



Royal United Services Institute of Nova Scotia Dispatches 20 January 2023

The Royal United Services Institute of Nova Scotia provides a forum for the study, promotion and debate of defence, security and safety 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. 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 Royal United Services Institute of Nova Scotia, the Department of National Defence or other government department, the Canadian Armed Forces, or the Royal Canadian Mounted Police or other agency.

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).

Renewal of RUSI(NS) Membership

An email was sent to members on 4 January announcing renewal of membership for 2023. If you have not received the email, please check your spam folder and, if necessary, contact RUSI(NS).

RUSI(NS) Survey 2023

A survey with a few questions has been sent by email to RUSI(NS) members asking for their comments about the Institute. Your feedback is important to the running of RUSI(NS) – please take the time to provide your thoughts about how we are doing.

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.

20 January, Friday - Royal Alberta United Services Institute Lunch & Learn with Cmdre Pat Montgomery "Canada's Naval Reserve - Past, Present and Future." 1130-1330. Live and via Zoom. To register: <https://www.rausi.ca/info-events/lunch-and-learn/562-canada-a-naval-reserve-past-present-and-future> and <https://us02web.zoom.us/meeting/register/tZUocOqpqz4tHt3qKTnDOFkLW8UDra0gxU8W>

Naval Reserve Centennial

The Naval Reserve of the Royal Canadian Navy will be turning 100 on 31 January 2023.

Sailors inspire Naval Reserve Centennial graphic identifier design

<https://www.canada.ca/en/department-national-defence/maple-leaf/rcn/2022/02/navres-centennial-graphic.html>



26 January, Thursday - The Hague Program on International Cyber Security seminar "Russian Information Warfare: Assault on Democracies in the Cyber Wild West." 1800 Amsterdam time. Via Zoom. To register:

https://universiteitleiden.zoom.us/meeting/register/u5cocOctrjovE9G0i_F0THO7rYNBAEkNRdhB

Emended: 15 February, Wednesday - RUSI(NS) Distinguished Speaker Brigadier-General G Michael Adamson, Commander 3 Canadian Space Division, titled "3 Canadian Space Division." 1300-1500. Via Zoom. To register, email RUSINovaScotia@gmail.com - indicate whether you are RUSI(NS) or, if not, of what department/ agency, unit, association or company you are a member. Put "RUSI(NS) Distinguished Speaker 15 February 2023 Registration" as the subject line of your email.

Advance reading:

The Growing Complexity of Space: Implications for Security and Stability

https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/202210E

21 February, Tuesday - Georgetown University Wargaming Society presentation "The Politics of Play: Wargaming with the US Military." Noon-1400 EST. Online. To register:

<https://www.eventbrite.com/e/the-politics-of-play-wargaming-with-the-us-military-tickets-415461174557>

7 March, Tuesday - Georgetown University Wargaming Society presentation "Malign: Gaming Influence in the Information Age." 1800-200 EST. Online. To register: <https://www.eventbrite.com/e/malign-gaming-influence-in-the-information-age-tickets-484966807777>

Publications:

Publications without links are available on request to RUSINovaScotia@gmail.com.

New: RUSI(NS) Information Note "Armoured Fighting Vehicles," 17 January 2023

<https://rusi-ns.ca/armoured-fighting-vehicles/>

RUSI(NS) Information Note "RCN Ship Pennant Numbers," 9 January 2023

<https://rusi-ns.ca/rcn-ship-pennant-numbers/>

This is actually an amended version of a Note published last spring and has been done in anticipation of an announcement about the ship type and therefore pennant numbers of the ships to be built by the CSC project.

New: Canadian Marine Industries and Shipbuilding Association *On Watch*, 18 January 2023

<https://www.cmisa.ca/cpages/on-watch-current>

Edmonton United Services Institute President's *Enews*, January 2023

Military Institute of Windsor *Communiqué*, Volume XLI, Number 1, January 2023

Naval Association of Canada recording “Seaspan Shipyards” by Denis Stevens, VP of Government Relations for Seaspan, 9 January 2023
https://youtu.be/XHKH6MQa_eE

Royal Alberta United Services Institute *Dispatches*, January 2023
<https://www.rausi.ca/component/acym/archive/178-rausi-january-2023-dispatches>

Royal Canadian Naval Association Admiral Hose Branch *Scuttlebutt*, January 2023

Royal Canadian Navy *Your Navy Today* Volume 5 Issue 7
<https://www.canada.ca/en/navy/corporate/navy-news/your-navy-today/volume-5-issue-7.html>

New: Royal United Services Institute of Vancouver Island *Newsletter*, Volume 55, 1st Quarter 2023.

New: Royal United Services Institute of Victoria (Australia) *Defence Update*, Volume 16, Issue 5, 16 January 2023

Royal United Services Institute of Victoria (Australia) *Quarterly Newsletter*, Volume 21, Issue 4, December 2022

St. Francis Xavier University Mulroney Institute of Government *Canadian Naval Review* Volume 18, Number 2 (2022)

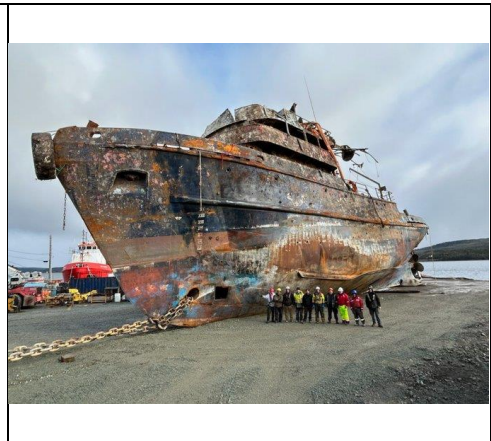
United Services Institute of Nanaimo and North Island *Newsletter*, Vol 31, No 1, January 2023





Veterans Affairs Canada *Salute!* January 2023
<https://www.veterans.gc.ca/eng/about-vac/news-media/salute/2022-12>

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.

Canadian Coast Guard @CoastGuardCAN Jan 12 tweeted:
News from #Newfoundland: We said goodbye to 2022 with a victory in Mount Carmel! Our #EnvironmentalResponse crew and contractors removed the pollution threat of the derelict vessel Matterhorn. It is now out of the water, secured, and ready for cleaning and deconstruction.
RUSI(NS) retweeted: Salvage for disposal of MATTERHORN formerly @NationalDefence ocean-going tug (type designation ATA) ST CHARLES
<http://www.forposterityssake.ca/Navy/TUG-ST-CHARLES.htm> ATA operated by Queen's/King's Harbour Master crews to provide tow & other support services to @RoyalCanNavy



