

Canadian Defence and the Canada-US Strategic Partnership

The Aerospace Dimension¹

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Arguably, the existence of a strategic defence partnership between Canada and the United States (US) has been most evident and pronounced in the aerospace sector. While elements of such a partnership do exist on the land (army) and maritime (navy) sides of the equation, they have been historically centered on the NATO linkage, and since the end of the Cold War on overseas operations from the Gulf, Somalia, the Former Yugoslavia, to Afghanistan. As a result, the land and maritime sides have largely existed at the operational/theatre level down to close tactical cooperation. Only on the aerospace side does their exist an integrated, institutionalized command structure - the North American Aerospace Defence Command (NORAD). As a result of this command, and the missions assigned to it, only in the area of aerospace has the bilateral relationship truly possessed a strategic quality. By virtue of NORAD's overall mission in the defence of North America in general during the Cold War, and its role in providing Integrated Tactical Warning/Attack Assessment (ITW/AA) to the National Command Authorities (NCA), and through the US NCA to its strategic nuclear forces, NORAD has operated at the strategic level, and for Canada, it has provided its only *window* into US strategic level considerations. In so doing, its mission and this role has also provided Canada with a strategic entrée into outer space.

The strategic quality of the aerospace relationship also extends beyond NORAD and, of course, related close cooperation between the United States Air Force (USAF) and the Canadian Air Force (CAF). It also exists in the defence industrial and technology areas. The Defence Production Sharing Arrangements (DPSA), the Defence Development Sharing Arrangements (DDSA), the North American Technology Industrial Base Organization (NATIBO), and the evolution of corporate relationships, *inter alia*, has created an integrated North American defence industrial capacity, and this capacity is overwhelmingly centered upon the aerospace sector.² Certainly, this integrated aerospace industrial relationship emerged for a variety of reasons independent of the NORAD elements. However, one should not ignore the symbiotic linkage between the industrial and defence components. NORAD provided Canada with access into strategic areas of US aerospace development and this access in turn created a conducive, or supportive environment for industrial/technological cooperation.

Today, this strategic partnership has come to a *fork in the road*. As the US moves in the near future to deploy a range of missile defences, continues to develop new technologies to practice space control, and proceeds to create a real global engagement, precision strike capability beneath the rubric of the Revolution in Military Affairs, Canada faces a difficult choice. It must decide whether to continue a strategic aerospace partnership, or transform the partnership into an operational or theatre one limited to North America and operating within only a portion of the aerospace sector. In fact, it must make a decision very quickly on the most pressing issue - missile defence. Failure to do so will likely result in having the decision made in Washington; one which will result in transformation to the detriment of a range of Canadian national strategic interests.

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² For the purposes of this paper, the aerospace sector also includes electronics, recognizing that there are significant land and sea elements in the electronics sector.

The Past

North American defence co-operation, dating back to Ogdensburg (1940), has always been problematic, yet essential for Canadian self-interest. Successive Canadian governments, Liberal or Conservative, have always been sensitive about a public image of Canadian subservience or satellite status stemming from the relationship. As a result, NORAD as the institutional embodiment of a strategic partnership has generally been downplayed. Rarely has it been portrayed as an alliance, but rather as a simple functional relationship driven by the Cold War and new technologies (the airplane and ballistic missile): in effect, almost a necessary evil. Furthermore, NORAD has rarely been seen as a strategic partnership, not least of all because strategic connoted nuclear weapons. Instead, NORAD has been compartmentalized, with a policy emphasis instead placed upon the NATO relationship, followed by the United Nations as representative of Canada's internationalist role.

