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THE STRATEGIC OUTLOOK FOR CANADA 2018

CANADIAN SECURITY AND DEFENCE IN A NEW WORLD (DIS)ORDER

EDITORS

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FOREWORD

In keeping with the change that was instituted last year, *Strategic Outlook 2018* is comprised of a series of different, yet related chapters dealing with the future and various considerations that Canadians should hold in mind for security and defence. This year, in addition to an assessment of some strategic issues at the geopolitical level, we have included specific discussions on defence and armed forces' capabilities to highlight the fact that the strategic choices made on implementation have an impact as important as the ends to which they are directed. For their varied and thought-provoking submissions, the CDA Institute is indebted to, in alphabetical order, James Boutillier, Chuck Davies, Ross Fetterly, Kim Richard Nossal, and the dynamic team of Andrea Charron and James Fergusson.

In recognition of the theme of last year's *Ottawa Conference on Security and Defence*, Kim Richard Nossal starts our collective outlook with his opening notes on great power relations, political "short-termism", and maintaining strategic flexibility and agility in light of an uncertain future. Great powers are inevitably viewed in Canada through the lens of the United States – a natural tendency given the dominant place that that nation holds in our global reality. He makes several sobering points on how the turmoil in the U.S., and elsewhere, is having an impact globally by shifting, in an increasingly obvious manner, the international framework created in the post-1945 era. His

reminder of Minister of Foreign Affairs Chrystia Freeland's dismissal of "client state" status in her June 2017 speech¹ just before the release of *Strong, Secure, Engaged*² is timely indeed as we continue to look at how the strategic choices made in that defence policy will enable both action and flexibility for the future.

From there, James Boutillier and Chuck Davies provide some perspective on two different countries that have correspondingly different influences on Canada.

First, 2016 Vimy Award winner James Boutillier considers the future for the Indo-Pacific region and in particular the growing power of and influence exerted by the People's Republic of China. An emergent powerhouse, it faces an uncertain economic future both internally and externally. Compounding this, it also faces a changing dynamic in the geopolitical framework of the Indo-Pacific region as it, Japan, Australia, India, and of course the U.S., manoeuvre around such thorny issues as the South China Sea, North Korea and the remnants of *Daesh* as their relative strengths, and weaknesses, shift considerably. Canada, as a Pacific and Arctic nation (recalling that China has recently self-described as a "Near-Arctic" nation³), will be increasingly challenged as it looks to play an engaged and relevant role in these key regions of the world against the backdrop of an emerging China.



Mexico is examined next, a country that is not often at the forefront of discussion for Canadians, and almost never for security or defence. As Chuck Davies points out, however, progress, or the lack thereof, in the third nation to share the continent should be a serious priority for Canada and Canadians alike. His three recommendations for where Canada can place increased emphasis in reinforcing the efforts that started in 2004 to build a better bilateral relationship and more stable North American partner are worthy of serious consideration. If implemented, they would not only improve the economic basis for Canadian and American security, but would also allow Canada to respond in a mature manner to the recent appeal by former Mexican President Vicente Fox not to “abandon” Mexico.⁴

From looking at some of the wider and international strategic issues, the team of Andrea Charron and James Fergusson, along with Ross Fetterly, next examine strategic decisions in implementing defence policy in a specifically Canadian context. Less heralded than the policies that they support, the ongoing strategic decision-making that ensures adequate national will and resourcing, plus the effective functioning of the full machinery of government, is critical to seeing the objectives of the policies attained.

The establishment of NORAD and the later decisions to maintain this system for continental air, aerospace and now maritime defence have

been truly strategic and have shaped the nature of Canada’s defence relationship with the U.S., as well as its national military capabilities, for 60 years. As Charron and Fergusson point out, the requirement to ensure that NORAD continues to meet the needs of the strategic decision taken in 1958 to jointly defend North America, but in a significantly changed and constantly changing world, is driving two significant modernisation initiatives, one pertaining to the command and control of NORAD air assets and the other the “renewal” of the North Warning System. Pointing to the “elephant in the room” for Canada – the requirement to make the additional strategic resource investments necessary to ensure that NORAD continues to function effectively as a binational agency – they underline the fact that even “standing ground” while the world changes requires a national, strategic force of will and deliberate effort to achieve.

Finally, Ross Fetterly underlines the central role that strategic resource management plays as the key enabler in the decisions taken for Canadian defence. Seemingly distant from the results that are produced – such as major procurements, forces deployed on operations or support to service members and their families – it nonetheless presents some of the greatest challenges to be faced in bringing *Strong, Secure, Engaged* to fruition. He highlights the fact that it will require strategic resolve within the Government of Canada, not just the Department of National Defence or the Canadian



Armed Forces, to execute a defence policy that has deliberately placed some of the most challenging resource issues into the decision-space of future parliaments.

On that note, it is worth observing that by this time next year, progress should, and must, be apparent to all Canadians in making real the goals articulated in *Strong, Secure, Engaged*. Whether through the mapping out of the implementation programme, deployments of CAF and police contingents around the globe or clear progress along the paths to new surface combatants, fighter aircraft, cyber capabilities and a modernised employment model for service personnel, the Government of Canada must demonstrate that the small steps necessary now are indeed being completed to enable the realization of the major steps scheduled for the future.

With this in mind, the CDA Institute will continue to evolve and develop the *Strategic Outlook* series as part of our contribution to the evaluation of the state of security and defence in Canada. We appreciate your comments and observations on the subjects discussed here, as well as on any other issues of strategic importance for the security and defence of Canada and Canadians. I encourage you to join the discussion during the *Ottawa Conference* or online with us at <https://cdainstitute.ca>.

BGen Matthew Overton (Ret'd)
Executive Director
CDA and CDA Institute





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CHAPTER 1

CANADA'S STRATEGIC OUTLOOK:

A LONG-TERM VIEW

*KIM RICHARD NOSSAL***ABSTRACT**

What will global politics look like in ten years, and what implications will the future global political environment have for Canadian security and defence policy? An exploration of the trends seen today in American, European and Chinese politics suggests that by the end of the 2020s, we will be truly in the “post-American world” first bruted by Fareed Zakaria in 2008. The emergence of a bipolar world in which the United States has retreated from its post-1945 role as the dominant underwriter of a liberal international order will have major implications for Canadian defence and security policy, presenting Canadians with a real choice: to follow the Americans and concentrate on being “secure” in North America, or remain “engaged” in the global system, an engagement that will mean that Canada will have to get serious about defence policy for the first time since the end of the Cold War.





Beyond the Short-Term

What will global politics look like in ten years, and what implications will the future global political environment have for Canadian security and defence policy? Some of the other chapters in this *Strategic Outlook*, as will be seen, examine the strategic environment in the more immediate term. The purpose of this chapter, however, is to shift focus further into the future as a way of concentrating the debate that Canadians need to have today about the future security and defence needs of the country. Whereas these other chapters are more regional or country-specific, this one attempts to be more global in perspective.

The need to try to lift the vision further into the future is particularly necessary given the pervasiveness of the “short-termism” that dominates contemporary Canadian approaches to security and defence. To be sure, governments in liberal democracies come by their enthusiasm for the short-term honestly: the electoral cycle imposes harsh realities on policymakers, even those who embrace fanciful rational management philosophies like “deliverology.”¹ But it is important to recognize that “deliverology” can readily be used to justify pushing into the future those decisions that are politically inconvenient today. Certainly the Liberal government of Justin Trudeau has resorted to this: to bolster its short-term electoral fortunes, it has pushed a number of key decisions — on defence spending in general and replacing the CF-18 fleet in particular — off until after the next election that is expected in October 2019. From the government’s perspective, it is particularly useful: it allows ministers to claim that the government remains firmly committed to a particular policy decision while not actually having to address it. Yet, while the embrace of such short-termism in defence policy is understandable *electorally*,



refusing to extend out the defence policymaking horizon beyond the next election runs the risk of affecting capabilities in the medium- and long-term, as the case of the CF-18 replacement clearly demonstrates.

While one way to overcome the pathologies of short-termism is to try to conceptualize what will be needed ten years from now, there can be little doubt that trying to see that far into the future is always a deeply fraught exercise. “Futurology” is an inexact science at the best of times, and strategic foresight, particularly in the area of defence and security, is always bedevilled by the fundamental unpredictability of human affairs and the related tendency of unexpected developments to intrude and alter the trajectory of events.

Because of this unpredictability, the plans that come from strategic planning exercises tend to be more problematic the longer into the future the vision is cast. For while global politics may be marked by the unpredictability of contingent events, political communities rarely have the luxury of being able to respond in a nimble fashion while life comes at them quickly. Particularly in the area of defence and security, political communities are inevitably tied to inertial decisions that are deeply rooted in the past, creating path dependent chains that bind future decision-makers. The result is that what might have looked like a wise and forward-looking set of decisions at one moment in time often does not look that way to those who have to live with the long-term consequences of those decisions. But paradoxically, it is the very path dependent limitations that are placed on future decision-makers by the choices made today that make thinking about long-term futures critical, even if we know the pitfalls that are inevitably associated with such exercises.

Peering into the Future

With these caveats entered, what are the key security and defence needs that Canada will likely require ten years hence? Because a full-spectrum assessment of security requirements — which would have to include an assessment of environmental security, food and water security, cyber security, among others — is beyond the capability of a single chapter, focus has been placed instead on the great power competition that is endemic to politics at a global level (and that competition is unlikely to disappear over the next decade). On the basis of what is seen today, what will be the future shape of great power relations?

The United States

By the end of the 2020s we are likely to see the full blossoming of the “post-American world” that Fareed Zakaria first posited in 2008.² For Zakaria, the post-American world is one in which the United States is no longer the unipolar hegemon, the “sole remaining superpower” after the end of the Cold War. Instead, the “rise of the rest”, in essence caused by the (relative) decline of the U.S., will displace American dominance. But into the next decade, it can be suggested that the “rise of the rest” will be only part of the explanation of the end of American hegemonic unipolarity. The other part of the explanation will be the fundamental transformation that occurred



in American politics in the 2010s, a transformation that not only gave rise to Donald Trump, but is also likely to continue to shape American domestic politics and foreign policy into the 2020s.

At the heart of the transformation is the reshaping of American domestic politics that began with the election of Barack Obama as president in 2008. While we might have expected that the election of an African-American president would help heal the divisions that race has always caused in American politics, precisely the opposite occurred. The eight years of Obama's presidency, from 2009 to 2017, galvanized among many Americans a rediscovery of those historically-grounded racial divisions. As a result, overtly racist slurs against Obama (and members of his family) began to appear in open public discourse and on social media in the U.S., a racism that was tacitly tolerated, if not openly encouraged, by members of the Republican establishment and amplified in the echo chambers of right-wing talk radio and *Fox News Channel*. Indeed, the demonization of Obama was literal: so frequently did white evangelical Christian leaders denounce Obama as Satan or the antichrist that by 2013 fully 25 per cent of Americans would tell pollsters that they thought that Obama might in fact be the anti-christ.³ By the end of Obama's presidency, the dog-whistle politics of an earlier era — the veiled appeals to white voters by using carefully coded rhetoric — had been replaced by a megaphone racism that was blatant and overt.

Donald Trump played a crucial role in the broader reappearance of overt racism in American politics. His enthusiastic leadership of the “birther” movement — the effort to delegitimize Obama by claiming that he had not been born in the U.S. — presaged the overt and unambiguous embrace of racism and race-baiting after Trump launched his formal bid for the presidency in June 2015, a racism that focused not only on African-Americans, but also on other “brown” people, from Mexicans to Muslims. And race was clearly a crucial factor in his success in 2016. As Adam Serwer put it succinctly, “had his racism been disqualifying, his candidacy would have died in the primaries.”⁴ And throughout his first year in office, Trump encouraged, and thus legitimized, a reversal in the trajectory of dealing with the issue of race in American politics.

Trump's race-baiting is important because it is deeply connected to a related phenomenon in the contemporary transformation of American politics that may have longer-term implications: the equally unambiguous appeal to the forces of white nationalism. Trump's “America First” policy, explicitly using the name of the anti-Semitic and pro-fascist isolationist movement of the early 1940s in the U.S., not only is an open signal to white supremacists throughout the country, but importantly marries white nationalism to the forces of economic nationalism and the economic protectionism that has always been at the core of the American national project going back to the 19th century. That economic nationalism, which in its 21st century manifestation sees international trade and a globalized economy as essentially bad for Americans, is encouraged by the nostalgic appeal to “Make America Great Again.” The marriage between white nationalism, economic nationalism and economic populism is most evident in the “alt-right” movement that emerged during the 2016 election.

The “America First” movement manifests itself most clearly in the disdain for international trade. Attempts to undermine the global trade regime naturally followed, beginning with the kind of assaults seen in 2017 on the World Trade Organization. The delegitimation of trade agreements was a key feature of Trump's campaign in 2015–16, and once in power, the assaults on those agreements began in earnest, beginning with the withdrawal from the Trans-Pacific Partnership (TPP). In his first year in office, Trump persistently sought to delegitimize



trade agreements, such as the North American Free Trade Agreement and the United States-Korea Free Trade Agreement, characterizing them as American job-killers.

The “America First” policy is also reflected in the administration’s deep skepticism about multilateralism and in particular about the contemporary liberal international order. For example, Trump’s characterization of climate change as a “hoax” will likely continue to translate into unwillingness on the part of the U.S. federal government to be part of multilateral climate change initiatives. And while “Teleprompter Trump” can routinely be made to mouth words that sound vaguely supportive of aspects of the contemporary liberal international order, it is clear from everything that Trump has said openly that he firmly believes that there is a “global power structure,” that, as the last ad of his 2016 campaign asserted, “has bled our country dry.”⁵

"In foreign policy, much will depend on whether Trump can sustain his insurgent attacks on the contemporary global order"

What are the longer-term implications of these recent developments likely to be? In foreign policy, much will depend on whether Trump can sustain his insurgent attacks on the contemporary global order and be able to actually turn his critique of contemporary global politics into policy. It is entirely possible that the combined power of the structures of the global system and the American state will simply overwhelm Trump, prompting him to abandon the insurgency altogether or to continue it on a purely rhetorical and symbolic level while American policy proceeds as usual.

While acknowledging that structural forces tend to push powerfully in one direction, the argument could nonetheless be made that there is a significant likelihood that the Trump administration will in fact be able to turn many of the president’s critiques of contemporary global politics into American policy in the next three or seven years. In that event, we will see longer-term effects. The hostility that Trump has exhibited towards the liberal international order has led to what might be called the “Trump cession” — in other words, the process by which Trump has ceded power, respect and leadership in global politics to others.⁶ The damage to American leadership, American global reputation and thus American power that has been caused by the Trump administration in its first year will likely be entrenched in the years ahead; that damage is unlikely to be reversed, even by a future administration less insistent on an “America First” line. It is likely that the insistence during the Trump era of “America First” will likely morph into “America Alone” in the 2020s.

The “Trump cession” and its aftermath will likely have profound effects on the orientation of other states. Already we are seeing a willingness on the part of America’s trading partners in the Indo-Pacific to work together without the United States: the *Comprehensive and Progressive Agreement for Trans-Pacific Partnership*, signed on 23 January 2018,⁷ was a carefully-calculated snook cocked directly at the U.S., right down to the choice of the date for the signing ceremony — one year to the day after Trump, just three days after his inauguration, withdrew the U.S. from the TPP. The trajectory established by the refusal of America’s trading partners in the Indo-Pacific to abandon multilateral approaches to trade in favour of the hub-and-spoke bilateral approach



being touted by Trump has considerable implications for the future: no longer will the U.S. be able to claim the leadership in regional trade that it had shown under previous administrations. Even if a future administration should wish to reverse Trump's 2017 decision, it would be put in the position of a *demandeur* and thus in a much weaker position.

Importantly, concerns about the future of American engagement in the Indo-Pacific on trade are mirrored in the area of security. This reality has prompted states across the region to rethink their security arrangements, bringing major powers like India into the equation and encouraging countries like Japan to re-evaluate their security in an environment where the U.S. might be still present militarily, but no longer is willing to *lead* and to do what is necessary to generate followership, as the ongoing and highly personalized conflict between Trump and Kim Jong-un of North Korea demonstrates.