<p>Communications Security Establishment (CSE) @cse_cst 12 Jan tweeted and RUSI(NS) retweeted: Our foreign signals intelligence mandate helps support the safety and well-being of Canadians, Canadian infrastructure, and Canada’s national interests. Learn more about our work in #SIGINT: https://cse-cst.gc.ca/en/mission/foreign-intelligence (Foreign intelligence)</p>	
<p>LGen J.J.M.J. Paul, CCA / CAC @Army_Comd_Arme 13 Jan tweeted: The Armoured Combat Support Vehicle (ACSV) project replaces the aging LAV II Bison and M113 TLAV fleet capabilities with 360 multi-variant platforms that are based on the LAV 6.0 chassis. (2/3) RUSI(NS) retweeted: Armoured Combat Support Vehicle project http://dgpapp.forces.gc.ca/en/defence-capabilities-blueprint/project-details.asp?id=1013 & https://www.tpsgc-pwgsc.gc.ca/app-acq/amd-dp/vbcs-acsv-eng.html</p>	
<p>Canadian Coast Guard @CoastGuardCAN 14 Nov tweeted: News from #BritishColumbia: We’ve extended our lease of the two emergency towing vessels for another year. These vessels can tow large ships in distress and have responded over 39 times since 2018 to help prevent maritime incidents! #OceansProtectionPlan RUSI(NS) retweeted: What is CAN🇨🇦 requirement for emergency towing services on its 3 coasts and Great Lakes? Are there enough tugs? "Emergency Towing Vessels: Providing a Lifeline to Safety for Ships in Distress Around the World" https://clearseas.org/en/blog/emergency-towing-vessels-providing-a-lifeline-to-safety-for-ships-in-distress-around-the-world/</p>	
<p>Royal Canadian Air Force @RCAF_ARC tweeted Jan 12: Two contracts were awarded to modernize the CH-149 Cormorant helicopter fleet to ensure continued support to SAR operations. Our current fleet will be upgraded to the most advanced version of the helicopter and will allow us to increase our fleet size from 13 to 16 aircraft. RUSI(NS) retweeted: Welcome increase of @RCAF_ARC fleet from 13 to 16 #CH149 #helicopters using available parts from other sources. Innovative, need more action like this when normal procurement takes so long https://www.canada.ca/en/department-national-defence/news/2022/12/minister-anand-announces-cormorant-mid-life-upgrade-and-simulator-solution-contracts-award-to-ensure-continued-search-and-rescue-capabilities.html</p>	

Skies Magazine @SkiesMag 13 Dec tweeted and RUSI(NS) retweeted: A journey to Canada's most northern settlement unlocked operational capability for the CH-148 Cyclone. Check out the epic expedition: <https://skiesmag.com/features/epic-expedition-proving-ch-148-cyclone-capabilities-north/> #alertnunavut #helicopter #avgeek @RCAF_ARC



Harjit Sajjan @HarjitSajjan Jan 11 tweeted: #DYK Island nations in the #Caribbean work together to enhance their security and respond to natural disasters. This is the Regional Security System. With our support, the air wing of the RSS maintains state-of-the-art avionics and the ability to carry out maritime surveillance. RUSI(NS) retweeted: Regional Security System = international agreement of eastern Caribbean island states for defence & security of eastern Caribbean <https://www.rss.org.bb/> CAN🇨🇦 committed to support regional disaster management (preparedness/response) capacities. Support extended to air wing of RSS



"CAN🇨🇦 delivers Haiti-purchased vehicles to help Haitian National Police respond to crisis" <https://www.canada.ca/en/global-affairs/news/2023/01/canada-delivers-haiti-purchased-vehicles-to-help-haitian-national-police-respond-to-crisis.html> @CanadaFP did not identify vehicles, possible The Armoured Group Terrier LT-79 armoured cars?



Dave Perry @DavePerryCGAI 16 Jan tweeted: (A shooting war concentrates the mind. Ottawa needs to end military procurement paralysis <https://www.theglobeandmail.com/opinion/editorials/article-a-shooting-war-concentrates-the-mind-ottawa-needs-to-end-military/>) RUSI(NS) retweeted: "Political grandstanding, bureaucratic defensiveness, cumbersome ethics rules & a withered national defence capacity all have played a part in procurement paralysis." Review priorities of defence procurement & political influence. Hold people responsible for timely delivery



David Pugliese @davidpugliese 16 Jan tweeted: My latest article...Purchase of new planes to replace 50-year Twin Otter military aircraft now on hold

<https://ottawacitizen.com/news/national/defence-watch/purchase-of-new-planes-to-replace-50-year-twin-otter-military-aircraft-now-on-hold> via @ottawacitizen

RUSI(NS) retweeted: Utility Transport Aircraft project (#RCAF_ARC #CC138 Twin Otter replacement) delayed <http://dgpaapp.forces.gc.ca/en/defence-capabilities-blueprint/project-details.asp?id=979> final delivery 2029/30. Should have been easy procurement (yes, demanding but civil requirements for a/c) but no explanation for hold

Comment from a RUSI(NS) member: Whenever this particular procurement is given new life, dollars to donuts that Viking Air Limited – now part of the resurrected De Havilland Canada – will no doubt be interested in bidding, with the pitch that the only aircraft you replace a Twin Otter with is a newer Twin Otter. (Western Canada-based Viking previously purchased and held the type certificates of all DHC aircraft, except, if I recall correctly, the DHC DASH 8... which became the Bombardier Q400 Series, until that company got out of the commercial transport aircraft market, to focus exclusively on the business jet segment.) Viking in fact developed a new 400 Series Twin Otter, one that it's since marketed to potential customers around the globe. A great bush and commuter aircraft, and like other breeds in the DHC stable, a Canadian icon.



Canadian Armed Forces Operations @CFOperations 17 Jan tweeted: The Canadian Army exercise planning and execution course launched today in Barbados. Our CAF members share their expertise and distinct skillsets as part of Canada's commitment to build regional security and improve rapid response to natural disasters in the Caribbean region
RUSI(NS) retweeted: Exercise #TRADEWINDS - @CanadianForces train with Caribbean partners to: stop organized crime & other threats that affect people across borders, humanitarian assistance & disaster relief #HADR, respond quickly to all events, strengthen partnerships including civil-military

Imagery of CAF in TRADEWINDS 2022:

<https://www.flickr.com/photos/cfcombatcamera/albums/72157654222522292>



CAN🇨🇦 to donate 200 Senator armoured cars to UKR <https://www.canada.ca/en/department-national-defence/news/2023/01/defence-minister-anita-anand-visits-kyiv-meets-with-defence-minister-oleksii-reznikov-and-announces-donation-of-200-additional-armoured-vehicles.html> & <https://roshel.ca/products/law-enforcement/senator-apc/>



Personal opinion from a colleague: While the need and urgency to aid Ukraine is undebatable, it is less clear how this fits within the Government of Canada's current time-consuming, overly bureaucratic, risk adverse, procurement process in that it is an untendered, directed, contract to one company. Indeed, the second directed and untendered contract to the same company with the previous purchase of eight vehicles. Questions could readily be asked if this is the process to equip or re-equip the Ukraine military why this same process cannot be used to recapitalize the Canadian Army for Latvia. Industrial benefits, risk, and price do not seem to be a barrier to a rapid contract award. Note that the government just announced a little more than a week ago the purchase of the \$406 million National Advanced Surface-to-Air Missile System for Ukraine outside of the procurement process for a critical air defences system that Canada does not even have to protect its own troops in Latvia. By its own admission, the Canadian Army has an urgent operational need for man portable anti-tank and anti-aircraft missiles, and a counter drone capability and they have been waiting for at least a year if not years for what is a basically combat capability for a modern Army.

And from a RUSI(NS) member: It's great to see Canada stepping up to support Ukraine, however, our forces do not seem to be on the government's list of priorities for badly needed upgrades...

"All set for Obangame Express 2023 International maritime exercise" <https://www.military.africa/2023/01/all-set-for-obangame-express-2023-international-maritime-exercise/> 2 @RoyalCanNavy Kingston-class patrol vessels deploying to participate in Ex #OBANGAMEEXPRESS. #RCNavy's 'diplomatic' function, building maritime security capacities



When you buy a tank, you need to buy a lot more than a tank...

