



# Royal United Services Institute of Nova Scotia

## Dispatches

### 31 July 2020

*The Royal United Services Institute of Nova Scotia provides a forum for the study, promotion and debate of defence and security issues.*

*Dispatches* is a weekly collection of links and news of current interest, included those tweeted and posted by the Institute on social media. Links to articles are checked at the time they are put into *Dispatches* but may be unavailable at a later date or in some states other than Canada.

If you are not a routine recipient of *Dispatches* but wish to be so, email the Institute's Chief Information Officer (CIO) at [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com). If you do not want to receive *Dispatches*, or wish to receive it at some different frequency, please inform the CIO. If you wish to receive *Dispatches* at a different address (i.e., not your work address), please inform the CIO. Past editions of *Dispatches* may be requested by contacting the CIO.

Everyone is encouraged to email to the CIO links and other content to be included in *Dispatches*.

Submissions and feedback are welcome anytime. Comments to articles can be from members or non-members of RUSI(NS). Any comment in *Dispatches* is the sole opinion of the author and does not necessarily represent the views of the Canadian Department of National Defence, the Canadian Armed Forces, the Royal Canadian Mounted Police or the Royal United Services Institute of Nova Scotia

RUSI(NS) also publishes:

1. a weekly Dimensions Newsletter, ( formally called *Defence & Security Newsletter*) aimed at opinion leaders and industry. If you are interested in receiving this newsletter, email [admin@duncom.ca](mailto:admin@duncom.ca); and
2. a weekly *China Open Source Newsletter* of articles curated from Chinese military-related websites based inside mainland China. If you are interested in receiving this newsletter, email [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

#### **Events:**

To list an event in *Dispatches*, email the CIO by noon Thursday. RUSI(NS) events are by invitation only. If you are interested in attending and have not been invited, email [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com). RUSI(NS) events may be cancelled at short notice – email RUSI(NS) if there is a question of an event occurring.

**19 August**, Wednesday - RUSI(NS) Distinguished Speaker Dr Peter Kikkert, Irving Shipbuilding Chair in Arctic Policy, Brian Mulroney Institute of Government, St Francis Xavier University, will present "The Canadian Rangers: Cornerstone for Community Disaster Resilience in Canada's Remote and Isolated Communities." Registration is required. To register, email [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com) by close of business Mon, 17 Aug. Zoom instructions will be emailed by end Tue, 18 Aug.

**16 September**, Wednesday - RUSI(NS) Distinguished Speaker TBA.

**21 October**, Wednesday - RUSI(NS) Distinguished Speaker TBA

**Recent Publications:**

**New:** RUSI(NS) Information Note “The Navy’s Barber Pole” by David J Freeman, 22 July 2020  
<https://rusi-ns.ca/barber-pole/>

RUSI(NS) Presentation "MV Asterix - Government of Canada Leased Replenishment Vessel" by RAdm Couturier, RCN (ret'd), CEO Federal Fleet Services Inc., 15 July 2020  
<https://rusi-ns.ca/mv-asterix-government-of-canada-leased-replenishment-vessel/>  
Recording of the video-conference is available on request to [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

RUSI(NS) Information Note “Canadian Warship Acceptance,” 15 July 2020  
<https://rusi-ns.ca/canadian-warship-acceptance/>

The Military Institute of Windsor Communiqué, Volume XXXVIII Number 7 July-August 2020 is available on request to [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

**New:** The Edmonton United Services Institute President’s Enews August 2020 is available on request to [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com)

**Tweeted by @RUSI\_NS:** RUSI(NS) tweets may also be viewed by clicking on the icon at <https://RUSI-NS.ca>. To have something tweeted or retweeted, email the CIO at [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).  
Original article title in parentheses.