Europe

A similar dynamic is unfolding in Europe. As president, Trump largely abandoned the negative rhetoric about the North Atlantic Treaty Organization (NATO) that he had used as a candidate; however, it is highly likely that Candidate Trump's vision of the alliance — as little more than a grubby protection racket in which the smaller members “owed” the U.S. huge sums of money for that protection — remains the *real* operating view that the president has of NATO, his teleprompter rhetoric notwithstanding. If so, that will have important medium-term implications, especially if the Russian Federation continues to push hard against European unity by interfering in the electoral processes of European states and pushing populist and nativist right-wing political parties that are, not at all coincidentally, pro-Russian in their political outlook.

But other factors and developments are likely to put further strain on the bonds of unity within the transatlantic alliance in the years ahead. For example, NATO faces unprecedented levels of stress from the emerging conflict between the U.S. and Turkey. One small but telling indicator is that Recep Tayyip Erdoğan, the Turkish president, has started to consistently refer to Turkey's other NATO allies as “crusaders” — an epithet commonly used by anti-Western jihadists. The conflict between Turkey and the U.S. has been particularly bitter over Kurdish nationalism, a division that the Russian Federation under President Vladimir Putin is actively working to exploit by providing the Erdoğan government with USD\$2 billion in arms. As Turkish armed forces attacked U.S.-backed Kurdish forces in Afrin in January 2018, it is increasingly possible that this conflict of interests will presage an accelerated estrangement in the 2020s, with the possibility that Turkey will leave the alliance altogether.

It is also likely that there will be significant political consequences for the Atlantic alliance as the United Kingdom leaves the European Union and London has to grapple at the same time with the increasingly frayed “special relationship” with a president who appears to care little for the state of British-U.S. relations. While it is possible that in the 2020s a new administration in Washington will move to re-establish a “new special relationship” with post-Brexit Britain, it is also entirely possible that by that time Britain would be little more than a kind of latter-day “Airstrip One”⁸ for a United States increasingly divorced from continental Europe.



In Europe, in other words, the unravelling of the American-led global order is likely to accelerate as the gap widens between Americans and western Europeans, exacerbated by the efforts of the Putin government to take advantage of the “Trump cession”. Just as the cancellation of the TPP galvanized those in the Indo-Pacific to organize without America to resist Chinese dominance, so too is it likely that the failure of the U.S. to lead in Europe will prompt Europeans to organize to resist Russian disruptions. In 2018, NATO allies were being urged to think about NATO without Turkey; it is not inconceivable that, if present trends continue, NATO allies — together with their non-NATO allies like Sweden — might be thinking about NATO without the U.S., a development that will be made easier by Britain’s *de facto* withdrawal from European security affairs that will come with its departure from the European Union.

China

But looking ahead ten years, the most profound effect by far of the “Trump cession” will be in relations between the U.S. and the People’s Republic of China. By the end of the 2020s, a more robust bipolar system will emerge with the U.S. and China as the primary global competitors, embracing very different approaches to economic and political organization and reflecting a significant change in the way that the relationship’s trajectory has been envisaged.

In the early days of post-Cold War globalization, it was common to assume that there was a convergence at work between the U.S. and China: many in the West not only believed that China was becoming “more like us” as a market-driven capitalist country, but also that as China became more capitalist, it would also become more liberal. Instead, what we have been seeing over the last few years is a China that embraces a very different model of economic and political development. While China’s path to wealth creation is marked by elements of capital accumulation, it continues to be much more state-directed. And we have seen very little willingness on the part of the authorities in China to tolerate, much less encourage, real liberal thought and ideas. Indeed, the ongoing inability of the Central People’s Government in Beijing to keep its hands off the Hong Kong Special Administrative Region (instead of having faith in Hong Kong people and letting politics in that part of China unfold in an organic way) tells us all we need to know about the future shape of politics in China in the years ahead.

This is not to suggest that China as a political community will not face challenges in the next decade. Some of them will be driven by twin demographic pressures: the country’s low birth rate on the one hand, and a concomitant rapidly ageing population that has been driven by the phenomenal success that the country has had in lifting hundreds of millions of Chinese out of abject poverty in the last three decades on the other.

Some of the pressures will be driven by China’s emergence as a truly global power as it grapples with the ripples that it will create as leaders in Beijing continue to emerge from the “century of humiliation” of the past. Eventually it is likely that Chinese leaders will find an equilibrium between an aggressive pushiness that prompts neighbours and others to resist Beijing and a global leadership role that will promote the “Chinese way” and attract followers in much the same manner as China attracted followership during the era of the “imperial court gift system” (or, as it is often called by Westerners, quite inappropriately, the “tribute system”). There is no better



indication of China's interest in projecting global leadership than the Belt and Road Initiative first enunciated by President Xi Jinping in 2013. This massive economic development initiative, seeking to create a Sino-centric trade network linking China, South Asia, the Middle East, Central Asia and Western Europe, clearly seeks to project Chinese influence in this broad geographic area, at the expense of the U.S., in the years ahead.

And still yet, some of the challenges will be driven by the perpetual dynamic of Chinese politics that we can see so clearly over the last 2,000 years: both centripetal and centrifugal forces that pull the peoples in what we can think of as Greater China apart — and together. The centrifugal forces are often in evidence: the willingness of those in the provinces to pursue their own interests; the economic inequalities across China that often foster dissent at the local level; and of course the contradictions of “splittism” — the Chinese term for separatism — in both the mainland and Taiwan. But so are the centripetal forces in evidence. Indeed, it can be argued that one of the important centripetal dynamics that will shape the Chinese body politic over the next ten years will be the continuing power of Chinese nationalism as the government in Beijing asserts Chinese interests, not only in the Indo-Pacific region but globally. That nationalism is likely to have a galvanizing impact, particularly in relations with the political community at the other end of the bipolar balance, the United States.

"what we can see is the possibility of the progressive disintegration of the American-led global order"

Synopsis

In short, if we take great power developments that are in train now, and project their trajectories into the 2020s, what we can see is the possibility of the progressive disintegration of the American-led global international order. While Trump and his administration's deep skepticism about the global order it inherited in January 2017 will in the fullness of time be gone, it can be suggested that the policies pursued by his administration after 2017 will have longer-term effects that will be increasingly difficult for a new administration to reverse.

In particular, the racism, xenophobia and nativist protectionism that the Trump administration has consistently encouraged and legitimized will likely remain part of the American body politic for a long time to come, if only because the clear enthusiasm on the part of many Americans for the president's race-baiting is not a genie that can be easily put back in a bottle. And it can be argued that the brand of nativist and racist nationalism that we are likely to see in American politics in the 2020s will exacerbate the relationship with China, where a strong nationalism that relishes the rise of China as a global power is likely to be encouraged by a similarly strong nationalism on the part of Americans.



Implications for Canada

Since 1945 Canadians have been content to define the grand strategy for their country in the broader context of American hegemonic leadership. As Canada's minister of foreign affairs, Chrystia Freeland, put it in her foreign policy statement of June 2017, the stable international order was always deeply in Canada's national interests and that order depended heavily on the United States. She stated eloquently: "in blood, in treasure, in strategic vision, in leadership, America has paid the lion's share."⁹ The likely transformation of that international rules-based order over the course of the 2020s will have major implications for Canadian security and defence policy.

In a "post-American" global order in which the U.S. has effectively ceded leadership and vision to others, and essentially withdrawn from asserting its power in all corners of the earth as it did during the 70 years after 1945 in defence of the international global system, the natural tendency will be for Canada's defence and security vision to narrow dramatically to fit the new American vision and that country's more limited engagement in global politics.

In that strategic environment, Canadians would have a highly limited defence mission: to use the *leitmotif* of the 2017 defence policy,¹⁰ the Canadian Armed Forces would be left with just two of the three enunciated missions: "strong at home" and "secure in North America," but no longer "engaged in the world." For in a world where the Atlantic alliance was no longer central to American interests, and serious and sustained engagement in the Indo-Pacific was no longer a priority for the administration in Washington, Canadian defence priorities would be radically reduced.

Freeland made it clear in her June 2017 statement that she believed that tucking safely under the American "protective umbrella" would make Canada little more than a "client state" of the U.S., which would, she claimed, "not be in Canada's interest." She did not explain precisely *why* it would not be in Canada's interest, but the use of the pejorative term "client state" implies one obvious answer: Canadians should aspire to something more than being a dependent satellite of a great power.

In the shrunken and wizened strategic environment of a post-American world, however, Canadians would not be *required* to do much in defence policy — in other words, they would have to contribute to North American defence in all domains (air, space, maritime and cyber), and very little else. In that strategic environment, there would be only one way for Canadians to maintain the third mission enunciated in 2017: in order to remain "engaged in the world," Canadians would have to agree to spend vastly more than we do now on defence. In light of these new realities, Canada would have to be capable of contributing *in a serious and meaningful way* to the security of allies and partners across both the Pacific and the Atlantic, helping to compensate for a diminution of American power capabilities.

In concrete terms, it would require the creation and maintenance of a range of military capabilities. It would require the creation of a real blue water navy that could contribute to combined naval operations mounted by allies in both Europe and Asia. It would require the expansion of the submarine fleet to add to the capabilities of allies on the other side of both oceans. It would require the acquisition of a littoral combat capability to augment the capabilities of other allies. It would require the development of a strategic airlift capability also able to operate



in both oceanic theatres at once. It would require the acquisition of a large fleet of the F-35 fifth-generation jet fighter being flown by our European and Indo-Pacific allies, together with a modernized refueling and Airborne Warning and Control System (AWACS) capability. And it would mean the reinvigoration of an expeditionary capability for the Canadian Army to assist in potential multinational operations across both the Pacific and the Atlantic. Canada's preference for multilateralism would not change, only its partners.

In other words, a post-American world in which the long-term consequences of the current "Trump cession" that results in a withdrawal from global leadership by the United States would present Canada with an unenviable choice: either follow the U.S. down the path of a progressively shrunken approach to global politics, which would not require very much spending on defence but would turn Canada into Freeland's dreaded "client state"; or strike out to remain "engaged in the world," even if such a course of action required that Canadians, for the first time in their history, would have to start being serious about defence spending in peacetime.





CHAPTER 2

THE INDO-PACIFIC IN FLUX:
NEW CHALLENGES FOR CANADA

DR. JAMES BOUTILIER

ABSTRACT

The 19th Party Congress of the Chinese Communist Party in October 2017 witnessed the consolidation of Xi Jinping's power as General Secretary. It also marked a turning point in Chinese domestic and foreign policy. The initial 30-year phase of explosive economic growth is drawing to a close. Analysts are increasingly concerned about the huge credit-driven debt burden that has begun to distinguish the Chinese economy, and Xi's apparent unwillingness to embrace a wide-ranging programme of economic reform. At the same time, China has embarked on an unprecedented outreach programme encapsulated in Xi's Belt and Road Initiative. This trade and infrastructure project has terrestrial and maritime components; the latter characterized by greater and greater naval rivalry between China and India, as well as a regional contestation for power between China and the United States. Despite naval diplomacy and trade overtures in Asia, Canada is coming to this half of the world in a period of dramatic flux, and Ottawa will need to prioritize its links with the region and move much more adeptly than it has done hitherto.

Note: The views expressed herein are those of the author alone and do not reflect the policies of the Royal Canadian Navy or the Department of National Defence.





The last quarter of the 20th century witnessed four unprecedented historical phenomena: the end of the Cold War; the rise of China; China's discovery of sea power; and a brief unipolar moment for the United States. The second and third were linked. As China became the world's assembly plant, it discovered that its success was tied to maritime commerce, namely, the shipment of Chinese goods to foreign markets and the importation of vital energy supplies.

The Chinese have traditionally viewed the sea as a barrier. Existential threats originated in the interior of Asia. Globalization, however, brought the Chinese face to face with the realities of seagoing trade and the value of sea power as a tool for protecting that trade, as well as for projecting Chinese influence around the world. In short, the Chinese became converts to the theories of the American prophet of sea power, Captain Alfred Thayer Mahan. Mahan argued that great nations have great navies, and, thus, the Chinese have accomplished something almost without parallel: they have built a world-class navy in 30 years, one that has begun to rival the world's greatest navy belonging to the United States.



In the process, they have set the stage for what Graham Allison has called the “Thucydides Trap”. Allison was referring to the way in which a rising hegemon, Sparta, came to challenge an existing hegemon, Athens.¹ In this case, China is the rising hegemon and the impending contest is likely to be played out at sea. Indeed, it could be argued that the Indo-Pacific region (two fundamentally different oceanic complexes inextricably linked by global energy flows and great power competition) is the world’s quintessential maritime arena: the scene of vast quantities of oceanic traffic, a naval arms race, and more and more examples of destabilizing contestation.^{2,3}

"Now, what we see instead is a China that is increasingly self-confident, assertive, and arrogant."

Mao Tse-Tung’s peppery successor, Deng Xiaoping, was a pragmatist. Not only did he initiate China’s spectacular modernization, following the insanity of the Cultural Revolution, but he provided direction: develop China’s power and keep a low profile. Xi Jinping has abandoned Deng’s sage advice. Now, what we see instead is a China that is increasingly self-confident, assertive and arrogant. Two trends (once again, interlocking) need to be tracked. First, the Chinese leadership has succumbed to a victimization narrative. They argue that China was the victim of a century of humiliation at the hands of the outside world and that that same world is contriving to prevent its rightful accession to the pantheon of great powers. An exquisite irony lies at the heart of this world view. Second, as the Chinese begin to project national power beyond their traditional “Middle Kingdom” boundaries (something which they have never done before on a sustained basis), and as they seek to refashion the international order, “with Chinese characteristics,” they have begun to encounter greater and greater levels of international criticism and resistance. Ironically, having castigated the United States as the regional “hegemon” for many decades, they have now become the region’s hegemon. All the while, they have remained amazingly tone deaf to the contradictions inherent in their contemporary condition; that a Marxist-Leninist-Maoist regime has become a capitalist (some would even say fascist), imperialist state.⁴ They are, in fact, the subjects of a self-fulfilling prophecy. As they assert themselves more aggressively in such places as the South China Sea (SCS), they are creating the resistance which fuels the victimhood narrative.

The 19th Party Congress that took place in Beijing in October 2017 marked Xi’s coronation. It was a vast scarlet and golden conjuring trick with thousands of obedient and obeisant delegates voting with metronome-like predictability. Xi’s first five years in office (2012-2017), as General Secretary of the Chinese Communist Party (CCP) and President of the People’s Republic of China (PRC), marked a period of dramatic power consolidation, and the elimination of political rivals, through the agency of a national anti-corruption campaign. That long overdue initiative was popular with the masses, but it remains to be seen whether corruption (which, in many ways is the



great cancer of Asia) has been significantly reduced let alone eliminated.⁵

The real question for China and the world is what happens next with the Chinese economy. This is a matter of enormous consequence since China has contributed upwards of half of global growth for many years. The first phase of China's stellar performance could be easily foretold – the unleashing of the pent-up capacity of an economy severely distorted by central planning. But China has come to the end of that phase, a period overwhelmingly dependent on foreign direct investment and the exportation of assembled goods. The world's workshop has begun to run out of steam. With indigenous labour costs rising and the absorptive capacity of the global system being challenged, China needs to undergo sweeping economic reforms. It needs to make the transition to an economy powered principally by domestic demand. But can a hybrid economy, still subject to state manipulation and the privileged demands of dinosaurian state enterprises, make the transition? Will the CCP, which has long talked about the importance of market forces, actually let those forces play a determining role? Xi has spoken about the need for reform and about the way that China is a new model for globalization, but there appears to have been precious little reform in his first five years in office. Having consolidated power, clamped down on foreign forces (a measure of the Party's deep-seated paranoia) and eliminated vexatious internal critics, will the Core Leader actually be able to deliver?⁶

A storm cloud is lurking on the horizon: mounting evidence that the economy is in serious trouble. While it is hard to arrive at a comprehensive appreciation of the weaknesses besetting the Chinese economy, there is compelling evidence that the economy is beginning to stagger under the weight of private and public debt. For years, the economy has matched the expectations of the leadership, but this has been because the Party has relied more and more heavily on economic stimulation via credit. These chickens are coming home to roost. Problems associated with the grey and black economies, the hemorrhaging of national wealth as money flows out of China to places like Vancouver, the *legerdemain* of “off balance sheet” accounts, and consumer debt generated by the citizenry are becoming harder and harder to explain away. Some analysts have even suggested that China is in worse shape than Japan was in the late 1980s just before the Japanese economy collapsed! What happens if the real estate bubble bursts or there is a run on Chinese banks? Could one of the world's greatest economic engines find itself in serious trouble in the next ten years and what would the global ramifications be of a dramatic slowdown in Chinese economic growth?⁷

If any of this came to pass, arguably, the Chinese defence budget, which has risen relentlessly over almost four decades, would come under severe pressure and the current assertiveness of Chinese foreign policy might be blunted. At the same time, a free trade arrangement involving Canada and the PRC would lose its lustre. Chinese tourism to Canada would most likely slump and fewer Chinese nationals would probably try to transfer their wealth to Canada.



