



Royal United Services Institute of Nova Scotia

Dispatches

18 June 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.

If you are not a direct recipient of *Dispatches* but wish to be so, email RUSINovaScotia@gmail.com. If you do not want to receive *Dispatches*, or wish to receive it at some different frequency, please inform RUSI(NS). 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).

Everyone is encouraged to submit 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 or other government department, the Canadian Armed Forces, the Royal Canadian Mounted Police or the Royal United Services Institute of Nova Scotia.

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. RUSI(NS) events may be cancelled at short notice – email RUSI(NS) if there is a question of an event occurring.

New: 21 June, Monday - DND Stakeholder Engagement Office Eastern Canada National extends an invitation to National Indigenous Peoples Day "The Blanket Workshop." 12:00-1:30 pm (en français) / 1:45-3:15 pm (English) (*editor*: TBC but likely EDT). Registration required; to register, email Capitaine Marie-Christine De Tilly Marie-Christine.detilly@forces.gc.ca. See info at end of *Dispatches*.

23 June, Wednesday - RUSI(NS) Distinguished Speaker Major Scott Roach, Canadian Joint Warfare Centre, will speak about Canadian Armed Forces use of wargaming. 1300 Atlantic time. Via Zoom. To register, email RUSINovaScotia@gmail.com by close of business Sunday, 20 June. As the subject line for your registration email, put: RUSI(NS) Distinguished Speakers 23 June 2021 Registration. Zoom joining instructions will be emailed to registrants by end Monday, 21 June. Advance reading for Maj Roach's talk: Canada to launch wargaming course <https://www.shephardmedia.com/news/training-simulation/canada-launch-wargaming-course/>

23 June, Wednesday - Center for Naval Analyses and International Institute for Strategic Studies webinar "The Arctic Region and Freedom of Navigation: Balancing National and International Interests." 11 am Eastern time. To register: https://iiss.zoom.us/webinar/register/WN_BEGc7S_IRC2NH4e-OVW_9g

24 June, Thursday - UK Fight Club (Wargaming Experimentation Group) Urban Warfare Webinar with John Spencer, Chair of Urban Warfare Studies, Modern War Institute. 1800-1930 (BST, UK time). Free. To register: <https://www.ukfightclub.co.uk/event-details/urban-warfare>.

Save the Date: 21 July, Wednesday - (TBC) Distinguished Speaker event. 1300-1500, via Zoom.

Note: There will be no Distinguished Speaker event in August.

Recent Publications:

Except where otherwise indicated, publications are available on request to RUSINovaScotia@gmail.com.

RUSI(NS) Presentation "The Canadian Army at an Inflection Point – Delivering Excellence Today and into the Future" by Brigadier-General J.J. Major, 2 June 2021

https://rusi-ns.ca/canadian_army/

RUSI(NS) Paper "The Princess Louise Fusiliers Diversity Soldier Experience Program" by Second Lieutenant Ahmed Elkar and Captain Michael Gray, 5 June 2021

<https://rusi-ns.ca/dsep/>

RUSI(NS) Information Note "Inshore to Offshore: Coastal Zones and Canadian Coast Guard Vessel Capabilities" by Phil Hanbidge, 28 May 2021

<https://rusi-ns.ca/coastal-zones-and-ccg-vessel-capabilities/>

RUSI(NS) Presentations "Arctic Air Operations: Canada and United States Agile Fighter Employment in Defence of North America" by Colonels Moar and Fesler, 19 May 2021

https://rusi-ns.ca/arctic_air_operations/

New: Naval Association of Canada, Ottawa Branch, presentation by Andrew Miller, Irving Shipbuilding, "Delivering the AOPS" on HMCS *Harry DeWolf* at-sea trials, 14 June 2021

<https://www.youtube.com/watch?v=ivefPUQI0TA>

New: Canadian Marine Industries and Shipbuilding Association *On Watch* 16 June edition

https://send.successbyemail.com/prvw_message2.aspx?chno=21ed1542-93bf-4cf9-a347-bb9f927a4a67

New: The Royal United Services Institute of Vancouver Island *Newsletter*, Volume 54, 3rd Quarter 2021.

New: The Royal United Services Institute of Victoria (Australia) *Occasional* Volume 6, Issue 5, 15 June 2021.

The Military Institute of Windsor *Communiqué* Volume XXXIX Number 6, June 2021.

Royal Alberta United Services Institute *Dispatches* June 2021

<https://rausi.ca/component/acym/archive/74-security-issues-in-the-arctic-region-part-ii?userid=306-QqXJ7Y1xfzfd0M&tmpl=raw>

Royal Canadian Naval Association Admiral Hose Branch *Scuttlebutt* June 2021 Edition.

The United Services Institute of Nanaimo and North Island *Newsletter* Vol 29 No 06 June 2021.

Company of Master Mariners of Canada Maritimes Division Newsletter *The Foghorn* June 2021

The Edmonton United Services Institute President's Enews May 2021.