Extending life of @RoyalCanNavy Victoria-class #submarines recognizes strategic importance of underwater force to CAN defence & "balanced #RCNavy"  
<https://www.cbc.ca/news/SOMNIA-1.5665020> Need address capability in National Shipbuilding Strategy 2.0. Partner with Australia? Meanwhile need Plan B  
(It's the mileage, not the years: Military says it plans to keep subs afloat past retirement dates)

*In response to an offline query whether life extension is a reasonable and effective solution: Life extension keeps the force going pending recapitalization (whatever combination of crewed and uncrewed vehicles). The skills of the sailors and sub force operating procedures are harder to resurrect than building boats.*



CADSI @CadsCanada 28 Jul tweeted and RUSI(NS) retweeted: The 2019 annual report for Canada's National Shipbuilding Strategy is out! DYK? Contracts awarded since 2012 will contribute \$17B to Flag of Canada's GDP + 15,500 jobs/year for 2012-2022. Ship <https://tpsgc-pwgsc.gc.ca/app-acq/amd-dp/mer-sea/sncn-nss/rapport-report-2019-eng.html> #economy #jobs #nationaldefence #nationalsecurity #ships @PSPC\_SPAC (Canada's National Shipbuilding Strategy: 2019 annual report)



Polar Epsilon 2 Limited Operations provides imagery to support @CanadianForces operations & all-weather, day-and-night space-based wide-area surveillance of maritime approaches to CAN to identify & track vessels in near real time <https://www.canada.ca/en/department-national-defence/maple-leaf/defence/2020/07/hard-work-creativity-pays-off-polar-epsilon-2.html> (Hard Work and Creativity Pays Off! Polar Epsilon 2 Celebrates a Key Milestone)



STRATCOMCOE @STRATCOMCOE 29 Jul tweeted and RUSI(NS) retweeted: "Contrary to the Melian Dialogue, the "strong" (bigger and rival states) cannot always do what they want, and the "weak" (smaller states) do not always have to suffer what they must." (COVID-19 and Future of Cyber Conflict <https://thediplomat.com/2020/07/covid-19-and-future-of-cyber-conflict/>)



July 2020 pic of barges for @NationalDefence Queen's Harbour Master Esquimalt show construction by Canadian Maritime Engineering, Port Alberni yard well underway. Strong yard/harbour service (people, tugs, barges, boats) part of 'balanced navy' <https://www.canada.ca/en/public-services-procurement/news/2019/07/government-of-canada-awards-contract-for-acquisition-of-four-steel-barges.html> #RCNavy (Government of Canada awards contract for acquisition of four steel barges)



**Posted on Facebook Royal United Services Institute NS with comments:**

Memes, the pandemic and the new tactics of information warfare

<https://www.c4isrnet.com/smr/information-warfare/2020/07/23/memes-the-pandemic-and-the-new-tactics-of-information-warfare/>



"...memetic warfare, which involves sharing memes on various social media platforms to stoke a particular reaction from various groups."

"...one way to begin combating disinformation is building trust from the local to the national level while also addressing the underlying domestic problems adversaries are exploiting from abroad."

Japan drone submarine eyes 16-hour dive with plastic battery

<https://asia.nikkei.com/Business/Technology/Japan-drone-submarine-eyes-16-hour-dive-with-plastic-battery>



Would development of plastic batteries reduce dependence on foreign sources of rare earths for metal batteries? Where is Canadian R&D stand on this?

Hmm, I wonder what this might mean someday for the detectability (e.g., from magnetic detectors) of military underwater drones...

Coronavirus response: The United Kingdom delivers field hospital to West Africa following UN global call for support

[https://www.nato.int/cps/en/natohq/news\\_177386.htm](https://www.nato.int/cps/en/natohq/news_177386.htm)



Canada's parallel response is to transport COVID-19 related humanitarian supplies to Latin American and Caribbean countries via Royal Canadian Air Force CC177 Globemaster. The UK aircraft (again, a C-17, demonstrating the utility of the aircraft as a strategic airlifter) carried supplies for the construction of a UK aid funded field hospital. Both appropriate responses. A form of 'medical diplomacy' but considering the ongoing global medical emergency they are the right things to do. Hmm, maybe the Canadian Armed Forces should look at what can be done with military engineers, containers, etc. for constructing fast-build field hospitals in countries needing them.

