue that the threat posed by countries such as Russia, China, North Korea, or other nations attempting to acquire ballistic missile capability, is highly exaggerated.[32] And while there may be a modicum of truth to this claim, there is also sufficient evidence to support that the threat is indeed growing and does present cause for concern.[33] While the intended target of such an attack would most likely be the U.S., it would undoubtedly pose a threat to Canada, simply by virtue of geographical proximity, if for no other reason.

Geographical proximity to the U.S. has l 01undoubt067.4198Tc -0.warnse fr04 r06.lt268crow 12 0 0

point.[34] Even if the bombers' intended target was the U.S., they would in all likelihood be engaged over Canadian territory, and would *de facto* also pose a threat to Canada.

Similarly, as ballistic missile technology evolved during the 1960 and 70s, and the threat to North America moved away from Soviet long-range bombers toward ICBMs, Canadian geography would still be a factor. The most direct missile trajectory to North America would still be via the North Pole and then through Canadian airspace, once again placing Canada at high risk in the event of a ballistic missile engagement. In fact, the siting of the Safeguard missile defence system at Grand Forks, North Dakota, so close to the Canadian border, was of great concern to Canada for exactly this reason.

Canadian apprehension was so strong that from the 1968 NORAD agreement until its renewal in 1981, Canada refused to participate in any way in any active ballistic missile defence, under the proviso of the 'ABM clause'.[35] But while the ABM clause may have afforded Canada a measure of political self-protection at that time, it no longer exists. On 13 December 2001, the U.S. officially rendered its intention to withdraw from the ABM Treaty, expressly because of the growing ballistic missile threat to the U.S. In President Bush's words, "I have concluded the ABM Treaty hinders our government's ability to develop ways to protect our people from future terrorist or rogue-state missile attacks."[36]

According to the 1999 U.S National Intelligence Estimate (NIE), ballistic missile proliferation has continued to evolve. The Estimate states that "the capabilities of the

[34] D.F. Holman Major-General (ret'd), *NORAD In the New Millenium* …., p 9. These radar belts consisted of the CADIN/Pinetree Line (1954), the DEW Line (1957), and the Mid-Canada Line (1958).
[35] Ibid, p 60.
[36] U.S. State Department, "Bush Announces US Withdrawal From ABM Treaty," [http://usinfo.state.gov/topical/pol/arms/stories/01121302.htm], December 2001.

missiles in the countries seeking to acquire them are growing." In addition, it cites increased trade and cooperation amongst countries that have been recipients of missile technology from others. Furthermore, it states that some countries are continuing to work toward attaining longer-range missile systems, including ICBMs.[37]

The report goes on to say,

> We project that during the next 15 years, the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran … The Russian threat will continue to be the most robust and lethal …[38]

Admittedly there are those who would take issue with the above assessments and be quick to remark that they are overstated. They would suggest that it would be foolish for any nation to attack the United States with ICBMs, knowing that such an attack would come with an "indelible return address," and that reprisal would be swift and devastating. Rather, it would be more feasible for a 'rogue nation' or terrorist group to attack using technologically less advanced and more accessible means.[39]

While this is certainly a logical point of view, a report released by the British American Security Information Council (BASIC) in March 2003, estimates that 31 countries now have an operational short-range ballistic missile capability.[40] Further to this, developing nations are purportedly improving the range and accuracy of their ballistic missiles at a faster rate than the U.S. and Russia did during the Cold War, due to

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[37] National Intelligence Council, *Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015* (CIA: 1999), p 4.
[38] Ibid, p 6.
[39] Steven Weinberg, "Can Missile Defence Work," The New York Review of Books, Vol. 49, No.2, [http://www.nybooks.com/articles/15132], February 2002.
[40] British American Security Information Council (BASIC), *Public Discussion Paper on Missile Defence* (London: BASIC, 2003), p 7. This number is apart from the five recognized nuclear weapons states: the U.S., U.K., Russia, France, and China.
[41] K. Scott McMahon, *Pursuit of the Shield* …., p 152.