Transcript of Centre of International Governance Innovation discussion "National Security Challenges in the 21st Century: A Discussion with Vincent Rigby, National Security & Intelligence Advisor to the Prime Minister," 8 June 2021

Tweeted by @RUSI NS:

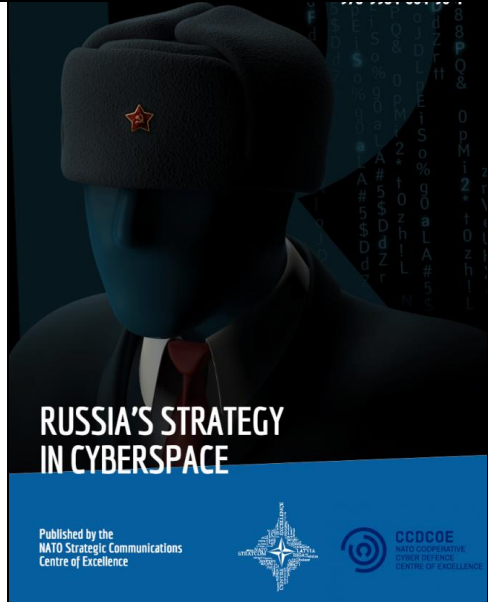
RUSI(NS) tweets may also be viewed by clicking on the icon at <https://RUSI-NS.ca>. To have something tweeted or retweeted, email RUSINovaScotia@gmail.com.

<p>"Defence Expenditure of NATO Countries (2014-2021)" https://www.nato.int/nato_static_fl2014/assets/pdf/2021/6/pdf/210611-pr-2021-094-en.pdf Defence expenditure as a share of GDP - #NATO guideline 2% - CAN 🇨🇦 1.39%</p>	<p>Graph 3 : Defence expenditure as a share of GDP (%) (based on 2015 prices and exchange rates)</p> <table border="1"> <thead> <tr> <th>Country</th> <th>2014 (%)</th> <th>2021e (%)</th> </tr> </thead> <tbody> <tr><td>Canada</td><td>1.39</td><td>1.39</td></tr> <tr><td>United States</td><td>3.52</td><td>3.52</td></tr> <tr><td>United Kingdom</td><td>2.79</td><td>2.79</td></tr> <tr><td>France</td><td>2.19</td><td>2.19</td></tr> <tr><td>Germany</td><td>1.39</td><td>1.39</td></tr> <tr><td>Italy</td><td>1.39</td><td>1.39</td></tr> <tr><td>Spain</td><td>1.39</td><td>1.39</td></tr> <tr><td>Netherlands</td><td>1.39</td><td>1.39</td></tr> <tr><td>Poland</td><td>1.39</td><td>1.39</td></tr> <tr><td>Czechia</td><td>1.39</td><td>1.39</td></tr> <tr><td>Hungary</td><td>1.39</td><td>1.39</td></tr> <tr><td>Bulgaria</td><td>1.39</td><td>1.39</td></tr> <tr><td>Romania</td><td>1.39</td><td>1.39</td></tr> <tr><td>Greece</td><td>1.39</td><td>1.39</td></tr> <tr><td>Turkey</td><td>1.39</td><td>1.39</td></tr> <tr><td>Ukraine</td><td>1.39</td><td>1.39</td></tr> <tr><td>Latvia</td><td>1.39</td><td>1.39</td></tr> <tr><td>Estonia</td><td>1.39</td><td>1.39</td></tr> <tr><td>Lithuania</td><td>1.39</td><td>1.39</td></tr> <tr><td>Slovenia</td><td>1.39</td><td>1.39</td></tr> <tr><td>Croatia</td><td>1.39</td><td>1.39</td></tr> <tr><td>Albania</td><td>1.39</td><td>1.39</td></tr> <tr><td>Montenegro</td><td>1.39</td><td>1.39</td></tr> <tr><td>North Macedonia</td><td>1.39</td><td>1.39</td></tr> <tr><td>Bosnia and Herzegovina</td><td>1.39</td><td>1.39</td></tr> <tr><td>Serbia</td><td>1.39</td><td>1.39</td></tr> <tr><td>Kosovo</td><td>1.39</td><td>1.39</td></tr> <tr><td>Malta</td><td>1.39</td><td>1.39</td></tr> <tr><td>Cyprus</td><td>1.39</td><td>1.39</td></tr> <tr><td>Portugal</td><td>1.39</td><td>1.39</td></tr> <tr><td>Greece</td><td>1.39</td><td>1.39</td></tr> <tr><td>Spain</td><td>1.39</td><td>1.39</td></tr> <tr><td>France</td><td>1.39</td><td>1.39</td></tr> <tr><td>Italy</td><td>1.39</td><td>1.39</td></tr> <tr><td>Germany</td><td>1.39</td><td>1.39</td></tr> <tr><td>United Kingdom</td><td>1.39</td><td>1.39</td></tr> <tr><td>United States</td><td>1.39</td><td>1.39</td></tr> <tr><td>Canada</td><td>1.39</td><td>1.39</td></tr> <tr><td>Other NATO</td><td>1.39</td><td>1.39</td></tr> <tr><td>Other</td><td>1.39</td><td>1.39</td></tr> </tbody> </table> <p>Note: Figures for 2021 are estimates.</p>	Country	2014 (%)	2021e (%)	Canada	1.39	1.39	United States	3.52	3.52	United Kingdom	2.79	2.79	France	2.19	2.19	Germany	1.39	1.39	Italy	1.39	1.39	Spain	1.39	1.39	Netherlands	1.39	1.39	Poland	1.39	1.39	Czechia	1.39	1.39	Hungary	1.39	1.39	Bulgaria	1.39	1.39	Romania	1.39	1.39	Greece	1.39	1.39	Turkey	1.39	1.39	Ukraine	1.39	1.39	Latvia	1.39	1.39	Estonia	1.39	1.39	Lithuania	1.39	1.39	Slovenia	1.39	1.39	Croatia	1.39	1.39	Albania	1.39	1.39	Montenegro	1.39	1.39	North Macedonia	1.39	1.39	Bosnia and Herzegovina	1.39	1.39	Serbia	1.39	1.39	Kosovo	1.39	1.39	Malta	1.39	1.39	Cyprus	1.39	1.39	Portugal	1.39	1.39	Greece	1.39	1.39	Spain	1.39	1.39	France	1.39	1.39	Italy	1.39	1.39	Germany	1.39	1.39	United Kingdom	1.39	1.39	United States	1.39	1.39	Canada	1.39	1.39	Other NATO	1.39	1.39	Other	1.39	1.39
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<p>Underwater dock to recharge/communicate with submarine drones https://ise.bc.ca/enabling-persistent-maritime-surveillance/ @IntSubEng Containerized & carried onboard vessels-of-opportunity such as fishing vessels as service auxiliaries, could considerably add to maritime wide-area/persistent surveillance operations (Enabling Persistent Maritime Surveillance)</p>																																																																																																																												
<p>The Naval Association of Canada @navalasn 12 Jun tweeted and RUSI(NS) retweeted: Our latest Briefing Note illustrates the complexity of the considerations involved in naval architecture and the design of warships. https://www.navalassoc.ca/wp-content/uploads/2021/06/BN40-Naval-Architecture-.pdf (Naval Architecture)</p>																																																																																																																												
<p>Royal Canadian Navy @RoyalCanNavy 13 Jun tweeted: This process saw the submarine move from the Purpose Built Repair Facility at the EGD to lift barge Seaspan Careen. A complex evolution that occurred over several hours, it is a testament to the incredible work and cooperation required from a number of stakeholders across...</p>																																																																																																																												