F-35 Is Performing Far Better Than Critics Would Have You Think

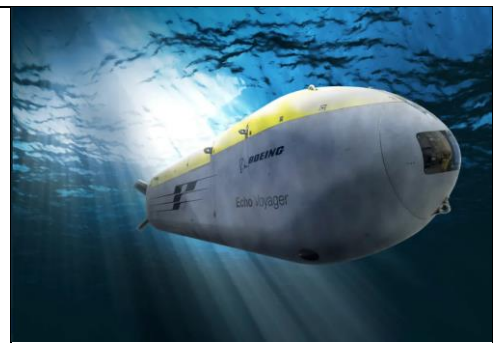
<https://www.forbes.com/sites/davedeptula/2020/07/20/f-35-problem-child-or-on-track-for-success/#22e2c49015d1>



At some point someone has to ask whether 'better' is the evil to 'good enough.' The evolution of the F-35 will continue for some years but the aircraft will be good enough for many missions before further modifications to enter service. Canada has to decide what version is good enough to start with if that aircraft is chosen.

Underwater armada: US Navy eyes drone wolf packs

<https://asiatimes.com/2020/07/underwater-armada-us-navy-eyes-drone-wolf-packs/>



Looks like the United States Navy does use diesel electric to power its underwater vehicles. Area and tactical anti-submarine (anti-UUV?) warfare is going to be interesting.

Okay, 'armada' and 'wolf-pack' is literary language.

Only swift action will achieve an African maritime renaissance

<https://issafrica.org/iss-today/only-swift-action-will-achieve-an-african-maritime-renaissance>



This is an area where the Royal Canadian Navy has been routinely deploying of late. It is one that the Canadian public needs to understand.

Work starts on final piece of HMS Glasgow's gigantic 'jigsaw'

<https://www.royalnavy.mod.uk/news-and-latest-activity/news/2020/july/23/200723-work-starts-on-final-piece-of-hms-glasgow-gigantic-jigsaw>



The Royal Navy (RN) will have operated the Type 26 Glasgow-class frigate for some while before Canada accepts its variant of the class, to be built by the Canadian Surface Combatant project (class name yet to be announced by the government). That is good because it means lessons from the introduction of the class into the RN can be applied by the Royal Canadian Navy (RCN). One can take it that the RCN is working closely with the RN and probably too with the Royal Australian Navy who have their own variant, the Hunter-class.

An 8,000 tonnes frigate! Obviously size is no longer a determinant in typing a warship.

Thousands register interest with Naval Shipbuilding College

<https://www.defenceconnect.com.au/maritime-antisub/6500-thousands-register-interest-with-naval-shipbuilding-college>



If the Canadian situation is understood correctly, whilst this country may not have a Workforce Register, Canadian yards have successfully built up their workforces, including new entry. That has been through individual effort, not collaboratively in some form of shipbuilding college.

\$168-185 billion Australian "earmarked for new builds and upgrades, which will carry through until the last of the Attack Class submarines comes together in the 2050s." Quite the commitment. There are billions yet to be committed to the Canadian National Shipbuilding Strategy, pandemic-response funding permitting.

Blessed Are the Peacemakers: What Afghanistan Can (Re)Teach Military Planners about Conflict Termination

<https://mwi.usma.edu/blessed-are-the-peacemakers-what-afghanistan-can-reteach-military-planners-about-conflict-termination/>



This contributor remembers a NATO high level wargame played in January 1991 where the scenario had the Russians invading Norway and then, after advancing part way down the coast, stopping and requesting to negotiate with possibly a withdrawal. I was on the main floor, a junior officer in a NATO/US senior headquarters, as very senior officers considered the problem game control staff had given them. I recall my commander, a seagoing three-star, standing beside me and muttering "D---, we know how to start a war, and we know how to win a war, but we don't know how to end a war!"