Certainly, the roots of aerospace cooperation that would lead to NORAD were primarily a function of the Cold War Soviet Union's long-range bomber, and subsequently ballistic missile threat to North America. Canadian interests in pursuing the relationship, and agreeing to its institutionalization were a product of legacy of the World War II trade-off³, and the geo-strategic location of Canada sandwiched between the US and the Soviet Union on the north-south axis.⁴ These two factors were the basis for the fundamental strategic interest of a close aerospace defence relationship with the US. The US would defend itself, and thus Canada, and thus Canada had a direct interest in ensuring that it was defended (and thus the US as well) in a manner of reflecting Canadian national interests. Thus, the heart of the aerospace relationship for Canada was obtaining the means to influence directly US defence planning. With the primary threat aerospace, integrating the relationship created that avenue of influence, as much as anyone could hope to influence the relationship with a Superpower.

This institutionalized relationship on the surface concerned only North America, as both the US and Canada sought to isolate it from NATO and wider global US activities⁵. However, it had two strategic qualities for Canada. First, Canada gained access to US strategic level activities manifested in the assignment of the ITW/AA mission to NORAD, which was supported by US space assets.⁶ In so doing, Canadians played a role in enhancing strategic deterrence by ensuring that US strategic nuclear assets would not be eliminated in a surprise first strike.⁷ In addition, the relationship provided Canada with a strategic entrée into space, especially after the establishment of Space Command in 1985. Canada was the only ally to obtain such a position, and its access to space thinking, planning, and operations were far beyond Canada's capacity to obtain on its own. In this sense, it was Canada's only window into the strategic, global picture.

Second, the value and importance of the aerospace defence relationship for Canada was much greater than North America. Certainly the relationship and NORAD provided Canada with a cost-effective method to ensure the surveillance of its national territory and airspace, and in so doing enhanced Canadian sovereignty claims especially over the North. But, it was the favourable operational and capital cost-sharing

³ Essentially, the US pledged to defend Canada if it came under attack, and Canada agreed that it would not allow a hostile power to use its territory to threaten the US. In current terms, this is represented by the notion that Canada would not become a *security liability*.

⁴ As part of the downplaying of the North American relationship, security thinking in Canada was based upon the east-west axis with NATO at the center.

⁵ Reflecting this was the moribund status of the NATO Canada-US Regional Planning Group (CANUSRPG). Internationally, this was evident in the various military interventions undertaken by the US, which Canada stayed aloof from. Certainly, Canadian peacekeeping did reflect a strategic relationship in undertaking key tasks, such as Suez, Cyprus, and the International Control Commission in Vietnam as a faithful ally and representative of the West.

⁶ These were (are) the Defense Support Program (DSP) infrared satellites in geosynchronous orbit, which are earmarked for replacement by the Space Based Infrared - High System (SBIRS-High).

⁷ Simply, a Canadian as Command Director in the Cheyenne Mountain Operations Center (CMOC) would have provided the ITW/AA to the US NCA with adequate time for a decision to launch its ICBM and bomber forces prior to the detonation of Soviet warheads.

arrangements that had strategic significance for Canada.⁸ Given the relatively low levels of Canadian defence spending and the lack of will to invest greatly in defence, a national approach to airspace surveillance and sovereignty missions would have either absorbed most of the defence budget or required a significant increase relative to maintaining other Canadian commitments overseas. Thus, cost sharing enabled Canada to maintain its overseas NATO and peacekeeping commitments without increasing defence spending. In other words, Canada's internationalist role was made possible by the cost-effectiveness of the North American aerospace defence relationship. It is in this sense that the North American relationship underpinned a greater role for Canada on the international stage, and elements of that role through the presence of Canadian Forces in Europe and UN peacekeeping as the representative of the West reflected a strategic partnership, albeit not fully recognized in this way during the Cold War.

