

# **Royal United Services Institute of Nova Scotia Dispatches**

# 26 April 2019

*Dispatches* is a weekly collection of links and news of current interest, included those tweeted and posted by the Institute on social media. The most recent four editions are posted to: <a href="https://rusi-ns.ca/dispatches/">https://rusi-ns.ca/dispatches/</a>. Note that links of articles are checked at the time they are put into *Dispatches*, but may be unavailable at a later date or in some states other than Canada.

If you are not a routine recipient of *Dispatches* but wish to be so, email the Institute's Chief Information Officer (CIO) at <a href="mailto:RUSINovaScotia@gmail.com">RUSINovaScotia@gmail.com</a>. If you do not want to receive *Dispatches*, or wish to receive it at some different frequency, please inform the CIO.

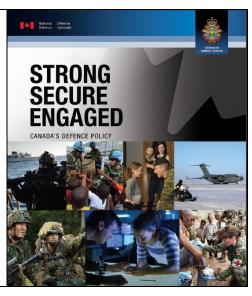
Everyone is encouraged to email to the CIO links and other content to be included in *Dispatches*. Comments to articles can be from members or non-members of RUSI(NS). Feedback is welcome anytime. Any comment in *Dispatches* is the sole opinion of the author and does not necessarily represent the views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

RUSI(NS) also publishes a weekly *Defence & Security Newsletter*, aimed at opinion leaders and industry. The most recent four editions are posted at: <a href="https://rusi-ns.ca/defence-and-security-newsletter">https://rusi-ns.ca/defence-and-security-newsletter</a>. If you are interested in receiving the newsletter, email <a href="mailto:admin@duncom.ca">admin@duncom.ca</a>.

# **Defence Policy Initiative Monitoring**

The RUSI(NS) Security Affairs Committee is monitoring progress of the government towards the 111 initiatives listed in the Canadian Defence Policy "Strong, Secure, Engaged" (SSE). Questions on SSE initiatives are being posed to CAF and DND staff, and articles and news releases are being reviewed for their reporting on initiatives. A monitoring document has been posted on the RUSI(NS) website at <a href="https://rusi-ns.ca/category/publications/defence-policy/">https://rusi-ns.ca/category/publications/defence-policy/</a>.

Anyone (member or not of the Institute) who is interested in participating in this project, or who can assist and has information that can be added to the monitoring record, please contact Murray Lee, chair SAC, or email <a href="mailto:RUSINovaScotia@gmail.com">RUSINovaScotia@gmail.com</a>.



# **Events:**

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

**1 May**, Wednesday - Canadian Museum of Immigration at Pier 21 lecture by Ellin Bessner, author of "Double Threat: The Canadian Jews, the Military, and World War II." 7:30 pm - 9:30 pm, part of Yom HaShoah (worldwide day of Holocaust Remembrance). Kenneth C. Rowe Hall, Canadian Museum of Immigration at Pier 21. Her talk (not a reading contrary to the Pier 21 event announcement) "is about the Jewish experience in general, with an emphasis on how they encountered the Holocaust, and her book and

research which cover those who were stationed in Halifax, or posted through, or the Y Depot, the Jewish Serviceman's Canteen on Quinpool, the Halifax Riots. She notes Jewish Canadians served in the Merchant Navy (90) and the RCN (nearly 600), and some were killed, some won medals for bravery, but most faced widespread antisemitism from authorities as well as from their deckmates. The RCN did not accept Jewish officers easily for many years during the war." See: <a href="https://ellinbessner.com/event/ellinbrings-double-threat-to-halifax-for-holocaust-remembrance-day-2019-at-pier-21/">https://ellinbessner.com/event/ellinbrings-double-threat-to-halifax-for-holocaust-remembrance-day-2019-at-pier-21/</a> and <a href="https://pier21.ca/visit/whats-on-calendar/yom-hashoah-with-author-ellin-bessner">https://pier21.ca/visit/whats-on-calendar/yom-hashoah-with-author-ellin-bessner</a>