RUSI(NS) retweeted: #RCNavy #submarine #HMCS CORNER BROOK not only strategic asset involved. @PSPC_SPAC Esquimalt Graving Dock & Seaspan Shipyards @MoreThanShips mobile/self-contained drydock SEASPAN CAREEN also strategic parts of CANcanshipbuilding/ship repair/maritime power <https://www.seaspan.com/vancouver-drydock-facilities>



STRATCOMCOE @STRATCOMCOE 17 Jun tweeted and RUSI(NS) retweeted: 📄 Our latest report "Russia's Strategy in Cyberspace" seeks to clarify the role of cyberspace in Russian strategic thinking. 📖 Read it here: <https://stratcomcoe.org/publications/russias-strategy-in-cyberspace/210>



Canadian Army @CanadianArmy 17 Jun tweeted and RUSI(NS) retweeted: "It's not the end of the world just because it's -40." Learn more about how the Canadian Army trains to fight in the Arctic at @CdnArmyToday: <https://canadianarmytoday.com/as-the-arctic-heats-up-so-too-has-arctic-warfare-training/> (As the Arctic heats up, so too has Arctic warfare training)



4 Cdn Div / 4 Div CA @4CdnDiv4DivCA 17 Jun tweeted: Canadian Rangers supporting Kashechewan and other Northern Communities affected by the COVID pandemic Des Rangers canadiens viennent en aide à des communautés touchées par la pandémie de COVID, à Kashechewan et ailleurs dans le nord. Read here / Lisez ici: <https://facebook.com/4CdnDiv4DivCA/posts/4553840034643704>



Canadian Armed Forces Operations @CFOperations 17 Jun retweeted and RUSI(NS) retweeted: The Canadian Rangers. Their motto is 'Vigilans' - 'The Watchers.' In support of protecting their communities from COVID-19 they have done so much more. Learn more <http://army-armee.forces.gc.ca/en/canadian-rangers/index.page> (Canadian Rangers)

Posted on Facebook Royal United Services Institute of Nova Scotia with comments:

Harry DeWolf trades ice-breaking for warm weather trials

<https://www.lookoutnewspaper.com/harry-dewolf-trades-ice-breaking-warm-weather-trials/>

"While HARRY DEWOLF is an Arctic and Offshore Patrol Ship that will be used as an icebreaker in the North, Canada needs a navy that can operate anywhere in the world."



