Dollars and Sense:

NORAD Modernization: Trudeau's Defence Policy, Part 2

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On June 2022 the Minister of National Defence presented the government of Canada's plan for NORAD modernization. This announcement came after a couple years of active efforts by the Department of National Defence (DND) and Canadian Armed Forces (CAF), especially senior officers assigned to NORAD, to push for continental defence modernization, and the imperative created by renewed great power competition to improve continental defences against a wide array of threats. These discussions had reached the point at which the issue featured in multiple engagements between two American Presidents and Prime Minister Justin Trudeau.

The NORAD modernization announcement pledged investment in five areas: surveillance systems; command and control; advanced air-to-air missiles; infrastructure and support capabilities; and science and technology. In discussing these investments, Minister of National Defence Anita Anand highlighted \$4.9 billion (B) in spending over six years, and indicated that the plan was funded for the long term, with a total value of approximately \$40B over 20 years. When asked if the \$4.9B was new funding, the Minister indicated that it was and that it was on top of funding provided in Budget 2022.

An explanatory backgrounder quietly issued two days later clarified that the figure of \$4.9B cited by the Minister referred to funds set aside on a cash basis (the amount over six years is \$3B) and that funding had been allocated in Budget 2022.³ This suggests that the Minister conflated accounting formats when describing the funding over

various time-frames. A week after the announcement, when asked if the \$4.9B the Minister had mentioned was new money, or was being reallocated from existing funds within the department, the Chief of Defence Staff (CDS) replied "I haven't completely figured out myself the sources of funds for this."

The need for clarification, then the unusual comments about a lack of certainty from the CDS, on top of the initial announcement which was organized on short notice, without American involvement (strange for a major announcement about a binational Canada-US defence arrangement), created significant uncertainty about the funding for NORAD modernization. Several observers have questioned whether there is actually any new funding assigned to the initiatives at all, or whether it is in effect "pretend money" as one prominent Canadian defence academic called it.⁵

A month after the announcement DND published a Fact Sheet further clarifying the financial underpinnings of the NORAD modernization initiative. That document indicates that "[t]he incremental funding for the first six years of NORAD modernization comes from existing, previously announced funding. Planning for NORAD modernization has been underway for several years, and the Government of Canada previously announced funding for elements of continental defence and NORAD modernization in Budget 2022, as well as defence funding in Fall Economic Statement 2020." It also stated that



A US Air Force F-35A fires an AIM-120 Advanced Medium-Range Air-to-Air Missile against a QF-16 aerial target during tests over the Gulf of Mexico on 20 June 2018. As part of its NORAD modernization, Canada will procure new air-to-air missiles.

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"[t]he most recent NORAD modernization announcement provides new funding beginning after year six."6

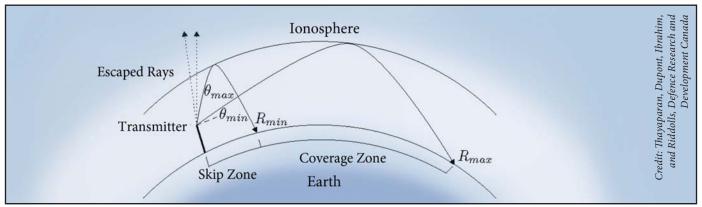
The announcement also itemized the funding across a number of capability investment areas, which is presented in Table 1. Notably, that itemization reflects funds provided on an accrual basis, and the backgrounder helpfully itemized the salient difference between the accrual and cash basis of accounting used by the government. According to the backgrounder, "[u]nder the accrual basis of accounting, the cost of acquiring an asset is recorded when the asset is put into service and spread over its useful life, rather than being recorded at the time the bills are paid. The portion of DND's accrual budget records the forecasted depreciation expense of capital assets, like equipment and infrastructure." The Department of Finance works with accrual accounting which is why that accounting format is the focus of funding descriptions in

Budgets and Fall Economic Statements, although in recent years those documents have sometimes described the cash value of funding. As the confusion created by the Minister's statement announcing the modernization plan highlighted, keeping the different accounting formats clear is problematic.

So too is finding information in Budgets or Fall Economic Statements to help reconcile the various statements attached to announcements like this. While recent major announcements related to DND's funding, dating back to the 2008 Canada First Defence Strategy, have been presented on 20-year time-frames, Budgets and Economic Statements generally only itemize funding over five-year time-frames, even if a funding announcement contained funds beyond the initial five-year window. This is unhelpful as, in trying to reconcile various budget commitments with long-term defence funding plans, it is impossible to

Table 1. Continental Defence Modernization Investments (Billions, accrual basis)