Conflict termination was added as part of the Canadian Forces College syllabus afterwards, and still may be. It's a topic officers at all ranks should consider. How can we end a conflict? Or at least transition to the next phase, as some things appear never ending...

Racial justice turns to Navy ships named for Confederate battles, segregationists

<https://www.sandiegouniontribune.com/news/military/story/2020-07-26/navy-ship-naming-controversy>



One has to believe that Canadian authorities are now looking carefully at how they name the ships to be built by the Canadian Surface Combatant project. There are many great names of past warships, with battle honours which the new ships would inherit, but those names could bring issues of their times.

And an announcement of the name of the sixth Arctic and Offshore Patrol Vessel is due.

Will NATO still be relevant in the future?

<https://www.atlanticcouncil.org/blogs/new-atlanticist/will-nato-still-be-relevant-in-the-future/>



“Having allies and institutions like NATO gives us an extraordinary advantage over Russia, China, and other adversaries”

“...allies usually find a way to resolve their differences, because alliance unity is too important to put at risk.”

New “Debt Trap” Concerns over China Lending to Africa

<https://www.geopoliticalmonitor.com/new-debt-trap-concerns-over-china-lending-to-africa/>



"Beijing has attempted to bolster confidence and renew faith in the enterprise by supporting health services in partner countries." "Dubbed the 'Health Silk Road'..." "China's partners, particularly those in Africa, will no doubt welcome any medical help they receive, but they will hope that they emerge from the shadow of the pandemic with their assets intact."

Debt traps - a form of ongoing economic warfare.

The US Navy's newest submarine comes with an Xbox controller

<https://www.theverge.com/2018/3/18/17136808/us-navy-uss-colorado-xbox-controller>



This is old news, but recently a colleague emailed: "Beginning with the USS COLORADO which went into active duty in November 2017, the US Navy has been using Xbox 360 controllers to operate Virginia-class submarine periscopes. Feedback from junior officers and sailors who said that the old controls for the periscope were clunky and 'real heavy' drove the equipment change. Other advantages include reduced training time (from hours to minutes), easy replacement around the world at any video game store, and a huge cost savings: \$20 compared to \$38,000 for the helicopter-style joystick used previously."

Gamers rule!

This Is Not Your Parents' Military. We Can't Fund It the Same Way

<https://www.defenseone.com/ideas/2020/07/not-your-parents-military-you-cant-fund-it-same-way/167151/>



This applies to all militaries, including Canada's. It needs to be taken into account in discussions about the cost of modern defence acquisition.

There are official publications that list the operating costs of Canadian Armed Forces equipment. Acquisition costs can be argued depending on what is being included in calculations.

Energy Unveils Blueprint for Nationwide, 'Unhackable' Quantum Internet

<https://www.defenseone.com/technology/2020/07/energy-unveils-blueprint-nationwide-unhackable-quantum-internet/167219/>



You can bet there is a quantum race going on. Media reports seem to indicate that China has a lead. To what extent is Canada engaged?



Soldier's 'very preventable death' prompts amendment ordering review of military MedEvac services

<https://www.armytimes.com/news/your-army/2020/07/27/soldiers-very-preventable-death-prompts-amendment-ordering-review-of-military-medevac-services/>



Medevac services supporting training by the Canadian Armed Forces at home and off our coasts seem to be adequate. At least, there has been no negative reporting. What internal staff studies conclude is another matter. Certainly anytime this commentator had to evacuate someone the system was there and responsive. Still, the US experience could/should be cause for review.

Oregon governor says US agents will start leaving Portland

<https://apnews.com/ebe8e681d99c3c790ee66e8089e67fdf>



"Militarized agents." A term on which probably most people agree when they see the, but if it is the basis for law and regulation it best be rigidly defined.

