



**Royal United Services Institute of Nova Scotia**  
**Dispatches**  
**31 December 2021**

*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 news of interest, including posts to social media by the Institute. Links to articles are checked at the time they are put into *Dispatches* but may be unavailable at a later date or in some countries other than Canada.

Everyone is encouraged to submit links and other content to be included in *Dispatches*. Submissions and feedback are welcome anytime. Email to [RUSINSDispatches@gmail.com](mailto:RUSINSDispatches@gmail.com). 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 or other government department, the Canadian Armed Forces, the Royal Canadian Mounted Police or the Royal United Services Institute of Nova Scotia.

If you wish to receive *Dispatches* at a different address (i.e., not your work address), please inform RUSI(NS). Past editions of *Dispatches* may be requested by contacting RUSI(NS).



**Annual General Meeting 2022**

The Royal United Services Institute of Nova Scotia will meet for Annual General Meeting 2022 at 1900 hours Halifax time, Tuesday, 25 January 2022. Zoom joining instructions will be emailed prior.

Don Moser  
Insp, RCMP  
President, RUSI(NS)

## RUSI(NS) 2021 Survey

The RUSI(NS) survey for how we did in 2021 will be emailed to members in January as part of the membership renewal email. It is short - please take a couple minutes to fill it in. Your feedback is important to the future activities of this Institute.

### **Events:**

To list an event in *Dispatches*, email RUSI(NS) by noon Thursday. RUSI(NS) events are by invitation. 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.

26 January 2022, Wednesday – planned date for Distinguished Speakers, presenting on Arctic operations. 1300-1500. Via Zoom.

16 February 2022, Wednesday – planned date for Distinguished Speaker, presenting on RCAF strategy. 1300-1500. Via Zoom.

**New:** 5 April, Tuesday - Georgetown University Wargaming Society presentation "Strategic Wargaming - The US Army War College Approach." 7:00–9:00 pm ADT. To register: <https://www.eventbrite.com/e/strategic-wargaming-the-us-army-war-college-approach-tickets-187766283007>.

### **Publications:**

Except where otherwise indicated, publications are available on request to [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

RUSI(NS) presentation “Canadian Coast Guard Arctic Region – Implementation and Successes” by Assistant Commissioner Neil O’Rourke, 29 November 2021  
[https://rusi-ns.ca/ccg\\_arctic\\_region/](https://rusi-ns.ca/ccg_arctic_region/)

RUSI(NS) presentation “Royal Canadian Navy – Globally Deployed for Strategic Effect” by Rear-Admiral Brian Santarpia, 27 October 2021  
[https://rusi-ns.ca/royal\\_canadian\\_navy/](https://rusi-ns.ca/royal_canadian_navy/)

RUSI(NS) presentation “Casualty Identification Program” by Dr Sarah Lockyer, 20 October 2021  
[https://rusi-ns.ca/casualty\\_identificaton\\_program/](https://rusi-ns.ca/casualty_identificaton_program/)

Canadian Marine Industries and Shipbuilding Association *On Watch*, 15 December 2021 edition  
[https://send.successbyemail.com/prvw\\_message2.aspx?chno=31ae3090-a6e8-4916-a569-d757b7edc2ca](https://send.successbyemail.com/prvw_message2.aspx?chno=31ae3090-a6e8-4916-a569-d757b7edc2ca)

Edmonton United Services Institute President’s *Enews*, December 2021.

Military Institute of Windsor *Communiqué*, Volume XL, Number 1, January 2022.

Naval Association of Canada presentation "NORAD Modernization and Renewal" by Dr Andrea Charron, 6 December 2021

<https://youtu.be/Vtf4g3qh26Q> (slides at [https://nac-o.wildapricot.org/resources/OTTAWA%20BRANCH/Documents/Meetings/2021-12-06-NORAD-Modernization\\_Charron.pdf](https://nac-o.wildapricot.org/resources/OTTAWA%20BRANCH/Documents/Meetings/2021-12-06-NORAD-Modernization_Charron.pdf)).