Nicholas Drummond @nicholadrummond 19 Jan tweeted: We love to debate the technical merits of one tank versus another, but history shows us that the industrial solution to manufacture and support a particular design is at least as important as the mix of firepower, protection and mobility offered. (<https://twitter.com/nicholadrummond/status/1616053538366291968>)



War Humour

Again, Ukraine demonstrates its mastery of IO. Watch the video.

Defense of Ukraine @DefenceU 12 Jan tweeted (<https://twitter.com/DefenceU/status/1613599573955444751>):

Western countries are so worried about sending tanks to Ukraine, they're arguing about what is and isn't a "tank." We offer our humble suggestion.

Introducing the 'M1A2 Abrams Recreational Utility Vehicle.'



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 RUSINovaScotia@gmail.com.

A Reporter Exposes China's Influence in Canada

The article "A Reporter Exposes China's Influence in Canada" by Sabastian Rotella in the Asian Times

(<https://asiatimes.com/2023/01/a-reporter-exposes-chinas-influence-in-canada/>) is an interesting report on the work of

Global News reporter Sam Cooper. Mr Cooper has been targeted in two lawsuits because of his work in investigating the work of Communist Chinese Party's (CCP) influence operations in Canada.



Jonathan Manthorpe wrote about this issue of influence operations in his book "The Claws of the Panda" as well. Mr Cooper has provided an update to Mr Manthorpe's original work. One point is very clear: Canada needs to investigate, evaluate and take the necessary action. Both men have pointed out that despite being warned of the issue by Canadian and allied intelligence, the Canadian government has failed to take any action of consequence and has generally ignored the problem.

The article is self-explanatory. Canada should be taking action similar to the Commonwealth of Australia. Not taking action would be travesty.

Taiwan Wargame Simulations Could Exacerbate U.S. Strategic Miscalculation

<https://uscnpm.org/2022/08/19/taiwan-wargame-simulations-could-exacerbate-us-strategic-miscalculation/>

If a staff member of the Chinese-funded Institute for China-America Studies is expressing reservations about conclusions from wargaming an invasion of Taiwan, then one can take it China is concerned with results of the games.



Too, wargames are not meant to be definitive. They are meant to make people think.

China is taking lessons from Russia's invasion of Ukraine, Taiwan's foreign minister says

<https://www.cbc.ca/news/politics/china-ukraine-russia-taiwan-1.6713413>

Canada's UN Ambassador Bob Rae: "We have to be prepared and ready for whatever comes. We shouldn't be naive about it..."



Is Canada truly ready to take military, economic and information action to counter a Chinese invasion, blockade or some other form of attack on Taiwan? Is Canada ready to do so early, before the Chinese action is irreversible?

Unmanned Maritime Strike – Navy and Air Force at the Cutting Edge of Tactical Integration

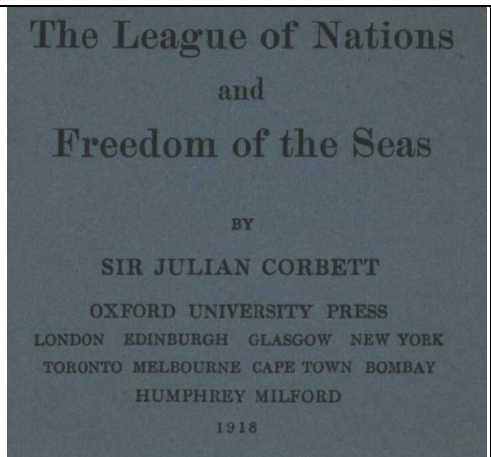
<https://www.navy.mil/Press-Office/News-Stories/Article/3267299/unmanned-maritime-strike-navy-and-air-force-at-the-cutting-edge-of-tactical-int/>



Note the embarkation of a 'MQ-9 Liaison Officer' in the aircraft carrier. A useful approach no matter what the element (destroyer, army battle group, etc.) that a remotely piloted aircraft system (RPAS), armed or not, may be operating in support. Indeed, the whole article seems to be more about sorting out relationships (command and control), formal and informal, and information exchange than about what the RPAS actually did for the naval group. Lessons that one can be assured the Royal Canadian Air Force's RPAS project (<https://www.canada.ca/en/department-national-defence/services/procurement/remotely-piloted-aircraft-system.html> and <http://dgpapp.forces.gc.ca/en/defence-capabilities-blueprint/project-details.asp?id=977>) are considering. The sort of lessons that were remarked in the September 2022 presentation to RUSI(NS) "Uncrewed Aerial Vehicles – Canadian and US Programs" (<https://rusi-ns.ca/rpas/>).

Freedom of the Seas

From a 11 January 2023 tweet, quoted from Corbett (leading maritime strategy writer) (https://twitter.com/James_WE_Smith/status/1613089845424914432): "It comes then to this—that if Freedom of the Seas is pushed to its logical conclusion of forbidding altogether the capture and destruction of private property at sea, it will in practice go far to rob fleets of all power of exerting pressure on an enemy, while armies would be left in full enjoyment of that power." The League of Nations and freedom of the seas (https://en.wikisource.org/wiki/The_League_of_Nations_and_freedom_of_the_seas)



There are nuances to freedom of the seas. To be studied and understood.

F-35 was and is the only choice for Canada

<https://torontosun.com/opinion/columnists/mackay-f-35-was-and-is-the-only-choice-for-canada>

"The defence of our nation and those who provide that security tops that list (of "critical subjects that should be immune from the rabid partisan games") when the fallout of failure can literally imperil the very lives of those who courageously take on unlimited liability when they join the (Canadian Armed Forces)."



Snipers set sights on new rifle

<https://canadianarmytoday.com/snipers-set-sights-on-new-rifle/>



Contract with Boeing is not the answer to replacing patrol and surveillance aircraft

<https://www.thestar.com/opinion/contributors/2023/01/16/contract-with-boeing-is-not-the-answer-to-replacing-patrol-and-surveillance-aircraft.html>

Boeing is making an unsolicited offer of their P-8 Poseidon as a replacement for the Royal Canadian Air Force's current fleet of modernized CP140 Auroras maritime patrol aircraft. The author of the article, Jacques Roy, makes fair points about the home-grown possibility of a Multi-Mission Aircraft built using Bombardier's successful Global Express business jet platform. Boeing is trying to find military buyers for their 737-800-based platform, much as they did for their F-18E/F Super Hornet in the Future Fighter Capability project. What's interesting in this case is that, just over some 40 years ago, Boeing was also competing its 707 aircraft to be Canada's long-range patrol aircraft – a competition won by Lockheed's Orion/Aurora platform. Perhaps they're hoping to not again be the proverbial bridesmaid....

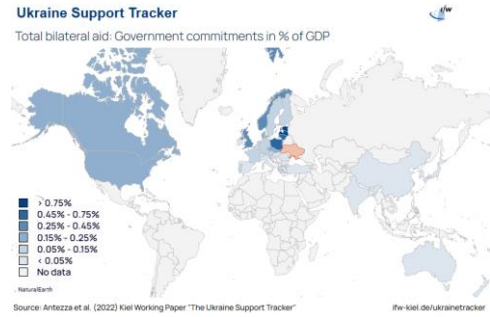


And Canada's PAL Aerospace, which has done well providing special mission platforms built around De Havilland's DASH 8 family of turboprops, is no doubt also hoping to contend for the MMA procurement.

Support to Ukraine

<https://www.ifw-kiel.de/topics/war-against-ukraine/ukraine-support-tracker/>

"In terms of total military support to Ukraine, Canada ranks fifth behind Poland, Germany, the U.K., and the U.S. in the top slot, according to the Kiel Institute for the World Economy."