Curiously, while the Party is committed to moving ahead economically, it is regressing politically. When Deng initiated economic modernization, the implicit social contract entailed political passivity in return for prosperity. Hundreds of millions of Chinese benefitted from this arrangement, but the citizenry wants different things now: better governance; less pollution; and greater protection under the law. Under Xi, however, the Party has become increasingly neo-totalitarian: “disappearing” human rights activists; enforcing the Party line in universities; and exerting what critics consider a malignant influence overseas via United Front⁸ organizations and expatriate Chinese residents. All of these developments have generated mounting angst on the part of foreign governments, intelligence agencies and security specialists.⁹

One vehicle for penetration and influence is the Belt and Road Initiative (BRI). The BRI is Xi’s pharaonic project to recreate the economic linkages of the historic Silk Route across Eurasia, and at sea, across the Indian Ocean to the Mediterranean. This is a highly ambitious and visionary undertaking that will not only absorb China’s excess infrastructural capacity, but also help cement Xi’s position among the Chinese greats; indeed, steps to this end were taken at the 19th Party Congress during which the BRI and Xi Jinping Thought were enshrined in the Chinese constitution, putting Xi slightly below Mao in the hierarchy of Chinese Communist theory. A number of countries, like India, have begun to view the BRI with increasingly jaundiced eyes. They see the trans-Eurasian trade route as uneconomical and the oceanic route as little short of an excuse for China to extend its maritime power into the Indian Ocean by way of a series of entrepôt, like the Sri Lankan port of Hambantota and the Pakistani port of Gwadar (not to mention China’s first overseas base in Djibouti).^{10,11} Xi has long spoken in millenarian terms about revitalizing China by way of the so-called China Dream, but as one experienced Indian diplomat observed, “China’s dream may become a nightmare for the rest of Asia!”¹² What, we have to ask ourselves, will become of this multi-faceted legacy project (an exercise in unprecedented Chinese outreach) over the next decade?

Will, for example, China succeed in converting ports like Gwadar into forward operating bases for the People’s Liberation Army Navy? Would actions of this sort consolidate the Indian Ocean’s reputation as the 21st century ocean where the real geostrategic competition comes to reside? That, in turn, could stimulate a Sino-Indian naval arms race, focus Washington’s attention on that corner of the world and leave Canada even more of a naval outlier than it is at present.

And, of course, we cannot make any assessment of China, as the emerging Asian giant, without assessing the most critical global relationship of all, the trans-Pacific relationship between China and the United States. This is not an easy thing to do, particularly in view of the uncertainties associated with contemporary presidential politics and Congressional malaise. While President Donald Trump undertook the longest visit to Asia in a quarter century, in November 2017, he began his first term in office by withdrawing from the Trans-Pacific



Partnership (TPP). This, in the eyes of most analysts, was a colossal mistake because the TPP, which would have included Canada, was the third leg in the American pivot to Asia that began under President Barack Obama and

"...and second is the transformation of the hub-and-spokes structure into a spider's web..."

Secretary of State Hillary Clinton.¹³ Many commentators saw the pivot primarily in military terms, but it was much more than that. It was an exercise in reassurance on a grand scale in a region where virtually all the powers are pursuing hedging strategies in which China is their number one *trade* partner, but the

United States is their number one *security* partner. The Trans-Pacific Partnership would have further reinforced America's role and reputation in the Indo-Pacific region, bringing together 40 percent of the world's GDP in an association that fostered trade liberalization and higher levels of economic performance. The Japanese Prime Minister, Shinzo Abe, is working diligently to rescue the TPP (rebranded TPP-11, minus the United States) from oblivion, and, fortunately for Canada, fixated as Ottawa is on the NAFTA negotiations, the abbreviated version of the TPP has now been agreed to.¹⁴

The Chinese, seduced by their own sense of exceptionalism, have a triumphalist vision of their place in the world vis-à-vis the United States. They believe that America has entered a period of inexorable decline and that the future belongs to the People's Republic. The declinist school is almost certainly premature in its assessment and fails to take into account an ironic, countervailing phenomenon, namely China's profound inferiority complex. One could argue that a sense of exceptionalism and inferiority are strange bedfellows, but the sense of victimhood referred to earlier (a condition shared by Vladimir Putin's Russia) is evidence that despite China's growing self-confidence, dark anxieties still haunt the leadership.

The security architecture of the Indo-Pacific (referred to as the Asia-Pacific region in the post-Second World War era) was characterized by a hub-and-spokes structure: the United States was the hub and the spokes radiated outwards to American allies – South Korea, Japan, the Philippines, Australia, New Zealand and Thailand. More recently, two major changes have transformed that construct: first is the addition of India (an emerging great power and security rival to China) to this structure and second is the transformation of the hub-and-spokes structure into a spider's web with vitally important links being forged across the spokes. Thus, we see a newly confident and assertive Japan pushing hard to develop security ties with Australia, India (complementing the Washington – New Delhi axis), the Philippines and Vietnam.¹⁵ Indeed, we appear to have entered an age of axes or corridors. While China is pushing west, India has an Act East Strategy, one that intersects the south-facing corridors of influence originating in Taiwan and South Korea. The more China challenges the existing order,



altering “facts on the ground” (to use contemporary foreign policy parlance) in the SCS, the more these new, countervailing axes or corridors of cooperation, like the Quad, are emerging.¹⁶

The Quad is one of a number of regional security arrangements that have evolved over the years. It brings together India, Japan, Australia and the United States in an alignment of interests that links the world’s largest democracies in a security relationship designed to counterbalance China’s rising influence. It remains to be seen, however, whether the Quad will prove robust enough to survive. Australia, in particular, has been concerned about offending its number one trade partner, China, but the Chinese have overplayed their hand badly in Australia of late with the aforementioned United Front operations and this has resulted in Canberra adopting a more muscular, pro-Quad posture.^{17,18}

If the Sino-American relationship is the most important bilateral relationship in the world, the North Korean dilemma is, arguably, the most important – and existentially dangerous – piece of unfinished business in Asia involving these two powers. The celebrated regional publication, *The Far Eastern Economic Review*, ran a cover story in 1992 asking what is to be done with North Korea. Policy planners are still wrestling with this intractable problem 25 years later. Many of them have asserted that China is the key to resolving the North Korean challenge.¹⁹ For a very long time, the Americans were dedicated to a non-nuclear North Korea, but a succession of Kims (the communist world’s only dynastic succession) have defied expectations and developed an arsenal of increasingly long-range missiles, equipped – so it would seem – with nuclear warheads. Since China provides North Korea with 90 percent of its food and fuel, the argument goes, Beijing has only to turn off the taps and Pyongyang will be brought to its knees in an instant. Unfortunately, this theory has failed to take into account the obduracy of the North Koreans or the complete unwillingness of the CCP to be party to the overthrow of a fellow “communist” regime. Terrified as the CCP was by the Colour Revolutions and the effects of the Arab Spring, it is certainly not going to engage in regime change in North Korea, despite President Trump’s initial expectations that they might do so. If the Chinese are not going to solve the problem, what then?²⁰ United Nations sanctions are beginning to bite, but North Korea has been extraordinarily adept at outflanking them. What if it had not been? What if the sanctions strangled Pyongyang slowly? Would the West be inviting a *Götterdämmerung* response from a nuclear-armed North Korea? Certainly Kim Fatty the Third, as the Chinese media has dubbed him derisively, is no fool and is not about to commit dynastic suicide. But he has other options available to him – options conferred upon him by the dictates of geography. Fortunately, for him, he can hold Seoul to ransom. The South Korean capital is within relatively easy striking distance of an impressive array of North Korean artillery, located just beyond the Demilitarization Zone that separates the two countries. Thus, it would be possible for him to extract concessions at the non-nuclear level by threatening enormous damage (and loss of life) to the South Korean capital.



Unfortunately, China will not come to the international community's rescue by applying pressure on Pyongyang; or perhaps, more precisely, not enough pressure to bring down the regime. Sadly, the politics of denial and a paucity of policy options have brought us to the point, predicted by analysts long ago, where Kim Jong-un can negotiate directly with Washington and where he continues to expand his nuclear weapons and missile arsenal. If the North Korean challenge was intractable before, it is doubly intractable now.

Elsewhere, in Southeast Asia, we see the Association of Southeast Asian Nations (ASEAN), which came into existence over 50 years ago, declaring itself not just an association but a "community." Sadly, this declaration comes at the very moment when the cluster of ten large and small, rich and poor, maritime and continental Southeast Asian powers is hopelessly fractured.²¹ ASEAN has done good work over the years. It has fostered trade, acted as a talking shop, and generated a breathtaking array of initiatives, agencies and organizations (so much so that it has almost paralyzed small foreign ministries faced with attending hundreds of meetings each year). Nonetheless, ASEAN was like a deer in the headlights when it came to the Chinese reclamation and militarization of key geographic features in the SCS.²² At least one of the member states, the Philippines, had the courage or the temerity to challenge Chinese pretensions in the SCS and the Permanent Court of Arbitration (PCA) ruling in July 2016 was a thundering triumph for Manila. The PCA declared Beijing's Nine Dash Line in the SCS bogus and Beijing's historical claims as not worth the paper that they were written on. Unfortunately, a change in the regime in Manila meant that the PCA ruling was allowed to languish (one more alarming setback to the rules-based international order) and in the interval the Chinese have highlighted the new peaceful and cooperative climate in the SCS; an easy thing for them to do having achieved all of the goals that they set for themselves! Furthermore, Chinese dollar diplomacy has fatally divided whatever "community" ASEAN might have aspired to. It is a useful organization, but as a Chinese foreign minister noted at a regional meeting, some powers are big and the rest are small and the latter just have to live with that reality.²³

At the same time there is evidence that the backwash from the Islamic State (IS), or *Daesh*, following its collapse in northern Iraq and Syria may be undermining the stability of states in Southeast Asia. Over the years, the \$90 billion USD soft power Saudi campaign to foster an austere and intolerant brand of Islam has profoundly affected Southwest Asia and now there are signs, particularly in Indonesia, Malaysia and the Southern Philippines, that IS returnees and other Wahhabist proponents may be seeking to promote their views more aggressively in a region long known for the relaxed and accommodating nature of its Islamic faith.²⁴

There is a new sense of expectancy in the air in Asia these days. Will President Trump be able to reassure America's friends and relations that the United States is, indeed, committed to the Indo-Pacific region? How will the North Korean stand-off play out? Will Xi succeed in reforming the Chinese economy, and if he does not, what could be the international ramifications? Will India continue on its current growth vector, despite being a light



year behind China? What does the future hold in store for a diminished ASEAN? How will China's ambitions be realized or thwarted in the great BRI undertaking? And will the growing competition for power and influence in Asian waters succumb to some tragic miscalculation that sparks a long-anticipated great power contest at sea?

These and many other regional challenges need to exercise the minds of Ottawa politicians and policymakers mightily in the years to come. Despite the incontrovertible importance of the Indo-Pacific region, Canada's track record there has been disappointingly inadequate. Prior to the Wall Street meltdown of 2007-2008, Canada allowed itself to become dangerously over reliant on the U.S. economy. Since then, it has struggled to diversify its trade links with Asia only to discover the weakness of the Canadian brand – as a result of Ottawa's failure to engage the region consistently – and the Darwinian nature of regional trade competition; the prime minister's failed trade mission to China in December 2017 is a case in point.

Trade, of course, is only part of the story. The security landscape in the Indo-Pacific region has grown increasingly problematic – not to say dangerous – of late. Sino-American relations are characterized by uncertainty and mistrust. North Korea's nuclear ambitions constitute an existential threat. The Russians are flexing their muscles in the Arctic and many of the nations of east and south Asia have moved beyond arms modernization to an action-reaction naval arms race. While the recent Canadian defence review is a useful document,²⁵ it exists in something of a vacuum, absent a foreign policy White Paper that would, presumably, seek to address some or all of the challenges outlined above. The Indo-Pacific region is particularly daunting from a security perspective by virtue of its enormous size, diversity and degree of militarization, not to mention its lack of collaborative defence organizations like NATO. Thus, Ottawa will need to prioritize its links with the region and move much more adeptly than it has done hitherto.





CHAPTER 3

BELOW THE RADAR:

MEXICO AND CANADA'S NATIONAL SECURITY

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ABSTRACT

The present political strains over the North American Free Trade Agreement (NAFTA) have put a modest spotlight on the relationship between Canada and Mexico, something that more commonly remains below the radar for most Canadians and their government. Regardless of how relations between North American nations settle out after the current upheaval, Canada will undoubtedly continue to see Mexico as a minor national security concern, with a focus primarily on combatting crime. This would be a mistake. The following discussion examines some of the deeper tectonic influences on Canada's national security, in particular North America's geography as well as demographic and economic trends, and suggests that Canada needs to pay more attention to Mexico. Its economic weakness and internal security problems constitute a very real, if indirect, risk for Canada because U.S. responses will often materially impact Canada and its economy. There are too many sources of friction slowly dragging Canada's economic efficiency further and further behind that of its southern neighbour, inexorably undermining its ability to keep up with the U.S. as a meaningful continental security partner. As Canada falls further behind the U.S., it gradually becomes a dependant – at the cost of its sovereignty – so the nation needs to make it a priority to reduce or eliminate as many of the causes of the widening economic gap between the two countries as possible. Mexico, as a case in point, is one such source of friction. If it can be materially helped on the path from troubled developing country to successful North American nation, all three partners would benefit, both economically and in terms of continental security.





Canada's new defence policy¹ does a respectable job of highlighting many trends threatening global and Canadian national security, identifying in particular the evolving balance of power, the changing nature of conflict and the rapid evolution of technology. Other factors such as climate change and mass migrations are also noted. While these threats are very real, there are also some less visible and slower – but in many ways more powerful – trends inexorably shaping global affairs and affecting Canada's current and future national security. It is important that these tectonic influences also be understood when considering long-term investments in defence and security capabilities, strategies and plans. Careful examination of these can reveal less readily apparent national security issues and threats.

A case in point is Mexico. Canada tends to see the country through very limited lenses: a tourism destination; a relatively minor economic partner;² and a collaborator in the area of combatting crime.³ The present political strains over NAFTA have put more of a spotlight on the Canada-Mexico relationship, but regardless of how relations between North American nations evolve as a result, Canada will almost certainly continue to view Mexico as a very minor national security concern. This would be a mistake. A closer examination of the deeper tectonic influences on national security, in particular the continent's geography as well as demographic and economic trends, suggests that Canada needs to pay more attention to Mexico.



Context

Geography is not an absolute determinant of the affairs of humanity, but it has a significant influence. It may impose physical constraints; inhospitable regions, for example, like the Canadian Arctic, inhibit agriculture and the development of large, complex societies. Conversely, it may offer opportunities such as good harbours and navigable inland waterways that enable long-distance commerce.