**4 May**, Saturday - Maritime Museum of the Atlantic speaker Roger Litwiller "White Ensign Flying: The Battle of the Atlantic and the loss of HMCS Trentonian." 2 pm. Maritime Museum of the Atlantic. See: <a href="https://maritimemuseum.novascotia.ca/event/white-ensign-flying-battle-atlantic-and-loss-hmcs-trentonian-roger-litwiller">https://maritimemuseum.novascotia.ca/event/white-ensign-flying-battle-atlantic-and-loss-hmcs-trentonian-roger-litwiller</a>

**8 May**, Wednesday - Distinguished Speaker TBA. 1130-1330 hours. Royal Artillery Park Officers' Mess. Note that this is the second Wednesday of the month, not our normal third Wednesday.

**24 June**, Monday - momomdays Halifax and Society of Atlantic Heroes show "Increasing Latent Stress Capacity to Generate Post-Traumatic Growth." 0800-1500. ScotiaBank Stage, 1593 Argyle Street, Halifax. RUSI(NS) members JM Blais and Ken Hoffer are closely involved in this worthy effort.

#### **Publications:**

RUSI(NS) Comments "The RCAF Needs a Quick Ending to the Search for a New Fighter," by Murray Lee, 22 April 2019

https://rusi-ns.ca/the-rcaf-needs-a-quick-ending-to-the-search-for-a-new-fighter/

RUSI(NS) Information Note "RCAF Squadron Numbers," by Murray Lee, 10 April 2019 <a href="https://rusi-ns.ca/rcaf-squadron-numbers/">https://rusi-ns.ca/rcaf-squadron-numbers/</a>

RUSI(NS) Defence Policy Initiative Monitor "Remotely Piloted Aircraft Systems," 10 April 2019 https://rusi-ns.ca/remotely-piloted-aircraft-systems/

RUSI(NS) Paper "F-35 Strengths and Vulnerabilities," by Ken Hansen, 26 March 2019 https://rusi-ns.ca/f-35-strengths-and-vulnerabilities/

Naval Association of Canada Starshell Winter 2019, No. 85 <a href="http://www.navalassoc.ca/wp-content/uploads/2019/03/Starshell-Winter-2019.pdf">http://www.navalassoc.ca/wp-content/uploads/2019/03/Starshell-Winter-2019.pdf</a>

**Tweeted by @RUSI\_NS**: Original article title in parentheses. RUSI(NS) tweets may be viewed by clicking on the icon at <a href="https://RUSI-NS.ca">https://RUSI-NS.ca</a>. To have something tweeted or retweeted, email the CIO by noon Thursday.



RUSI(NS) tweeted Apr 13: Some remarks on naval force costs https://www.facebook.com/permalink.php?story\_fbid=2172033 189551886&id=618819224873298 ... Article may be focused on US amphibious (landing) force but its points can be considerations for #RCNavy structure development RUSI(NS) retweeted 19 Apr: Comment from a reader: An @IrvingShipbuild proposal to provide the #RCNavy a support ship at competitive cost "Why Canada Needs a Humanitarian Assistance and Disaster Relief Ship"

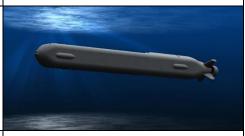
http://www.navalreview.ca/wp-

content/uploads/public/vol13num1/vol13num1art1.pdf

Canadian Armed Forces Operations @CFOperations 20 Apr tweeted: Rapidly responding to support Canadians in their time of need is one of the most important missions for the CAF. Today our Regional JTFs are deploying reconnaissance teams to New Brunswick and Québec to assess where we can best assist. #OpLENTUS @JTFA\_FOIA @2divCA\_2candiv RUSI(NS) retweeted: Operation LENTUS #OpLENTUS = @CanadianForces response to natural disasters in CANIII. Objectives: help provincial/territorial authorities, respond quickly & effectively to crisis; stabilize natural disaster situation <a href="https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-lentus.html">https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-lentus.html</a>



RUSI(NS) remarks on Extra Large Unmanned Underwater Vehicles (XLUUV) & RCNavy #Submarine Force <a href="https://www.facebook.com/permalink.php?story\_fbid=2181193">https://www.facebook.com/permalink.php?story\_fbid=2181193</a> 088635896&id=618819224873298 #UUV underwater #drones