The Harry DeWolf-class ships are listed by the Royal Canadian Navy as ice-capable ships, not as icebreakers. Icebreaking is a mandated role of the Canadian Coast Guard and not the Navy. "Arctic and Offshore Patrol Ship" (sic, singular) is the project title; the ships are typed by the Navy as Arctic and Offshore Patrol Vessels and the type designation AOPV is worn on the caps of the ships' companies. Most certainly, the ships are capable and can operate globally, hence the 'and' in the project title and type name - Canadians can expect to see the ships employed off far continents and islands as readily as off Canada's coasts and Arctic.

U.S. lawmakers planning economic battle with China have some questions — about Canada

<https://www.cbc.ca/news/world/us-china-bill-canada-1.6061718>

"The bigger story of the bill is an economic one: That the era of free markets is falling out of fashion, replaced by government-mandated industrial policy."



Ultimately, success in conflict, contention and competition is much based on the strength of a state's economy (if you will, a version of "victory to the bigger battalions" or "who has the gold, wins"). Of late we have seen and felt the relationship between the industrial strength of states, driven by their industrial policies, and their defence, security and safety. The sourcing of critical materials, and location of manufacturing facilities, during the pandemic are just two of many examples that have gotten greater publicity - there are many more that are less appreciated.

What is Canada's industrial strategy? What does our strategy do to support our defence, security and safety?

From a RUSI(NS) member: This new legislation, with its bipartisan support, will have an impact on Canada-US relations which are likely to force the hand of our current government and how it operates in relation to how it deals with China. The opposition has made it clear that most of the current government's actions have been well, weak. Time will tell whether there will be an extensive realignment of US policy if Canada demonstrates an unwillingness to confront China in certain areas.

New U.S. Arctic center to increase collaboration on climate, security

<https://www.upi.com/Defense-News/2021/06/10/sixth-arctic-center-to-be-built/9231623339358/>

"Defense Department regional centers are international academic venues for bilateral and multilateral research, communication and training, with the goal of building strong, sustainable, international networks of security leaders," Kirby said.

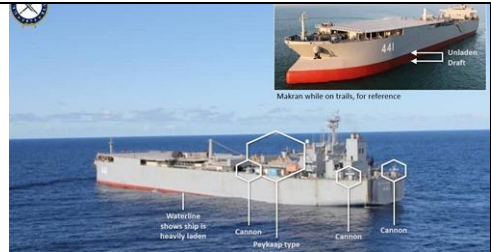
"It will work with Arctic nations including Canada, Denmark, Finland, Iceland, Norway, Russia and Sweden."

An opportunity for a Canadian academic institution? Some already have Arctic-focused centres.



Iranian Warship Could Be Bringing Millions of Gallons of Fuel to Venezuela

<https://news.usni.org/2021/06/10/iranian-warship-could-be-bringing-millions-of-gallons-of-oil-to-venezuela>



MAKRAN, "because it is a naval auxiliary, it is not entitled to belligerent rights during armed conflict, meaning that it may not lawfully conduct attacks," ... "But like U.S. naval auxiliaries, it may carry out the full range of naval support missions and is protected by sovereign immunity."

For an explanation of sovereign immunity, see the RUSI(NS) paper: "Warships: Sovereign Immunity versus Sovereign Territory" (<https://rusi-ns.ca/warships-sovereign-immunity-versus-sovereign-territory/>).

Also, the article "Why the United States Can't Touch Iran's Atlantic-Bound Warships" (<https://foreignpolicy.com/2021/06/10/venezuela-sanctions-iran-warships-law/>) is a very good piece about warships' sovereign immunity. *If you cannot access the article, a copy is available from RUSI(NS).*

Drone Used High Power Microwaves To Knock Down Other Drones In DARPA Demo

<https://www.thedrive.com/the-war-zone/41025/drone-used-high-power-microwaves-to-knock-down-other-drones-in-darpa-demo>



A "... counter-drone interceptor that uses a high-power microwave directed energy weapon to defeat drone swarms." With a decision engine "to classify potential threats, form a 'local engagement picture' of the surrounding airspace, and then make recommendations to the human operator about deploying its interceptors." And widely deployable, including shipborne. Quite the possibility as a counter-drone screen.

Gremlins Drones Could Be Rearmed Inside Their Mothership Transport Aircraft

<https://www.thedrive.com/the-war-zone/41042/gremlins-drones-could-be-reloaded-inside-their-mothership-transport-aircraft>



Gremlins program "... experimenting with swarming drones that are designed to be launched and recovered in mid-air." And then re-loaded (and presumably re-charged/fueled).

Aerial aircraft carrier in the making!

Libya's UAV Strike Should Galvanize Efforts to Do Something About Autonomous Weapons

<https://www.defenseone.com/ideas/2021/06/libyas-uav-strike-should-galvanize-efforts-autonomous-weapons/174449/>



"How could future norms be fashioned to take into account those weapons that fall in the definitional gray zone between 'autonomous' and 'automatic'? How do you certify the accuracy, reliability, and predictability of any weapon that has autonomous features, and verify that they meet basic standards of safety and legality? And most urgently, what are the potential malign uses of a system like this, and how can these risks be prevented right away?"