A final consideration of the Cold War strategic relationship is found in the area of defence industrial cooperation. Notwithstanding the Avro Arrow myth, the development of the DP/DDSA within the context of evolving corporate relationships embodied a strategic partnership and trade-off. For the US, the relationship reflected core US strategic concerns about ensuring second-sources of supply and the dispersion of industrial assets. For Canada by virtue of its privileged access to the US defence market, it represented vital economic interests relative to technology and production in which the Canadian market was simply too small to support a viable independent base. Certainly, the relationship has had its irritants relative to behaviour on both sides of the border contrary to its spirit.⁹ Nonetheless, its existence and deepening into an integrated North American base, for all intents and purposes during the Cold War, spoke to another element of the strategic partnership, and with its dominance in the aerospace sector, directly relates to the strategic quality of the larger aerospace relationship.

The Present

The fundamental implication of the end of the Cold War for the aerospace relationship can be summed up in one phrase - territorial obsolescence. The ability of Canada to *pick and choose* about the aerospace elements it would or would not get involved in largely stemmed from its geo-strategic location. Canadian territory was vital for US strategic interests, and Canada could leverage its location to act only in areas deemed central to its foreign policy interests. Thus, for example, Canada could sidestep US Anti-Ballistic Missile (ABM) efforts without damaging the overall relationship.¹⁰ However, with the end of the Cold War, the new relationship with Russia, and the end of the primary military threat to North America, Canadian territory lost its strategic significance, at least until the attacks on September 11th, 2001. As a result, the aerospace relationship and the future of NORAD emerged quietly as an issue, and both became seen to revolve around the return of ballistic missile defence (BMD) to prominence on the US security agenda.

For Canada, the overall relationship as embodied in the 1994 White Paper remained conceptually restricted to North America. With regard to BMD, policy moved forward slightly to a somewhat more active role from that established in 1985, when the Mulroney government rejected official Canadian involvement in SDI R&D, but allowed for the participation of Canadian companies. Consultation on BMD became formal policy, and the government identified a potential Canadian role in the surveillance and reconnaissance elements relative to their potential contribution to other Canadian defence interests. Thus was born in nascent form the idea of a Canadian asymmetric contribution to BMD. It would evolve into ideas of a

⁸ Operational costs are divided on a 90 (US) - 10 (CDN) basis. Capital costs historically were 2/3rds (US) - 1/3 (CDN), with the exception of the 1980s North Warning System modernization divided on a 60 (US) - 40 (CDN) basis. Importantly, capital cost sharing entailed only Canadian infrastructure. The US paid 100% for infrastructure in the US.

⁹ On the US side, the irritants largely related to Canadian Industrial and Regional Benefits (offsets) and on the Canadian side to specific Congressional legislation limiting contracts to US only and Canadian access to *black box* technology.

¹⁰ Canada and the US negotiated an anti-ballistic missile clause into the 1968 renewal, which was only removed in 1980. In 1985, the Mulroney government announced that it would not officially participate in the Strategic Defense Initiative (SDI), and the relationship was not damaged overall. However, it did affect Canadian access to US planning the aerospace sector until the early 1990s following the appointment of General Horner to CINC-NORAD/SPACE.

Canadian contribution to the Space Surveillance Network (SSN) and the possibility of deploying tracking and damage assessment radar on Canadian soil to facilitate the US National Missile Defence (NMD) effort.¹¹ Most importantly, the idea of an asymmetric contribution has been a Canadian one, with the US largely leaving the door open with regard to a Canadian contribution, as well as Canadian participation.

Prior to September 11th, the future of the strategic aerospace relationship, and NORAD centered upon the issue of Canada participation in NMD made possible with the new clauses in the 1996 NORAD renewal allowing for new missions if both parties agreed.¹² As far as can be determined from the American perspective, there has been no direct pressure on Canada to consider the use of its territory for radar, tracking centers, communications nodes and/or interceptor sites, not least of all because of the Article IX prohibition in the ABM Treaty (now defunct), even though a ground-based system for the defence of North America would likely be more effective with such sites in Canada. Nonetheless, the US proceeded through the NMD programme and its successor Global Missile Defence (GMD) to plan on the basis of no Canadian territorial involvement.¹³ Thus for Canada the only possible areas of participation rested in Command and Control and Battle Management (C²/BM), which rested outside the Treaty.¹⁴