For much of North America, geography generally favours north-south communication and commerce, whether along the east and west coasts, through the Mississippi and St. Lawrence/Great Lakes basins, or on the central plains. An important endeavour in the early political histories of both Canada and the U.S. was overcoming their respective geographies by building unifying east-west rail connections. Another was establishing a binational relationship that manages rather than tries to fight the natural north-south flow. In both cases, the two countries have been remarkably successful. American author and journalist Robert D. Kaplan, in his well-researched 2012 book *The Revenge of Geography*, comments that “The American-Canadian frontier is the most extraordinary of the world’s frontiers because it is long, artificial, and yet has ceased to matter.”⁴

The U.S.-Mexico border region, on the other hand, is very different. To begin with, Mexico is more geographically fragmented than either of its two northern neighbours. It comprises multiple regions divided by rugged mountain ranges, and northern Mexico in particular is more geographically, socially and economically connected to the U.S. Southwest than it is to Mexico City.⁵ Much of the current border was arbitrarily established by treaty after the Texan War of Independence (1835-1836) and the Mexican-American War (1846-1848) when most of Texas, New Mexico, Arizona, California, Nevada and Utah were ceded to the U.S.⁶ The border bears no relation to the broad, indistinct transitional region that geographically characterizes a significant portion of the area.⁷ If history is any guide, the current U.S. administration’s intent to try to seal this border is unlikely to be any more successful over the long-term than earlier efforts to do so⁸ – or for that matter the Soviet Union’s post-Second World War fortifying of the artificial Inner German Border.

This, however, does not mean that the American motivation to better secure the border with Mexico is misplaced. The latter is in considerable trouble, unable to establish effective control over much of its territory or protect its population from organized criminal entities that effectively rule large areas.⁹ While its government views the problem as one of public security rather than national security,¹⁰ it is not out of the question that Mexico could become a failed state, which would represent a major security threat to North America. The resulting internal economic and political disruption would almost certainly descend into open conflict, cause substantial population displacements and foster other troubles that would inevitably spill over into neighbouring countries.



Looking at demographics, a nation's future place in the world will be defined by many variables, of which population is one. Economic and military power may be even more defining, but both have major demographic components. Indeed, it is impossible to discuss a nation's demographics without reaching into the realm of economics and vice-versa.

Among current G7 nations,¹¹ Canada is forecast to have the highest population growth rate in the coming decades, growing 10-12% by 2030 and 23-28% by 2050, driven in part by its higher immigration rate.¹² Despite this, the country will remain relatively sparsely populated. As a number of knowledgeable authorities have commented, this low population density will continue to materially constrain its economic efficiency and growth.¹³ The U.S. population will grow at a rate only slightly less than Canada's, but according to International Monetary Fund (IMF) projections, both its Gross Domestic Product (GDP) and GDP per capita (a common measure of economic efficiency and productivity) growth will continue to substantially outperform Canada's,¹⁴ widening its economic dominance of the continent.

"The artificial definition of the border between the U.S. and Mexico...creates significant challenges"

Mexico, on the other hand, is a developing country with generally weak infrastructure.¹⁵ Its population is forecast to grow over 14% by 2030, to nearly 148 million people, and 27% by 2050,

to over 164 million – nearly half that of the U.S. While its rate of GDP and GDP per capita growth over the next few years is forecast to be better than even that of the U.S.,¹⁶ it is starting from a very low base. If it is to obtain any substantive benefit, it will need to further improve its economic performance.

Challenges

The artificial definition of the border between the U.S. and Mexico, and its considerable variance with both the geography of the region and its demographics, creates significant challenges. In the U.S. Southwest, both history and long-term Hispanic immigration have created a regional population that is closely connected to northern Mexico. Roughly one-third of immigrants to the U.S. come from Spanish-speaking Western Hemispheric countries and regions (Mexico, Central America, South America and the Spanish-speaking Caribbean) and just under half of these are from Mexico.¹⁷ Immigrants from Mexico tend to settle in the U.S. Southwest and represent a concentrated population amongst whom Spanish endures as a living language into third generations and beyond,¹⁸ unlike other immigrant communities in the U.S.



These strong geographic, cultural, linguistic and familial ties in the region led the late-University of New Mexico professor Charles Truxillo to predict that the southwestern U.S. and northern Mexican states would band together to form a new country as early as 2080.¹⁹ This may be one possible outcome, although the challenges would be enormous. Other alternatives may be preferable, ideally more akin to the U.S.-Canada border solution. After all, strong cultural, language, familial and economic ties are equally prevalent along much of it, so in theory something comparable should be possible in the southern portion of the continent.

Several very significant practical problems unfortunately stand in the way. To begin with, the U.S. and Mexico have the greatest disparity in both GDP and GDP per capita of any two contiguous nations in the world.²⁰ Significant economic mismatch between neighbouring states inevitably creates pressure to thicken borders in the name of security, migrant control or economic protection. It also makes it very difficult to maintain positive and productive collaboration between nations on defence, security and other matters of mutual importance because of the asymmetry between national capacities and capabilities. For North America, the problem is compounded by the continent's geography, which generally favours north-south connections, so border thickening adds further friction to the economic development of all three neighbours, especially the smaller partners.

Mexico's faster population growth rate, weaker economic performance and generally lower level of technology adoption also add complexity to a relationship already strained by the country's previously mentioned national struggle to assert effective state control over its many disparate regions and the fact that it is not at all certain that it will ultimately prevail, or if it does, what success will look like. These conditions have bedevilled attempts to better integrate the economies in the southern region of North America for years and make it impossible to adopt anything resembling the U.S.-Canada border solution. To the contrary, they add up to a festering continental security problem that will only worsen unless Mexico can become an economically stronger, more secure and successful polity.

National Security Implications for Canada

Canada's security and economy are inextricably linked. The nation's ability to assure its security and defend its sovereignty is highly dependent not only on political will and action, but also the economic capacity to afford the investments required to shoulder its fair share of continental security, however that is defined among the three nations.

Over the next five years, the IMF predicts that Canada will continue to trail its American neighbour in both GDP and GDP per capita growth by a considerable margin.²¹ This substantial and growing difference has been



the source of warnings by economists for years,²² but it also has significant long-term implications for Canada's sovereignty. The U.S. will quite legitimately do what it must to defend itself and its maritime and air approaches, which by and large are also Canada's maritime and air approaches. If Canada's economic capacity relative to the U.S. continues to gradually erode, then so too will its ability to keep up as a meaningful continental security partner in a world of shifting power balances, the weakening ability of international mechanisms to effectively arbitrate and defuse conflicts, and quickly evolving defence and security technologies.²³

It is in this context that the ongoing insecurity in Mexico and its foundations in geography, continental economic disparity and other complex factors represent a substantive risk to Canada's national security – not because the instability is likely to spill over directly, but because of its impact on the U.S. American responses to the problem will often also affect economic intercourse across its northern border, adding further friction and drag on our own economic performance. This is powerfully illustrated by the current NAFTA negotiations, the early genesis of which was the Trump administration's concerns about U.S.-Mexico trade, security and other issues. Most of the Canada-U.S. stress points only began to emerge later as the process unfolded, and it is doubtful that many would have risen to the level of priority they appear to have today for the U.S. administration absent the NAFTA reset.

This is not to suggest that we would have been better off without NAFTA. Even if the present tripartite agreement devolves into a series of bilateral deals, American responses to U.S.-Mexico issues will continue to impact Canada for a number of reasons, including the inherent bias in all government bureaucracies in favour of standardized solutions, policies and business practices. More to the point, it remains very much in the long-term economic interests of all three countries that Mexico ultimately succeed as a North American nation and that relatively open commerce, domestic stability, effective governance and reasonable economic compatibility prevail within the continent.

Solutions

While the current U.S. administration has a very particular view of the issues along its southern border, fundamentally the U.S.-Mexico relationship has very deep and broad economic,²⁴ security²⁵ and other roots. For its part, the Canadian government has been pursuing various bilateral economic initiatives with Mexico since at least 2004,²⁶ and more recently in the area of justice and security.²⁷ It is clear, however, that tangible results have been at best limited and there is no evidence of any substantial priority being placed by the Canadian government on the effort. Many of the discussions have been largely self-driven at the technical level with no sense of an overarching strategy and no evidence of an integrated plan guiding the work.²⁸ Furthermore, the respective



nations' bilateral efforts appear to have at best limited coordination between them and few common objectives.

Given the importance of ensuring the success of Mexico, a national security priority for Canada should be a sustained effort to encourage development of a coherent long-term North American strategy for appropriately supporting Mexico's national development. It should have at least three principal areas of focus:

- *Economic development*, aimed at gradually moving Mexico's GDP per capita and its rate of technology adoption closer to those of its North American partners;
- *Infrastructure development*, aimed at overcoming Mexico's geographical fragmentation by strengthening unifying transportation and communication links within the country; and,
- *Justice and internal security*, aimed at building a stronger national capacity to effectively maintain law and order in a way that holds the confidence of Mexico's population.

"Mexico has long been largely below Canada's radar when it comes to both economic and security considerations"

Such a strategy would in no way reduce Mexico's sovereign responsibility for the national effort required, but would ensure that the support provided by its partners was most efficiently targeted to achieve the intended results. While under current circumstances it may be difficult to engage the U.S. administration in substantive discussions on this, Canada and Mexico could do considerable preparatory work together and perhaps informally with key U.S. officials. Even a preliminary draft strategy and plan would improve the focus of ongoing collaborations, highlight areas requiring priority of effort and set conditions for future evolutionary development.

Conclusion

Mexico has long been largely below Canada's radar when it comes to both economic and security considerations. Certainly, implementation of the NAFTA agreement in 1994 began to change that dynamic, especially on the economic front, but fundamentally Canada still focuses its security attentions elsewhere. This is a mistake because Canada's security and economy are inextricably linked. The nation's ability to assure its security and defend its sovereignty is highly dependent not only on political will and action, but also the economic capacity to afford the investments required to shoulder its fair share of continental security, however that is defined.



Mexico's economic weakness and internal security problems constitute an indirect but very substantive risk for Canada since U.S. responses to them will inevitably and materially impact the Canadian economy. This fundamental dynamic exists regardless of which administration occupies the White House, although details may vary.

There are many internal and external sources of friction eroding Canada's economic efficiency relative to the U.S., and the nation needs to make it a priority to reduce or eliminate as many of them as possible. To its credit, the Liberal government under Justin Trudeau has undertaken various initiatives to address some of the internal issues, guided in part by the recommendations of the Finance Minister's Advisory Council on Economic Growth; of course, it continues to place a major emphasis on trying to ensure a successful outcome to the NAFTA negotiations. It is also pursuing wider trade diversification through international trade agreements with varying degrees of vigour.

These are all important and worthwhile initiatives, but Canada's economic "centre of gravity" will likely always be in North America, and if Mexico can be materially helped on the path from troubled developing country to successful North American nation, all three partners would benefit substantially, both economically and in terms of continental security. The process would take decades, but at some point it may be possible to begin to replicate the successful model of the U.S.-Canada border in the southern region of the continent. This would be the ultimate sign that North American security and economic strength was no longer threatened by significant internal issues and is a very worthwhile objective for all three countries to pursue.





CHAPTER 4**THE ELEPHANT IN THE ROOM:
CANADA AND NORAD MODERNIZATION***DR. ANDREA CHARRON AND DR. JAMES FERGUSSON*

ABSTRACT

Strong, Secure, Engaged is silent on the costing of the modernization and renewal of NORAD even though it is a priority for the government. This chapter examines NORAD's two most important modernization projects: a new Command and Control architecture and the "renewal" of the North Warning System, both of which will require funding (personnel and resources), but for which the lack of discussion on the cost of and funding for these projects is the "elephant in the room".

Note: This paper is based upon a forthcoming detailed report on the future of the North American defence relationship that is funded by a Targeted Engagement Grant from the Defence Engagement Program, Department of National Defence.





The new Canadian defence white paper released in June 2017, entitled *Strong, Secure, Engaged*,¹ is similar to all past defence white papers; the order of defence importance is to be strong at home, to help secure North America and to engage in the world with allies. SSE, as it is dubbed, emphasizes the “secure” tranche by committing to modernize the North American Aerospace Defense Command (NORAD) and renew the North Warning System (NWS). Beyond that, detailed discussion of the future North American defence relationship with the United States (U.S.) is largely absent. There is no clear statement of what the government understands modernization and renewal to mean or entail. Furthermore, in terms of the government’s future funding commitments, both modernization and renewal are noticeable by their absence. The only direct link between funding and North American defence modernization relates to the commitment to procure 88 new fighters sometime in the future.

This chapter examines NORAD’s two most important modernization projects: a new Command and Control (C²) architecture and the “renewal” of the NWS, both of which will require funding (personnel and resources). In the case of the NWS, the estimated cost is in the billions of dollars of spending, but neither projects’ expenses seem to have been costed in SSE. While there is lots of attention to and discussion of the projects, there is next to no discussion around the costs or plans to pay for them. This, for Canada and NORAD, is the elephant in the room.

This preoccupation with ensuring the future of the relationship, and NORAD’s modernization, has been a perennial one. Certainly, these issues came to the fore in reports released by the NORAD Binational Planning Group



created in the immediate post-9/11 period. In 2006, for example, Canada and the U.S. agreed to sign the binational agreement in perpetuity and to add a new mission (maritime warning) to stay relevant and ensure that a 9/11-like event did not happen again. Then, in 2013 under General Charles H. Jacoby (commander of NORAD, 2011-2014), “NORAD Next” – a broad analysis of what threats and challenges the U.S. and Canada would face in the 2025 to 2030 timeframe and what steps must be taken to prepare for them – was undertaken. Admiral Bill Gortney (2014-2016) continued the analysis by asking direct questions about NORAD’s battle management processes and testing new C² structures in exercises. Now, under General Lori Robinson (2016-present), another study begun in 2016 is underway, entitled the “Evolution of North American Defence (EvoNAD)”, that looks out even farther into future time horizons and explores threats emanating from new domains – some yet even to be named. In all cases, the Permanent Joint Board on Defense has “blessed” the studies and the changes to date.

The studies, especially “NORAD Next” and “EvoNAD”, provide insight into the details of NORAD’s future modernization and renewal, and implications for Canada, especially in terms of future resource and funding requirements. Two issues are at the forefront. The first is how to better manage the “battle rhythm” of NORAD via a new C² architecture (that includes the structure, “pipes and processes”²) so that the commander of NORAD can consider the “up and out” strategic picture rather than be bogged down in the “down and in”. The second issue is the replacement/modernization/reinvention of the NWS, which has nearly reached the end of its operational life.

The costs of these two elements of the North American defence relationship do not appear in SSE or government future spending projections. The lack of such planning is due in part to the fact that costs are difficult to estimate, especially in the case of NWS renewal, and it remains to be seen whether C² modernization, as recently exercised, will come to fruition. Nevertheless, the silence on the costs of these projects is very problematic.

C² Modernization

Beginning with Admiral Gortney and followed by General Robinson, the past three annual NORAD VIGILANT SHIELD exercises (NORAD’s annual fall field training exercises aimed at improving operational capability in a binational environment) tested new C² architectures. Prior to these last three exercises, NORAD C² processes vital to conduct the air defence of North America rested upon a hub-and-spoke model. The commander of NORAD, drawing upon dedicated NORAD air defence assets, provided by the respective National Command Authorities, distributed these assets to the three regional commands, Alaska Regional Headquarters (ANR), Canada Regional Headquarters (CANR) and Continental U.S. Regional Headquarters (CONR), which then conducted the air defence operation in their respective regions. The NORAD commander oversaw the air defence operation for North America as a whole, adjusting asset taskings as required based upon information passed from the regional commands through the NORAD operational centre at Peterson Air Force Base (AFB) in Colorado Springs, Colorado.³

This structure and process had the commander looking “down and into” North America as a function of the post-9/11 threat environment; it was essential that threats internal to North America be considered, as well as



surveying the approaches to North America for potential threats. Questions emerged, however, about whether the commander's attention to tactical and operational requirements constrained her ability to also absorb strategic considerations, especially given the dual-hatted nature of the position as commander of both NORAD and U.S. Northern Command (USNORTHCOM). Specifically, the commander needed to consider the strategic "big" picture, including coordinating with activities of the other combatant commands of the U.S. Unified Command Plan (UCP), the Canada-U.S. tri-command structure and other allies.

Given the increased demands placed upon the commander of NORAD, the modernization of NORAD C², as exercised in the recent VIGILANT SHIELDS, allowed the commander to be strategically focused by devolving operational command to CONR, with the establishment of a NORAD Combined Forces Air Component Command (NORAD CFACC or NCFACC). The NCFACC took over from the commander of NORAD the issuing of air tasking orders to the regional commands. So, in essence, the existing C² arrangements remained in place, but now the NORAD commander and the staff (i.e., the NJ3 – the NORAD operations director) could focus on the more strategic "up and out" picture of how best to defend North America.