This is a US matter but there have been Canadian articles about militarization of our police forces. Like defunding, the term and its meaning is whatever who uses it wants to make of it.







NASA's next-generation Mars rover Perseverance blasts off

<https://www.cbc.ca/news/technology/mars-perseverance-launch-1.5668467>



Third Mars launch in a week. Who's going to provide air traffic control services between UAE, China, and US? Big sky/space theory, due regard,...

Posted on Facebook Royal United Services Institute NS: RUSI(NS) postings may be viewed by clicking on the icon at <https://RUSI-NS.ca>. To have something posted or commented, email the CIO by noon Thursday.

 <p><a href="https://mailchi.mp/rusi.org/24-july-this-week-169218?e=a539211a30">https://mailchi.mp/rusi.org/24-july-this-week-169218?e=a539211a30</a></p>	
<p>Lengthy F-35 Upgrade List To Transform Strike Fighter's Future Role</p> <p><a href="https://aviationweek.com/ad-week/lengthy-f-35-upgrade-list-transform-strike-fighters-future-role?mc_cid=ed1f706929&amp;mc_eid=5a63ba383e">https://aviationweek.com/ad-week/lengthy-f-35-upgrade-list-transform-strike-fighters-future-role?mc_cid=ed1f706929&amp;mc_eid=5a63ba383e</a></p>	
<p>The Navy's Barber Pole</p> <p><a href="https://rusi-ns.ca/barber-pole/">https://rusi-ns.ca/barber-pole/</a></p>	
<p>CHINA AND IRAN SHOULD BE ACCOUNTABLE FOR THEIR COVID-19 COVER-UPS: NEW MLI-CSRG</p> <p><a href="https://macdonaldlaurier.ca/files/pdf/20200629_State_liability_Teich_PAPER_FWeb.pdf?mc_cid=f0cda6a529&amp;mc_eid=a8426c0175">https://macdonaldlaurier.ca/files/pdf/20200629_State_liability_Teich_PAPER_FWeb.pdf?mc_cid=f0cda6a529&amp;mc_eid=a8426c0175</a></p>	
<p>Standing up for Human Rights means blocking Huawei from 5G</p> <p><a href="https://www.macdonaldlaurier.ca/standing-human-rights-means-blocking-huawei-5g/?mc_cid=f0cda6a529&amp;mc_eid=a8426c0175">https://www.macdonaldlaurier.ca/standing-human-rights-means-blocking-huawei-5g/?mc_cid=f0cda6a529&amp;mc_eid=a8426c0175</a></p>	

Iran moves mock-up U.S. carrier to mouth of Gulf: satellite images

<https://www.reuters.com/article/us-iran-usa-carrier/iran-moves-mock-up-u-s-carrier-to-mouth-of-gulf-satellite-images-idUSKCN24S0ZL>



Quebec shipyard late delivering Coast Guard icebreakers after pushing federal government on purchase

<https://nationalpost.com/news/canada/quebec-shipyard-late-on-delivering-icebreakers-after-pushing-feds-on-purchase/wcm/9697432e-e885-4fb7-9a11-ce38fcc80d8b/>



Was the Pentagon's Blacklist of Chinese Companies Justified?

<https://www.defenseone.com/technology/2020/07/was-pentagons-blacklist-chinese-companies-justified/167286/>



China at center of US-Australia meeting on shared challenges

<https://thehill.com/policy/international/509428-china-at-center-of-us-australia-meeting-on-shared-challenges>



Iran holds annual Gulf drill amid rising tensions with U.S.