Royal Alberta United Services Institute *Dispatches*, December 2021.  
<https://rausi.ca/component/acym/archive/88-rausi-dispatches-december-2021>

Royal Alberta United Service Institute *News* October-December 2021  
<https://www.rausi.ca/news/publications>

Royal Canadian Naval Association Admiral Hose Branch *Scuttlebutt*, Christmas/New Years Edition.

Royal Canadian Naval Reserve *Link*, Vol 29, No 1, 2021  
<https://issuu.com/lencre-reservenaval-link-navalreserve/docs/link-2021-vol29-navalreserve>

Royal Canadian Navy *Your Navy Today* - Volume 4 Issue 9  
<http://www.navy-marine.forces.gc.ca/en/news-ynt/2021/11-your-navy-today.page>

Royal United Services Institute of Victoria (Australia) *Quarterly Newsletter*, Volume 20, Issue 4, December 2021.

Royal United Services Institute of Victoria (Australia) *Defence Update*, Volume 9, Issue 8, 20 December 2021.

Veterans Affairs Canada *Salute!*, December 2021.

**Tweeted by @RUSI NS:**

RUSI(NS) tweets may also be viewed by clicking on the Twitter icon at <https://RUSI-NS.ca>. To have something tweeted or retweeted, email [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

2 @PALaerospace King Air 200 & 2 Dash-8-100 maritime patrol aircraft operate both coasts as @FishOceansCAN Fisheries Aerial Surveillance & Enforcement (FASE)  
"Government of Canada launches new aircraft to improve conservation and protection of our oceans"  
<https://www.newswire.ca/news-releases/government-of-canada-launches-new-aircraft-to-improve-conservation-and-protection-of-our-oceans-893755485.html>



Canadian Armed Forces @CanadianForces 15 Nov tweeted and RUSI(NS) retweeted: New radios are on their way for the Integrated Soldier System Project! The ISSP provides smartphone-like computers and equipment integrated into a wearable combat vest to allow soldiers to stay better connected on operations. <https://canada.ca/en/department-national-defence/services/procurement/integrated-soldier-system-project.html>  
(Integrated soldier system project)



Canadian Army @CanadianArmy Nov 14 tweeted: Members of Canadian Army Trials and Evaluation Unit participate in a shooting range during their Individual Battle Task Standard in the training area at Combat Training Centre, 5th Canadian Division Support Base Gagetown, Gagetown, New-Brunswick, September 17, 2021.

RUSI(NS) retweeted: CATEU mission to provide specialized land force trial expertise & unique trial support capabilities for @CanadianArmy & other @CanadianForces agencies by conducting impartial trials & evaluations on new & modified equipment <http://www.army-armee.forces.gc.ca/en/ctc/index.page>

*From one of our members:* My suggestion will be to retire all ELCAN Optics & procure all brand new EOTech Halographic Sights in combination with Tactical 3x Magnifier Scopes with quick flip to side. Ideal for CQB environments & long distance shooting. Zeroed at 36 yard = 5 inches accuracy from 50-300 yds



Brian Santarpia @BrianSantarpia 4 Nov tweeted: Great article with tons of detail for those trying to understand the pros and cons of various options for conventional submarine replacement projects.

(The Navy Isn't Prepared To Face The Growing Diesel Submarine Threat

<https://www.thedrive.com/the-war-zone/42900/the-truth-about-the-growing-diesel-submarine-threat-from-a-veteran-sub-hunter>)

Worth reading for public understanding of capabilities & limitations of diesel-powered submarines, & their importance as strategic assets in defence of CAN🇨🇦 & as part of balanced @RoyalCanNavy. @NationalDefence has initiated Victoria-class submarine replacement project



Dr Phil Weir @navalhistorian 28 Dec tweeted: Fascinating @WarOnTheRocks piece by Jonathan Panter & @jdfalc1 on lessons from reduced crewing on the @USNavy's Littoral Combat Ships & implications for uncrewed vessels, particularly inc maintenance, cost, time & personnel for which tend not to decrease

(The Unplanned Costs of an Unmanned Fleet

<https://warontherocks.com/2021/12/the-unplanned-costs-of-an-unmanned-fleet/>)

Brian Santarpia @BrianSantarpia 28 Dec tweeted: So many helpful observations herein for naval force developers. RUSI(NS) retweeted: And observations for general public & shipfans who wish/need to understand more/better about naval force development.