LAWS = lethal autonomous weapons systems.

The Phantom of Arctic Misgovernance

<https://warontherocks.com/2021/06/the-phantom-of-arctic-misgovernance/>



"The Arctic Council explicitly excludes defense issues from its charter (though it increasingly tackles other security topics such as human, food, and environmental security)."

"Defending the region's successful governance apparatus, reforming it where desirable, and combatting efforts to subvert it all start with a clearer picture of how the Arctic's challenges are unique — and where they are not really Arctic at all."

Arctic infrastructure lacking in some areas say former army colonel

<https://www.nunavutnews.com/news/arctic-infrastructure-lacking-in-some-areas-say-former-army-colonel/>



The Arctic is a tremendous logistical challenge. Strong

marine and land infrastructure (ports, airfields, roads, navigable waterways, etc.) goes a long way to ensuring the defence and security of the region. Analysis of the infrastructure, both what there is and what are the needs/opportunities, should be a collaborative effort by multiple government departments in conjunction with the people who live there.

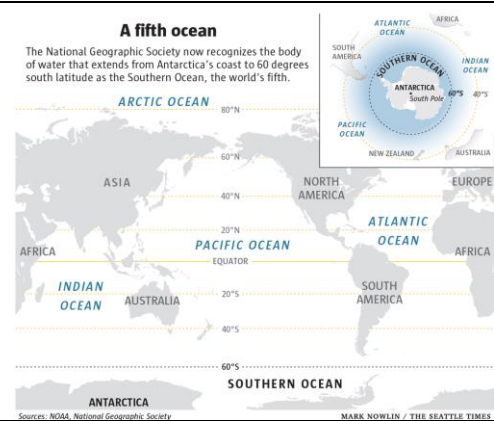
Note the linked article "Four more harbours planned for Nunavut" (<https://www.nunavutnews.com/news/four-more-harbours-planned-for-nunavut/>) which reports plans to compile a master list of marine infrastructure needs for Nunavut. Such lists could make interesting reading, especially by department (including Canadian Armed Forces) planners.

How many oceans does Earth have? National Geographic now says 5.

<https://www.seattletimes.com/nation-world/how-many-oceans-does-earth-have-national-geographic-now-says-5/>

Arghh, Billy, have yer sailed the Seven Seas...er...Five Oceans?

Won't change the way nations divide up the world ocean into naval regions.



China's Submarine Fleet Is Huge. The U.S. Navy Plans To Whittle Away At It With Mines.

<https://www.forbes.com/sites/davidaxe/2021/06/08/chinas-submarine-fleet-is-huge-the-us-navy-plans-to-whittle-away-at-it-with-mines/?sh=3d95667a297a>



Offensive mining operations with extra-large unmanned undersea vehicles (drone submarines). This could pose a significant threat throughout the world. To counter that, navies will need to put additional effort into anti-submarine (especially theatre-level), counter-drone and counter-mine capabilities. What developments, in organizational changes (new drone squadrons? upgraded diving units?) and in equipment acquisitions (drone hunters? replacements of the Kingston-class mine warfare vessels?) will the Royal Canadian Navy undertake?

USNS Patuxent Rescues Mariners from Sinking Ship in Gulf of Aden

<https://navalpost.com/usns-patuxent-t-ao-201-rescue-operation-gulf-of-aden/>



The US Military Sealift Command fleet replenishment oiler USNS PATUXENT, operating as part of the US Fifth Fleet near the Gulf of Aden, on 7 June 2021 undertook a rescue of 15 crew from a civil general cargo vessel. Using a significant resource such as a fleet replenishment oiler for such a task highlights the utility of a naval force including multi-role vessels such as fleet tugs, capable of rescue, logistics, diving support, salvage and other

general but important functions. To be a balanced, globally operating, blue water navy, the Royal Canadian Navy would do well to acquire ocean-going fleet tugs.

Digital Engineering Could Speed Wartime Arms Production

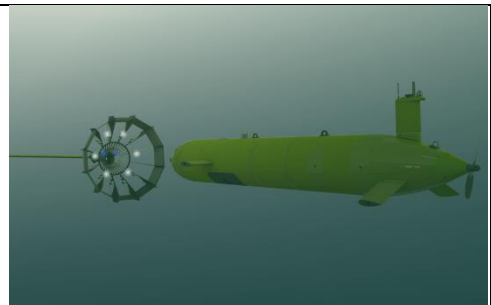
<https://www.defenseone.com/technology/2021/06/digital-engineering-could-speed-wartime-arms-production/174564/>



Digital engineering has some fascinating prospects. Not just for facilitating maintenance of current equipment but also for modernization and upgrading so that, if needed at some point in the future, a new version ('mark') can be easily produced without there having been production of previous versions. Almost like having a digital warehouse of mobilization stock.