The choice to make CONR, based at Tyndall AFB, and thus its commander, the NCFACC was based on several factors including its greater personnel and technology capacity, in addition to its relative greater security, located far from the axis of an air attack from the far north. With this new position, the commander of CONR would become triple-hatted as the NORAD operational commander, CONR commander and U.S. First Air Force commander.

"Overall, potential concerns about this new C2 structure appear not to reside in increased investment for Canada but rather in the intangible world of perception"

On the surface, it appears that such C² changes, depending on whether they will be on a surge or permanent basis, will have few resource demands. As per NORAD's past history, new infrastructure costs for the NCFACC would be borne by the U.S.⁴ If, instead, the NCFACC was to be assigned to CANR, at least part of the costs, necessitated by the need to expand significantly the CANR Combined Air Operations Centre (CAOC), as well as the communications systems (the "pipes and processes"), would be significant. In other words, the potential logic of establishing the NCFACC in Winnipeg, Manitoba given its location in the centre of the continent is offset by its limited current CAOC capacity to conduct the operational air defence of North America and would require significant investments on the part of Canada, as well as the U.S.

Overall, potential concerns about this new C² structure appear not to reside in increased investment costs for Canada, but rather in the intangible world of perception. Thus, for example, this new structure, should the NCFACC remain permanently with CONR, may generate the perception that CANR (and ANR) has been downgraded to an air defence sector, among other perceptions that come naturally when big, bold changes are proposed, such as when NORAD first assumed the new maritime warning mission. However, there are potentially significant costs. As also exercised in recent VIGILANT SHIELDS, there is the requirement for a backup, or re-



dundant, NCFACC to avoid a single point of failure. This was CANR, which, as noted above, greatly strained its limited resources and capacity. Of course, there is no reason, *per se*, why CANR needs to take on this function.⁵ Political considerations may, however, drive Canada to assume this role, not least of all to remain a relevant and important binational partner.

More important, the elevation of CONR to NCFACC will place significant personnel demands on the Royal Canadian Air Force (RCAF). The relatively small Canadian contingent in CONR will have to be increased to ensure its binational balance, including the likely need to deploy a two-maple leaf Canadian in the position of deputy commander of the NCFACC⁶ and to augment Canadian numbers at the NCFACC as a whole, potentially representing an increase of at least 100 personnel.

It is unlikely that the establishment of a NCFACC will be personnel-neutral as a function of the transfer of Canadian personnel from Peterson AFB (NORAD's headquarters in Colorado Springs) to Tyndall AFB. All of the other duties of NORAD, and thus Canadian personnel requirements, will continue to be located at NORAD headquarters at Peterson AFB. What is more, the binational agreement states:

No permanent changes of station of forces assigned, attached or otherwise made available to NORAD operational control will be made without the approval of the national authority of the Party concerned. The basic command organization for the Parties' respective defense forces, including administration, discipline, internal organization, and unit training, shall be exercised by national commanders responsible to their national authorities.⁷

This suggests that approval will be required by the Chief of the Defence Staff and U.S. Secretary of Defense for the NCFACC to become a permanent position.

While the costs, especially in terms of personnel, as well as potentially in infrastructure for CANR to meet the demands of a new C² structure may not appear too burdensome, they should not be underestimated especially given the current personnel shortages (including vacancy shortages and unfulfilled recruitment targets) in the RCAF in particular and the Canadian Armed Forces in general. These costs cannot be treated in isolation from other related modernization costs, of which estimates for the NWS represents the “big” elephant in the room.

NWS Renewal

Renewal is probably the wrong term to apply to the NWS, unless one considers the NWS as the renewal of the Distant Early Warning (DEW) line and its companion Mid-Canada and Pinetree lines established in the 1950s. It is more accurate to apply the term replacement, but this depends, in turn, upon whether the NWS is eliminated, as was the case for the DEW, Mid-Canada and Pinetree lines. Thus, perhaps modernization of the North American air early warning system is more accurate. Regardless, the NWS reaches the end of its serviceable life in 2025, a mere seven years from now, which coincides with the end of the spending commitments (estimated at \$32 billion) laid out in *Strong, Secure, Engaged*.



The requirements to renew, replace and/or modernize the NWS are driven by three considerations. First, the current short- and long-range radars are approaching their end of life, and at a minimum, must be replaced. Second, the capability and location of the NWS, stretching across the Canadian north and down the Labrador coast, cannot deal with the new generation of long-range Russian air-launched cruise missiles (ALCMs). Third, and related to the second, the NWS is located too far south in Canadian territory to give sufficient advanced warning in light of new threats. The benefit of geometry and time are needed.

At the time of its establishment, the NWS was designed to identify and track Soviet bombers to enable NORAD air defence fighters, dispersed to forward operating locations (FOLs) in the north, to intercept them before they could release their ALCMs.⁸ In modern-day parlance, the objective was to destroy the “archers” (the bombers) before they could release their “arrows” (the missiles), largely because ALCMs were very difficult to detect through ground-based radars. Today, the new generation of ALCMs can be released by Russian bombers from somewhere between the mid-Arctic ocean and Russian airspace in its high Arctic, and in the future, from deep inside Russian territory.⁹

The NWS is not configured to “see” out to these new launch points and is incapable of identifying and tracking ALCMs. It may be possible to replace the current long-range radars with much more powerful ones. Even then, however, there is the issue of whether or not their current locations are optimal. Located across the Canadian Arctic mainland, it may prove necessary to move the new radars to the northernmost edges of the Canadian Arctic archipelago, including the possibility of deploying a long-range radar at Alert on the eastern tip of Ellesmere Island. Even with powerful long-range radars, their ability to identify and track small-signature ALCMs is questionable. In order to intercept detected Russian bombers prior to their ALCM launch points, FOLs will also need to be moved much farther north.¹⁰ While this may bring NORAD fighter/interceptors within range, no defence is perfect and Russian ALCMs could still leak through.

"the NWS is located too far south in Canadian territory to give sufficient advanced warning in light of new threats."

The ALCM threat, in terms of NORAD’s mission to deter, detect and defend, raises several other issues. Compounding the small signatures of ALCMs is the fact that they also fly at very low, ground-hugging altitudes. It is possible that developments in naval surface-wave radar may provide some tracking solutions, alongside, possibly, an over-the-horizon backscatter radar. But, ideally, the future ground-based system will need to be supplemented by both space-based tracking and air-based look-down capabilities, such as additional Airborne Warning and Control System (AWACS) aircraft. Moreover, as ground-based systems are fixed outward, the early warning system may also require a second layer, perhaps a modernized NWS and/or a radar line farther south to allow more time to react.

Finally, two other considerations should be noted. First, the future Canadian fighter replacement for the CF-18 will need to possess an ALCM look-down/shoot-down capability,¹¹ which several fighters can do including the



F-35 Joint Strike Fighter.¹² Second, the ALCM threat may also require the acquisition of a ground-based point defence capability.¹³

The solution to the renewal, replacement and/or modernization of the NWS will require a system of systems. This solution is now being examined through a binational committee, along with a separate committee established to examine future FOL requirements.¹⁴ It is clear that the costs will be extremely high. According to one unofficial estimate, the simple replacement of the NWS as is will cost around \$4 billion. A system of systems may cost around \$11 billion.

It is not assured, however, that, as in the case of the construction of the NWS, these costs will be fully shared on a 60:40 basis as currently agreed upon, with the U.S. paying the majority. Some might speculate that President Donald Trump, given his determination to be the president who makes allies pay their “fair share”, will seek to re-negotiate the arrangement, but this is unlikely. North American defence arrangements rarely gain the attention of presidents in any detailed sense; relevant bureaucratic and military actors overwhelmingly drive these understandings. Moreover, Canada in the context of North America is not Europe. Instead, the key question lies in the definition of what specifically falls under the cost-sharing agreement.

While cost-sharing reduces the burden on the Canadian budget, the actual costs to Canada depend not only upon the agreed solution, but also upon what is defined as NORAD early warning infrastructure, including the costs of FOLs.¹⁵ Besides the high costs of building infrastructure in the Arctic, there is also the question of environmental cleanup if the NWS is disassembled. This is yet another very large elephant in the room for future Canadian defence spending, which may require significant increases beyond those planned in the recent white paper or a shift in investment priorities altogether. Whether the current government is fully aware of the cost implications of a renewed, replaced and/or modernized NWS is an open question.

Conclusion

NORAD continues to be essential to the defence of North America. All commanders have taken seriously the responsibility to deter, detect and defend it by continually reviewing future threats, C² architecture and needed capabilities. The threats facing North America today, however, can reach it more quickly via more domains, which means that NORAD needs to continue to evolve and modernize in very new ways. As is the case in successive Canadian defence policies, the devil that is in the financial details is often hidden, absent or underestimated. On that score, Canada is always consistent. Canada's elephant is not the United States; it is a lack of financial planning.





CHAPTER 5

IMPLEMENTING *STRONG, SECURE, ENAGAGED*:
RESOURCE MANAGEMENT CHALLENGES

COLONEL ROSS FETTERLY (RETIRED), PHD

ABSTRACT

The 2017 policy reset to the defence establishment provided by Strong, Secure, Engaged provides a reinforcement of continuing institutional renewal and adaptation to the transforming security environment. The reality in the coming years, however, of simultaneously growing the numbers of military personnel and public servants in defence, ramping up recruiting and training capability, maintaining ageing equipment, purchasing and transitioning to new equipment, all the while adapting to a transforming military force and coping with a shifting international strategic environment and activity levels, will be a significant institutional challenge. While conditions continue to change in the international strategic environment, the fundamentals of defence resource management have not, nor will they. Three distinct issues are likely to impact resource management going forward: the first is people – the continued inability to recruit in-demand civilians to meet annual military recruiting targets will constrain the ability of the defence establishment to deliver capability; the second is the experience gap of military personnel that developed during the 1990s – the gap will have moved to the cadre with the most experience and who are at the end of their careers at a time when implementation of the 2017 defence policy will reach a critical point; and finally, the third considerable challenge to Canadian governments is economic – maintaining planned expenditure levels over an extended period of time. To fund Strong, Secure, Engaged at planned levels over the next 20 years would be an historic precedent indeed.





In an age of urgency, where strategy, structure and people are significant contributors to organisational success,¹ the competitive landscape keeps transforming throughout all sectors of the economy causing government, corporations, small businesses and universities to constantly examine the external environment and how they can better organise and operate within current surroundings. In defence, this is particularly evident in the fluid international security environment where governments in recent years have reassessed their defence strategies, the missions they undertake and the funding levels required to operate in a changed strategic environment. Under this construct, the Canadian government released a new defence policy in 2017 entitled *Strong, Secure, Engaged* (SSE).² A defence policy, as with any other government policy, is in effect ideas put into action. In particular, the defence policy centres on strategy and people within a largely established, but evolving, structure. These ideas include growth in authorized levels of military and civilian personnel; a dramatic increase in the capital equipment procurement program; more support for military personnel and their families; as well as greater financial transparency with respect to defence funding. The ideas articulated in SSE will both influence and shape the defence establishment while forming the framework under which the management of defence resources will function. It is evident that the recent decade in which the Canadian Armed Forces (CAF) was engaged in the Afghanistan mission has had a profound impact on both the department and military – demonstrated by a stronger institutional focus towards long-term planning³ – that clearly resonates in SSE and is likely to continue over the near-term.



In an international security environment where the only constant is change, the shelf life of defence policies are shrinking and organisational imperatives for defence departments are shifting. Increasingly, national defence establishments are being called upon to be more adaptive to a fluid and uncertain environment. The policy reset to the Canadian defence establishment provided by SSE reinforces the idea of continuing institutional renewal and adaptation to the transforming security environment. The reality in the coming years, however, of simultaneously growing the numbers of military personnel and public servants in defence, ramping up recruiting and training capability, maintaining ageing equipment, purchasing and transitioning to new equipment, all the while adapting to a transforming military force and coping with a shifting international strategic environment and activity levels, will be a significant institutional challenge. When all of these undertakings are combined, the resulting situation can be expected to decidedly magnify program and budgetary challenges. These effects, both internal and external to defence, will continue notwithstanding the increased funding levels promised by the government. This chapter will focus on key issues that are likely to impact both the defence budget and implementation of SSE over the coming decade, beginning with a consideration of the primary budgetary elements of Personnel, Operations & Maintenance (O&M) and Capital Equipment; the final section will consider the capacity of the defence establishment to execute the tenets of SSE.

Defence Budget Elements: Personnel, O&M and Capital Equipment

Personnel

The management of human resources in the CAF has gradually evolved in recent decades from that of a supporting function to one of increasing importance as an institutional strategic enabler. Yet, despite considerable focus on human resource issues in the CAF, challenges persist. In the coming decade, informed decisions on programs related to recruiting and retention, wellness and family support need to be taken. Furthermore, changes to operational demands will have the potential to impact existing skill sets and force structure requirements; consequently, increased attention directed towards personnel and unit readiness can be expected.

As the Department of National Defence (DND) and CAF move through the coming decade, how the defence establishment prepares its military and civilian personnel for the future operating environment needs to become an essential institutional focal point. Indeed, the next decade's demographics will cause a generational change within the Canadian military and younger members will need to be prepared for the future operating environment. Notwithstanding the capital-intensive nature of the DND and CAF, it is people – both military and civilian – that drive the institution and execute their assigned tasks to the best of their abilities to deliver required outputs. In this environment, where uncertainty is increasing and decision cycles are decreasing, soldiers, sailors and air personnel will need to be prepared to deploy without extensive preparation to a complex, multinational, asymmetric environment overseas. This scenario is a possible primary catalyst in the development of future training requirements and also elevating costs.

The environment in which defence personnel will work into the next decade is evolving in a number of different ways. First, the steep growth in data, combined with the precipitous expansion in computing power, increases



the probability that military personnel at all levels will be inundated with information and by the intensification of technology in both headquarters and the operating environment. This implies greater automation of the workplace, where armed forces and defence departments “will need to redefine jobs and processes so that their organizations can take advantage of the automation potential that is distributed across them.”⁴ As a probable consequence, fewer military personnel will be required for the same output. While this trend is not new, the pace of automation is increasing. The implication for defence is that the training bill and investment in job-related skills will grow – most notably leadership and decision-making ability will increase in importance and more training will be needed in those areas for personnel to function effectively in the future operating environment.

Second, changes in the operating environment will probably require a rebalance of qualifications and skill sets in personnel at all ranks. This is due to a greater emphasis on certain skill sets becoming increasingly apparent within military settings, which will in turn, have an impact on the need for greater recruiting for cyber, information technology, information operations, intelligence and in relationship-building-type jobs (such as liaison officer in a multinational setting or in civil/military relations). The accumulative effect of demands for additional information technology and information management can be expected to result in demands for further growth in military and civilian defence establishment positions. In a discipline where the private sector is already aggressively competing for individuals in this field, the DND and CAF need to position themselves in a manner that attracts these highly skilled and in-demand people.

And finally, the history of CAF overseas commitments since the beginning of the 1990s has been one of de-

"As a probable consequence [to automation], fewer military personnel will be required for the same output"

ployments as part of United Nations or other multinational missions from peacekeeping to warfighting to countries or regions where years earlier it would not have been expected. Operating in this type of environment places a premium on soft skills. While lessons learned in recent decades have changed some of the ways in which CAF personnel are prepared for deployments, given the evolving future security

environment, more emphasis on soft skills in such areas as digital literacy, cultural awareness, negotiation in a coalition setting, operational adaptability, language, self-awareness and flexibility is required as part of integral military training.