the spread of missile technology, expertise, and technical assistance.[41] Without referencing the entire list of countries possessing ballistic missiles and attempting to quantitatively and qualitatively assess the individual or collective threat, suffice it to say that ICBM capability provides a nation with an element of prestige and a means of coercive diplomacy.[42] Clearly this was the case with the Soviet Union throughout the Cold War, and arguably an element of Russian foreign policy that persists to this day.[43]

The Democratic People's Republic of Korea must also be characterized in this manner. North Korea's recent withdrawal from the nuclear non-proliferation treaty, combined with the expulsion of nuclear arms inspectors and an unabashed disclosure of intent to pursue nuclear weapons capability,[44] can only be interpreted in a threatening manner. While such capability would certainly present regional security concerns, North Korea is steadfastly working toward achieving an ICBM capability, which would clearly present a global threat. North Korea has successfully utilized its increasing nuclear and ballistic missile capability as leverage to gain diplomatic talks with the U.S., for purposes of gaining economic aid, political recognition, and a non-aggression pact. [45]

Turning away from such 'states of concern', the BASIC report goes on to further state,

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[42] Wilton Park, *Missile Defence, Deterrence and Arms Control: Contradictory Aims or Compatible Goals?* (Geneva: United Nations, 2002), p 4.
[43] Tim Youngs and Claire Taylor, *Ballistic Missile Defence* …., p 22. For example, Russian officials threatened to reinstall multiple nuclear warheads (MIRVs) on certain ballistic missiles should the U.S unilaterally withdrawal from the ABM Treaty.
[44] The Washington Times, *A Look at Recent Actions by North Korea*, 3 Mar 2003.
[45] Peter Grier and Faye Bowers, "Rising risks of nuclear North Korea" The Christian Science Monitor, [http://www.csmonitor.com/2003/0507/p01s01-woap.htm], May 2003. Note that diplomatic talks between the U.S. and North Korea took place in Beijing the week of 21-25 April 2003. Since then the U.S. has stated that it will not attend further talks with North Korea unless they are "larger and genuinely multilateral," i.e. include Japan, South Korea, and possibly Russia.

> The threat to regional stability and ultimately global security from the proliferation of ballistic missiles is exacerbated by the danger that these weapons could fall into the hands of terrorists. [46]

In this regard, the most lucrative terrorist targets would likely be in the U.S. as opposed to Canada. Realistically, any such attack would be oriented more toward disrupting day-to-day life and influencing foreign policy, rather than outright destruction and defeat of the world's sole superpower. However, should Canadian foreign policy be aligned with that of the U.S. and also odds with any such terrorist group(s), Canada could conceivably present a 'softer' target. It is also plausible that given rudimentary technology and the targetting capability of early generation ballistic missiles, Canada could find itself the unintended target of an attack aimed at the U.S.[47] Accordingly, Canada's prime susceptibility to any future ballistic missile attack will continue to be a function of its geographic proximity to the U.S.

As a final comment in this area, whereas most Canadians would be quick to draw the distinction that North America consists of Canada, the U.S., and Mexico, there is a large portion of the world that does not hold to, or care about this distinction.[48] For these people, North America is North America, and Canada is part of that landmass. Moreover, it is important to consider that Canada has stepped out of its traditional peacekeeping role within the last decade or so, and actively participated in U.S.-led military operations. One need only reflect on Canadian military involvement during the Gulf War, Kosovo, and most recently in Afghanistan. And although Canada may have opted out of the current liberation of Iraq, Canada's recent military operations have been

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[46] BASIC, *Public Discussion Paper on Missile Defence ….*, p 7.
[47] James Fergusson, *Déjà vu: Canada, NORAD, and Ballistic Missile Defence* (Winnipeg: The University of Manitoba, 2000), p 16.
[48] Canada, *Standing Committee on National Defence and Veterans Affairs,* 4 May 2000.

closely aligned with the U.S., and there is a close working relationship between the two countries.

Why Canada Should Participate in Missile Defence?

The simple answer to this question is that Canada's geographical proximity to the U.S. makes it susceptible to the growing threat posed by countries and 'non-state actors' with emerging ballistic missile capability, many of whom have either ideological or religious differences with the U.S. The more complicated and lengthy answer is that there is a great deal at stake between the two countries, especially in terms of political and military relationships, without mentioning economic ties. In addition to these matters, the issue of Canadian sovereignty must also be considered in any decision by Canada to not to participate in the U.S. missile defence program.