Enabling Persistent Maritime Surveillance

<https://ise.bc.ca/enabling-persistent-maritime-surveillance/>



NATO standards for replenishment-at-sea (RAS) connections have well served both NATO and non-NATO navies, allowing great interoperability and collaborative support. Will similar standards for underwater docking will be developed? It would be a regret if a number of company-specific arrangements resulted in the absence of a multi-national (civil and navy) standard.

German army can't cope with potential drone attack, expert says

<https://www.dailysabah.com/business/defense/german-army-cant-cope-with-potential-drone-attack-expert-says>



"... disposable drones, or kamikaze drones, which are armed with explosives and used to track and attack targets, represent a new, more perfidious development in drone technology."

"... technology to repurpose a commercial drone into a combat one is widely available ..."

The easy availability of commercial drones that can be converted to military purposes is a dangerous 'drone proliferation.'

If the German army is concerned it can't cope, what is the state of the Canadian Armed Forces for counter-drone measures?

US Army fires autonomous launcher in Pacific-focused demo

<https://www.defensenews.com/land/2021/06/16/us-army-fires-autonomous-launcher-in-pacific-focused-demo/>



The Defense One (<https://www.defenseone.com/>) "D Brief"

17 June 2021 we explained this cool idea of robot trucks deployed from aircraft to shoot at ships: This week in emerging weapons news, the U.S. Army just sent an autonomous, robot truck on an artillery mission to show how it might "take out enemy ships and other defensive systems in multidomain operations in the Indo-Pacific theater," Defense News reported Wednesday. The idea: The AMLs drive off the back of a C-130 to their firing locations on some notional island. Jets, meanwhile, are flying overhead for aerial protection as the AML's precision fires head toward their target. Then the trucks head back into the C-130 and fly to an undisclosed location.

Other Sources:

#3D printing

GE receives Air Force airworthiness qualification in under a year for first metal 3D-printed, critical jet engine part

<https://www.pressreleasefinder.com/pr/GEADPR049/en/>

Some RUSI(NS) members will recall our visit some years ago to the laser additive manufacturing (3D printing) facility at FMF Cape Scott. This article show further progress with this interesting technology.

#cyber operations

Avoiding civilian harm during military cyber operations: six key takeaways

<https://reliefweb.int/report/world/avoiding-civilian-harm-during-military-cyber-operations-six-key-takeaways>

#drones

Pentagon adds 'Ghost Fleet' of autonomous ships to San Diego's cutting-edge Navy squadron

<https://californianewstimes.com/pentagon-adds-ghost-fleet-of-autonomous-ships-to-san-diegos-cutting-edge-navy-squadron/392464/>

#intelligence

I, spy: Does Canada need a foreign intelligence service?

<https://www.theglobeandmail.com/opinion/article-i-spy-does-canada-need-a-foreign-intelligence-service/>

#land power

Powering the U.S. Army of the Future

<https://www.nap.edu/catalog/26052/powering-the-us-army-of-the-future>

#maritime strategy

Tactics of the Maritime Strategy and Cover and Deception Operations

Lessons: <https://cimsec.org/pat-roll-on-tactics-of-the-maritime-strategy-and-cover-and-deception-operations/>

#NATO #China

NATO's Pivot to China: A Challenging Path

<https://www.csis.org/analysis/natos-pivot-china-challenging-path>

#Oceans Protection Plan

Transport Canada releases fourth OPP report

<https://shippingmatters.ca/transport-canada-releases-fourth-opp-report/>

and report: Report to Canadians: Investing in our coasts through the Oceans Protection Plan

<https://tc.canada.ca/en/initiatives/oceans-protection-plan/report-canadians-investing-our-coasts-through-oceans-protection-plan>

#shipping

Armies have long known to study the terrain and human environment in which they operate. Navies naturally know their 'terrain' and, if they have a Corbett-based appreciation of their operating environment, also study shipping.

5 reasons global shipping costs will continue to rise
This analysis is available on request to RUSI(NS).

Why We Are in a Shipping Crisis That's Sparking Shortages

<https://www.businessinsider.com/shipping-crisis-causing-shortages-why-2021->

#space

The risks and benefits of emerging technologies in the space power domain: Space Situational Awareness Warfare and Mediating Space Security

<https://www.kcl.ac.uk/news/the-risks-and-benefits-of-emerging-technologies-in-the-space-power-domain-space-situational-awareness-warfare-and-mediating-space-security>

Reports:

Space Situational Awareness Warfare

<https://www.kcl.ac.uk/warstudies/assets/ssa-warfare.pdf>

and

Mediating Space Security: How new and social media are shaping the security discourse

<https://www.kcl.ac.uk/warstudies/assets/mediating-space-security.pdf>

#warfare

The Truth About Tripwires: Why Small Force Deployments Do Not Deter Aggression

<https://tnsr.org/2021/06/the-truth-about-tripwires-why-small-force-deployments-do-not-deter-aggression/>

How NATO Plans to Really Crush Russia in a War (Not What You Think)