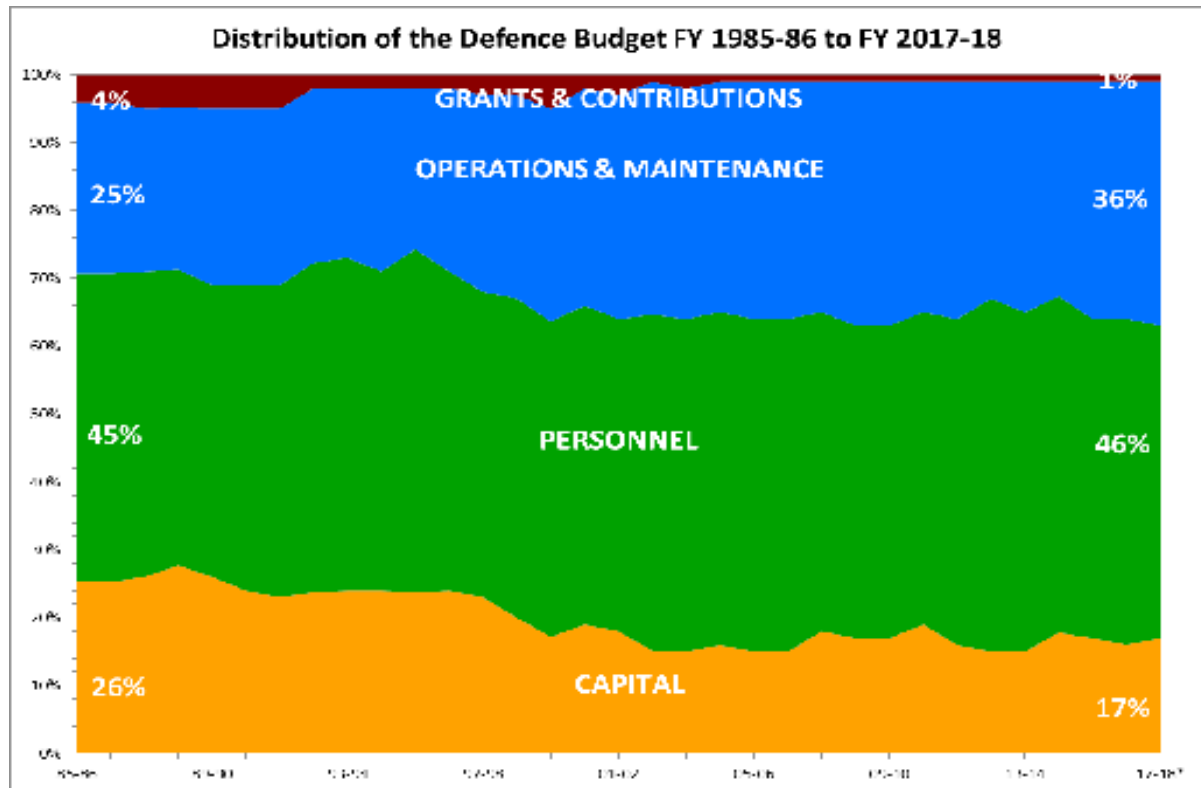
Operations & Maintenance

The dominant theme in resource management for the past two decades has been the growth of O&M at the expense of capital expenditure. This is illustrated in Figure 5-1. The impact of these historical expenditure allocations will reverberate over the timeframe of the 2017 defence policy. This is noteworthy because growing demands on the O&M budget can be a leading indicator of future defence budget pressures, namely the availability of reduced funds for equipment procurement. Operations and maintenance expenditures consist of a wide assortment of elements that appear unrelated, yet are interconnected by the collective nature of sup-



port they provide to CAF activity rates. This conundrum highlights the central dilemma in defence resource management – that of whether the focus should be near-term (O&M), or long-term (capital equipment), or an uneasy mix of both.

Figure 5-1



Several factors will impact O&M over the next decade. First, SSE calls for increases of both military (3,500 Regular Force and 1,500 Reserve Force) and civilian (1,150) personnel, which will create a significant incremental demand for O&M resources. Second, increased use of ageing equipment will create further pressure on the centrally managed National Procurement (NP) budget for spare parts and maintenance within the Assistant Deputy Minister (Materiel) (ADM (Mat)) organisation.⁵ While the DND NP budget does not normally receive significant external scrutiny, it is one of the most significant elements of O&M expenditure. The NP budget:

provides the wide variety of support services that allows the CAF equipment to function while on deployed operations, during training or in support to Canadians during natural disasters. The NP budget is a consolidated and centralized budget, managed by specialists, which acquires materiel and/or services necessary to support existing equipment, or systems, that are administered centrally.⁶

The impact of current funding pressures in the NP budget, over time, could result in “backlogs of required work, fewer sea days and flying hours, reduced availability of equipment for training activities and operational requirements, more laborious and expensive corrective repairs, and reduced life expectancy of military equipment.”⁷



Although there are many cost drivers that influence O&M expenditure, there are six interrelated cost drivers that largely determine Canadian O&M costs. They are interconnected in that each relate to people, their equipment and the activities that they undertake. These six fundamental cost drivers include: 1) the number of military personnel; 2) activity rate of the CAF; 3) age of equipment in the defence inventory; 4) type of equipment usage; 5) increasing level of fixed costs; and 6) defence-specific inflation. These six central defence cost drivers in Canada describe the character and shape of demands on defence budgets leading into the next decade. Viewed collectively, the programed increases of military and civilian personnel (who will need training, development and will consequently consume O&M), an ambiguous global security environment that will place operational demands on the use of high value and high operating cost fleets, some equipment fleets ageing while others are replaced, increased use of long-term fixed capital equipment manufacturer maintenance contracts, and finally the integration of new capital equipment fleets and capabilities loaded with extraordinary levels of technology will all have an elevated impact on the defence-specific inflationary effects on O&M. The combined impact of these fundamental and overriding cost drivers will be a relentless pressure on O&M defence budgets. While DND officials understand current cost drivers, the next decade will constitute a shift to a different blend of these six historical cost drivers, which may have unexpected consequences regarding O&M costs. While O&M costs have a near-term focus, expenditure on capital equipment procurement is a long-term investment in CAF capability.

"the long-term viability of the CAF rests largely on the capability of the defence procurement process to purchase, or upgrade, the right equipment, and in a timely manner"

Capital Equipment

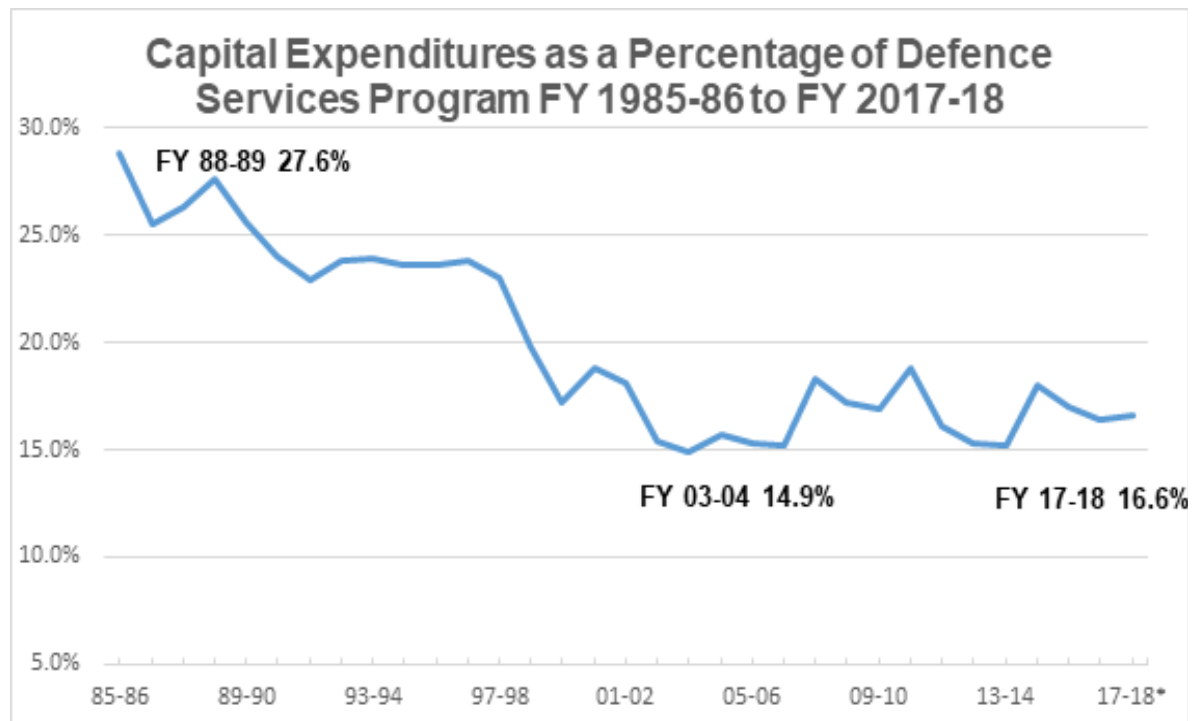
A key pillar in rebuilding the capacity of the CAF to meet the current and emerging challenges of the next decade is the wide-ranging need for recapitalization and modernization of a number of major defence equipment fleets. While SSE addresses the need to replace or upgrade a considerable number of equipment fleets, as well as new capabilities, all of this will require capital equipment funding earmarked in the fiscal framework for the next two decades actually being made available. In a rapidly evolving strategic environment that places a premium on a responsive procurement system, the long-term viability of the CAF rests largely on the capability of the defence procurement process to purchase, or upgrade, the right equipment, and in a timely manner, as detailed in SSE.

The existing capacity within defence has placed significant limitations on the responsiveness of the department to react to increases in demand for capital equipment, despite some recent personnel growth and internal institutional reforms in governance and procurement processes. Building capital equipment procurement capacity is a complex, difficult, medium-term activity that requires sustained institutional effort. Faced with existing military and civilian personnel shortages and ongoing deployed operations, the availability of personnel for employment in project management offices is limited. Indeed, capability limitations have been a limiting factor



in responding to the accumulating demands placed on ADM (Mat) given the growth in procurement programs in recent years. The actions taken in 2018 and in the coming years can be expected to have a direct impact on the level of capacity and output that ADM (Mat) will deliver. Specifically, timely delivery of capital projects will be closely linked to the ability of the department to develop and sustain sufficient capacity within the capital acquisition process. If this does not occur, insufficient capacity will delay implementation and delivery of policy-directed capital equipment projects, negatively impacting planned CAF capabilities. Consequently, planning and implementation of increased capacity needs to occur in order to establish the conditions for new capabilities to be delivered a decade from now.

Figure 5-2



Timeliness of capital equipment projects is becoming an operational imperative. Figure 5-2 illustrates the difficulty in Canada over the past 20 years of increasing procurement to the level of the early 1980s and 1990s, when the CF-18s and Canadian Patrol Frigates were coming into service. Nevertheless, despite considerable investment in ADM (Mat) and in defence procurement reform over the past decade, increases in capital equipment procurement as a percentage of the defence budget have been marginal. A fundamental concept in defence economics is that the average age of equipment in military inventories ages slowly. Yet, following extended periods of under-investment, it takes many years of active re-investment to bring the average age of equipment fleets back down. In order to maintain relatively modern and constant-age capital equipment in the CAF inventory, a sustained investment of capital in the range of a quarter of the defence budget is likely required. This will surely be a considerable challenge to the Government of Canada, in a necessary whole-of-government⁸ approach to defence procurement.



Having considered the primary budget elements of personnel, O&M and capital equipment, the capacity to implement SSE will be examined next.

Capacity to Implement SSE

The management in defence of a diverse range of very different military capabilities is an undertaking that requires continual institutional effort and constant monitoring, as well as the ability to respond promptly to changing circumstances. Consequently, effectively administering resources, in addition to ensuring that the necessary oversight and management functions are, for example, operating effectively, is becoming the centre of gravity within the defence establishment. The defence policy released in June 2017 outlined the Government of Canada's defence priorities while providing direction to the defence department on a range of issues, the most prominent relating to people and capital equipment procurement. Meeting government policy objectives will require a long-term concentrated and detailed institutional effort. There appears to be a lack of institutional consensus within National Defence Headquarters (NDHQ), however, that implementing SSE is the primary defence priority. For instance, increased project submissions from DND to Treasury Board, or a public campaign to hire additional public servants to meet the higher staffing levels authorized by SSE, would clearly demonstrate a shift in resources towards policy priorities, but such have not yet occurred. This apparent malaise needs to be resolved in the near-term.

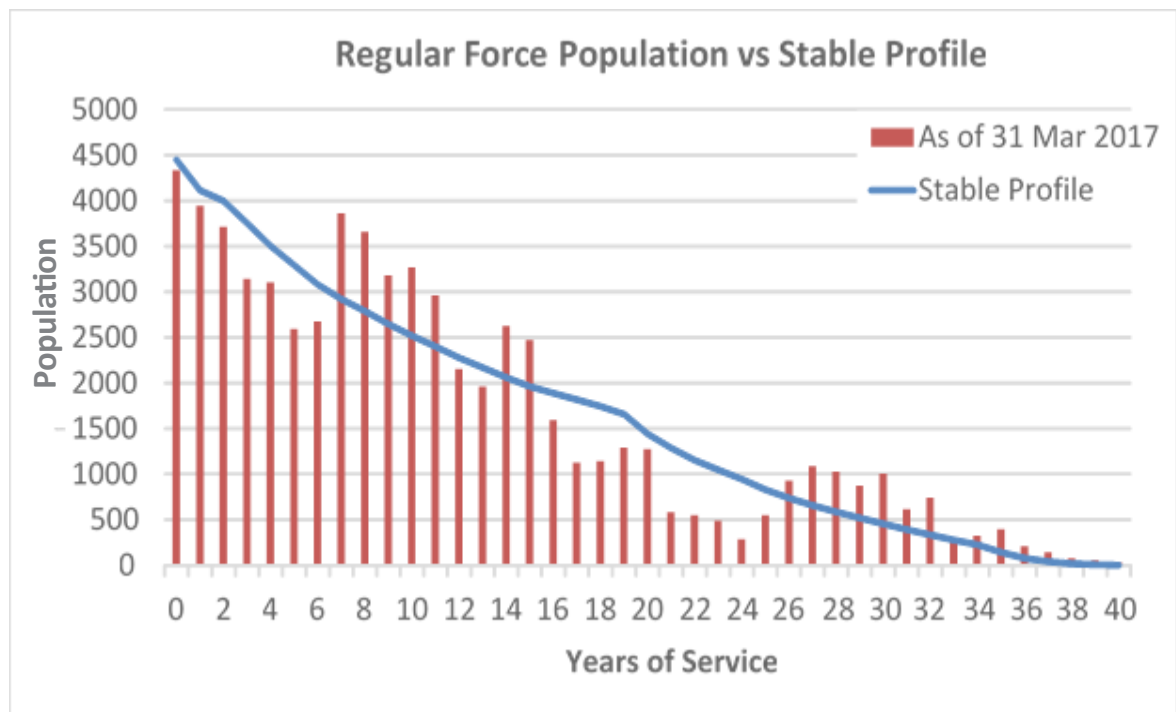
When defence-relevant strategic shocks occur, they sometimes change the conventional perspectives of defence departments. A drastically new or altered environment “forces the entire defence enterprise to reorient and restructure institutions, employ capabilities in ways, and confront challenges that are fundamentally different than those routinely considered in defence calculations.”⁹ Consequently, managing defence resources effectively in an uncertain environment is likely to be central to sustained institutional success at NDHQ over the coming decade.

In the current international strategic environment, the use of new technologies by national military organizations does not necessarily assure victory in conflict. It is the “integration of innovation into effective methods and means that gives a strategic or tactical edge.”¹⁰ Thus, it can be expected that the Canadian defence establishment will need to address disruptive technologies as an essential component of defence posture and management. At a time where innovation is accelerating, an organisational imperative of defence organizations is an ability to keep up-to-date with technological change. While the speed of international security crises are occurring faster, the rate of government bureaucratic decision-making has not kept pace. This is due in part to the long lead time for military organisations to acquire and deploy new capabilities. In many organizations, decision cycles, as well as the time needed to react to change, will have to be decreased. Out of necessity, this will cause changes to long-established practices and procedures. While defence organizations have worked to get inside the decision cycle of their opponents for decades, the lessons from Iraq¹¹ and Afghanistan have indicated that speeding up the decision cycle is no longer sufficient.



The level of CAF readiness will need to be responsive to unexpected shifts or changes in the future security environment. People, equipment and facilities, as well as funding, will need to be available to respond to a crisis or coalition operation in short order. Readiness can be viewed from operational or structural perspectives.¹² Operational readiness is near-term and inward looking with a focus on efficiency and therefore assessing the difference between actual and potential capability; in contrast, structural readiness is outward looking and concerned with the overall size that the national military force needs to be to successfully engage opponents. The resource implication for the CAF in the future is that structural readiness needs to be an institutional priority. A number of different factors – the planned changes directed by SSE, the changes in the composition of military forces over the coming decade, the adjustments to the cost of supporting weapon systems and the adjustments to activity levels – can all combine to affect the funding level of O&M available to support the maintenance of desired levels of readiness.