Bill Blair @BillBlair 20 Dec tweeted: We have authorized a deployment of Canadian Armed Forces Rangers to assist the community of Bonne-Espérance, Quebec in response to COVID-19 outbreaks in the region. We stand ready to provide support to all provinces and territories during their time of need.

Anita Anand @AnitaAnandMP 20 Dec retweeted: Bonne-Espérance, QC : In response to a provincial request, Canadian Rangers will perform logistics and supply operations, deliver essential goods, and share pandemic-related information with community members. We will always be there to support Quebecers and all Canadians.

RUSI(NS) retweeted: RUSI(NS) presentation "The Canadian Rangers: Cornerstone for Community Disaster Resilience in Canada's Remote and Isolated Communities" <https://rusi-ns.ca/canadian-rangers/> #CanadianRangers could serve as model for how targeted government investment can build resilience in jurisdictions



Andrea Charron @AndreaCharron 20 Dec tweeted and RUSI(NS) retweeted: Important read. <https://arctictoday.com/what-the-new-defense-spending-bill-could-mean-for-the-arctic/> Not including concerted attention and resources to diplomacy is a crucial error that will not help the US keep the Arctic in a healthy competitive zone. (What the new defense spending bill could mean for the Arctic)



**Posted on Facebook Royal United Services Institute of Nova Scotia:**

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

**China Transferring Navy Type 056 Corvettes to the Coast Guard**

<https://www.navalnews.com/naval-news/2021/12/china-transferring-navy-type-056-corvettes-to-the-coast-guard/>

The Canadian Coast Guard (CCG) is procuring offshore patrol vessels based on a naval design (though in reality the design of the Arctic and Offshore Patrol Ship project vessels will be considerably changed to meet CCG requirements). The Chinese Coast Guard receives combatants (corvettes) transferred from the People's Liberation Army Navy (sic, the Chinese navy). Says something about how the two coast guards are and are intended to be employed.



**Annual international collaboration Operation North Pacific Guard targets illegal, unreported and unregulated fishing**

<https://globalfishingwatch.org/impacts/on-the-high-seas/>

*The above article was posted and included in last week's Dispatches. The two comments below were posted this week:*



Two PAL Aerospace King Air 200 operate from Campbell River, BC, and two Dash-8-100 maritime patrol aircraft operate from St John's, NL, and Halifax, NS, in the Fisheries and Oceans Canada's Fisheries Aerial Surveillance and Enforcement (FASE) program. See: "Government of Canada launches new aircraft to improve conservation and protection of our oceans"

<https://www.newswire.ca/news-releases/government-of-canada-launches-new-aircraft-to-improve-conservation-and-protection-of-our-oceans-893755485.html>

*and*

**Canada wraps up Operation North Pacific Guard to combat global illegal fishing**

<https://www.canada.ca/en/fisheries-oceans/news/2021/11/canada-wraps-up-operation-north-pacific-guard-to-combat-global-illegal-fishing3.html>



**Breaking China's grip on rare earths should be an AUKUS mission**

<https://asia.nikkei.com/Opinion/Breaking-China-s-grip-on-rare-earths-should-be-an-AUKUS-mission>

There's an economic 'war' going on, and one of the important axes of advance by our competitor is in control of rare earth metals. "Rare earth sovereignty" is something to which Canada, its public, government and industries, should be paying attention.



For starters, there needs to be more readily comprehensible explanations of the availability of rare earths in Canada or otherwise under Canadian control, the supplies chains that get the earths where they are needed, and the threats from outside, adversarial, control.