However, C²/BM participation spoke to the heart, and thus future of the strategic relationship. Canadian NORAD personnel as a function of the structure of the Cheyenne Mountain Operations Center (CMOC), and associated Air Defence, Missile Warning, and Space Control Centers occupied a variety of key positions in all of these centers, including the post of Command Director. It was through these posts in part that Canada obtained access to space and strategic level considerations. The proposed NMD system, once operational, hinged upon centralized C²/BM, which could have been assigned to either NORAD or SPACE Command.¹⁵ Without Canadian agreement, the mission would have gone to the latter, and because of the short time lines for decisions to release an interceptor and the key role of space in the BMD mission overall, the viability of Canadian personnel in the various posts was in jeopardy. Not only would space and missile defence become closed to Canadians, but also Canadian access to US strategic plans in both areas would disappear, and NORAD would likely have reverted back to an air defence mission only. Given the absence prior to September 11th of any serious air breathing threat to North America, the future of NORAD came into question.

However, the key issue for Canada today is not the future of NORAD *per se* relative to Canadian strategic interests. Rather, it is the loss of access to, and involvement in strategic level areas in the realm of space in particular. September 11th, not least of all because of the important role NORAD played in responding to the attacks and since then, has largely removed concerns about its future. The threat of similar attacks, alongside concerns about cruise missiles being launched clandestinely from ships off the North America coast, has provided NORAD with a vital air defence mission once again. But, there still remains the key issue of the BMD/space side of the equation for Canada, and it is this issue which will likely determine whether the aerospace relationship with the US continues to be a strategic partnership for Canada.

¹¹ The contribution to the SSN began in the late 1990s with ground-based sensors, and is now transitioning to the deployment of a space-based optical sensor.

¹² The agreement was renewed a year early with no changes and now extends to 2006.

¹³ The Bush Administration merged the previous independent Theater Missile Defence (TMD) and NMD programmes into a single overarching missile defence effort. Its architecture for the defence of North America entails a layered system of forward deployed naval and air assets, Navy Theater Wide and the Airborne Laser, and a ground-based mid-course phase layer now under construction as an initial test bed and emergency operational capability at Fort Greely, Alaska. The term GMD is employed to distinguish the actual programme from the generic BMD concept, and also reflects the extension of BMD to US allies overseas.

¹⁴ The ABM Treaty contains no reference to C²/BM, and Article IX is explicit in reference to interceptors and radar. The only possible stumbling block here was Agreed Statement I(G), which refers to the transfer of blueprints to allies concerning the construction of an ABM system and its components.

¹⁵ It was reported that the US Joint Requirements Oversight Council in 1996 expressed a preference for NORAD to take on the NMD mission, if Canada agreed. The alternative, at the time, was linked to NORAD at the top through the dual hating of CINC NORAD and SPACE.

In this regard, too much attention has been paid to implications of Northern Command (NORTHCOM), and little to the apparent merger of SPACE Command and STRATEGIC Command. The separation of NORAD from SPACE Command by virtue of CINC NORAD exchanging CINCSPACE for CINC NORTHCOM, and thus the lateral move of NORAD itself raises significant issues about Canadian involvement in space. It is difficult to predict how this will impact upon the current structure of the CMOC not least of all because it hinges upon GMD. If Canada agrees to participate, it is likely that the ground-based component in Alaska would be operationally assigned to NORAD by virtue of the link to NORTHCOM, or some variant therein. Other space-related elements of the NORAD mission would remain, with little, if any need to physically re-structure the CMOC. Canada would not only maintain its strategic access, but also be in a position to provide a real asymmetric contribution by considering the use of its territory, and engage in more active research and development across the aerospace spectrum. In effect, it would amount to continuing the longstanding strategic partnership.