<https://www.reuters.com/article/us-iran-military-drill/iran-holds-annual-gulf-drill-amid-rising-tensions-with-u-s-idUSKCN24T15T>



Japan's air force faces a 'relentless' burden, imposed by China

<https://edition.cnn.com/2020/07/28/asia/japan-china-fighter-jet-scrambles-intl-hnk-dst/index.html>



Russia and China Are Catching Up on Hypersonic Missiles Amid US Neglect, Expert Says

<https://www.military.com/daily-news/2020/07/29/russia-and-china-are-catching-hypersonic-missiles-amid-us-neglect-expert-says.html>



China's Grand Strategy

[https://www.rand.org/pubs/research\\_reports/RR2798.html?utm\\_source=WhatCountsEmail&utm\\_medium=RAND%20Policy%20Currents+AEM:%20%20Email%20Address%20NOT%20LIKE%20DOTMIL&utm\\_campaign=AEM:631600804](https://www.rand.org/pubs/research_reports/RR2798.html?utm_source=WhatCountsEmail&utm_medium=RAND%20Policy%20Currents+AEM:%20%20Email%20Address%20NOT%20LIKE%20DOTMIL&utm_campaign=AEM:631600804)



Understanding the Factors That Will Impact the Succession to Vladimir Putin as Russian President

[https://www.rand.org/pubs/perspectives/PE349.html?utm\\_source=WhatCountsEmail&utm\\_medium=RAND%20Policy%20Currents+AEM:%20%20Email%20Address%20NOT%20LIKE%20DOTMIL&utm\\_campaign=AEM:631600804](https://www.rand.org/pubs/perspectives/PE349.html?utm_source=WhatCountsEmail&utm_medium=RAND%20Policy%20Currents+AEM:%20%20Email%20Address%20NOT%20LIKE%20DOTMIL&utm_campaign=AEM:631600804)



**Other Sources:** Recommendations for ‘themes’ (e.g., #drones) to list in this section are welcome.

### #Arctic

The Arctic with Dr. Elizabeth Buchanan and Katie Burkhart

podcast: <http://cimsec.org/sea-control-191-the-arctic-with-dr-elizabeth-buchanan-and-katie-burkhart/44975>

Note the list of links to Arctic-related articles.

Arctic Governance: Keeping the Arctic Council on Target

<http://cimsec.org/arctic-governance-keeping-the-arctic-council-on-target/44930>

### #China

China military watch

<https://www.aspistrategist.org.au/china-military-watch/>

### #command

Can Mission Command Actually Work?

<https://mwi.usma.edu/can-mission-command-actually-work/>

### #conflict

What political psychology tells us about the likelihood of war post-pandemic

<https://www.kcl.ac.uk/what-political-psychology-tells-us-about-the-likelihood-of-a-post-pandemic-war>

## **#Covid**

In intelligence terms, COVID-19 is a revolutionary situation

<https://www.theglobeandmail.com/opinion/article-in-intelligence-terms-covid-19-is-a-revolutionary-situation/>

## **#cyber operations**

Don't Rush to Judge the CIA's Covert Cyber Offensive

<https://www.worldpoliticsreview.com/articles/28938/don-t-rush-to-judge-the-cia-s-covert-cyber-offensive>

## **#cybersecurity**

Cyberattacks on OT Systems on the Rise

<https://www.maritime-executive.com/article/naval-dome-cyberattacks-on-ot-systems-on-the-rise>

## **#drones**

Risk Aversion and the Army's New Tactical Unmanned Aircraft: Buying Technology is One Thing, Being Able to Employ it is Another

<https://mwi.usma.edu/risk-aversion-and-the-armys-new-tactical-unmanned-aircraft-buying-technology-is-one-thing-being-able-to-employ-it-is-another/>

## **#futurecasting**

Australian Army Research Centre Strategic Assessment (Quarter 2, 2020)

<https://researchcentre.army.gov.au/library/other/strategic-assessment-quarter-2-2020>

## **#information operations**

Through the Looking Glass: Assessing the Evidence Base for P/CVE Communications

<https://rusi.org/publication/occasional-papers/through-looking-glass-assessing-evidence-base-pcve-communications>

Deep Fake, Twitter Hacked: Welcome to Disinformation on Steroids. An Interview with Tech Expert Branka Marijan