JTFA | FOIA @JTFA\_FOIA 21 Apr tweeted: Flood preparation work continues today. Our @CanadianForces will support @NBEMO\_OMUNB with tasks like sandbag filling and placement, door-to-door checks and evacuation support if necessary pic.twitter.com/WSPGQmu0o0 RUSI(NS) retweeted: Assistance w response to #NBfloods & #QCfloods provided by 2 Regional Joint Task Forces, @JTFA\_FOIA to NB & FOI(E) (using @2divca\_2candiv handle) to QC. Subordinate to CANI Joint Operations Command (@CFOperations). All joint, not army (tho mostly Army people in field) #OpLENTUS



5thCanadianDivision @5CdnDiv 22 Apr tweeted: Operation LENTUS is the @CanadianForces response to the floods in #NewBrunswick due to the rising waters of the Saint John river. Click here for photos: https://bit.ly/2KVcaeq @CTVAtlantic @Global\_NB @NBEMO\_OMUNB @JTFA\_FOIA pic.twitter.com/5JzMRUPH8j RUSI(NS) retweeted: Info on #OpLENTUS 19-01, @CFOperations @JTFA\_FOIA @2divCA\_2candiv assistance in response to #NBflood #QCflood now posted at: https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-



Maritime Reporter @ShipNews 22 Apr tweeted: USCG Releases Arctic Strategic Outlook <a href="http://zpr.io/g9bwt">http://zpr.io/g9bwt</a>
PUSI(NS) retweeted: #USCG @USCG "#Arctic Strategic

operations/operation-lentus.html

RUSI(NS) retweeted: #USCG @USCG "#Arctic Strategic Outlook" 22Apr19

https://content.govdelivery.com/accounts/USDHSCG/bulletins/240150c and

https://www.uscg.mil/Portals/0/Images/arctic/Arctic\_Strategic\_Outlook\_APR\_2019.pdf @CoastGuardCAN @JTFN\_FOIN @CFOperations

see also: Coast Guard: US Must Work to Prevent a Fight in the Arctic

https://www.military.com/daily-news/2019/04/22/coast-guard-us-must-work-prevent-fight-arctic.html

and

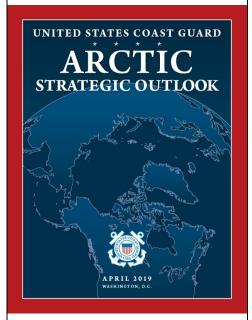
New Coast Guard strategy for the Arctic calls for 'projecting sovereignty' to contest China and Russia

https://www.washingtonpost.com/national-security/2019/04/22/new-coast-guard-strategy-arctic-highlights-projecting-sovereignty-china-russia-look-north/

RUSI(NS) Comments "The RCAF Needs a Quick Ending to the Search for a New Fighter" <a href="https://rusi-ns.ca/the-rcaf-needs-a-quick-ending-to-the-search-for-a-new-fighter/">https://rusi-ns.ca/the-rcaf-needs-a-quick-ending-to-the-search-for-a-new-fighter/</a> Selection of #RCAF #FutureFighter needs to be expedited

David Pugliese @davidpugliese 22 Apr tweeted: DND provides an update on AOPS...my latest....Arctic Offshore Patrol Ship fleet to fully operational in 2025, says DND <a href="https://ottawacitizen.com/news/national/defence-watch/arctic-offshore-patrol-ship-fleet-to-fully-operational-in-2025-says-">https://ottawacitizen.com/news/national/defence-watch/arctic-offshore-patrol-ship-fleet-to-fully-operational-in-2025-says-</a>

RUSI(NS) retweeted: "Full operational capability 2015" of #RCNavy #Arctic&Offshore Patrol Vessels from #AOPS project & summaries of other projects for @CanadianForces at @NationalDefence "Status report on transformational and major Crown projects" <a href="https://www.canada.ca/en/department-national-defence/corporate/reports-publications/departmental-plans/departmental-p







dnd/

General Jonathan Vance @CDS\_Canada\_CEMD 24 Apr tweeted: Ms. Diana Beaupré and Mr. Adrian Watkinson have made it their personal mission to identify, document and honour the gravesites of every Canadian soldier buried in the UK as a result of WWI. So far they're at 3,882. Thank you for your work in helping us all #RememberThem.