In the political sense, a decision by Canada in the near future to not participate in missile defence would almost certainly not be well received by the U.S., and undoubtedly carry repercussions. Exactly what those consequences would be and to what degree they might impact on Canada is purely speculative. In any case, the current-day political climate is already sufficiently strained, largely due to Canada's decision to not participate in the U.S.-led invasion of Iraq, but also due to several other recent political follies. In this latter regard, Canadian government officials have recently made statements that ring of anti-Americanism, referring to Americans as "bastards," and President Bush as a "failed statesman." Not surprisingly, American patience is wearing thin and the U.S.

Ambassador to Canada, Mr. Paul Cellucci, recently delivered a stern rebuke to Canada for refusing to join the war in Iraq.[49]

Any remaining political leverage that Ottawa might still have with Washington could be acutely damaged as a result of not participating in missile defence. As an extension to this, Canada's international status, in the sense that it is viewed as having a special relationship with America, whether rightly or wrongly, could also be diminished.[50] As an independent sovereign nation Canada is obviously free to make its own choices, but in this context, both short-term and long-term Canadian interests need to be closely considered, as the effects of a decision on missile defence could be enduring.

While it may appear that the Canadian government is faced with having to make the unenviable choice between its foreign policy agenda and its defence relationship with the U.S., this is not necessarily true. To support missile defence does not imply that Canada would have to abandon its long-standing foreign policies of international arms control, or nuclear non-proliferation.[51] On the contrary, missile defence might actually serve to discourage the proliferation of ballistic missile technology and nuclear weapons, by rendering such weapons ineffective, and therefore discouraging their procurement.[52] Furthermore, Canada's support for missile defence may very well serve to increase its standing and influence on the international stage in global security matters.

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[49] U.S Rebukes Canada, *The Globe and Mail*, 26 March 2003.
[50] Allan Sens, "The National Missile Debate," Department of Political Science, UBC, [http://www.policy.ca/PDF/20010122.pdf].
[51] Department of Foreign Affairs and International Trade, "US Strategic and Missile Defence Initiatives," [http://www.dfait-maeci.gc.ca/foreign_policy/usstrat-en.asp].
[52] Canada, *Standing Committee on National Defence and Veterans Affairs,*4 May 2000.

Whether the Canadian government chooses to participate in a missile defence program, or not, the U.S will implement a missile defence system. "Canada will not be needed for the central role geography required it to play in North American air defence."[53] The U.S. does not require any authorization or consent from the Canadian government, as no installations need to be built in Canada to operate the system. Nonetheless, the U.S. would most certainly prefer Canada's support for political reasons, as well as for purposes of establishing international legitimacy.[54] More importantly however, Canada must choose to cooperate with the U.S. in missile defence if it wishes to protect its own interests.

Clearly one of those interests is Canadian sovereignty. In the words of Jack Granatstein, the Chair of Council for Canadian Security in the 21st Century,

> Canada has no obligation to say 'ready, aye ready', every time Washington calls, but … Canada needs to recognize that sometimes its sovereignty and interests can be best served by saying yes to the United States, especially when the decisions of 30 million Canadians make can have an impact on the lives of 300 million Americans.[55]

Saying yes to missile defence would give Canada a voice in the planning and future conduct of missile defence operations over Canadian territory, thereby addressing national sovereignty concerns. On the contrary, by saying no to missile defence Canada would cede control over its own airspace and sovereignty, and be resigned to a position of 'debris acceptance' if the U.S. conducted an intercept over Canadian territory. Surely

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[53] Joseph T. Jockel and Joel J. Sokolosky, *The End of the Canada-US Defence Relationship* (Kingston: Queen's University, 1996), p 3.
[54] CTV News, "Cabinet debate on 'Star Wars' expected soon," [http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1052168546312_77], May 2003. While Russia and China had previously voiced concerns about a U.S. missile defence system, recent news reports indicate that both countries are now unopposed to such a system, because the concept of operations has changed. As such, any arguments regarding international legitimacy appear to be declining.
[55] J.L. Granatstein, *A Friendly Agreement in Advance – Canada-US Defence Relations Past, Present, and Future* (Ottawa: Renouf Publishing Co. Ltd., 2002), pp 16-17.