If, however, Canada either says no to GMD, or simply refuses to make a decision, it is likely that the NORAD mission would have to change, with possibly its terms of reference reverting back to the pre-1981 air mission only. The CMOC would be re-structured to remove NORAD personnel from vital GMD/space elements, with the status of key posts, such as Command Director at issue. Any attempts by Canada to argue that contributions elsewhere in the broader aspects of North American defence (land, sea, or air only), and/or limited aerospace efforts will not keep the strategic window open. The US will likely to operate on the principle of *need to know*, and with Canada outside GMD, and the symbiotic relationship between BMD and space, Canada will *not need to know*.

The narrowing of the aerospace relationship will not only affect Canada's strategic interests with regard to space, and access to US thinking, planning and intelligence with regard to space as it concerns North America. It also will have four other significant effects. First, it will also close the door on the global, strategic picture that derives from space and with it the key elements of space linked to larger, global security considerations. Specifically, this relates to the key role of space in the practical elements of the Revolution in Military Affairs. The net result will be Canada more dependent upon the US in operations outside of North America, because Canada will not have that key access and information that comes from the space linkage.

Second, with access to Canadians closed or narrowed, Canada's current space investment strategy, military and civil may be significantly affected. This strategy has hinged upon the close relationship with the US as evident in the Joint Space Project. There is no direct evidence that the RADARSAT II dispute related to Canadian policy on BMD. However, it may be harbinger of the future relationship on space, if Canada is on outside. Certainly, other options exist, such as developing the relationship with the European Space Agency (ESA).¹⁶ But, there are problems here as well, and certainly such a relationship or a more national approach which may be needed will not be as cost-effective, or as fruitful as close cooperation with the US.

Third, it will also likely effect the defence industrial/technological relationship. In the past, Canadian firms have been reluctant to invest in areas of R&D without the engagement of the Canadian government, as has occurred for example in the missile defence sector since the 1985 SDI decision. Canadian companies tend to view such investments as too risky. At the same time, the US is unlikely to provide highly classified data with regard to missile defence and space vital for a firm to engage in such R&D, because the Canadian government is not directly engaged. There are limits to how far the US will go in obtaining advanced technology offshore. Finally, US concerns about technology diffusion, which underpinned the recent International Trade in Arms Regulations (ITARS) dispute, are also likely to reinforce a US decision to forego Canadian company involvement. These are likely to combine to affect the decisions of US parent firms of Canadian companies on the type of work and R&D they will be allowed to undertake. Thus, the narrowing of the relationship is likely to impact directly on Canada's industrial and technological interests.

¹⁶ The Canadian Space Agency (CSA) has had a long relationship with ESA. However, it is limited because of tendency of many in Europe to see ESA as a European-only institution, reflecting a component of the much bigger European Union political agenda.

Finally, consideration also has to be given to the loss of Canada's privileged and unique relationship with the US as compared to other allies. Naturally, this is difficult to quantify. Nonetheless, one cannot ignore the perceptions and beliefs that will be generated by a Canadian decision not to be involved in GMD, and their impact on Canada's status in this regard. It is important to remember the consternation of Canadians when Canada was not mentioned in President Bush's first address to Congress after September 11th, and when a US poll identified the United Kingdom as the US' closest ally.

The Future

Although US planners must proceed on a US only basis for the time being, this doesn't mean that Canada has lost the opportunity to engage in GMD, and, in so doing, protect its strategic aerospace relationship. However, the longer Canada waits, the more difficult it will likely be to engage because decisions have to be made sooner, rather than later. It appears that the opportunity will exist only until 2004, even though the NORAD agreement stretches until 2006 for three reasons. First, the GBI test bed in Alaska is planned to be operational in 2004, and this will provide an emergency capability for the missile defence of North America.¹⁷ Second, the next Unified Command Plan evaluation is legislated for this year, and the specifics about C²/BM among the various commands are likely to be settled at this time at the latest. Finally, it is a presidential election year, and the Administration will seek to ensure that GMD is well advanced, such that it will not be an issue in the election, and the next Administration, if Democrat, will not be able to undo its efforts.