pic.twitter.com/SwW4zijWiT

RUSI(NS) retweeted: .@VeteransENG\_CA informs that names are included in Canadian Virtual War Memorial

https://www.veterans.gc.ca/eng/remembrance/memorials/canadian-virtual-war-memorial #RememberThem #WeRemember

Philippe Lagassé @PhilippeLagasse 25 Apr tweeted and RUSI(NS) retweeted: Independent Review Panel for Defence Acquisition progress report April 2017 to December 2018 now available. Good information about what we've been up to: <a href="https://www.canada.ca/en/department-national-defence/corporate/reports-publications/irpda-progress-report-defence/corporate/reports-publications/irpda-progress-report-defence/corporate/reports-publications/irpda-progress-report-defence/corporate/reports-defence/defence/corporate/reports-defence/defence/corporate/reports-defence/defe

<u>defence/corporate/reports-publications/irpda-progress-report-2017-20181.html</u>

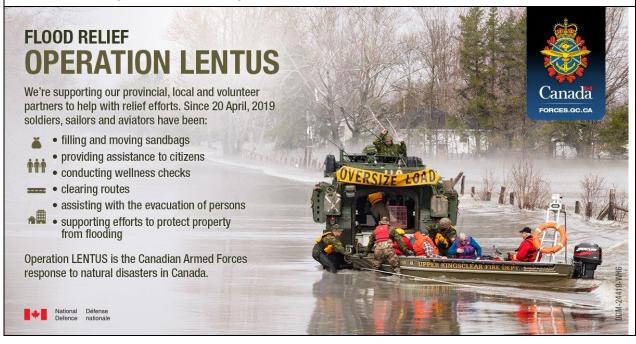




Independent Review Panel for Defence Acquisition
Progress Report
April 2017 - December 2018

Canadian Armed Forces Operations @CFOperations 25 Apr tweeted and RUSI(NS) retweeted: About 1,000 soldiers, sailors and aviators are helping New Brunswick and Quebec with flood relief efforts. #OpLENTUS

When we work together, we're #StrongAtHome.



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

Pacific Commander Davidson Asks Congress to Fund 'Regain the Advantage' Plan Aimed at China

https://news.usni.org/2019/04/18/pacific-commander-davidson-asks-congress-to-fund-regain-the-advantage-plan-aimed-at-china

"Establish a Maritime Security Initiative (MSI) program for Oceania, modeled after the successful MSI program operating in South East Asia." One can wonder whether that Initiative would involve Canada. We might not need the "security and



defense assistance" component (taking that to mean funding), but our involvement might ensure that Canadian efforts in Oceania would better be part of a great collaboration. Canada is already involved in the North American Maritime Security Initiative (see: "HMCS Saskatoon participates in the North American Maritime Security Initiative Pacific Exercise 2017"

http://www.forces.gc.ca/en/news/article.page?doc=hmcs-saskatoon-participates-in-the-north-american-maritime-security-initiative-pacific-exercise-2017/izkjsh7q) so any expansion, presuming it fits Canadian foreign policy objectives, has a basis from which to work.

# Rethinking National Security

Howard Coombs of the Conference of Defence Associations Institute distributes papers and article of interest to member associations of the conference and to partners - the Royal United Services Institute of Nova Scotia is grateful to receive his "Aerograms." His latest (24 April 2019) is the Federation of American Scientists (FAS) Special Report "Rethinking National Security" (https://fas.org/wp-content/uploads/media/Pathinking National Security pdf) by

content/uploads/media/Rethinking-National-Security.pdf) by Stanford Professor and FAS Adjunct Senior Fellow Martin Hellman (whose biography is at <a href="https://fas.org/expert/martin-hellman/">https://fas.org/expert/martin-hellman/</a>).

This short report (12 pages) argues that "in the age of nuclear weapons, cyberattacks, terrorism, and environmental crises, [American] national security is becoming inseparable from global security." Consequently, the United States must "rethink national security at a fundamental level." It's an interesting and alternate view point.