it would be unacceptable if a nuclear, biological or chemical warhead was detonated anywhere over Canada, particularly if something could have been done to prevent it.[56]

The 1994 White Paper on Defence states that "sovereignty is a vital attribute of a nation-state … Canada should never find itself in a position where, as a consequence of past decisions, the defence of our national territory has become the responsibility of others."[57] Further, it lists the protection of Canada, and the defence of North America in cooperation with the U.S., as the top two defence priorities.[58] Despite an impending defence review, it is almost assured that these two roles will be key components of any future defence policy.[59] Accordingly, a decision by Canada to participate in missile defence would support these stated objectives, and thereby speak to the issue of preserving Canadian sovereignty. Furthermore, such a decision would fuse with the existing bilateral defence relationship that exists through NORAD.

A recent strategic assessment of Canadian defence policy stated that any contribution to missile defence would "build upon existing defence missions", with the implication being that it would most likely be conducted under the auspices of NORAD.[60] NORAD exemplifies the long-standing mutual defence relationship that has existed between Canada and the U.S. since 1958. While the NORAD mission has evolved over the decades in relation to the threat, its current mandate is to provide aerospace warning and control. Aerospace warning includes "the monitoring of man-

[56] Lieutenant-General George E.C. Macdonald, *NORAD and National Missile Defence* …., p 7.
[57] DND Policy Group, "1994 White Paper on Defence," [http://www.forces.gc.ca/admpol/eng/doc/white_e.htm].
[58] Ibid.
[59] Elinor Sloan, *The Revolution in Military Affairs: Implications for Canada and NATO* (Kingston: Queen's University Press, 2002), p 138.
[60] DND Policy Group, "Strategic Assessment 2002," [http://www.forces.gc.ca/admpol/eng/doc.02 0 0 10.02 251.94316m(lica)Tj10.02/9BT/TT0 1 2g19.46196 115.20006 Tm(s Uni)Tj

made objects in space and the detection, validation and warning of attack against North America, whether by aircraft, missiles, or space vehicles."[61] In fact, NORAD has provided warning of ballistic missile attack since the 1960s, and the expansion of that mandate to include missile defence would seem logical.

However, should Canada choose not to participate in missile defence, the mission of aerospace warning would undoubtedly endure for the U.S., and the Americans would be under no obligation to extend their missile defence perimeter to Canada. In all probability, the responsibility for missile defence would be transferred to the U.S. Northern Command (NORTHCOM). As a result, Canadian personnel could no longer participate in the warning and assessment process, and would therefore be excluded from the upgraded surveillance and warning sensors. In addition, the binational command structure, whereby a Canadian Lieutenant-General serves as the NORAD Deputy Commander-in-Chief (D/CINC), would have to be restructured given the responsibilities associated with the aerospace warning mission, especially given the potential for command decisions involving missile defence of the U.S. homeland.

NORAD aside, the overall Canada-U.S. defence relationship is one based on mutual trust and respect. The establishment of the Permanent Joint Board on Defence (PJBD), which was founded by President Roosevelt and Prime Minister King more than 60 years ago, speaks to this point. Over time that relationship has grown even more closely intertwined as evidenced by the more than 80 treaties and 250 memoranda of

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[61] Ann Denholm Crosby, *Dilemmas in Defence Decision-Making – Constructing Canada's Role in NORAD, 1985-96* (New York: St. Martin's Press, 1998), p 101.

understanding relating to joint defence issues, as well as numerous bilateral working committees that currently exist.[62]

Additionally, Canada has consciously endeavoured to make its military forces more interoperable with those of the U.S., striving to achieve "seamless integration". Canada's non-integration with U.S. missile defence efforts would present serious potential for harm to the overall bilateral defence relationship, especially at a time when the U.S. is extremely concerned about defence and security. Therefore, it is incumbent on the Canadian government to seriously consider all available options before taking a decision on missile defence.