**Future naval commerce raiding**

<https://defense-and-freedom.blogspot.com/2021/12/future-naval-commerce-raiding.html>

The use of helicopter-carrying 'box ships' as commerce raiders might seem a bit much to some, but the article is cause for reflection. Presuming that commercial trade and not just the movement of military material remains vital in future conflicts and approaching-conflict situations, what might be the nature of commerce raiding and other trade disruption? It's not going to be just



nuclear submarines and missile-launching bombers that sink merchant ships. And in a world where it seems that not even the nature of the loads carried by containerships can be assured (otherwise why are migrants and drugs getting through, and articles speak of minimal percentages of cargoes being verified on arrival at ports?), what is the nature of contraband and how do states ensure the movement of legal cargoes?

Some of the thinking along these lines may be applicable, too, to counter-piracy and other maritime security/constabulary functions.

**Opinion: China is testing the West. We shouldn't back down.**

<https://www.washingtonpost.com/opinions/2021/12/23/china-is-testing-west-we-shouldnt-back-down/>

"The best way to demonstrate to China that tantrums and bullying won't work is to continue apace with our (US) efforts to build up our alliances and capability to keep the region free ..."



How does this fit with Canadian strategies (national, security and naval)?

**US Marines Must Relearn to Protect Pacific Supply Lines, Commandant Says**

<https://www.defenseone.com/threats/2021/09/us-marines-must-relearn-protect-pacific-supply-lines-commandant-says/185127/>

"... the logistics challenge must be protected all the way back to U.S. defense industry factories and military warehouses."



Current issues with supply chains demonstrate the balance and therefore fragility of military (including Canadian) logistics lines of communication back to sources (in Canada, wherever). Canadian government staffs, not just the military, need to study and assess the resiliency of our supply chains in the face of adversarial attack (including, maybe especially, cyber, financial and economic) and natural incidents.

**Bear, Meet Porcupine: Unconventional Deterrence for Ukraine**

<https://www.defenseone.com/ideas/2021/12/bear-meet-porcupine-unconventional-deterrence-ukraine/360195/>

"Going porcupine," a deterrence strategy to make the potential cost of offensive action unpalatable to a possible aggressor. Easier to measure in the material, kinetic, world, than it is when fighting in the cyber, public information and financial/economic warfare domains.



## The Marines Are Copying the Air Force's Efforts to Counter Online Disinformation

<https://www.defenseone.com/threats/2021/09/military-intel-officials-highlight-efforts-counter-online-disinformation/185346/>



"This information advantage will lead to 'decision dominance.' "Decision dominance is a desired state in which a commander can sense, understand, decide and act faster and more effectively than an adversary ... " (ref: "Out: 'information warfare.' In: 'information advantage'"

<https://www.c4isrnet.com/information-warfare/2020/09/29/out-information-warfare-in-information-advantage/>).

The US Marine Corps information "branch is working to emulate an Air Force culture of 'convergence.'" Convergence = "the shift away from systems that depend on manual inputs, human-to-human distribution, and analog written procedures that help determine "who else needs to know." (ref: "The Convergence of Man and Machine, But Better"

<https://www.defenseone.com/ideas/2021/07/convergence-man-and-machine-better/183107/>).

The language of information warfare and thereafter has been frequently evolving as people wrestle with what it is and what actions are involved. What one can take away, no matter how one labels it, is that there is a war going on in the public information domain.

## Combat Ready by RUSI(NS) member Tim Dunne

<https://canadianarmytoday.com/combat-ready/>

"The Canadian-led battle group in Latvia has adapted NATO, Canadian and allied doctrine to evolve its standard operating procedures. Exercise Silver Arrow confirmed that and more."

"Silver Arrow is an opportunity, at a strategic level, 'to demonstrate leadership within the NATO mission with an activity that is important. We need to demonstrate Canadian military leadership, hitting above our weight at a strategic level, at the tactical and institutional level, ..."



## Nobody Wants Rules in Space

<https://www.defenseone.com/technology/2021/05/nobody-wants-rules-space/173870/>

Interesting: "U.S. Space Command works with the United Kingdom, Canada, Australia, and other countries through a program called Olympic Defender, to share tactics and procedures for space monitoring and come to agreements about what constitutes unsafe behavior."