<https://cdainstitute.ca/interview-deep-fake-twitter-hacked-welcome-to-disinformation-on-steroids-an-interview-with-tech-expert-branka-marijan/>

## **#information technology**

The Pentagon's Platform One Offers an Ambitious Model for the Future of Software

<https://www.defenseone.com/technology/2020/07/pentagons-platform-one-offers-ambitious-model-future-software/167184/>

## **#law enforcement**

Justice Official Explains Why Law Enforcement is Worried about 5G

<https://www.defenseone.com/threats/2020/07/justice-official-explains-why-law-enforcement-worried-about-5g/167204/>

## **#leadership**

Winning the War on Distraction: Military Leaders Need Quiet Minds in the Digital Age

<https://cimsec.org/winning-the-war-on-distraction-military-leaders-need-quiet-minds-in-the-digital-age/44535>

## **#logistics**

The Value of a Moment – Logistics and the Acceleration of War

<https://logisticsinwar.com/2019/11/26/the-value-of-a-moment-logistics-and-the-acceleration-of-war-2/>

### **#maritime security**

The Cod Wars and Today: Lessons from an Almost War

<http://cimsec.org/the-cod-wars-and-today-lessons-from-an-almost-war/44945>

Fight Illegal Fishing for Great Power Advantage

<http://cimsec.org/fight-illegal-fishing-for-great-power-advantage/44905>

The Deadly Secret of China's Invisible Armada

<https://www.nbcnews.com/specials/china-illegal-fishing-fleet/>

### **#planning**

Jazz and the Orchestra: The Problem with Planning

<https://thearmyleader.co.uk/problem-with-planning/>

### **#strategy**

Start with Book Three: Finding Utility in Clausewitz's On War

<https://warroom.armywarcollege.edu/articles/start-with-book-three/>

### **#war**

Protracted Great-Power War

<https://www.cnas.org/publications/reports/protracted-great-power-war>

After the Calamity: Unexpected Effects of Epidemics on War

<https://thestrategybridge.org/the-bridge/2020/7/30/after-the-calamity-unexpected-effects-of-epidemics-on-war>

## Other:

### THE NATIONAL SHIPBUILDING STRATEGY IS FOCUSED ON 3 PILLARS:

- » Construction of large vessels (more than 1,000 tonnes of displacement)
- » Construction of small vessels (less than 1,000 tonnes of displacement)
- » Vessel repair, refit and maintenance projects



### PARTNERS UNDER THE NATIONAL SHIPBUILDING STRATEGY:

- » Irving Shipbuilding Inc.
- » Seaspan's Vancouver Shipyards
- » 3<sup>rd</sup> partner to be selected in 2020



### PROGRESS OF IRVING SHIPBUILDING INC. ON PROJECTS:

- » Sea trials for the 1<sup>st</sup> Arctic and Offshore Patrol Ship (AOPS)
- » Launch of 2<sup>nd</sup> AOPS
- » Work to continue on AOPS 3 and 4
- » Lockheed Martin Canada selected for the design work on the 15 new Canadian Surface Combatants
- » 2 additional AOPS to be constructed and customized for the Canadian Coast Guard

### PROGRESS OF SEASPAN'S VANCOUVER SHIPYARDS ON PROJECTS:

- » 2 Offshore Fisheries Science Vessels delivered to the Canadian Coast Guard
- » Ongoing work on 1<sup>st</sup> Joint Support Ship for the Royal Canadian Navy
- » 16 new multi-purpose vessels to be constructed for the Canadian Coast Guard

### SMALL SHIPS AND REPAIR, REFIT AND MAINTENANCE:

Government of Canada awarded \$2.3B in contracts to:

- » Irving Shipbuilding Inc., Chantier Davie and Seaspan's Victoria Shipyards for maintenance of the Royal Canadian Navy's 12 Halifax-class frigates (\$1.5B excl. taxes)
- » Ocean Industries Inc. for construction of 4 naval large tugs (\$102M)
- » Canadian Maritime Engineering Ltd. for construction of 4 steel barges for Canadian Forces Base Esquimalt (\$2.1M)
- » Heddle Marine Service Inc. for work on the CCGS Caribou Isle (\$1.6M)
- » Chantier Verreault for vessel life extension for the CCGS Samuel Risley (\$1.9M)
- » Chantier Davie for dry-dock refit of the CCGS Louis S. St-Laurent (\$7.1M)
- » Newdock St. John's Dockyard Limited for the refit of the CCGS Hudson (\$10M)

2 additional search and rescue lifeboats (5<sup>th</sup> and 6<sup>th</sup>) delivered to the Canadian Coast Guard

### ECONOMIC BENEFITS

- » In 2019, \$3.3B in new contracts to Canadian companies in 6 different provinces
- » Of this amount, approx. \$186.7M went to small businesses with less than 250 full-time employees
- » Contracts awarded for 2019 are estimated to contribute more than \$4.1B (\$1.0B annually) to Canada's gross domestic product (GDP) → Approx. 10,365 jobs/year for 2019-2022
- » Contracts awarded since 2012 will contribute approx. \$17.04B to Canada's GDP → Average of 15,500 jobs/year for 2012-2022
- » Large ship construction - \$0.8B, to contribute more than \$1.04B (\$261M annually) to Canada's GDP → Average of 2550 jobs/year for 2019-2022
- » Small ship construction - \$120.2M, to contribute approx. \$69M (\$17M annually) to Canada's GDP → Average of 170 jobs/year for 2019-2022
- » Repair, refit and maintenance - \$2.3B, to contribute more than \$3.0B (\$758M annually) to Canada's GDP → Average of 7,600 jobs/year for 2019-2022

### THE YEAR AHEAD

- » 3<sup>rd</sup> shipyard to be added as a strategic partner under the National Shipbuilding Strategy
- » Acceptance of 3<sup>rd</sup> Offshore Fisheries Science Vessel
- » Beginning of construction of Offshore Oceanographic Science Vessel
- » Delivery of 1<sup>st</sup> and 2<sup>nd</sup> Arctic and Offshore Patrol Ships (AOPS)
- » Construction to continue on 3<sup>rd</sup> and 4<sup>th</sup> AOPS
- » Beginning of construction on 5<sup>th</sup> and 6<sup>th</sup> AOPS



## *The Watch*

Dear senior homeland defense and security professionals and allies:

The United States Northern Command Magazine *The Watch* Second Edition (<https://thewatch-magazine.com/>) has been released and free copies are available.

This second edition of *The Watch* focuses on "collaborative defense" highlighting the value of local, regional, and international defense partnerships. For alliances to succeed, defense partners must embrace emerging technology to counter increasingly sophisticated threats. The magazine includes a key leader profile of BGen Pete M Fesler, deputy director of operations for the North American Aerospace Defense Command (NORAD). BGen Fesler explains how the US and its partners are investing in cutting-edge technology to meet new threats. He also discusses the science of getting military cargo and personnel to the fight in a technologically sophisticated environment. *The Watch* also looks upward to the crowded landscape of space, where scientists are tracking 8,800 metric tons of debris orbiting Earth. Finally, the magazine highlights the partnership between Canada and the United States that has protected North America since the beginning of the Cold War.

*The Watch* is a unique publication with each issue exploring changing Homeland Defense threat environments (air/ground/maritime/cyber/space), emerging great power competition in the Arctic, cutting-edge technologies, and highlighting innovative homeland defense partnerships. Each issue emphasizes the importance of the United States partnering with its allies and trusted partners to defend their collective homelands.

How to get a free copy of *The Watch*: If you would like to be added to our mailing list, please complete the form at: <https://thewatch-magazine.com/contact/> to provide:

Full name, rank:  
Organization:  
Mailing Address:  
Email Address:  
Quantity to be sent (1x ea-25x ea):

We look forward in hearing from you!

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