Should Canada decide to participate in missile defence there are a myriad of factors and considerations involved in examining possible options. In the simplest terms the two obvious choices are either participation or non-participation. While the latter course of action is always a possibility, it is not viewed as a viable choice for the reasons outlined by this paper. In view of that, the question with participation therefore becomes, to what degree?

It may be that Canada's contribution would be largely symbolic or moral, in the form of political endorsement, with missile defence continuing to be administered under the auspices of NORAD. This would facilitate the incorporation of the full gamut of missile defence operations into a revised NORAD framework, and maintain direct Canadian military and political involvement in the program. Perhaps Canada could contribute to the program by offering the use of Canadian territory for the future placement of a long-range radar site. Or, it could be that Canada would contribute in a

[62] J.L. Granatstein, *A Friendly Agreement in* Advance …., p 8.

full-fledged manner, by contributing in all of the aforementioned areas, but also choosing to contribute financially to the program.

This supposition aside, a more probable version of a Canadian commitment to missile defence is reflected in the 1994 Defence White Paper, which states that Canadian involvement in missile defence would have to be "cost-effective and affordable, and build on missions the Forces already perform."[63] Analyzing this statement, it is therefore unlikely under the current fiscal climate the Canadian government would inject a large financial contribution into the defence budget to support missile defence. Even so, cost-effective and affordable are relative terms, and in the end Canada's political support may matter more than any financial contribution.

Conclusion

The continental defence of North America has provided the foundation for a common bond between Canada and the U.S., and fostered mutual defence cooperation for over six decades. In this respect, Canada's geographic proximity to the U.S. and the orientation of the Cold War threat made Canada integral to the U.S. defence equation. Even as the threat evolved from the Soviet long-range bomber to nuclear ICBMs, the threat axis still dictated that any attack on the U.S. would come via Canadian skies. A protective missile umbrella would neutralize that threat to the U.S., and by extension Canada.

U.S. support for missile defence would ebb and flow over the years, and aspire to new futuristic heights with the launch of SDI by President Reagan in the early 1980s.

[63] DND Policy Group, "1994 White Paper on Defence," [http://www.forces.gc.ca/admpol/eng/doc/white_e.htm].

While missile defence had always been in the background of the U.S. political landscape, the advent of SDI threatened to alter the strategic balance of power between the two nuclear superpowers. Furthermore, it marked the first time that participation in missile defence would become an issue of political debate in Canada. In the day, Canada would decline to participate in SDI.

However, some twenty years later the dilemma of Canadian participation in a U.S. sponsored missile defence program has presented itself once again. While the traditional threat posed to the U.S. by Russia is still present, the proliferation of ballistic missile technology has widened the list of potential aggressors to include other 'states of concern' and 'non-state actors'. The terrorist attacks of 11 September 2001, have only served to heighten the U.S. sense of vulnerability and its determination to thwart any future attacks on its homeland. As part of this defensive plan, an initial deployment of a missile defence system is planned for 2004-05.

While Canada has not officially been invited to participate in the missile defence effort, it will inevitably be faced with making a decision in this respect. Indeed there are many aspects of Canada-U.S relations that must be considered with such a decision. This paper has examined what is believed to be the more prominent issues, namely those concerning the bilateral political and defence relationships, as well as the issue of Canadian sovereignty. It has demonstrated that in all regards there is the potential for severe repercussions with any decision by Canada to not participate in missile defence.

Furthermore, from the evidence presented in this paper it has been demonstrated that there is a growing ballistic missile threat presented by 'states of concern' and non-state actors'. The facts are immutable. And while arms control initiatives and nuclear

non-proliferation agreements are admirable and essential to future global stability, diplomacy isn't always successful. And should diplomacy fail, a missile defence system would provide the necessary means to deter any contemplated aggression through the use of ballistic missiles, rather than being subjected to the threat of their use.

If Canada has any intention of influencing the missile defence program and the eventual conduct of operations, then it must indicate a willingness to participate without any further delay. Continued political procrastination will only lead to lost opportunity and unnecessary additional speculation concerning Canada's relationship with the U.S, and commitment to continental defence. A decision by Canada to support missile is the right one, because it makes the most sense politically, militarily, and in terms of Canadian sovereignty. Therefore, in sum, and on the balance of evidence presented, Canada must participate in the U.S. missile defence program.

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