Navy Mine Warfare Teeters Between Present, Future

<https://www.nationaldefensemagazine.org/articles/2023/1/17/navy-mine-warfare-teeters-between-present-future>

Naval mines remain a potent threat world-wide. Does the Royal Canadian Navy have the mine countermeasures organization, people and equipment to protect Canadian harbours and, if tasked by government, friendly locations elsewhere?



"That leaves nine mine countermeasure packages for potential use on 'vessels of opportunity'..." A thought: could a US Navy mine countermeasures package be deployed in a Royal Canadian Navy Kingston-class mine warfare vessel? Further, will the Kingston-class replacement (the Kingstons are getting old and their replacement as multi-role patrol vessels is necessary in a National Shipbuilding Strategy refresh/Defence Policy Update) have satisfactory mine countermeasures (and maybe mine laying) capability?

It's Time For Canada To Join The AUKUS Defence Pact

<https://www.canzukinternational.com/2023/01/its-time-for-canada-to-join-the-aukus-defence-pact.html>



Ping, Ping: Bringing autonomy to hydrography to map the undersea world for the Navy

<https://breakingdefense.com/2023/01/ping-ping-bringing-autonomy-to-hydrography-to-map-the-undersea-world-for-the-navy/>

Acronym Alert!

LDAH = long-duration autonomous hydrography

IPOE = intelligence preparation of the operational environment (that one is well known in the military)

Cool tech, having the vessel's autonomous system receiving information from the hydrographic survey payload to guide route manoeuvres.



Other Sources:

#3D printing

Australian Army Proves Metal 3D Printing can Strengthen Sovereign Capability

<https://www.spee3d.com/australian-army-proves-metal-3d-printing-can-strengthen-sovereign-capability/>

US Army Chooses MELD to 3D Print Metal Military Vehicles

<https://3dprint.com/292115/us-army-chooses-meld-to-3d-print-metal-military-vehicles/>

#Arctic

A Battle for the Arctic Is Underway. And the U.S. Is Already Behind.

<https://www.politico.com/news/magazine/2022/12/17/climate-change-arctic-00071169>

#armour

Why the US Army doesn't call MPF a tank

<https://twitter.com/ronkainen7k15/status/1616022853551534082>

#Canadian Armed Forces

Canadian Armed Forces 101

<https://www.canada.ca/en/department-national-defence/corporate/reports-publications/transition-materials/defence-101/2020/03/defence-101/caf-101.html>

Vehicles

<https://www.canada.ca/en/army/services/equipment/vehicles.html>

A recent tweet from an OSINTer about (not) tracking CA resources highlighted these two pages. Good overviews.

#China

The PLA's People Problem

<https://www.defenseone.com/ideas/2023/01/plas-people-problem/381728/>

#exercises #wargaming

Names from Nowhere? Fictitious Country Names in Survey Vignettes Affect Experimental Results

<https://academic.oup.com/isq/article/67/1/sqac081/6987670>

#Indo-Pacific

Could Beijing Risk a Diversionary War Against Taiwan?

<https://www.lawfareblog.com/could-beijing-risk-diversionary-war-against-taiwan>

The U.S. Navy Submarine Force could sink the Chinese fleet and save Taiwan, but at the cost of a quarter of its boats

<https://www.forbes.com/sites/davidaxe/2023/01/10/the-us-navy-submarine-force-could-sink-the-chinese-fleet-and-save-taiwan-but-at-the-cost-of-half-its-boats/>

#information operations #culture warfare

Russia Finds a New Target: Maps That Still Mark Crimea as Ukraine's

<https://www.wsj.com/articles/russia-finds-a-new-target-maps-that-still-mark-crimea-as-ukraines-11673521246>

Controlling what people know, where...

#innovation

Innovating for Great Power Competition: An Examination of Service and Joint Innovation Efforts

<https://csbaonline.org/research/publications/innovating-for-great-power-competition-an-examination-of-service-and-joint-innovation-efforts>

#intelligence

After the Emergencies Act: Canada Needs an Intelligence System Review

<https://www.cigionline.org/articles/after-the-emergencies-act-canada-needs-an-intelligence-system-review/>

#planning

Working Back From "What If?"

<https://warroom.armywarcollege.edu/articles/what-if/>

#international relations

Who Are You Calling a Great Power?

<https://www.lawfareblog.com/who-are-you-calling-great-power>

#Canadian Armed Forces

Military concerned by Canada's absence from American-British-Australian security pact

<https://www.ctvnews.ca/politics/military-concerned-by-canada-s-absence-from-american-british-australian-security-pact-1.6231547>

#maritime security

#naval warfare

Assessing impacts to maritime shipping from marine chokepoint closures

<https://www.sciencedirect.com/science/article/pii/S2772424722000336>

#subsea warfare

Cybersecurity Under the Ocean: Submarine Cables and US National Security

<https://www.lawfareblog.com/cybersecurity-under-ocean-submarine-cables-and-us-national-security>

#NATO

NATO Medical Support Capstone Concept is Approved

<https://www.act.nato.int/articles/nato-medical-support-capstone-concept-approved>

Opening remarks by the Chair of the NATO Military Committee, Admiral Rob Bauer and NATO Deputy Secretary General Mircea Geoană at the start of the Military Committee in Chiefs of Defence session. 18 January 2023

https://www.nato.int/cps/en/natohq/opinions_210684.htm

#naval warfare

Bringing Back the Fleet? A Review of NWP-3 Fleet Warfare, Change 1

<https://cimsec.org/bringing-back-the-fleet-a-review-of-nwp-3-fleet-warfare-change-1/>

#Royal Canadian Air Force #FFCP Future Fighter Capability Project

New RCAF fighters operational by 2032

<https://frontline.online/defence/featured/11952-New-RCAF-fighters-operational-by-2032>

#Russia-Ukraine War

I Live, I Fight, I Win? Analyzing Russia's Slightly Bizarre Manual for Soldiers Fighting in Ukraine

<https://mwi.usma.edu/i-live-i-fight-i-win-analyzing-russias-slightly-bizarre-manual-for-soldiers-fighting-in-ukraine/>

An examination of how Ukraine and Russia might think about and plan the inevitable offensives to come in 2023

<https://mobile.twitter.com/WarintheFuture/status/1613773437989949441>

and <https://en.rattibha.com/thread/1613773437989949441>

How Ukraine became a laboratory for Western weapons and battlefield innovation

<https://www.cnn.com/2023/01/15/politics/ukraine-russia-war-weapons-lab/index.html>

Russia-Ukraine War and stalemate

<https://en.rattibha.com/thread/1614889566317711360>

Offensives around Bakhmut and Kreminna highlight different strategic & cultural approaches that Ukraine and Russia have applied in the war

<https://twitter.com/WarintheFuture/status/1615611175106146310>

Mercenaries and massive troop call-ups won't win Putin's war

<https://www.aspistrategist.org.au/mercenaries-and-massive-troop-call-ups-wont-win-putins-war/>

#armour

What is a 'main battle tank,' and how will Ukraine use them?

<https://breakingdefense.com/2023/01/what-is-a-main-battle-tank-and-how-will-ukraine-use-them/>

Ukraine is using its old tanks as artillery amid trench warfare in Bakhmut

<https://taskandpurpose.com/tech-tactics/ukraine-bakhmut-tanks-artillery/>

Even old tanks can have their uses.

Infantry fighting vehicles for Ukraine, what does this mean for 2023?