Today, opposition to Canadian participation with the end of the ABM Treaty has now focused upon the weaponization of Outer Space. Canadian policy since the 1960s has opposed weaponization, and many fear that beneath GMD, or as part of GMD (the SDI legacy) lies the deployment of space-based weapons. However, several factors need to be considered with regard to this argument. First, the technology to weaponize outer space is at least fifteen years into the future. Second, the key role of outer space assets relative to GMD is launch identification (which Canada has been engaged in through NORAD's ITW/AA mission), tracking, target discrimination, and cueing. This use of outer space is consistent with existing practices and Canadian policy. Third, the case for space-based weapons goes well beyond missile defence, and is being driven by reasonable concerns about the vulnerability of critical military and civilian space-based infrastructure.¹⁸ In other words, weaponization is an issue driven by strategic considerations outside of missile defence *per se*. The linkage is that a space-based boost-phase intercept capability simultaneously provides missile and space defence as the launchers are the same.

Finally, and most importantly, the question is whether engagement in GMD traps Canada into the weaponization of outer space. Certainly, many of the arguments employed above suggest that Canadian strategic interests would be similar, with regard to space defence itself. However, it is difficult to predict the strategic world and Canadian political considerations fifteen or more years into the future. Engagement on GMD does not bind Canada to weaponization, and a future Canadian government can say no. Moreover, the answer to the future lies in the most useful ways to influence the US debate, as much as anyone can influence the US. It is difficult to see how Canada would be able to influence the US in the future at all if its strategic aerospace relationship becomes limited in the manner suggested above. Canada may stand on principle, but it unlikely to carry much weight in a US debate. On the other hand, Canada as a full strategic aerospace partner in GMD and elsewhere may be able to do so.

In conclusion, it is important to recognize that the weaponization issue is in the distant future. It is also vital to recognize that the key strategic issue of Canadian participation in GMD of today is not all or nothing. To decline participation by making an explicit policy statement in this regard, or by making no policy statement whatsoever does not mean that the Canada-US defence relationship, and much broader and

¹⁷ The other major elements of GMD, Navy Theater Wide, the Airborne Laser, and the Army Theater High Altitude Area Defense (THAAD) are planned to be operational around 2007.

¹⁸ According to many analysts, space has now become a military and economic center of gravity for the West. Hostile states acquiring long-range ballistic missiles will also likely possess a space launch capability, which could enable them to employ, for example, nuclear warheads to destroy space-based assets as a crude anti-satellite capability.

deeper political, economic, and social relationship will collapse. Fears of economic punishment are simply unfounded, because of the complicated and compartmentalized nature of US politics. This is also the case for the defence relationship overall, especially given the importance of air defence, surveillance and control in the wake of September 11th. Certainly, concern must be given to the future here as September 11th fades into memory, if no future attacks take place. Nonetheless, in this area, along with many others, the integrated nature of North American security and defence, stemming from the complex interdependent relationship between Canada and the US, and the larger common values and interests of the two societies ensures that cooperation will continue.

The key issue is thus not cooperation itself, but the scope and nature of cooperation relative to Canadian strategic interests. Whether Canada should now also consider offering its territory to GMD with the ABM Treaty gone, needs to be evaluated closely relative to the payoffs for Canada in aerospace and elsewhere, which would likely be funded on a cost-sharing basis. Regardless, the relationship will change if Canada does not participate in GMD. The longstanding strategic aerospace relationship will likely become a limited air-breathing theatre or operational relationship, which will significantly affect Canada's strategic interests and its role on the international stage. Perhaps, at the end of the day, one other point needs to be raised. Missile defence is designed to protect a nation's citizens, and the fundamental role of a democratic government is to provide protection to its citizens.