<https://nationalinterest.org/blog/buzz/how-nato-plans-really-crush-russia-war-not-what-you-think-187402>

Note "Mission Partner Environments" and related article:

Multinational exercises help improve the Mission Partner Environment

https://www.army.mil/article/245647/multinational_exercises_help_improve_the_mission_partner_environment

The Death of American Conventional Warfare: It's the Political Willpower, Stupid

<https://thestrategybridge.org/the-bridge/2017/11/5/the-death-of-american-conventional-warfare-its-the-political-willpower-stupid>

Other:

NATO Multimedia Library May-June 2021 Acquisitions List

https://www.natolibguides.info/ld.php?content_id=10701615

Climate Change

Recently the RUSI(NS) Security Affairs Committee discussed the article "Byron York's Daily Memo: Biden vs. the Pentagon" (<https://www.washingtonexaminer.com/opinion/byron-yorks-daily-memo-biden-vs-the-pentagon>) in which President Biden "said that the nation's top military leaders told him the 'greatest threat' facing America is global warming." To state global warming as the 'greatest threat' for the attention of defence was striking. A query was put to a senior CAF officer whether there were any such statement from senior Canadian authorities (civil and/or military). The following was received in reply: "The A/CDS acknowledges this regularly – publicly at the Senate Standing Committee on National Security and Defence (SECD) back in April. Specifically:

· Current Threat Environment: Senators from all groups sought details on LGen Eyre's assessment of the current global threat environment. LGen Eyre noted that there is a confluence of threats that can combine in various forms to produce multifaceted threats, such as a global re-ordering (the rise of authoritarian states), climate change (opening of the Arctic and human migration flows), global and domestic extremism, and the accelerating of technological changes."

Also of note:

A Climate Security Plan for Canada

<https://climateandsecurity.org/wp-content/uploads/2021/01/A-Climate-Security-Plan-for-Canada-January-2021.pdf>

and

Surrounded on all Warm and Cold Fronts: How the Canadian Army can Combat the Climate Crisis

https://cradpdf.drdc-rddc.gc.ca/PDFS/unc350/p812543_A1b.pdf

This topic has been one of discussion in the RUSI(NS) Security Affairs Committee and with other people. That has led to, coincidentally or otherwise, the following articles being brought forward:

Prevent, halt & reverse marine ecosystems degradation

by Vice Admiral Asaf Humayun, former Vice Chief of the Naval Staff, Pakistan Navy

<https://pakobserver.net/prevent-halt-reverse-marine-ecosystems-degradation-by-vice-admiral-asaf-humayun-r/>

Is Climate Change America's Greatest Security Threat?

<https://www.defenseone.com/ideas/2021/06/climate-change-americas-greatest-security-threat/174689/>

And from a webpage of the Prime Minister of Canada:

Strengthening Transatlantic Defence and Security

Note content about: "NATO Centre of Excellence on Climate and Security"

<https://pm.gc.ca/en/news/backgrounders/2021/06/14/strengthening-transatlantic-defence-and-security>

Security Affairs Committee Synopsis

Russia

Last week saw the worst outbreak of Covid in Russia with more than 13000 people a day being infected. This was the official figure which is usually off by two or three times. Officially Russia is now the sixth highest case load in the world and likely is a lot higher. Russia has produced a good solid vaccine, the Sputnik V, but the government is so untrusted that few are willing to get the vaccine

thus Covid is spreading rapidly, overwhelming the medical system. Lockdowns are continuing throughout the country and the regime is unable to do much about it.

The regime is more interested in putting down the ‘extremists’ of Navalny’s groups and supporters than to do anything effective against the pandemic, so what will this do in the longer term? The question is do the people really support the regime? One has to wonder whether the regime’s lack of effectiveness in tackling the pandemic, especially amongst the old, (their main supporters) or dealing with corruption and political interference, coupled with unbridled foreign operations of dubious interest with most operations with high casualty rates amongst private security companies and soldier ‘volunteers’ in formerly allied nations such as Georgia and Ukraine. One has to wonder if they will survive in the longer term or will the regime’s supporters realize they are on a course to disaster?

President Putin did a rather interesting interview with the US media company NBC this past Saturday. The interview was strange, especially the conversation talking about the differences between Biden and Trump — it was almost surreal from a Western point of view. It also shows Putin at his most arrogant manner possible as one who has eliminated his enemies and basically destroyed his country’s economy and set so many foreign incursions in motion with little or no benefit to the Russian people. The interview is worth watching to see what we are really dealing with as an individual and it is not a pretty sight. Russia has nuclear weapons, it is their only real strength, its economy is terrible and set in the 1980s, corruption is rampant and more than 25% of the population want to move out today if they could afford to do so. This is hardly a sign of a country on the rise.