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

Matt Gurney: Nine years. Two elections. And still no new fighter jets for Canada

 $\frac{https://nationalpost.com/opinion/matt-gurney-nine-years-two-elections-and-still-no-new-fighter-jets-for-canada}{}$ 



Marked 'EE,' these are the Canadian Forces jobs where only women need apply

 $\frac{https://nationalpost.com/news/canada/the-canadian-forces-jobs-where-only-women-need-apply}{}$ 



Lack of expert procurement staff could hinder Canadian Forces drone purchase

https://ottawacitizen.com/news/national/defence-watch/lack-of-expert-procurement-staff-could-hinder-canadian-forces-drone-purchase



What US intelligence believes happened with North Korea's weapons test

 $\frac{https://www.cnn.com/2019/04/18/politics/us-north-korea-weapon-claim/index.html}{}$ 



Troops will be deployed as N.B. floodwaters creep higher

https://www.cbc.ca/news/somnia-1.5105083

1 dead in western Quebec as waters rise and army begins deployment

https://www.cbc.ca/news/somnia-1.5105493

Russia would be Turkey's 'first best choice' for fighter jets if its F-35 plan flops

https://www.defensenews.com/global/europe/2019/04/19/russia -would-be-turkeys-first-best-choice-for-fighter-jets-if-its-f-35-plan-flops/

How Vietnam Quietly Built up 10 Islands in Asia's Most Disputed Sea

https://www.voanews.com/a/how-vietnam-quietly-built-up-10-islands-in-asia-most-disputed-sea/4882776.html







# **Other Sources:**

#### #airpower

The Future of the (US) Air Force

https://www.popularmechanics.com/military/a27194938/air-force-secretary-heather-wilson/

# #Arctic

Military Drills in Arctic Aim to Counter Russia, but the First Mission Is to Battle the Cold https://www.nytimes.com/2019/04/12/world/europe/global-warming-russia-arctic-usa.html

#### #artificial intelligence

Does artificial intelligence threaten human rights?

https://epthinktank.eu/2019/04/16/does-artificial-intelligence-threaten-human-rights/

# #cyberwar

Formjacking and the new threats to government

https://www.fifthdomain.com/opinion/2019/04/19/formjacking-and-the-new-threats-to-government/

Is cyberwarfare war? Insurers balk at paying for some cyberattacks

https://thebulletin.org/2019/04/is-cyberwarfare-war-insurers-balk-at-paying-for-some-cyberattacks/

Insurance has a lot more impact on military operations than many realize. Mixing insurance (think also financial warfare), cyber operations and law ('lawfare') and you have a potent brew.

Responding to cyberattacks: Prospects for the EU Cyber Diplomacy Toolbox http://www.epc.eu/pub\_details.php?cat\_id=17&pub\_id=9081&year=2019

#### #defence procurement

Status report on transformational and major Crown projects

https://www.canada.ca/en/department-national-defence/corporate/reports-publications/departmental-plans/departmental-plan-2019-20-index/supplementary-information-index/report-crown-projects.html

# #drones

US Army postpones demo plans for next-gen unmanned aircraft

 $\underline{https://www.defensenews.com/digital-show-dailies/aaaa/2019/04/18/us-armys-next-gen-unmanned-aircraft-tech-demo-plans-on-hold/}$ 

RPA Ethics: A Focused Assessment

https://smallwarsjournal.com/jrnl/art/rpa-ethics-focused-assessment

World not ready for autonomous ships

http://shipmanagementinternational.com/world-not-ready-for-autonomous-ships/

# #information operations

Toward an Information Operations Kill Chain

https://www.lawfareblog.com/toward-information-operations-kill-chain

linked to:

Persistent Engagement and Tacit Bargaining: A Path Toward Constructing Norms in Cyberspace <a href="https://www.lawfareblog.com/persistent-engagement-and-tacit-bargaining-path-toward-constructing-norms-cyberspace">https://www.lawfareblog.com/persistent-engagement-and-tacit-bargaining-path-toward-constructing-norms-cyberspace</a>

and

Understanding the tactics of information operation attacks (on democracy, etc.) allow for the development of IO defensive actions.