Funding	Area of Investment	Individual Investments
\$6.96	Bolstering Canada's ability to detect threats earlier and more precisely by modernizing surveillance systems.	Arctic Over-the-Horizon RadarPolar Over-the-Horizon RadarClassified Sensors
\$4.13	Improving Canada's ability to understand and communicate threats to decision-makers in a timely manner through investments in modern technology.	 Modernize command, control and communications capabilities Modernize the Canadian Combined Air Operations Center Renew the CAF's high- and low-frequency radio capability Enhance satellite communications in the Arctic Procure new digital radios Expand support for the Pathfinder program New positioning, navigation and timing capability
\$6.38	Strengthening Canada's ability to deter and defeat aerospace threats by modernizing air weapons systems.	 Short-range air-to-air missiles Medium-range air-to-air missiles Long-range air-to-air missiles
\$15.68	Ensuring CAF can launch and sustain a strong military presence across the country, including in Canada's North, through investments in new infrastructure and support capabilities.	 Acquiring additional air-to-air refueling aircraft Upgrading infrastructure at four locations in Canada's North Upgrade fighter infrastructure across Canada Modernize air operational training infrastructure
\$4.23	Future-proofing Canadian capabilities to defend North America through investments in science and technology.	
\$1.18	Internal services	
Total \$38.56		



An illustration of over-the-horizon radar propagation included in a 2019 DRDC article. These radars are a major component of NORAD modernization.

know the full value over 20 years of a budget's initiatives if only a five-year view is presented. As an example, Budget 2022 stated "Budget 2022 proposes to provide \$6.1 billion over five years, starting in 2022-23, with \$1.3 billion in remaining amortization, and \$1.4 billion ongoing to the Department of National Defence in order to meet our defence priorities, including our continental defences, commitments to our allies, and for investments in equipment and technology to immediately increase the capabilities of the Canadian Armed Forces." None of the words in that paragraph make clear how much money, on an accrual basis, might be available in total over a 20-year time-frame.

Parsing the NORAD modernization Fact Sheet, with the aid of conversations with defence officials, the funding for NORAD modernization (on an accrual basis) appears to contain the following sources of funds. The first is Budget 2022 which, as discussed above, highlighted \$6.1B over five years of accrual funding, but did not specify how much money was provided to DND over a 20-year time period. The Budget 2022 announcement provided \$12.2B on an accrual basis towards NORAD modernization, and this funding had already been provided to DND prior to the announcement. A second source of funds was the 2020 Fall Economic Statement which had, amongst other things, itemized for defence "\$8.9 billion for anticipated future requirements." As readers might recall from a previous column, as a result of the reprofiling of the Capital Investment Fund due to shifting project schedules, \$8.9B worth of funding for projects approved in Strong, Secure, *Engaged* was shifted out beyond the original 20-year timeframe to align with the requirements of those initiatives. In shifting this funding, the Department of Finance allowed DND to retain the \$8.9B worth of fundings in its Capital Investment Fund within that same 20-year window for anticipated future investments. This gave DND a source of funds to use for future investments but required DND to present government with a plan to spend the money. DND therefore had a pre-existing source of funds, already in its fiscal framework from the Fall Economic Statement 2020, and NORAD modernization provided a funding decision about how that money will be used. Third, new funding of roughly \$17.5B, not previously in the fiscal framework, was provided with the NORAD

modernization announcement itself. Added all up, that amounts to the total of \$38.6B, on an accrual basis, announced by the Minister. With that complicated combination of funding sources, it is easy to see how it may have been difficult to understand, or communicate.

Additionally, since the value of the announcement on an accrual basis represents, literally, how the government will account for NORAD modernization on its books, the more meaningful presentation of the funding for anyone not worried about how the government is going to account for it, is the value on a cash accounting basis. This is the money that will actually be given to DND and CAF through the Parliamentary Estimates process, appear in departmental planning documents, be reported to NATO, and actually be spent on personnel, operations and maintenance, equipment and infrastructure. While the various explanatory documents do not spell this out, DND's Chief Financial Officer stated at a Canadian Global Affairs Institute conference that the total cash value of NORAD modernization is \$87B over 20 years. For the sake of comparison, Strong, Secure, Engaged contained \$62.3B in new funding over 20 years on a cash basis. Thus, while the funding arrangements are convoluted, there is new money attached to modernization Canada's defence through NORAD, and a sizeable amount of it at that. \$\vec{\psi}\$

Notes

- Department of National Defence (DND), "Minister Anand Announces Continental Defence Modernization to Protect Canadians," News Release, 20 June 2022.
- 2. Cable Public Affairs Channel (CPAC), "Canada Announces \$4.9B Investment for NORAD Modernization," Headline Politics, 20 June 2022.
- 3. DND, "Minister Anand Announces Continental Defence Modernization to Protect Canadians."
- 4. General Wayne Eyre, The West Block, 26 June 2022.
- Conference of Defence Associations Institute (CDAI) Force Development Series, "Canada's Future Submarine Capability: 2030 and Beyond," Ottawa, 30 November 2022. Conducted under Chatham House Rule.
- DND, "Fact Sheet: Funding for Continental Defence and NORAD Modernization," 21 July 2022.
- 7. Ibid.
- 8. Canada Department of Finance, Budget 2022.
- 9. Department of Finance, Fall Economic Statement, 2022, p. 134.

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