Figure 5-3



Furthermore, the age profile of CAF personnel in terms of years of service also impacts on the capacity of military personnel to implement SSE. The CAF has two significant experience gaps in the age profile of the current military population.¹³ This is evident in Figure 5-3, where the effects of reduced recruiting can be seen at “years of service” points where the population profile is below the stable personnel profile. In particular, the Forces Reduction Plan, which was used in the downsizing of the CAF to 60,000 personnel as part of the Canadian government’s strategy to eliminate the large structural deficit in Budget 1994,¹⁴ resulted in a considerable gap in the number of personnel with between 22 and 26 years of service. When combined with a smaller, yet significant, gap of personnel with between 17 and 21 years of service, this substantial and protracted ten year experience gap



(generally, 17 to 26 years of service) will become evident shortly when less-experienced people will be managing a large portfolio of SSE-mandated capital equipment projects. In an organisation that promotes individuals internally, this experience gap could have a negative impact on CAF leadership and impact NDHQ's capacity to move initiatives and projects forward. Hence, the current experience gap will be a significant structural impediment that could potentially impact corporate-level capacity to implement SSE. This structural impediment is derived from the significant number of years in Figure 5-3 where recruiting fell short of target levels.

Conclusion

One constant feature in the defence environment in recent decades has been change. This highlights the need to keep engaged as the final victors of each new era "have not usually been the states that initiated the revolution, but those that responded best once the technologies and techniques had become common property."¹⁵ This idea highlights the necessary long-term nature of national defence establishments and the need for governments to provide continuing attention to national security. Such has proven to be a challenge in Canada. As a country of regions, national governments of all parties need to strike a balance between regional and national perspectives. Compromises are often made – this is a principal reason why Canada has been a successful and cohesive country. Yet, this can also mean that defence is not always a priority for Canadians and resources are at times allocated to other priorities. Furthermore, there does not appear to be a unifying strategic vision regarding a whole-of-government approach to the 2017 defence policy. An omission such as this could impact on the implementation of SSE at the federal level. Over the next decade, Canada could enter into a recession, while governments and national priorities could change. The history of defence funding in Canada, outside of periods of conflict, is one of budget cuts followed by periods of reinvestments. The most important challenge to defence in the next decade will be the ability to maintain defence as a priority over time, as the economy slows or government priorities shift. Based on the history of defence funding in Canada, the defence establishment can expect periods where SSE elements may not be fully funded.

Changing the objectives of defence policy into military capability can take years or decades depending on the capability. It requires a long-term sustained government and defence effort. Success will be defined by how SSE is implemented and the milestones upon which government and department are assessed over the next decade. While the current operational tempo allows the DND and CAF to provide an institutional focus on defence policy implementation, activity rates could increase that could draw people and resources to other priorities. Nevertheless, it is important to acknowledge that while conditions continue to change in the international strategic environment, the fundamentals of defence resource management have not, nor will they. While defence establishments are planning machines, it will take a long-term concentration of effort and prioritisation of SSE initiatives institutionally to achieve the designated objectives. This will include ranking SSE initiatives for staffing over other institutional priorities.

Successful implementation of SSE over the next decade is likely to involve addressing three distinct and important issues. First is people, both military and civilian. People move programs. The continued inability to recruit



to annual targets will not only reduce the ability to implement SSE, but also constrain the ability of the defence establishment to deliver capability. Second is the experience gap of military personnel that developed during the 1990s. In a decade, the gap will have moved to the cadre with the most experience and who are at the end of their careers. At a time when implementation of SSE will be at a critical point, experienced personnel will be below the desired level. This gap will need to be addressed through contractors or other strategies, which potentially may be expensive. Finally, the third considerable challenge to Canadian governments is maintaining planned expenditure levels over an extended period of time. To fund SSE at planned levels over 20 years would be precedent-setting. Right now, SSE is a concept, existing on paper only; the trick, the challenge, will be to turn it into reality, hopefully in full, but most probably in part if history is any guide.



AFTERWORD

Strategic Outlook 2018 has presented a glimpse of what the world might possibly look like in a decade from now and suggested some possible implications for Canada across a diverse spectrum of topics. The picture that has been painted, when considered *in toto*, is somewhat dark, leaving the distinct impression that in the future our country will undoubtedly face a range of extremely difficult challenges. The conclusion to be drawn is that if Canada is to successfully engage with these complex and multifaceted questions, especially from a security and defence perspective, it must begin preparing now; there is something to be said for being proactive rather than reactive given the possible consequences of inactivity.

Over the next ten years, Canada will have to contend with external issues emanating from each cardinal direction: to the north, true renewal and modernization will be required to ensure NORAD's continued viability and usefulness in defence of the continent; to the south, it will have to contend with the retreat of America from its position of global leadership in all of its various dimensions and, more locally, its responses to instability in Mexico; to the west, the nation will need to engage meaningfully in an Indo-Pacific dominated by the rise of China as the regional hegemon; and to the east, in Central and Eastern Europe, Canada will have to meet a creeping and increasingly meddlesome Russia. The *Strategic*

Outlook deliberately did not cast its gaze in this direction given the regular attention that “reassurance” and “deterrence” receive in academic and policy circles when discussing the region and Canadian deployments to support NATO in Latvia, the Baltic Sea and in the air. To further complicate matters, challenges internal to Canada also abound. How *Strong, Secure, Engaged* is actualized – how resources are effectively managed to turn mere words into people, equipment and capabilities that can then be used in pursuit of national objectives – will surely be problematic given the historic tendency to only partially implement defence policies over time.

Anywhere that Canada looks, either beyond or within its borders, security and defence challenges are manifest, and *Strategic Outlook 2018* has focused on some of these vitally important issues. It is not difficult, however, to identify other areas of concern. Rapid technological change over the next decade (even over the next year in some cases) will compel Canada to decide how it will negotiate the cyber domain in respect of crime, terrorism, privacy, offensive and defensive operations, and of course security. The commercialization of space will surely present a host of challenges as well, from weaponization to exploration to colonization. A warming Arctic, combined with more assertive Arctic and near-Arctic nations, will challenge Canada to enforce its sovereignty and protect itself. Both the Department of National Defence and the Canadian Armed Forces will



likewise need to consider how best to maximize their human resource potential in order to deal successfully with a sometimes ambiguous, but always complex, operating environment. And so the list continues.

In light of this mass of issues, one must avoid the natural temptation to view each in isolation. Rather than being discrete and separate, as they have been presented in the preceding chapters, these challenges form part of a complex web of interrelationships and interdependencies, where policy approaches to one may have ramifications for others, positive, negative or otherwise. As in the past, contemporary security and defence is a “wicked” problem, one that defies comprehensive resolution given the constantly shifting “environment” in which this drama unfolds.

Despite the varying levels of analysis taken by the preceding chapters – beginning with the global perspective and then moving down through the regional and country-specific and concluding with the national – the theme of national economic capacity, broadly interpreted, is constant throughout. Of note, authors were not asked to discuss fiscal matters, but arrived at that conclusion entirely on their own, independently. If Canada is truly serious about being strong at home, secure in North America and engaged in the world, it will cost the nation’s taxpayers billions of dollars to revitalize NORAD, support Mexico through a whole of government approach, equip the military

to be credible and capable in the absence of the United States and, at the most basic level, implement even a fraction of the commitments made in the new defence policy. Other no less important security and defence priorities will also compete for the same limited resources. Without predictable (and significant) funding, little of what has been proposed in these pages will ever come to fruition, much to the nation’s detriment.

But more than money, there must be a concomitant investment of political will over the long-term. Successive governments of whatever stripe must look beyond the next election, abandoning their “short-termism” in other words, and commit seriously to positioning the nation, through DND, the CAF and other agencies of national power, for success in a continually evolving and always challenging security environment. *Strong, Secure, Engaged* is the foundation, but without the sustained desire and will to implement it (or any other future defence policy for that matter) over many years, and indeed multiple governments, its publication will have been nothing more than an exercise of the mind.

The CDA Institute’s intent, in being provocative and slightly unconventional through this year’s Strategic Outlook, was to provide food for thought. This document is not intended to be the definitive analysis of the many security and defence challenges that Canada will face in an unpredictable future, but it is intended,



however, to initiate and further the discussion on issues where Canada can prepare now to negotiate the world in the next decade and beyond.

Readers wishing to contribute to the ongoing debate may offer their own thoughts and opinions at <https://cdainstitute.ca>.

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CDA Institute*





NOTES

Foreword

1. Government of Canada, Global Affairs Canada, “Address by Minister Freeland on Canada’s foreign policy priorities”, 6 June 2017, https://www.canada.ca/en/global-affairs/news/2017/06/address_by_ministerfreelandoncanadasforeignpolicypriorities.html, accessed 5 February 2018.
2. Government of Canada, Department of National Defence, *Strong, Secure, Engaged – Canada’s Defence Policy*, 2017, <http://dgpapp.forces.gc.ca/en/canada-defence-policy/docs/canada-defence-policy-report.pdf>, accessed 30 January 2018.
3. Eva Dou, “A New Cold War? China Declares Itself a ‘Near-Arctic State’”, 26 January 2018, *The Wall Street Journal*, <https://www.wsj.com/articles/a-new-cold-war-china-declares-itself-a-near-arctic-state-1516965315>, accessed 5 February 2018.
4. Alexander Panetta, “Ex-Mexican president to Trudeau: Don’t be ‘Judas’ and betray us on NAFTA”, 20 November 2017, *The Globe and Mail*, <https://www.theglobeandmail.com/news/politics/ex-mexican-president-to-trudeau-dont-be-judas-and-betray-us-on-nafta/article37028013/>, accessed 5 February 2018.

Chapter 1

1. As Rachel Curran notes, “Deliverology is simply the science (or art, depending on your perspective) of delivering on goals and promises, particularly those made by governments. It relies on a clear identification of priorities; the setting of targets and the collection of data related to those priorities; and the exercise of central oversight through a unit reporting directly and regularly to the leader.” See Rachel Curran, “Will ‘deliverology’ work for the federal government?” *Policy Options*, 27 April 2016, <http://policyoptions.irpp.org/magazines/april-2016/is-deliverology-right-for-canada/>, accessed 11

February 2018,

2. Fareed Zakaria, *The Post-American World* (New York: W.W. Norton, 2008).
3. Paul Harris, “One in four Americans think Obama may be the anti-christ, survey says,” *The Guardian*, 2 April 2013, <https://www.theguardian.com/world/2013/apr/02/americans-obama-anti-christ-conspiracy-theories>, accessed 11 February 2018.
4. Adam Serwer, “The nationalist’s delusion,” *The Atlantic*, 20 November 2017, <https://www.theatlantic.com/politics/archive/2017/11/the-nationalists-delusion/546356/>, accessed 11 February 2018.
5. See “Donald Trump’s argument for America,” 4 November 2016, https://www.youtube.com/watch?time_continue=15&v=vST61W4bGm8, accessed 11 February 2018.
6. Stephen Saideman of Carleton University calls it “hegemonic abdication theory,” a play on “hegemonic stability theory,” a core theoretical approach to understanding American hegemonic leadership in global affairs from 1945. See <http://saideman.blogspot.ca/2017/12/hegemonic-abdication-theory.html>, accessed 11 February 2018.
7. See the Government of Canada’s webpage on the CPTPP, <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/tpp-ptp/index.aspx?lang=eng>, accessed 11 February 2018.
8. A reference to George Orwell’s 1949 novel, *Nineteen Eighty-Four*, in which the British Isles, known as “Airstrip One,” have been incorporated into the fictional superstate of Oceania.
9. Government of Canada, Global Affairs Canada, “Address by Minister Freeland on Canada’s foreign policy priorities,” 6 June 2017, House of Commons,

Debates, https://www.canada.ca/en/global-affairs/news/2017/06/address_by_ministerfreelandoncanadasforeignpolicypriorities.html, accessed 11 February 2018.

10. Government of Canada, Department of National Defence, *Strong, Secure, Engaged – Canada’s Defence Policy*, 2017, <http://dgpapp.forces.gc.ca/en/canada-defence-policy/docs/canada-defence-policy-report.pdf>, accessed 11 February 2018.

Chapter 2

1. Graham Allison, “The Thucydides Trap: Are the U.S. and China Headed for War?”, *The Atlantic*, 24 September 2015, <https://www.theatlantic.com/international/archive/2015/09/united-states-china-war-thucydides-trap/406756/>, accessed 13 December 2017.
2. Anonymous, “Indonesia Considers Joining Forces with ‘UNCLOS Defenders’ to Defend Strategic Interests”, *Jakarta Globe Online*, 14 December 2017, <http://jakartaglobe.id/news/indonesia-considers-joining-forces-unclos-defenders-defend-strategic-interests/>, accessed 14 December 2017.
3. James Stavridis, “China’s military power already on par with US in East Asia”, *Nikkei Asian Review*, 22 November 2017, <https://asia.nikkei.com/Viewpoints/James-Stavridis/China-s-military-power-already-on-par-with-US-in-East-Asia>, accessed 13 December 2017.
4. Jonathan Manthorpe, “The dawn of a fascist China - and what it means for us”, *iPolitics*, 12 October 2017, <https://ipolitics.ca/2017/10/12/the-dawn-of-a-fascist-china-and-what-it-means-for-us/>, accessed 15 December 2017.
5. Stein Ringen, “A dazzling spectacle of China’s totalitarianism”, *Washington Post*, 18 October 2017, <https://www.washingtonpost.com/opinions/a-dazzling-spectacle-of-chinas-totalitari->



- anism/2017/10/17/364bf8e4-b296-1e7-9e58-e6288544af98_story.html, accessed 15 December 2017.
6. Lindsay Hughes, "Implications of the Chinese Communist Party's 19th Congress: Part One: Xi Consolidates Power", *Future Directions International*, 23 November 2017, <http://www.futuredirections.org.au/publication/implications-chinese-communist-partys-19th-congress-part-one-xi-consolidates-power/>, accessed 15 December 2017.
 7. Jim McGregor, "Xi Jinping's New Era of Global Leadership", *Diplomatic Courier*, 7 December 2017, <https://www.diplomaticcourier.com/2017/12/07/xi-jinpings-new-era-global-leadership/>, accessed 15 December 2017.
 8. One example of United Front activities is the use of the Chinese diaspora as vectors of influence for Beijing, fifth columnists and agents of soft power. See for example, Michael McGowan, "Chinese government exerts influence across Australian society, MPs told," *The Guardian*, 30 January 2018, <https://www.theguardian.com/australia-news/2018/jan/31/chinese-government-exerts-influence-across-australian-society-mps-told>, accessed 2 February 2018. Less covert strong-arming by the CCP has also been observed. See for example, Josh Horwitz, "China is retaliating against a US university for inviting the Dalai Lama to speak at graduation" *Quartz*, 19 September 2017, <https://qz.com/1080962/china-is-retaliating-against-the-university-of-california-san-diego-for-inviting-the-dalai-lama-to-speak-at-commencement/>, accessed 2 February 2018.
 9. Evan A. Feigenbaum, "The Big Bet at the Heart of Xi Jinping's 'New Deal'", *Macro Polo*, 27 November 2017, <https://macropolo.org/big-bet-heart-xi-jinpings-new-deal/>, accessed 12 December 2017.
 10. Ilaria Maria Sala, "Chinese investment aid to Sri Lanka has been a major success—for China", *Quartz*, 26 January 2017, <https://qz.com/896219/chinese-investment-aid-to-sri-lanka-has-been-a-major-success-for-china/>, accessed 15 December 2017.
 11. Anonymous, "Prospects for Pakistan in 2018", *Oxford Analytica*, 27 November 2017, <https://dailybrief.oxan.com/Analysis/DB226058/Prospects-for-Pakistan-in-2018>, accessed 13 December 2017.
 12. Commentary made to the author at the United Services Institute seminar, "From Contest to Cooperation: A Vision for Shared Prosperity in the Indo-Pacific Region", New Delhi, India, 2-3 November 2017.
 13. Isaac Kfir, "American power, where art thou?", *Asia & the Pacific Policy Society*, 17 November 2017, <https://www.policyforum.net/american-power-art-thou/>, accessed 15 December 2017.
 14. Les Whittington, "For Liberals, it was a year of spinning their wheels", *Hill Times*, 13 December 2017, <https://www.hilltimes.com/2017/12/13/liberals-year-spinning-wheels/128532>, accessed 14 December 2017.
 15. Dipanjan Roy Chaudhury, "India, Japan & Australia firm up partnership for free and open Indo-Pacific region", *Economic Times*, 13 December 2017, <https://economictimes.indiatimes.com/news/defence/india-japan-australia-firm-up-partnership-for-free-and-open-indo-pacific-region/articleshow/62055943.cms>, accessed 14 December 2017.
 16. Danielle Rajendram, "India's new Asia-Pacific strategy: 'Act East'", *Lowy Interpreter*, 18 December 2014, <https://www.loyyinstitute.org/the-interpretor/indias-new-asia-pacific-strategy-act-east>, accessed 15 December 2017.
 17. Nick Bisley, "Mistrust of Australia is growing in China", *Lowy Interpreter*, 4 December 2017, <https://www.loyyinstitute.org/the-interpretor/mistrust-australia-growing-china>, accessed 15 December 2017.
 18. Sanjeev Miglani, "Indian navy the odd man out in Asia's 'Quad' alliance", *Reuters*, 22 November 2017, <https://www.reuters.com/article/us-india-usa-quad/indian-navy-the-odd-man-out-in-asias-quad-alliance-idUSKBN1DM0UB>, accessed 15 December 2017.
 19. Oriana Skylar Mastro, "Why China Won't Rescue North Korea", *Foreign Affairs*, January/February 2018 issue, <https://www.foreignaffairs.com/articles/asia/2017-12-12/why-china-wont-rescue-north-korea>, accessed 15 December 2017.
 20. Marius Grinius, "How Canada can help solve the North Korea crisis", *Globe & Mail*, 29 November 2017, <https://www.theglobeandmail.com/opinion/canada-picks-up-the-north-korea-file/article37126788/>, accessed 15 December 2017.
 21. Ten member states including Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.
 22. Anonymous, "A Constructive Year for Chinese Base Building", *Asia Maritime Transparency Initiative*, 14 December 2017, <https://amti.csis.org/constructive-year-chinese-building/>, accessed 14 December 2017.
 23. Kamran Bokhari, "For India and China, Southeast Asia is a Battleground", *Geopolitical Futures*, 12 December 2017, <https://geopoliticalfutures.com/india-china-southeast-asia-battleground/>, accessed 15 December 2017.
 24. Noor Zahid, "Islamic State Becoming a Growing Presence in Southeast Asia", *Voice of America News*, 25 August 2017, <https://www.voanews.com/a/islamic-state-becoming-growing-presence-in-southeast-asia/4001693.html>, accessed 15 December 2017.
 25. Government of Canada, Department of National Defence, *Strong, Secure, Engaged – Canada's Defence Policy*, 2017, <http://dgpapp.forces.gc.ca/>



en/canada-defence-policy/docs/canada-defence-policy-report.pdf, accessed 30 January 2018.

Chapter 3

1. *Strong, Secure, Engaged: Canada's Defence Policy*, 7 June 2017, Chapter 4. Accessed at <http://dgpaapp.forces.gc.ca/en/canada-defence-policy/docs/canada-defence-policy-report.pdf>.
2. The limited nature of the relationship is clearly revealed in Governments of Canada and Mexico, *Canada-Mexico Partnership - 2016 Annual Report*, accessed at <http://www.canadainternational.gc.ca/mexico-mexique/2016c-mp-pcm.aspx?lang=eng>.
3. Primarily focused on criminal activity. See Canada, Prime Minister's Office, *Canada-Mexico Cooperation on Security and Defence*, 28 June 2016. Accessed at <https://pm.gc.ca/eng/news/2016/06/28/canada-mexico-cooperation-security-and-defence>.
4. Robert D. Kaplan, *The Revenge of Geography: What the Map Tells us About Coming Conflicts and the Battle Against Fate* (New York: Random House, 2013), 332. By "ceased to matter", he means the two countries have successfully moved beyond classical state-versus-state border conflict.
5. *Ibid.*, 335.
6. *Ibid.*, 338.
7. *Ibid.*, 332. For a good illustrative and more personalized description, see Paul Hunter, "What's up with Trump's border wall? Prototypes are ready to test, but it's a bit more complicated in Texas," 5 December 2017. Accessed at <http://www.cbc.ca/news/world/border-wall-donald-trump-prototypes-texas-1.4431921>.
8. Alisa Cromer, "Brief History: A Timeline of the U.S. Border Wall", *Worldstir*, 28 January 2017. Accessed at <http://www.worldstir.com/history-u-s-mexico-border-wall/>.
9. For a detailed overview, see the current United States government's comprehensive travel advisory for Mexico. Accessed at <https://travel.state.gov/content/passports/en/alertswarnings/mexico-travel-warning.html>.
10. Anonymous, "Crime is no longer a national security issue – It is now a public security issue, Attorney General tells the UN", *Mexico News Daily*, 20 June 2017. Accessed at <http://mexiconewsdaily.com/news/crime-is-no-longer-a-national-security-issue/>.
11. Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
12. Population data obtained from the United Nations *World Population Prospects 2017 Revision*, accessed at <https://esa.un.org/unpd/wpp/Publications/>, and, Population Reference Bureau 2017 *World Population Reference Sheet*, accessed at <http://www.prb.org/Publications/Data-sheets/2017/2017-world-population-data-sheet.aspx>.
13. The Finance Minister's Advisory Council on Economic Growth has recommended increasing immigration rates even further in order to strengthen economic growth. See *Attracting the Talent Canada Needs Through Immigration*, 20 October 2016. Accessed at <http://www.budget.gc.ca/aceg-ccce/pdf/immigration-eng.pdf>. See also, Doug Saunders, *Maximum Canada: Why 35 Million Canadians Are Not Enough* (Toronto: Knopf Canada, 2017). Mr. Saunders' arguments were also summarized in Doug Saunders, "Far from a Full House", *The Globe & Mail*, 16 September 2017, and published online under the title "Canada needs a fuller house to thrive – but population growth isn't enough", at <https://beta.theglobeandmail.com/news/national/doug-saunders-maximum-canada-population-problem/article36275893/>.
14. As much as double. See International Monetary Fund [IMF], *World Economic Outlook Database*, April 2017. Accessed at <http://www.imf.org/external/pubs/ft/weo/2017/01/weodata/weoselgr.aspx>.
15. Anonymous, "How a New Infrastructure Plan Could Help Build Mexico's Future", Wharton School, University of Pennsylvania, 8 September 2015. Accessed at <http://knowledge.wharton.upenn.edu/article/how-a-new-infrastructure-plan-could-help-build-mexicos-future/>.
16. IMF, *World Economic Outlook Database*.
17. U.S. Department of Homeland Security, *2015 Yearbook of Immigration Statistics*, data for the years 2012-2015. Accessed at <https://www.dhs.gov/immigration-statistics/yearbook/2015/table2#>.
18. Kaplan, *Revenge of Geography*, 338.
19. The Associated Press, "Professor Predicts 'Hispanic Homeland'", *Citizenreview Online*, April 2004. Accessed at <http://citizenreviewonline.org/april2004/professor.htm>.
20. IMF, *World Economic Outlook Database*.
21. *Ibid.*
22. Most recently by the Finance Minister's Advisory Council on Economic Growth. See its *First Report* (20 October 2016) and *Second Report* (6 February 2017). Both accessed at <https://www.budget.gc.ca/aceg-ccce/home-accueil-en.html>.
23. For an excellent example of this latter phenomenon, see Elsa B. Kania, "Battlefield Singularity: Artificial Intelligence, Military Revolution, and China's Future Military Power", Center for a New American Security, 28 November 2017. Accessed at [https://www.cnas.org/publications/reports/battlefield-singularity-artificial-intelligence-military-revolution-and-chinas-future-military-power?utm_content=bufferc9814&utm_medium="](https://www.cnas.org/publications/reports/battlefield-singularity-artificial-intelligence-military-revolution-and-chinas-future-military-power?utm_content=bufferc9814&utm_medium=)



um=social&utm_source=twitter.com&utm_campaign=buffer.

24. M. Angeles Villarreal, "U.S.-Mexico Economic Relations: Trends, Issues, and Implications", Congressional Research Service, 27 April 2017. Accessed at <https://fas.org/sgp/crs/row/RL32934.pdf>.
25. Clare Ribando Seelke and Kristin Finklea, "U.S.-Mexican Security Cooperation: The Mérida Initiative and Beyond", Congressional Research Service, 29 June 2017. Accessed at <https://fas.org/sgp/crs/row/R41349.pdf>.
26. *Canada-Mexico Partnership - 2016 Annual Report*.
27. *Canada-Mexico Cooperation on Security and Defence*.
28. *Canada-Mexico Partnership - 2016 Annual Report*.

Chapter 4

1. Government of Canada, Department of National Defence, *Strong, Secure, Engaged - Canada's Defence Policy, 2017*, <http://dgpapp.forces.gc.ca/en/canada-defence-policy/docs/canada-defence-policy-report.pdf>, accessed 31 January 2018.
2. "Pipes and processes" refers to the physical infrastructure and communication channels/arrangements that are needed.
3. The NORAD operational centre is fully integrated with the U.S. Northern Command centre, except for the J3 positions (operations), which are separate to ensure state sovereignty. For example, as only USNORTHCOM has a ballistic missile defence mission, which does not include Canada, the operations functions must remain separate, within that command.
4. As per the binational agreement: "The financing of expenditures connected with the integrated headquarters of NORAD and in support of NORAD-assigned personnel at other U.S. and Canadian commands to perform NORAD missions shall be arranged by mutual agreement between appropriate agencies of the Parties." See *The Agreement between the Government of the United States and the Government of Canada on the North American Aerospace Defense Command (or Binational Agreement)*, 28 April 2006, <https://www.state.gov/documents/organization/69727.pdf>, Article IId, accessed 31 January 2018. The U.S., however, has usually paid the lion's share, especially infrastructure costs. For example, the terms of reference for the financing of the NWS means that the U.S. pays for all NORAD infrastructure located in the U.S.; NORAD infrastructure in Canada is paid on a cost-sharing agreement of 60% U.S. and 40% Canada.
5. There is currently a backup command centre, although its location is classified. In addition, the old NORAD headquarters in Cheyenne Mountain, Colorado is available and regularly tested.
6. In the current structure, a one-maple leaf Canadian is the deputy commander of CONR (as is the case for ANR as well), and a one-star American is the deputy commander of CANR.
7. *Agreement*, Article IIf.
8. As part of NWS in the 1980s, three FOLs were established in Northern Canada at Iqaluit, Rankin Inlet and Inuvik.
9. According to information in the public domain, Russian long-range ALCMs, deployed or under development, include the KH-55 (nuclear payload, range 3000 kilometres), the KH-101 (conventional, 5500 kms) and the KH-102 (nuclear, 9600 kms). The KH-101 and 102 are considered stealth subsonic. These capabilities are likely adaptable to submarine/surface launch.
10. Two existing possible options are Alert (but this will need a paved runway) and the U.S. base at Thule, Greenland.
11. A system has look-down/shoot-down capability if it can detect, track and guide a weapon to an air target moving

below the horizon as observed by the system.

12. The Boeing Super Hornet also possesses this capability, but the decision has been made to reject its purchase as the interim capability.
13. In VIGILANT SHIELD 2017, the U.S. deployed a South Carolina national guard air defence unit to North Bay, Ontario. Of further note, point air defence was identified as a requirement in the recent white paper, although it is earmarked for overseas deployments.
14. The binational FOL committee also includes U.S. European Command (EUCOM) as a function of Greenland and air defence requirements for the sea-launched cruise missile threat.
15. While the early warning system is a NORAD asset *per se*, the actual infrastructure, including maintenance, is Canadian.

Chapter 5

1. Aaron De Smet and Chris Gagnon, "Organizing for the Age of Urgency", *McKinsey Quarterly*, January 2018, <https://www.mckinsey.com/business-functions/organization/our-insights/organizing-for-the-age-of-urgency>, accessed 9 February 2018.
2. Government of Canada, Department of National Defence, *Strong, Secure, Engaged - Canada's Defence Policy, 2017*, <http://dgpapp.forces.gc.ca/en/canada-defence-policy/docs/canada-defence-policy-report.pdf>, accessed 30 January 2018.
3. To explain further, both, the department and military, invested considerable resources in Chief of Force Development to examine future capabilities and the Liberal government was thus able to leverage that work in bringing forward a number of projects in SSE.
4. Michael Chui, James Manyika and Mehdi Miremadi, "Four Fundamentals of Workplace Automation", *McKinsey Quarterly*, November 2015, <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/>



- four-fundamentals-of-workplace-automation, accessed 9 February 2018.
5. For example, the United States Congressional Budget Office has estimated that O&M for military aircraft increases by one percent to three percent for every additional year of age, after adjusting for inflation. See Federal Government of the United States, Congressional Budget Office, *The Effects of Aging on the Costs of Operating and Maintaining Military Equipment* (Washington, D.C.: Congressional Budget Office, 2001), 2, available online at <https://www.cbo.gov/sites/default/files/107th-congress-2001-2002/reports/agingcostsom.pdf>, accessed 15 January 2018.
 6. Ross Fetterly and Naceur Essaddam, “National procurement: a critical defence vulnerability,” *Review of Business Research* 8, no. 2 (2008), 62.
 7. Government of Canada, Auditor General of Canada, *2011 Fall Report* (Ottawa: Auditor General of Canada, 2011), Chapter 5 – Maintaining and Repairing Military Equipment – National Defence, 5.36, available online at http://www.oag-bvg.gc.ca/internet/English/parl_oag_201111_05_e_35937.html#hd5e, accessed 15 January 2018.
 8. Defence capital equipment procurement in Canada is inherently a whole-of-government activity. While the Department of National Defence and Canadian Armed Forces both fund and are the recipients of procured military equipment, they are reliant on a number of different federal departments that play a supporting role in the procurement process. Most prominent among them is Public Services Procurement Canada (PSPC), the government procurement authority. Other organisations include Innovation, Science, and Economic Development Canada (ISED) and Treasury Board of Canada Secretariat (TBS).
 9. Nathan Freier, *Known Unknowns: Unconventional Strategic Shocks in Defence Strategy Development* (Carlisle, PA: Strategic Studies Institute, 2008), vii, available online at <https://ssi.armywarcollege.edu/pdffiles/PUB890.pdf>, accessed 24 January 2018.
 10. Robert A. Johnson, “Predicting Future War,” *Parameters* 44, no. 1 (2014), 69.
 11. Stanley McChrystal with Tantum Collins, David Silverman and Chris Fussell, *Team of Teams: New Rules of Engagement for a Complex World* (New York, NY: Penguin, 2015).
 12. Richard, K. Betts, *Military Readiness: Concepts, Choices, Consequences* (Washington, D.C.: Brookings Institution, 1995).
 13. Provided by Government of Canada, Department of National Defence, Director General Military Personnel Research and Analysis, (2018) through Dr. Binyam Solomon.
 14. Government of Canada, Department of Finance, *The Budget Plan* (Ottawa: Department of Finance, February 1994), available online at <https://www.budget.gc.ca/pdfarch/1994-plan-eng.pdf>, accessed 9 February 2018.
 15. Frederick W. Kagan, “The Art of War” in *American Defense Policy*, 8th Ed., eds., Paul J. Bolt, Damon V. Coletta and Collins G. Shackelford, Jr. (Baltimore, MD: Johns Hopkins University Press, 2005), 229 and 237.
- rb3oMV-3BFq9P-oyXGoi-nTpEGU-dn9AxB-6cAEZP-cuXwmu-6cAFag-cnQWUo-5zti66-PDXtvY-6FqCd-56Y8At-pBStbG-ppShYM-pUKMnJ-awin8U-ejqwWi-pBUhSp-fmCMjK-7qWZ7x-fcVCrZ-fgPbVL-pBUqZ6-nAZgsh-zWvfC5-aeTyyh-pAWT6R-6gvx7u-Przj5H-6cEtA1.
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