#### #leadership

Why Military Leaders Should Study Human Nature

https://fromthegreennotebook.com/2019/04/21/why-military-leaders-should-study-human-nature/

# #media operations

It Takes Two to Tango: The Journalist's Role in a Healthy Military-Media Relationship https://mwi.usma.edu/takes-two-tango-journalists-role-healthy-military-media-relationship/

"...culpability that some journalists share in creating legitimate concerns about going on camera in a period of increasingly divisive politics."

A US article but worth a read, to analyze the experience of others and to reflect on one's own situation. The Canadian military-media relationship is better; military and media are trying. Canadian reporters who to greater of lesser extent write on defence and security affairs are on the whole doing well. The military is increasingly appreciating the value of putting 'memes on target.'

#### **Dust Off The Podium**

https://mwi.usma.edu/dust-off-podium/

Follow-on comments to the "Tango" article, from Brent Colburn, previously Assistant to the US Secretary of Defense for Public Affairs.

# #plans

Could The U.S. Navy's War Plan Orange (For Fighting Japan) Be Used Against China? <a href="https://nationalinterest.org/blog/buzz/could-us-navys-war-plan-orange-fighting-japan-be-used-against-china-53362">https://nationalinterest.org/blog/buzz/could-us-navys-war-plan-orange-fighting-japan-be-used-against-china-53362</a>

The Chinese are already practicing 'base warfare' - building island bases to push out their perimetre. The US has to greater or lesser extent been doing the same. Would be an interesting strategy to game. Hmm, what would be Canada's role in such a conflict?

# #refugees

Canada continues to stand with refugees

https://www.nationalobserver.com/2019/04/18/opinion/canada-continues-stand-refugees

# #Russia #strategy

Gerasimov Unveils Russia's 'Strategy of Limited Actions'

https://jamestown.org/program/gerasimov-unveils-russias-strategy-of-limited-actions/

"...a new Russian strategy of 'limited actions,' which...seeks to defend and promote 'national interests' beyond Russian territory." "...the foundation for implementing this strategy involves the 'creation of a self-sufficient grouping of troops (forces) based on force elements of one of the branches of the Russian Armed Forces possessing high mobility and the capability to make the greatest contribution to executing assigned missions." "Winning and holding information superiority, preemptive readiness of commandand-control and comprehensive support systems, and covert deployment of the necessary grouping are the most important conditions for implementing this strategy."

### #shipbuilding

Report to Congress on U.S. Navy Frigate FFG(X) Program

https://news.usni.org/2019/04/24/report-to-congress-on-u-s-navy-frigate-ffgx-program

For those tracking frigate shipbuilding programs and making comparisons with CSC. The US CB report is updated, apparently quarterly.

# #space

China's space mission (part 2): aiming to control the high ground

https://www.aspistrategist.org.au/chinas-space-mission-part-2-aiming-to-control-the-high-ground/

# #strategy

Strategy - Agenda for change 2019 - Strategic choices for the next (Australian) government <a href="https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2019-02/Agenda%20for%20change%202019\_0.pdf">https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2019-02/Agenda%20for%20change%202019\_0.pdf</a> The study of strategy encompasses that of other states.

# **#underground warfare**

The Army wants a way to map underground tunnels using ground robots and drones <a href="https://www.armytimes.com/news/your-army/2019/04/22/the-army-wants-a-way-to-map-underground-tunnels-using-ground-robots-and-drones/">https://www.armytimes.com/news/your-army/2019/04/22/the-army-wants-a-way-to-map-underground-tunnels-using-ground-robots-and-drones/</a>

#### #urban conflict

Combat in cities report, volumes I-II

http://cgsc.contentdm.oclc.org/cdm/ref/collection/p4013coll11/id/2285

1972 "The purpose of this study was to validate and expand existing combat in cities doctrine by identifying voids and weaknesses for the promulgation of doctrinal changes applicable throughout the spectrum of urban warfare. The report group considered urban conflict in Europe and the Pacific during World War II, post-war European uprisings against the Soviet Union, the battle for Seoul during the Korean conflict, and the recent battles for Saigon and Hue. On the lower end of the combat in cities spectrum, the urban unrest and the attendant civil disturbances that have occurred in the United States during the last decade were examined."