See: https://www.youtube.com/watch?v=9mhi_AyQAYw

Iran

Iran is sending a small squadron around to the Atlantic consisting of a “destroyer,” the *Sahand*, and a new vessel called the *Makran* based on an oil tanker hull. The trip will be over 6000 nautical miles and take more than 30 days. They will go around the Cape of Good Hope and into the Atlantic; the final destination is unknown but suspected as being Venezuela. The *Makran* is carrying up to seven armed motor launches that are commonly used in the Straits of Hormuz. It is a form of sticking a finger into the eye of the US especially in light of sanctions against the regime of Nicholas Maduro. They are correct in one area: they do have a right to have freedom of navigation and no one will question that right or their right to enter the Atlantic. But to break sanctions may be another story.

China

It is good to point out that China is not the Communist Chinese Party (CCP). The CCP represents only about 8% of the population of China. It is hierarchical and starts as members in a village or local area and rises to the pinnacle in the form of Xi Jinping, also known by his many titles and positions including “Core Leader.” There are statistics that say that 95% of all Chinese citizens support the CCP...as the CCP controlled media have said so...it must be true...may be and maybe not. There is no doubt that many folks within the CCP are well meaning and are devoted to the Party and maintaining the party’s position in the lives of all Chinese citizens. There are others, as we have found in our own country as well, who are out for themselves — corruption is systemic and ongoing and many folks are so used to this corruption that they no longer are able to see it.

Xi is always talking about the success of the ways of the CCP but he and many others also do not point out the vast failures, as anything that is embarrassing is usually put down and silenced. At the local level, demonstrations are not unheard of and their actual numbers are completely unknown but it is estimated to be in the tens of thousands with incidents of varying sizes and level of violence. The last figure from some time ago was 20000 + per year. Usually these demonstrations are in response to

local CCP officials doing something corrupt or unpopular that affect the local population. Groups associated with religion or other non-party groups also can cause a bit of mayhem. The actual opposition within China to the CCP is there. China is not the CCP despite them saying so constantly. The CCP has followed Dr Goebbels direction well — say a lie, make it big and keep saying it and people will believe it eventually. Look at our friends to the south and the “big lie” and then look at the unfortunate people who have been led astray. The same applies to China.

In keeping with previously announced ineptitude such as tumbling rockets crashing uncontrollably to the Earth, we now have a major nuclear accident in a province with over 126 million folks in it. The CCP is keeping the lid on the issue and is once again displaying the opacity that the CCP is known for in the world. The same country that brought Covid 19 to the world killing nearly 4 M people around the globe now brings a potential nuclear disaster. By the way, we have absolutely no idea how many Chinese citizens have perished with Covid and the CCP’s incompetent handling of the pandemic; they make sure of it as well through a highly controlled press. Fills one with confidence in their ability to be honest and forthcoming about problems and issues. Nor has the CCP explained to their own public about the collapse of dams throughout the country, part due to the weather and part because of poor construction.

The Taishan Nuclear Power Plant is located in Guangdong Province and is part owned by a French company, Framatome. Unfortunately for the CCP, the French partners announced the issue to the world...but not the CCP who continue to deny that there is a problem. This issue has not been picked up by the Chinese press.

Lastly, China has stated “that the days of ‘global decisions’ being made by a small group of countries are long gone.” This was in answer to the G7 summit. They may be right in some respects but a country unilaterally performing debt diplomacy, causing a pandemic and now appearing to be on the way to creating a nuclear disaster needs someone to call out their actions for those who cannot.

Canadian Armed Forces Strength

The numbers of people in the CAF is often a topic of discussion. The Government of Canada makes this and other data sets available through the Open Government site (<https://open.canada.ca/en>).

Total Number of Military and Civilian Personnel

<https://open.canada.ca/data/en/dataset/9139319a-9cef-4584-ab4e-6b5f4393ed15>

Year	Civilian Female	Civilian Male	Civilian Unknown	RegF Female Officers	RegF Male Officers	RegF Female NCM	RegF Male NCM	ResF Female Officers	ResF Male Officers	ResF Female NCM	ResF Male NCM
2020	11,645	15,898	86	3,430	13,872	6,996	41,539	4,113	9,678	5,917	28,540



Journée nationale des peuples autochtones
ATELIER DES COUVERTURES

National Indigenous Peoples Day
THE BLANKET WORKSHOP

21 JUIN
EN FRANÇAIS
12 h à 13 h 30

JUNE 21
IN ENGLISH
1:45 to 3:15 PM

Canada.ca/Defense

Canada

If you are interested in learning about reconciliation with Aboriginal and Métis peoples and want to make positive changes in your community, this workshop is for you!

Through immersive activities, participants will experience the dispossession experienced by the Aboriginal peoples of Quebec and Canada. During a workshop, you will be invited to put yourself in the place of the Aboriginal people to try to understand their historical, territorial, emotional, cultural and spiritual experience of colonialism... But also their resistance.

An activity of exchange and sharing is planned for the last thirty minutes to pool the questions and reflections that it raises in them.

PLACES ARE LIMITED.

Registration required Marie-Christine.detilly@forces.gc.ca

Facilitation will be provided by Marie Émilie Lacroix

Join us for this immersion activity and discussion on reconciliation with Aboriginal and Métis peoples as part of National Indigenous Peoples' Day.