<https://mobile.twitter.com/WarintheFuture/status/1611118392299393024>

A tank is not a howitzer

<https://wavellroom.com/2023/01/18/a-tank-is-not-a-howitzer/>

#drones

Russia's Iranian-Made UAVs: A Technical Profile

<https://rusi.org/explore-our-research/publications/commentary/russias-iranian-made-uavs-technical-profile>

#information operations

Disinformation About The Current Russia-Ukraine Conflict – Seven Myths Debunked

<https://euvsdisinfo.eu/disinformation-about-the-current-russia-ukraine-conflict-seven-myths-debunked/>

Shifting The Focus, Engineering Paranoia, Manufacturing Fake Threats

<https://euvsdisinfo.eu/shifting-the-focus-engineering-paranoia-manufacturing-fake-threats/>

Russian So-Called ‘Peace Proposals’ Are Empty PR Stunts

<https://euvsdisinfo.eu/russian-so-called-peace-proposals-are-empty-pr-stunts/>

#war art

Paintings And Propaganda: The Art Motivated By War In Ukraine

<https://www.rferl.org/a/ukraine-russia-was-murals-art-propaganda/32091293.html>

#NATO

Ending the war while ensuring Russia does not gain territory via nuclear coercion

<https://thebulletin.org/2023/01/ending-the-war-while-ensuring-russia-does-not-gain-territory-via-nuclear-coercion/>

#security

Murky Threats: Why Defense Against Gray-Zone Aggression Needs a Whole-of-Society Approach

<https://fourninesecurity.de/en/2023/01/09/why-defense-against-gray-zone-aggression-needs-a-whole-of-society-approach>

#staffwork

Practical Guide To Writing Briefing Notes In The Government Of Canada

https://uwaterloo.ca/defence-security-foresight-group/sites/ca.defence-security-foresight-group/files/uploads/files/dsfg_policy_brief_writing_guide_v2.pdf

#strategy, naval

The Fourth Battle of the Atlantic Is Underway

<https://cepa.org/article/the-fourth-battle-of-the-atlantic-is-underway/>

#subsea warfare #marine security

On Protecting the Undersea Cable System

<https://www.lawfareblog.com/protecting-undersea-cable-system>

#warfare

Ignoring Failure - General DePuy and the Dangers of Interwar Escapism

<https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/January-February-2023/Burke/>

Deterrence Through Doctrine: The Case for a Joint Counter-Landing Doctrine

<https://warontherocks.com/2023/01/deterrence-through-doctrine-the-case-for-a-joint-counter-landing-doctrine/>

#morale

Haunted by Clausewitz's Ghost - Moral Forces in the Collapse of the Afghan Military

<https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/November-December-2022/Potter/>

#wargaming

Is it okay to enjoy wargames?

<https://punchboard.co.uk/is-it-okay-to-enjoy-wargames/>

Other:

2023 Canadian Naval Memorial Trust Essay Competition

See poster at end of *Dispatches*.

Military Strategy Magazine Volume 8, Issue 3

<https://www.militarystrategymagazine.com/>

contents:

Does Artificial Intelligence Change the Nature of War?

Great in Theory: Does the U.S. Need a New Strategic Paradigm?

Turnaround Bundeswehr: What Money Cannot Buy

On Two Antecedent Principles of War

Quantum Principles

Because War Matters: The Communications Problem in Strategic Studies

Operational Stress Injury Research

The MacDonald Franklin Operational Stress Injury (OSI) Research Centre (located at Lawson Health Research Institute) is conducting an online study to evaluate associations between personality traits and moral injury among Canadian Armed Forces (CAF) Veterans. We are reaching out because you previously expressed interest in being contacted about new research opportunities related to Veteran health. **We are inviting you to participate in this online survey study.**

Study background:

CAF members may encounter challenging deployment experiences that may increase their risk of experiencing moral injury. Research is needed to understand whether differences in personality impact the development of moral injury among CAF Veterans.

Study procedure:

You are eligible to participate in this study if you 1) have a history of military service within the CAF (i.e., CAF Veteran), 2) are at least 18 years of age 3) are able to provide informed consent, and 4) are English-speaking.

If you choose to participate, you will be asked to complete a series of online questionnaires. The duration of the survey is approximately 30 to 45 minutes.

Please click the link below to check your eligibility and to sign up:

<https://participaid.co/studies/dL9Xje>

If you have already participated in this study, we ask that you please **do not** complete it again.

If you are aware of other CAF Veterans who might be interested in participating, please also feel free to send them the link.

If you have any questions or concerns, you may contact the MacDonald Franklin OSI Research Centre at osiresearch@sjhc.london.on.ca.

Principal Investigator: Dr. Don Richardson.

Thank you for your support.

Russian Federation Navy Surface Combatant Recognition and Identification Guide

https://www.oni.navy.mil/Portals/12/Intel%20agencies/russia/Russia_Ship_Silhouettes_2021.png

See: The Russian Navy - A Historic Transition

<https://www.oni.navy.mil/ONI-Reports/Foreign-Naval-Capabilities/Russia/>

UNCLASSIFIED
RUSSIAN FEDERATION NAVY
SURFACE COMBATANT RECOGNITION AND IDENTIFICATION GUIDE

MAJOR COMBATANTS

 KUZNETSOV CV 302.3 meters (991.8 feet) <i>Admiral Kuznetsov</i>	 KIROV CGN 252.0 meters (826.8 feet) <i>Petr Velikiy</i>	 STEREGUSHCHIY I FFG 101.5 meters (332.8 feet) <i>Steregushchy</i>	 KRIVAK I FF 133.5 meters (438.2 feet) <i>Krivak</i>
 UDALOY I DD 153.2 meters (502.6 feet) <i>Viktor</i> , <i>Admiral Kalashov</i> , <i>Admiral Tribun</i>	 UDALOY II DD 153.2 meters (502.6 feet) <i>Admiral Chabarovskiy</i>	 STEREGUSHCHIY II FFG 101.5 meters (332.8 feet) <i>Sobolovskiy</i> , <i>Stary</i>	 KRIVAK II FF 123.5 meters (405.2 feet) <i>Plyusny</i>
 UDALOY I DD 153.2 meters (502.6 feet) <i>Admiral Panteleev</i> , <i>Admiral Stroganov</i> , <i>Admiral Ushakov</i> , <i>Stroganovskiy</i>	 UDALOY II DD 153.2 meters (502.6 feet) <i>Murabit</i> , <i>Chapayevskiy</i>	 STEREGUSHCHIY III FFG 106.0 meters (347.8 feet) <i>Gromyachiy</i>	 NEUSTRASHIMYY FF 128.6 meters (425.2 feet) <i>Neustrashimyy</i> , <i>Neustrashimyy</i>
 SLAVA CG 156.8 meters (514.5 feet) <i>Morskoi Bortov</i> , <i>Voronezh</i>	 GRIGOROVICH FFG 154.8 meters (507.6 feet) <i>Admiral Grigoryevich</i> , <i>Admiral Esenin</i>	 GORSHKOV FFG 135.0 meters (442.8 feet) <i>Admiral Gorshkov</i> , <i>Admiral Krasovskiy</i>	 GRISHA III FFL 71.2 meters (233.6 feet) <i>Grisha</i>
 SOVREMENNYI DDG 236.0 meters (774.2 feet) <i>Neustrashimyy</i> , <i>Ryknyy</i>	 BYKOV FFLG 95.0 meters (311.8 feet) <i>Vasily Bykov</i> , <i>Dmitriy Paganov</i>	 GEPAHD I FF 102.1 meters (336.5 feet) <i>Grifon</i>	 GRISHA V FFL 71.2 meters (233.6 feet) <i>Grisha</i> , <i>Grisha</i>
 GEPAHD II FF 102.1 meters (336.5 feet) <i>Grifon</i>	 GEPAHD II FF 102.1 meters (336.5 feet) <i>Grifon</i>	 GEPAHD II FF 102.1 meters (336.5 feet) <i>Grifon</i>	 GEPAHD II FF 102.1 meters (336.5 feet) <i>Grifon</i>

MINOR COMBATANTS

 DERGACH PGG 61.5 meters (201.6 feet) <i>Zaria</i> , <i>Tamara</i>	 NANUCHKA III PGG 59.5 meters (194.8 feet) <i>Rus</i> , <i>Andrey</i>	 TARANTUL III PGG 56.1 meters (184.1 feet) <i>Zvezdochka</i> , <i>Zvezdochka</i>	 PARCHIM II PG 79.2 meters (260.1 feet) <i>Dneprov</i> , <i>Kavkaz</i>
 URAGAN PGG 67.6 meters (221.8 feet) <i>Neuchay</i> , <i>Dobrynya</i>	 SVIVAZHSK PGG 76.1 meters (249.7 feet) <i>Sevastopol</i> , <i>Vasily Voinich</i> , <i>Vasily Ostrov</i> , <i>Zelenskiy Dni</i>	 TARANTUL III PGG 56.1 meters (184.1 feet) <i>R-24</i> , <i>Zvezdochka</i> , <i>Kabardynskoye Chernye</i> , <i>Zvezdochka</i>	 ASTRAKHAN PG 61.5 meters (201.6 feet) <i>Astrakhan</i> , <i>Kaluga</i>
 TARANTUL II PGG 56.1 meters (184.1 feet) <i>R-79</i> , <i>Starynets</i>	 SVIVAZHSK PGG 76.1 meters (249.7 feet) <i>Sevastopol</i> , <i>Vasily Voinich</i> , <i>Vasily Ostrov</i> , <i>Zelenskiy Dni</i>	 TARANTUL III PGG 56.1 meters (184.1 feet) <i>R-21</i> , <i>Zvezdochka</i> , <i>R-22</i> , <i>Zvezdochka</i> , <i>R-24</i>	 NANUCHKA IV PGG 59.5 meters (194.8 feet) <i>Sevastopol</i>
 TARANTUL II PGG 56.1 meters (184.1 feet) <i>R-71</i> , <i>Kavkaz</i> , <i>R-231</i>	 SVIVAZHSK PGG 76.1 meters (249.7 feet) <i>Sevastopol</i> , <i>Vasily Voinich</i> , <i>Vasily Ostrov</i> , <i>Zelenskiy Dni</i>	 SMOLNY PST 136.0 meters (446.2 feet) <i>Smolny</i> , <i>Parkuzh</i>	 NANUCHKA IV PGG 59.5 meters (194.8 feet) <i>Sevastopol</i>

Ship silhouettes are not to scale
ICOD: 11 January 2023

UNCLASSIFIED

Russian Losses

John Spencer @SpencerGuard 16 Jan tweeted: What does Russia have left? I was playing with some numbers last week. The real question is what does Russia really have in storage? Is the equipment even there, is it useable? #RussiaUkraineWar

Equipment	On Hand (2022)	Lost in Ukraine (Oryx / UA)	Percentage lost (Oryx / UA)
Main Battle Tanks	3,417 2,927 (Army) 330 (Naval Infantry) 160 (Airborne) *10,200 reported in storage	1621 / 3098	47.4% / 90.6%
Infantry Fighting Vehicles	6,570 5,180 (Army) 1,260 (Naval Infantry) 130 (Airborne) *8,500 reported in storage	1910 /	29.%
Armored Personnel Carriers	7,272 6,050 (Army) 400 (Naval Infantry) 822+ (Airborne) *6,000 reported in storage	796 /	10.9%
Reconnaissance Vehicles	1,700 (Army) *1,000+ in storage	32 /	1.8%
Artillery systems	5,899 4,894+ (Army) 405 (Naval Infantry) 600 (Airborne) *17,175 reported in storage	463 / 2086	7.8% / 35.3%
Multiple Launch Rockets	1,114 1,056 (Army) 58 (Naval Infantry) *3,220 reported in storage	168 / 437	15% / 39%
Helicopters	948 127 (Naval Aviation) 821 (Aerospace Forces)	75 / 276	7.9% / 29%

Security Affairs Committee Synopsis

Intelligence

Much of what is available today is what the media calls open source intelligence or OSINT. It comes from a vast variety of sources and agencies of various reliability and some are outright pieces of disinformation. Social media has provided platforms for gifted amateurs and "trolls" and lots of interesting people in between such as journalists. There a lot more of those folks than there are trained reliable intelligence analysts to deal with the vast quantity of information that is out in public view. As stated in previous notes, information has to be analyzed by trained, capable people. This is not an easy process at best an absolute horror show at worst.

In my first operational tour as an intelligence officer, life was simple. The number of sources and agencies that I needed on a regular basis was under a hundred - it has risen exponentially ever since and well beyond the capability of most intelligence organizations to actually review and comment upon, and it has overwhelmed most agencies. There have been major improvements in the information technology to deal with some aspects and there are very high hopes that new artificial intelligence capabilities will greatly help in future. Still, the problem arises in the initial inputs to any computer application, artificial or otherwise. It has become apparent that machine learning can also cause biases intended or otherwise, so its use is still questionable although better than nothing and this has to be managed somehow. The Russia-Ukraine war has been an example of this new challenge, vast quantities of information of questionable value have been created. It has given new meaning to the quaint idea of circular reporting and often contributors are in competition to see who may get the most "followers," so analysis is lacking. While there are some contributors who are conscientious there are others who acquire information by stealing other folks' work and using it on their own channel. It is essentially the "Wild West" and there are a lot of people with ulterior motives. All that to say, the world has changed and a lot of how we see things can be very different from reality.

O Canada

The biggest news of the week within Canada has been the publication of a book, "Where to from Here: A path to Canadian Prosperity" by former Finance Minister Bill Morneau of his time within the cabinet of Prime Minister Trudeau. Taken with the Jodie Wilson-Raybould book "Indian in the Cabinet: Speaking Truth to Power," her view on her time in cabinet and her subsequent organized dismissal plus others who have intimate knowledge of the actions of the government, it shows a very ugly side to the current state of politics. While one understands that all these critics have an "axe to grind," the consistency of claims is disturbing. The books should be viewed with that understanding, however, the message is that perhaps we all should be taking more time to view current actions.

The second piece of news is the further delay of the Twin Otter replacement. Nine aircraft were originally purchased of which four are still in operation in 440 Squadron, the only Air Force squadron in the north. Defence procurement needs a fix and most of it involves eliminating the role of other departments in the overall process and the de-politization of the process as "too many cooks definitely spoil the broth." DND has returned capital expenditure money every year since 2016 to the tune of over 12B CAD in capital funds. It speaks for itself.

Canada has just announced that they will purchase 200 Roshel Senator armoured cars for Ukraine on top of the eight already delivered. Canada has also sent 39 of the new LA- 6 based armoured combat support vehicles, the 30 tonnes replacement for the LAV-2 Bison built in the 1990s. Canada is the fifth largest contributor to Ukraine, providing over 5B CAD in support in cash donations and equipment and resources coupled with ongoing training assistance provided in the UK and Poland. It is impressive. One wonders what we did with the 1200 + M 113, 200 older Bison, 203 Coyote, etc., though; each of these systems was recently retired. 1600 armoured vehicles would have made a substantial contribution as well. Where are they?

The North Warning System consists of 47 different sites. Most are unmanned but occasionally visited by Canadian Ranger Patrols. Given that Russia has taken a more hostile approach to countries in the West and especially on its borders, Canada might want to consider manned bases for such an important system, especially with Russia's push for Arctic dominance. Canada needs to consider the importance of national sovereignty.

Iran

Demonstrations have been quelled at least on the surface. Brutality is the tool of authoritarian regimes of all types. According to European media there are also visible cracks within the regime itself including some opposition even within the Iranian Revolutionary Guard Corps. The latest execution, on 14 January 2023, was the hanging of Ali Reza Akbar. Although demonstrations have been smaller this set off a large number of people and has caused wide-spread condemnation from around the world. Iran's leader has doubled down on recent crackdowns on demonstrations but executions have at least temporarily stopped after this high profile killing.

The IRGC has expressed concern that the executions and the sale of drones to Russia has placed Iran in a very difficult position. Further sanctions were placed on the country and have hampered various operations of the IRGC. The IRGC not only conducts military operations, it has wide-spread commercial operations as well. Further sanctions plus increased surveillance hampers all of these operations. There are members of the national government who have also expressed concern that the current operations have merely caused opposition to go to ground and organize under the radar. There is concern that this movement is not over and that security forces may also be impacted by the regime's cruelty.

The commander of the Iranian Navy, Shahram Irani, announced that Iran would operate in two straits in the world where they have never operated, however, only one was mentioned, the Panama Canal. Iran had sent two warships into the Atlantic in 2021 but did not achieve their final destination in the cruise to Venezuela. Still, Iran continues to press hard for a perception of a blue water navy. No ships have left port to conduct this activity as yet.

Belarus

Belarus conducted joint exercises with Russia along the southern border of Belarus. The troops closest to the border were Belarus troops with Russian troops remaining further away. Russia continues to add equipment and troops in Belarus but the piece that is absent are tanks. Most vehicles seen are soft skin vehicles and armoured personnel carriers indicating that a major operation is not likely to occur at this time. A second major exercise is being conducted in northern air fields with aircraft of both countries taking part in "defensive" exercises. One new facet is physical fighting between Russian and Belarus troops. Russians have been apparently less than ideal guests to date and are generally despised by the local population. It is little secret that most Belarus citizens are less than happy about hosting the Russians. They are generally anti-war as they are generally friendly to the Ukrainians and want no part of Russia's actions.

Belarus authorities have started criminal proceedings against opposition leader Sviatlana Tsikhanouskaya. It is thought this is an attempt to portray the opposition leader as an enemy of Belarus. Unfortunately for the Lukashenko regime, most people know who is the real enemy of the state is and Ms Tsikhanouskaya is not it. Mr Lukashenko's days are coming to a close, whether by an act by Putin or by the Belarus people but time will tell.

The Russia-Ukraine War

The Russians have continued their rather "bloody minded approach" to the war by appointing Gen Valery Gerasimov as commander of the whole operation. His role normally is the equivalent of the Chief of Defence Staff in Canada. He was the principle planner of the initial operation in Ukraine. The war started without a specific leader overall and commanders of the six columns reported directly to President Putin. This was an unmitigated disaster. Col Gen Dvornikov was next followed by Gen

Zhidko and most recently followed by air force commander Gen Surovikin, and now after just three months, he has been replaced by Gen Gerasimov.

Gen Surovikin's crime apparently was his relationship with Yevgeny Progozhin, Putin's chef and head of the private military company Wagner Group. It is becoming clearer that there are major cracks and factions forming within the regime about the conduct of the war. Officially this has been blamed on the West, poor commanders, corruption, etc., but not on Putin himself...officially. Recent blogs and VLOG from within Russia shows that the public is now openly blaming the actions of the president and his leadership, something previously unheard of because of security crackdowns.

The new structure obviously has President Putin at the top, followed by Minister of Defence Shoigu, and the Commander over all is Gen Gerasimov who has three deputies, Gen Surovikin, former commander in Ukraine, Gen Salyukov, commander Russian ground forces and Col Gen Kim, vice-commander of Russian ground forces. Their exact duties are unknown at present. Keep in mind Gen Surovikin was an air force officer who did early training as an armour officer. Perhaps a real attempt to coordinate air and ground forces more effectively? Time will tell.

Although no general mobilization has been announced, Russia has apparently black listed 8m men from leaving the country. The message being presented is that Russia will not have a general mobilization, however, letters are still going out to thousands of young men. Conscription and call up will also now affect men with more than three children. This seems to indicate that Russia is mobilizing despite announcements stating otherwise.

Russia launched a large scale missile and drone strike on the night of 13/14 January 2023. The attack was mainly oriented towards the Ukrainian electrical infrastructure but also apparently targeted a large apartment complex killing 45 civilians. The attack leveled the centre section of the nine story building. Russia of course denied that they targeted any civilian infrastructure. This means of course they are simply incompetent, a much better explanation.

Russia's Wagner Group stated that they took Soledar, however, Ukraine was able to withdraw in good order and, more importantly, still generally control the area through artillery fire. Footage of the area shows fields of dead Russians in large numbers. One estimate suggested that up to 77% of the Wagner Group forces were eliminated as a result of this operation. Soledar has no critical importance to Ukraine. The "win" in Soledar was trumpeted to the world by Yevgeny Progozhin as he also once again criticized the leadership of the Russian armed forces. As mentioned earlier, these comments may have led to the change in leadership of the operation. Some sources have suggested that Progozhin is attempting to gain recognition as a national leader and possibly a legitimate successor to Putin. This seems a step too far and the leadership change will likely suppress such ambitions at least for a short period.

The last item in this section was the announcement of a helicopter crash killing the Minister of the Interior, his deputy and other key members of the ministry. The crash occurred as a result of a combination of poor weather and misfortune and not the result of enemy action. Eighteen people are known to have died so far but this may increase. The loss is critical at a rather bad time for Ukraine. The Ministry is responsible for the following organizations:

- a. National Police;
- b. State Border Services;
- c. State Emergency Service of Ukraine;
- d. National Guard;
- e. State Migration Services of Ukraine; and

f. Main Service Centre of the Ministry of Internal Affairs.

The loss is more than just the lives lost. It is the effect of losing key coordinators of major capabilities at an inopportune time. It is not a matter that can be quickly fixed and these organizations are vital for the security of Ukraine. The loss is more than tragic.

China

China is likely the second largest country population-wise. This year China has officially stated that their population has actually dropped by nearly 1m people. Some have suggested that it is likely it has been dropping since 2010 with one estimate suggesting the population is actually closer to 1.26b. Still, any recognition at any time by the Communist Chinese Party is significant. The working age population has been officially declining for several years. China Update suggested that by 2060 a third of the population will be over 60. China is unlikely to be able to "fix" this issue.

China has several other areas of concern as well. The problem of the collapse of the property development market coupled with the CCP's attack on private tech companies, educational institutes, private firms and the destruction of small time investors' nest eggs have crippled the economy. CCP actions have also increased debt to prop up a badly designed and structured financial system. Official Chinese debt has skyrocketed at both the national level but also at the state and independent city levels. The debt is massive and its exact level is obscured by "creative accounting" of the CCP and a system that is built to produce false answers.

Food has also become an increasingly difficult program. Arable land has been badly polluted and subject to soil loss as a result of major floods in recent years. The ability of China to feed itself has been reduced and food prices are therefore rising beyond normal affordability within the country. Some areas are more prone than others; the industrial north has both water and food production issues as an excellent example.

The pandemic has left China in a poor situation, firstly, the zero covid lockdown coupled with the opposite effect where rules and testing simply disappeared over night. The effect in both cases interrupted the global supply chain and called into question China's role as the "factory to the world." This has meant the loss of industry and investment by foreign firms. Even Chinese companies are seeking cheaper areas to conduct business. This is fixable with time to regain the trust of foreign companies and investors but China may not have the time.

As mentioned before in previous notes, China has territorial disputes with virtually all its neighbours. Most importantly is its increasingly violent interaction with India and its confrontation over Taiwan with most of the West. Any major action can and will result in major economic pain in both cases. These however are not the only issues. China seems "bull-headed" in its approach to the world. This is unlikely to get better in the near term.

The last issue is the great move towards urbanization. China has over 880m people living in major cities and towns. Many do not have the necessary skill sets to progress. Most cities have extensive poor sections living on marginal wages. China is continuing its march towards urbanization with limited ability to plan or even have reliable figures.

The last but growing problem is pollution of its limited water supply where the north with only 20% of fresh water resources has over 50% of the population. The water infrastructure has been built over time since the 1950s. They used Soviet designs and building principles, the result is that China has built more than 37k dams and reservoirs mainly in the early years without understanding the hydrology

of the areas. The result is collapsing dams along with the buildup of heavy pollutants destroying fresh water supplies when dams break.

Jimmy Rushton @JimmySecUK 18 Jan tweeted: Two Marines defeated the AI detection system of a military robot by... hiding in a cardboard box and walking right up to it.
Don't underestimate people's ingenuity!

human with a weapon looks different.” To improve their algorithm, the DARPA team spent a week with a group of Marines out at a test site. For six days, the Marines walked around and the engineers refined their algorithm for detecting people. Phil said, “On the seventh day I said, ‘We’re done. We’re flipping it.’”

Now the Marines would try to defeat the AI system. They parked the robot in the middle of a traffic circle and the Marines had to approach it undetected starting from a long distance away. “If any Marines could get all the way in and touch this robot without being detected, they would win. I wanted to see, game on, what would happen.”

“Eight Marines—not a single one got detected,” Phil said. They defeated the AI system not with traditional camouflage, but with clever tricks that were outside of the AI system’s testing regime. “Two somersaulted for 300 meters; never got detected. Two hid under a cardboard box. You could hear them giggling the whole time.” Like Bugs Bunny in a Looney Tunes cartoon, sneaking up on Elmer Fudd in a cardboard box. “One guy, my favorite,” Phil said, “he field-stripped a fir tree and walked like a fir tree. You can see his smile, and that’s about all you see.” The AI system had been trained to detect humans walking, not humans somersaulting, hiding in a cardboard box, or disguised as a tree. So these simple tricks, which a human would have easily seen through, were sufficient to break the algorithm.



CANADIAN FORCES INTELLIGENCE COMMAND
COMMANDEMENT DU RENSEIGNEMENT DES FORCES CANADIENNES

RUSSIA'S CLAIM:

Russian-installed officials in the partially-occupied Zaporizhzhia region of Ukraine claim that Russian forces will likely be poised to launch a spring offensive to capture the remaining Ukrainian-held portion of the region.

BASED ON CANADIAN FORCES INTELLIGENCE COMMAND ANALYSIS:

- Russian forces in occupied areas of the Zaporizhzhia region have been constructing static defensive positions for months, indicating significant concern about a future Ukrainian offensive to retake captured territory.
- Russia is sinking resources into its effort to capture more territory in the neighbouring Donetsk region. Ukrainian defenders have inflicted very high losses, while Russia has achieved only minor territorial gains.
- Russia's poorly-equipped and inadequately-trained forces will very likely not be able to conduct a successful offensive along the Zaporizhzhia frontline in the next few months.



2023 CANADIAN NAVAL MEMORIAL TRUST

Essay Competition

Canadian Naval Review will be holding its annual essay competition again in 2023. There will be a prize of \$1,000 for the best essay, provided by the **Canadian Naval Memorial Trust**. The winning essay will be published in *CNR*. (Other non-winning essays will also be considered for publication, subject to editorial review.)

Essays submitted to the contest should relate to the following topics:

- Canadian maritime security;
- Canadian naval policy;
- Canadian naval issues;
- Canadian naval operations;
- History/historical operations of the Canadian Navy;
- Global maritime issues (such as piracy, smuggling, fishing, environment);
- Canadian oceans policy and issues;
- Arctic maritime issues;
- Maritime transport and shipping.

If you have any questions about a particular topic, contact cnrcoord@icloud.com.

Contest Guidelines and Judging

- Submissions for the 2023 *CNR* essay competition must be received at cnrcoord@icloud.com by Tuesday, **30 May 2023**.
- Submissions are not to exceed 3,000 words (excluding references). Longer submissions will be penalized in the adjudication process.
- Submissions cannot have been published elsewhere.
- All submissions must be in electronic format and any accompanying photographs, images, or other graphics and tables must also be included as a separate file.

The essays will be assessed by a panel of judges on the basis of a number of criteria including readability, breadth, importance, accessibility and relevance. The decision of the judges is final. All authors will be notified of the judges' decision within two months of the submission deadline.

FONDS DE COMMÉMORATION DE LA MARINE CANADIENNE 2023

Concours de rédaction

La *Canadian Naval Review* tiendra à nouveau son concours annuel de rédaction en 2023. L'auteur(e) du meilleur article recevra un prix de 1 000 \$, gracieuseté du **Fonds de commémoration de la marine canadienne**, et son article sera publié dans la *Canadian Naval Review*. (Des articles non retenus pourraient aussi être publiés, sous réserve d'une révision éditoriale.)

Les articles présentés dans le cadre de ce concours doivent porter sur l'un ou l'autre des sujets suivants :

- Sécurité maritime canadienne
- Politique navale canadienne
- Questions touchant la Marine canadienne
- Opérations navales canadiennes
- Histoire/opérations antérieures de la Marine canadienne
- Problèmes maritimes à l'échelle internationale (comme la piraterie, la contrebande, la pêche et l'environnement)
- Politiques et problèmes concernant les océans canadiens
- Problèmes maritimes dans l'Arctique
- Transport et expédition par voie maritime

Si vous avez des questions sur un sujet en particulier, veuillez envoyer un courriel à l'adresse cnrcoord@icloud.com.

Lignes directrices du concours et sélection du gagnant

- Les articles présentés dans le cadre du concours de 2023 de la *CNR* doivent être envoyés au plus tard le mardi, **30 mai 2023** à cnrcoord@icloud.com.
- Ils doivent contenir 3 000 mots au maximum. Ceux qui dépassent ce nombre de mots seront pénalisés au cours du processus de sélection.
- Les articles ne doivent jamais avoir été publiés auparavant.
- Tous les articles doivent être soumis en format électronique, et les photographies, les images ou toute autre représentation graphique et les tableaux qui les accompagnent doivent être envoyés dans un fichier distinct.

Les articles seront évalués par un jury en fonction d'un certain nombre de critères, dont la lisibilité, la profondeur, l'importance, l'accessibilité et la pertinence. La décision du jury est sans appel. Les auteur(e)s seront informés de la décision du jury dans un délai de deux mois suivant la date limite de la présentation des articles.