Combat in cities report, volume III

http://cgsc.contentdm.oclc.org/cdm/ref/collection/p4013coll11/id/2282

1972 "This annex describes historical examples concerning the use of infantry weapons in city fighting and the characteristics and capabilities of current infantry weapons when employed in combat cities. Each type of infantry weapon is covered in detail in this annex, to include description, characteristics, technique of fire, maintenance methods, problems, and tips on training and specific guidance for fighting with these weapons in built-up areas. This annex also outlines penetration data on most infantry weapons and their ammunition when employed against various types of targets and material found in city fighting."

#### Other:

Operation LENTUS 2019 New Brunswick / Nouveau-Brunswick on Flickr

photos: <a href="https://www.flickr.com/photos/canarmyatlantic/sets/72157704697926662">https://www.flickr.com/photos/canarmyatlantic/sets/72157704697926662</a>

For Combat Camera photos of Op LENTUS, go to:

http://www.combatcamera.forces.gc.ca/en/photo-search.page#ipa\_galleryHome

and search LENTUS.

**GC InfoBase** - Find the latest information on all government finances, people and results https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html

# Shipbuilding

Think Defence @thinkdefence  $8:23~AM \cdot Apr~19$ , 2019 tweeted: Will leave you with this quote from Ray Mabus, former US Navy Secretary

"If we keep building ever more expensive, ever more exotic, ever longer build times for ships, we are unilaterally disarming ourselves"

Exactly Ray, exactly

(https://mobile.twitter.com/thinkdefence/status/1119199850384515072)

# **Photo Albums of RCN**

Roger Litwiller 2018 RCN Photos

https://www.flickr.com/photos/rogerlitwiller/sets/72157693112997530

Sandy McClearn Nautical Photos

https://smcclearn.smugmug.com/Nautical

in which RCN gallery: https://smcclearn.smugmug.com/Nautical/Canadian-Navy

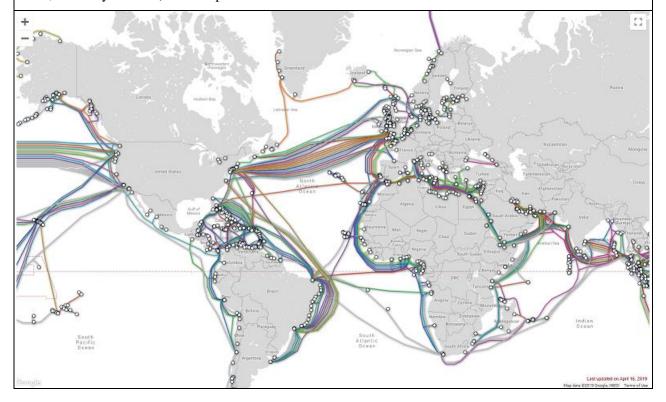
Reach out and touch someone...



# **Submarine Cable Map**

https://www.submarinecablemap.com/

A reminder of how much of the internet passes on the ocean bottoms. Hmm, there could be (actually, has been, for many decades) another part of underwater warfare here...



Canadian Navy @RCN\_MRC 24 Apr tweeted: You love all things Navy? Are you a great writer? Then you may have what it takes to enter the Canadian Naval Review essay competition. Best essay wins \$1,000 and will be published in the Canadian Naval Review. Submissions are due by September 30th, 2019. <a href="https://www.navalreview.ca/submissions/">https://www.navalreview.ca/submissions/</a>

#### 2019 CANADIAN NAVAL MEMORIAL TRUST

# **Essay Competition**

Canadian Naval Review will be holding its annual essay competition again in 2019. 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 or naval.review@dal.ca.

#### Contest Guidelines and Judging

- Submissions for the 2019 CNR essay competition must be received at cnrcoord@icloud.com or naval. review@dal.ca by Monday, 30 September 2019.
- Submissions are not to exceed 3,000 words. 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.

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