More on Olympic Defender at: "Space Command takes over Operation Olympic Defender"

<https://www.c4isrnet.com/battlefield-tech/space/2020/05/21/space-command-takes-over-operation-olympic-defender/>



And one of our recent Canadian Forces College students has written: "Integrating Into Combined Space Operations: Implications for Canadian Space Policy" (<https://www.cfc.forces.gc.ca/259/290/22/305/Seidler.pdf>).

### **Navy Next-Generation Logistics Ship (NGLS) Program**

<https://s3.documentcloud.org/documents/21170560/navy-next-generation-logistics-ship-nxls-program-background-and-issues-for-congress-dec-22-2021.pdf>



"The Next Generation Logistics Ship (NGLS) is planned to be a new class of ships to augment the current Combat Logistics Force ships, through the use of commercial ship designs tailored for military applications to conduct logistics missions. The NGLS will enable refueling, rearming, and resupply of Naval assets ..."

Reads a lot like the approach taken by Chantier Davie to convert what is now Motor Vessel ASTERIX, leased as an interim replenishment oiler (AOR) to the Royal Canadian Navy (RCN). The conversion included taking a merchant ship and 'tailoring' it to undertake naval roles such as underway replenishment.

"Press reports about the Navy's new fleet architecture have suggested that the Navy might want to procure between 18 and 30." "... NGLS procurement cost of \$150 million per ship." Hmm, maybe Canada should buy into the US program after our Joint Support Ship project replenishment oilers are built and delivered. A third or even fourth AOR could be very useful to the RCN as a blue water (long endurance, globally deployable) navy.

### **'Brains and muscle': The volunteer band of ex-Canadian Forces personnel responding to disaster zones**

<https://nationalpost.com/news/brains-and-muscle-the-volunteer-band-of-ex-canadian-forces-personnel-responding-to-disaster-zones>



"This unique approach to veteran wellness has been recognized by the department of Veteran's Affairs, which provided Rubicon with \$750,000 over three years."

Bravo, Veterans Affairs Canada.

### **New Destroyer, Armed With Lasers and Hypersonic Missiles, Envisioned as Navy's Future Centerpiece**

<https://www.defenseone.com/technology/2021/01/new-destroyer-armed-lasers-and-hypersonic-missiles-envisioned-navys-future-centerpiece/171365/>



"... we need a ship that can generate enough power to drive more sophisticated radars, electronic warfare systems and directed energy weapons ..."

Hmm, the measure of a warship in the future (maybe now) may not be the number of missiles it carries ('magazine depth') but the amount of power it can generate.

### **Globe-Spanning Wargame Puts New Naval Concepts to the Test**

<https://www.defenseone.com/threats/2021/08/globe-spanning-exercises-puts-new-naval-concepts-test/184406/>

Good to read about such a broad reach of connection ('federation') between participants. Can make for a better exercise, particularly when considering higher level and future warfare.

The line between wargaming and exercising has never been distinct. Getting more blurred.



### **What does future warfare look like? It's here already**

<https://www.bbc.com/news/world-59755100>

"... the solution (to 'most dangerous challenges to Western security') is two things - close consultation and collaboration with allies and investment in the right places."



### **Other Sources:**

#### **#drones**

In 2021 we saw the future of drone warfare: bigger, faster and better armed

<https://www.thenationalnews.com/world/2021/12/24/in-2021-we-saw-the-future-of-drone-warfare-bigger-faster-and-better-armed/>

The Unplanned Costs of an Unmanned Fleet

<https://warontherocks.com/2021/12/the-unplanned-costs-of-an-unmanned-fleet/>

#### **#grand strategy**

Report to Congress on Great Power Competition

<https://news.usni.org/2021/12/27/report-to-congress-on-great-power-competition-2>

#### **#NATO**

The Future of NATO's Air and Missile Defence

<https://rusi.org/explore-our-research/publications/occasional-papers/future-nato-air-and-missile-defence>

#### **#strategy**

Getting the Multi-domain Challenge Right

[https://cgsr.llnl.gov/content/assets/docs/CGSR\\_Getting-the-Multi-Domain-Challenge-Right.pdf](https://cgsr.llnl.gov/content/assets/docs/CGSR_Getting-the-Multi-Domain-Challenge-Right.pdf)

Other:

