

Van Arty Association and RUSI Van Members News Oct 13, 2020

Newsletters normally are emailed on Monday evenings. If you don't get a future newsletter on time, check the websites below to see if there is a notice about the current newsletter or to see if the current edition is posted there. If the newsletter is posted, please contact me at bob.mugford@gmail.com to let me know you didn't get your copy.

Newsletter on line. This newsletter and previous editions are available on the Vancouver Artillery Association website at: www.vancouvergunners.ca and the RUSI Vancouver website at: <http://www.rusivancouver.ca/newsletter.html>. Both groups are also on Facebook at: <https://www.facebook.com/search/top/?q=vancouver%20artillery%20association> and <https://www.facebook.com/search/top/?q=rusi%20vancouver>

Wednesday Lunches - Lunches suspended until further notice. Everyone stay safe!!

Upcoming events – Mark your calendars (see Poster section at end)

The 2021 BC Military Gala is CANCELLED. The Sheraton Wall Ctr is booked for Apr 23, 2022

Aug 09

to

Virtual Remembrance Run in Support of the Juno Beach Centre

Nov 28

Oct 14 'Wednesday Lunch' Zoom meeting

Oct 14 RUSI NS Zoom seminar 'Marine Industry Supply Chains of Canadian Shipyards'

'Wednesday Lunch' Zoom meeting

Oct 21 'Wednesday Lunch' Zoom meeting

New Event - RUSI Nova Scotia Video Conference Presentation

The Royal United Services Institute of Nova Scotia extends an invitation to hear a video-conference presentation Wednesday, 28 October, by Commander Helga Budden, Commanding Officer, Canadian Armed Forces Transition Unit Nova Scotia/Newfoundland and Labrador, about transition from the Forces titled "Transition – A Step We All Take." (See posters at end of newsletter for Cdr Budden's bio)

The talk will start at 1 pm Halifax time (1:30 pm St John's, noon Ottawa, 11 am Winnipeg, 10 am Calgary, 9 am Victoria), Wednesday, 28 October, then be followed by Q&A and finish by 3 pm Halifax time. Registration is required. There is no fee to attend this event. To register, email RUSINovaScotia@gmail.com by close of business Sunday, 25 October. As the subject line for your registration email, put "RUSI(NS) Distinguished Speaker 28 October 2020"

Registration". In addition to your name please also provide your organization. The event will be done by Zoom. Instructions will be emailed to registrants by end Monday, 26 October.

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

China is Preparing to Field a Third Aircraft Carrier.

Here is why they're no match for US flattops. *Benjamin Brimelow, Business Insider Oct 8, 2020*



Chinese aircraft carrier Liaoning during a drill in the western Pacific Ocean, April 18, 2018

(Reuters via Business Insider)

Of all the new weapons in China's modern, ever-growing military arsenal, few have gotten as much attention as its aircraft carriers. China has two carriers in service with a third on the way. The first, the Liaoning, was commissioned

in 2012, while the second, the Shandong, was commissioned in December 2019. Chinese state media has repeatedly displayed the ships in flashy videos showing off their capabilities, the most recent of which was released at the end of last August. Despite the hype and praise lavished on them, China's carriers are just not that big a threat compared to US carriers.

Both the Liaoning and Shandong are based on the Soviet-designed Kuznetsov-class carrier of the 1980s. The ship that became Liaoning, in fact, was being built as a Kuznetsov-class carrier for the Soviet navy until its construction was halted by the dissolution of the Soviet Union in 1991. China purchased the incomplete hull from Ukraine in 1998 and then did a nearly decade-long refit in an attempt to turn the ship into a true aircraft carrier, removing some older Soviet-designed systems like its missile arsenal. The Shandong was given upgrades as well. But one relic of their Soviet origin still hampers their effectiveness: ski-jump ramps.

A J-15 fighter takes off of the Liaoning in the South China Sea
(Reuters via Business Insider)

The ski-jump is part of the Short Take-Off But Arrested Recovery (STOBAR) system, which launches an aircraft by forcing it upward as it speeds down the deck, allowing it to take off with less speed than normally required. STOBAR carriers come with a significant trade-off in that the aircraft

have to be light in order to take off. This means Chinese jets can only carry a handful of missiles and have a limited fuel capacity. In contrast, US carriers use steam-powered (and eventually electromagnetically powered) catapults to launch aircraft, allowing them to take off with heavier payloads. US carriers can launch fighters, fighter-bombers, surveillance and airborne-control



aircraft, and even small transports, while Chinese carriers can only launch fighter jets with limited strike capability. Chinese carriers must also launch their jets one at a time, while US carriers can launch two jets within seconds.



*A People's Liberation Army Navy Shenyang J-15
Flying Shark jet fighter
CCTV*

Added to this is the fact that China's current naval fighter, the J-15 Flying Shark, is believed to be largely inferior to its American counterparts. Like China's carriers, the J-15 is based on a Soviet design. Unable to buy the Su-33 carrier-based fighter from Russia, the Chinese instead bought an unfinished Su-33 prototype from Ukraine and reverse-engineered it. The result is a carrier fighter plagued with problems. While the prototype provided a good frame, it did not include the Su-33's engines. China, known for having difficulty producing efficient jet engines, had to settle for underpowered domestic versions. The underpowered engines and other mechanical issues resulted in numerous crashes, some fatal, that were such a problem that at one point the entire J-15 fleet was grounded for three months. The J-15 is also the heaviest carrier-based fighter in service — an unwelcome distinction given the limits of the STOBAR system. The J-15's empty weight, or without any fuel or weapons, of 38,000 pounds is nearly 6,000 pounds heavier than the F/A-18E/F Super Hornet and 4,000 pounds heavier than the F-35C.

Other differences compound the weaknesses of China's carriers. Their total air wings are smaller (40 and 44 on Liaoning and Shandong compared to 60 and 75 on the Nimitz and Gerald R Ford-classes). Chinese carriers are believed to be slower and can only operate at sea for roughly six days before needing to refuel, whereas US nuclear-powered carriers can operate continuously for years as long as the crew is resupplied. What's more, the Chinese have less than a decade of experience with carrier operations, while the US has close to a century of hard-earned experience from multiple conflicts across numerous continents. But it is important to remember that China has a different mission in mind for its carriers. "It has little to do with fighting Taiwan or even fighting in the East China Sea," Timothy Heath, a senior defense researcher at the Rand Corporation, told Insider. "In both of those situations, carriers are probably not going to last very long." Rather, China is hoping to use its carriers to help secure the important Indian Ocean trade routes that are the maritime part of China's Belt and Road Initiative. "That's the real value of these, and it's worth bearing that in mind when we start to question why they are willing to spend so much money on building carriers with limited air capacity," Heath said. "For that mission, it may be enough." Most of East Asia's oil imports flow through important choke points like the Strait of Malacca, and because China lacks allies in the region, it does not yet have military bases that can guarantee security to its interests there. Moreover, the presence of rivals like India — which has its own carriers — increase China's need for carriers to support its naval operations in the region. "They are the mobile air bases to go with the ships to provide security as a way to compensate for the fact that they don't have a string of military bases on land along that Indian Ocean route," Heath said.

The Shandong, China's first domestically developed aircraft carrier, departs Dalian in Liaoning province, May 13, 2018 (Reuters via Business Insider)

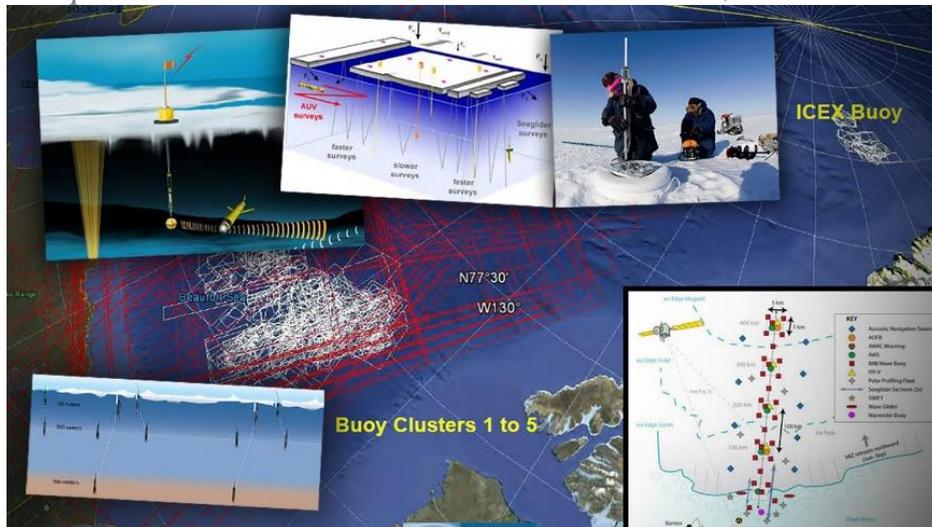


The Chinese mainland's prime defense against enemy carriers is not China's carriers but its anti-access/area-denial arsenal, which includes ballistic missiles, submarines, ground-based aircraft, and navy surface ships. It is also worth noting that while China's current carriers may be inadequate, a new generation of carriers is under construction. The latest, the Type 003-class, which will have a flat deck rather than a ski jump, is believed to feature a steam-powered or electromagnetic catapult launch system and is expected to enter service in 2024, though state media claims it could be launched as soon as the end of this year. China is also reportedly working hard to replace the J-15 with a stealth fighter. With China's ability to build ships extremely fast and its strong commitment to military modernization, the current carriers could turn out to be training vessels that help it gain carrier experience. Until then, China's carriers have a lot to learn before they can rival US flattops. "It's a steep learning curve, and they are still on that curve," Heath said.

US Navy Builds Network of Drone Subs and Sensor Buoys in the Arctic.

The project is ostensibly aimed at gathering data about ice coverage in the region, but the technology could be adaptable to other military purposes.

Joseph Trevithick The War Zone October 1, 2020



USN/US Army

The US Navy has awarded the Woods Hole Oceanographic Institution a contract worth more than \$12 million to develop unmanned undersea vehicles and buoys, along with a networked communications and data sharing infrastructure to link them all together. The project is ostensibly focused on

developing a overall system to support enhanced monitoring of environmental changes in the Arctic for scientific purposes. However, it's not hard to see how this work could be at least a steppingstone to the creation of a wide-area persistent underwater surveillance system in this increasingly strategic region. The Pentagon announced the award of the contract in a daily

notice on Sept. 29, 2020. The Office of Naval Research (ONR) is managing what is officially called the Arctic Mobile Observing System (AMOS), which is also described as an "Innovative Naval Prototype" effort. ONR's secretive Netted Emulation of Multi-Element Signature (NEMESIS) electronic warfare program and its work on an electromagnetic railgun, which you can read about, respectively, here and here, are also an Innovative Naval Prototype projects. "The work to be performed provides for the design, development, integration and testing of an acoustic navigation network, a distributed communication system, gateway buoy nodes and unmanned vehicle capabilities to support the Arctic Mobile Observing System," according to the Pentagon's contracting notice. Woods Hole's work under this contract is expected to wrap up by the end of the 2024 Fiscal Year.

Mobile Sensing System for Arctic Observation and Prediction

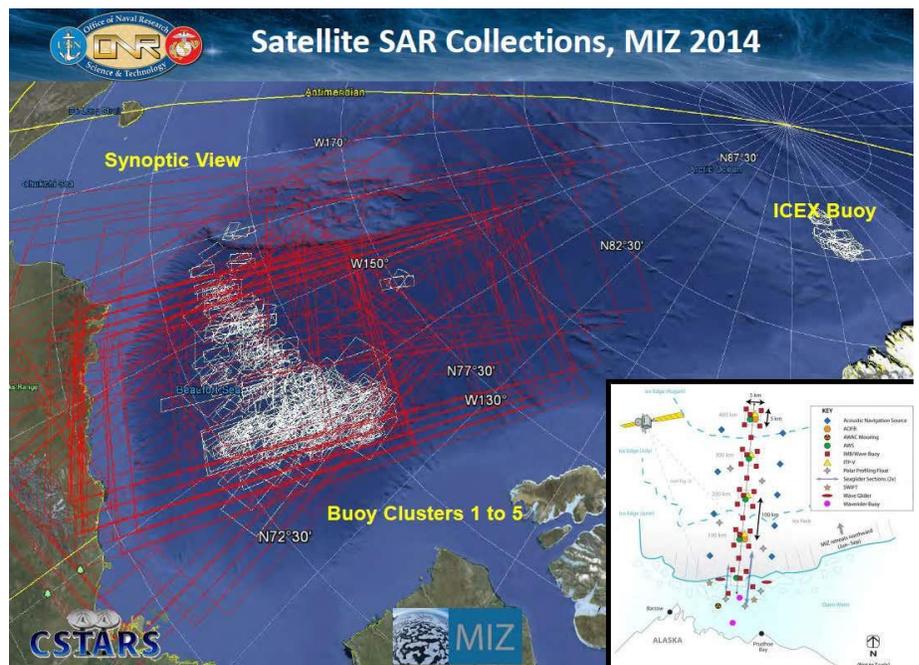
- Multiple unmanned platforms with under-ice capabilities – UUVs/buoys/floats will collect data around a central buoy node drifting with the sea ice that provides power/comms
- Bi-directional data transfer and mission adaptability with autonomy improvements
- Designed to characterize the Arctic environment & prototype CONOPs for persistent robotic observing systems in the Arctic

USN

ONR envisions the AMOS prototype as consisting of various kinds of unmanned undersea vehicles (UUV), including fully autonomous types, along with fixed

sensors. All of this would be tied together through a series of communications and data sharing nodes, suspended underwater underneath buoys installed on the surface of the ice. "AMOS will be designed to persist/endure for 12 months, have a sensing footprint goal of 100 km [approximately 62 miles] from the central node and have 2-way Arctic communications (vehicle to vehicle, vehicle to node and node to shore)," according to an official project website. An ONR briefing slide showing a very broad overview of the AMOS concept. The primarily publicly-stated goal of the AMOS program, which began in 2018, is provide a means of readily monitoring and assessing what is going on underneath the ice in the Arctic across broad areas.

A map showing areas where satellites equipped with synthetic aperture radar (SAR) were used to collect imagery of ice coverage in the Arctic during ONR's earlier Marginal Ice Zone (MIZ) Initiative in 2014.



USN

Receding ice and other environmental changes in the region as a result of global climate change has led to increased US military activities in the region and prompted a new demand to better understand what is going on above and below the surface. Just being able to predict when and where significant amounts of ice will develop, or recede, which can be influenced by underwater conditions, such as water temperature, could have significant impacts on naval operations in the far north. "If the Navy's thinking about having to run operations up there with submarines, surface vessels and aircraft, you really need to understand that operational environment," Scott Harper, ONR's Program Manager for Arctic and Global Prediction, told *Defense News* in an interview in May. "Where is that sea ice and how quickly is it retreating? And what is it doing to the upper water column in the ocean?" "You have satellites that can look down at the surface of the Arctic Ocean and the sea ice conditions," Harper continued. "But what we don't have [is] the ability to look under the ice and understand what the ocean conditions are, and that's what we're really trying to enable with Arctic Mobile Observing System prototype."

It's also worth noting that AMOS is the latest in a series of research efforts aimed at addressing these challenges that ONR conducted since 2011. The proposed overall architecture for this new prototype system is, in fact, very similar to the one developed for the Stratified Ocean Dynamics in the Arctic (SODA) experiment in the Beaufort Sea, part of the Arctic Ocean, which concluded last year. If the AMOS prototype successfully meets the Navy's goals, it possible that the service could expand the use of such networks in the Arctic or use lessons learned from this program to support follow-on efforts. ONR has indicated in the past that there are a number of "leap ahead technological goals" that will be necessary to achieve first in order for the system to work as intended. These technological milestones include the development of UUVs and buoys that can withstand the extremely cold conditions in the region for extended periods of time. There is also a requirement for an "under-ice acoustic navigation system" to make up for the fact that UUVs operating deep under the ice will find it difficult, if not impossible to utilize GPS. Satellite coverage in the Arctic is limited, in general, which also limits access to satellite navigation and communications and data sharing networks. "The fact that we can put sensors out that will know where they are without having to come to the surface to get a GPS fix – because they can't come to the surface because there's sea ice there for nine months out of the year," ONR's Harper said in his May interview with *Defense News*. "That's a big win." "You can go out there and you can put your sensors in the ice, but a lot of times they'll fail," Harper added. "And they'll fail because



they'll get crushed in the ice or tipped over or toppled by changing ice conditions. And so, the ability to deploy a buoy that is robust enough to survive the sea ice is one of the technological hurdles to doing this."

Ice Mass Balance Buoy

A system that networks together a fleet of UUVs, together with an array of fixed sensor and communication nodes for the purposes of

monitoring activity underwater would also seem readily adaptable to other roles, such as intelligence, surveillance, and reconnaissance in Arctic waters, especially with regards to foreign submarine operations. Just being able to provide US military commanders and American intelligence agencies with additional basic situational awareness of what's happening under the ice, as well as above it, could be a major boon. The top of an Ice Mass Balance Buoy, a type already in use to measure shifts in polar ice, which could be a starting place for the AMOS sensor and communication nodes. "We have significant domain awareness challenges, and that really begins in the high latitudes," retired Admiral Paul Zukunft, who was previously the Commandant of the US Coast Guard, told a gathering at the 2020 Defense News Conference earlier in September. "Things start to get pretty dark once you get up higher than 72 degrees north." "We sent a national security cutter to patrol that region in a relatively ice-free portion of the season," he continued. "And we stumbled upon a joint exercise between Russia and China. Our intelligence community did not have awareness that this was going on. So we were the originators of this information and otherwise we would not have known. We need to continue to invest in domain awareness."

An armada of drone submarines patrolling even autonomously, tied together with a sensor network, could be a major step forward in gaining this kind of insight into how other navies are operating in the region. Navies around the world have long used the Arctic as a place to conduct discreet submarine operations that are difficult for potential adversaries to monitor. In many ways, this adaptation of AMOS would mirror other Navy efforts to develop new and improved underwater sensor networks, with both fixed nodes and unmanned vehicles, to help monitor submarine traffic and other maritime movements across broad areas of the open ocean.

A US Navy ocean glider type unmanned undersea vehicle, commonly used for underwater survey purposes. Concept art associated with the AMOS programs suggests these could be adapted to Arctic conditions to support the prototype system.

USN



A ThayerMahan SeaWatch autonomous wave glider type unmanned vehicle, which the Navy is also experimenting with as a means of conducting maritime surveillance across a broad area.

THAYERMAHAN



The Navy is hardly the only one looking in expanding its underwater infrastructure, both in the Arctic and elsewhere. Russia is reportedly working on various projects in this vein in the Arctic, including potential underwater facilities and nuclear reactors to power them, that are again ostensibly for research purposes, but could easily have military applications. The Chinese

have also established underwater monitoring stations, officially for scientific research, in the Pacific that could also be used to collect information about the goings and comings of foreign submarines and other vessels. When it comes to the Arctic, Russia is steadily expanding its overall military footprint in the region with the establishment of a constellation of bases, many of which are still growing significantly in size and scope. Work is notably in progress to dramatically extend the runway at Nagurskoye Air Base, Russia's northernmost outpost. Competition in the Arctic region will only grow in the near future as global climate change makes it more accessible, in general, opening up a host of new potential economic opportunities. This includes the exploitation of natural resources, from oil to fish, as well as lucrative maritime shipping routes. All told, the Navy's AMOS project looks set to be an important effort, both with regards to its immediate objectives to collect important information about Arctic conditions and as a stepping stone to further developments to support an increasing US military presence in the region.

Vancouver Artillery Association Yearbook Updates

VAA Virtual Lunch every Wednesday at Noon PDT - <https://zoom.us/j/710845848> - Drop in for 10 minutes or stay for an hour

Important Announcement for all members of the Vancouver Artillery Association and serving members of 15th Field Artillery Regiment. On 17 October 2020, The Royal Canadian Artillery Association will be holding their Annual General Meeting and Leadership Symposium. Register today!

During the AGM a vote will be taken to approve the constitutional changes required for local Association members to also be members of the RCAA. Your vote is needed to ensure that the Vancouver Artillery Association stays affiliated. Please register for the AGM at <http://rca-arc.org/>

The nominal roll has been updated and now contains 5,081 names of soldiers that have been a member of 15th Field Artillery Regiment, RCA and/or the units that it perpetuates. This an increase of 690 since April 2020! An updated excel sheet has been included on the nominal roll page at <https://www.vancouvergunners.ca/nominal-roll.html>.

Is your information correct? Would you like to work on the nominal roll project? contact me at president.vcrgunners@gmail.com

1926 Yearbook update - News clippings featuring Sarcee summer training camp. <https://www.vancouvergunners.ca/1926.html>

Honours and awards update - Battery Sergeant Major Creswick Claude Whebell, DCM has been updated in our nominal roll. <https://www.vancouvergunners.ca/nom-roll-wea--wig.html>

Military Medal page update - Gunner Ivan Jeffrey Stephen, MM has been added to the list of Military Medal awardees. <https://www.vancouvergunners.ca/military-medal.html>

We have been informed of the passing of Major (Retired) Ronald Richard Mathews, CD. Ron was a member of 15th Field Artillery Regiment, RCA from 1987 until 2005 when he transferred to 12 Service Battalion. Photos of Ron have been raised to the header in most of those years. Our condolences to his family and friends. Further details will be posted when known.

Arne Knudson Episode 4 – With the Anti-Tank Regiment in England has now been uploaded. <https://www.vancouvergunners.ca/arne-knudsen.html>

Remember – Stay healthy and stay safe!

Who (or What) Is It?

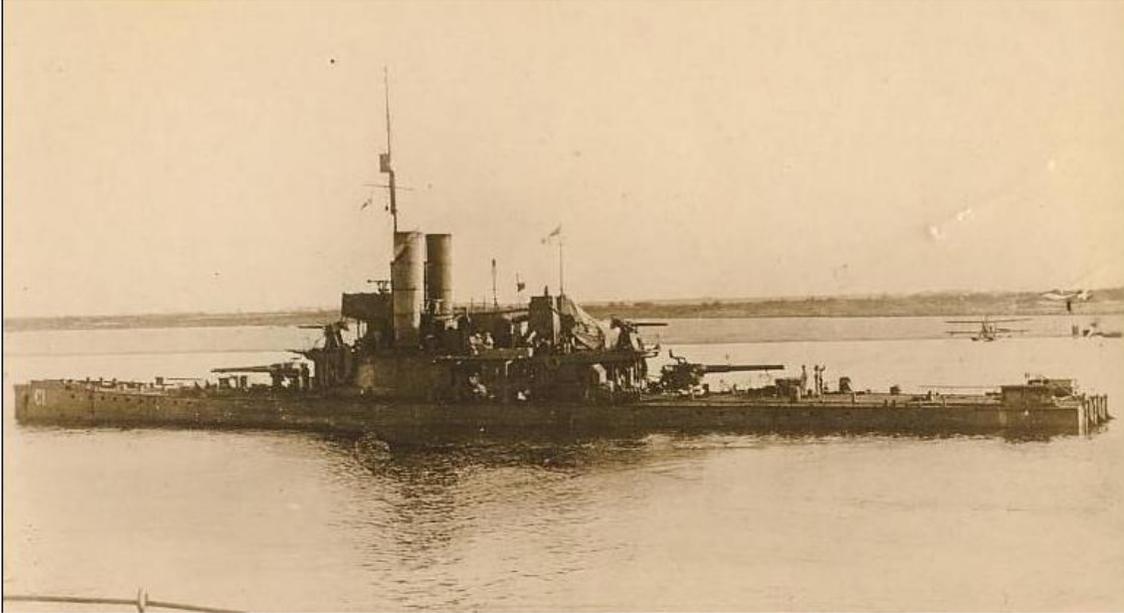


Last Week: The *Feldgendarmarie* were a type of military police units of the armies of the Kingdom of Saxony (from 1810), the German Empire and Nazi Germany until the conclusion of World War II in Europe. Despite the surrender of all German forces in May 1945, some *Feldgendarmarie* and *Feldjägerkorps* units in the western zones of occupied Germany were allowed to keep their weapons by the Allies because of the number of POWs that required guarding and processing. For example, the British VIII Corps based in Schleswig-Holstein used an entire regiment of volunteers from the *Feldgendarmarie* to maintain discipline at its demobilisation center at Meldorf. Re-activated military police, who received extra rations as pay, were identified by an armband stating *Wehrmachtordnungstruppe* (Armed Forces Order Troop). In June 1946, more than 12 months after the official end of World War II, the *Feldgendarmarie* became the last German units to surrender their arms.

Who was the last Japanese soldier to surrender after WW2? Hiroo Onoda held out on the Philippines island of Lubang from 1945 until his surrender in 1974. His intelligence, determination, and refusal to surrender made him a celebrity – though he was more widely regarded as a hero outside Japan than in it. Another straggler emerged from the jungles only a few months after Onoda's surrender – in fact, as a direct consequence of the immense burst of publicity that accompanied it. His name was Teruo Nakamura, he was the “last of the last” to return home of all the stragglers who fought on after 1945. Nakamura had grown up in Formosa (Taiwan) – then a Japanese possession that had been seized from China at the conclusion of the Sino-Japanese War of 1894-95. Born in 1923, he was a member of the indigenous aboriginal peoples who by then comprised only a small minority of the island's population. His real name, it appears, was Attun Palalin, but he adopted a Japanese one when he was conscripted and joined the war effort in 1943.

This Week: We move to a nautical theme for this week's quiz, as can be seen in the photo. But first, a bit of a history lesson for you. Did you know that the coast of British Columbia was

defended by the Imperial Japanese Navy during part of World War One? This was done because the Royal Navy was over-stretched, and the Royal Canadian Navy was, to put it politely, rather tiny, nothing like it became in the succeeding conflict. The irony of a future enemy, now friend again, defending us is further heightened by the fact that the flagship, IJNS Izumo, was the very ship that started the conflict that became the Second World War when she shelled Shanghai in 1937. Further, she was built in the United Kingdom by Armstrong Whitworth. By the way, the officers and men of the Izumo were quite well-received while stationed in Esquimalt, and popular at social events.



Well, the vessel in our photograph is not in the same league as the Izumo, which was an armoured cruiser. Ours is rather tiny, and not very well-armoured, although fairly well-armed for her size. Unlike the Izumo, which saw

action in three wars, and ended up being scrapped and turned into toys and early Toyotas, ours saw service in two world wars, and met a glorious end, punching much above her weight. Indeed, amongst some naval aficionados, she is a legend. Even more interestingly, our scrappy (versus ‘scrapped’) ship has not one, but two connections to our plucky Canucks, and, indeed, is firmly connected in an interesting way to the current 15th Field Regiment (RCA). So, keen Jack Tars, and land lubbers, who was she? And, more pertinent to our purpose, what are the two connections, with the one to the glorious “Fightin’ 15th”? Send your answers to the editor, Bob Mugford (bob.mugford@gmail.com), or the author, John Redmond (johnd._redmond@telus.net).

Ready, aye, ready!

From the ‘Punitary’

Why did the turkey cross the road twice? To prove he wasn’t a chicken.

Murphy’s Other Laws

Information deteriorates upward through bureaucracies.

Quotable Quotes

I love Thanksgiving because it’s a holiday that is centered around food and family, two things that are of utmost importance to me. *Marcus Samuelsson*

Wednesday Digital Video Lunch

No need to worry about COVID-19 when you go digital. Pop into our video lunch **at noon** on Wednesdays and say hi. All you need is a laptop, tablet or smartphone. These sessions are being hosted by the Vancouver Artillery Association and are **open to all** – especially those who attended Wednesday lunches.

Join us to check up on your old lunch buddies.

<https://zoom.us/j/710845848>

Zoom is the leader in modern enterprise video communications, with an easy, reliable cloud platform for video and audio conferencing, chat, and webinars across mobile,



desktop, and room systems. Zoom Rooms is the original software-based conference room solution used around the world in board, conference, huddle, and training rooms, as well as executive offices and classrooms. Founded in 2011, Zoom helps businesses and organizations bring their teams together in a frictionless environment to get more done. Zoom is a publicly traded company headquartered in San Jose, CA.

[Join our Cloud HD Video Meeting now](#)

Use the link above on your computer Zoom program or dial in on your phone 778 907 2071 Meeting ID: 710 845 848

Invite 2 friends! We have room for 100! See you on Wednesdays at noon. Bring your own lunch and beverage of choice.



The
Royal United Services Institute of Nova Scotia
presents

Distinguished Speaker

Commander

Helga Budden

Commanding Officer

**Canadian Armed Forces Transition Unit
Nova Scotia/Newfoundland and Labrador**



Transition
A Step We All Take

**1-3 pm Halifax time, Wednesday, 28 October 2020
via Zoom (register through RUSINovaScotia@gmail.com)**

Commander Helga Budden



Cdr Budden was born and raised in Donkin (Cape Breton), Nova Scotia. She enrolled in the Canadian Armed Forces in 1992 in the Regular Officer Training Program (ROTP) as a Maritime Engineer and attended the Royal Military College in Kingston, Ontario. She graduated with a B Eng (Civil) in 1996 and was commissioned as an Acting Sub-Lieutenant. Over the next four years she completed her Marine Systems sub-occupational and Head of Department training in HMC Ships NIPIGON, PRESERVER, and IROQUOIS as well as ashore at Naval Officer Training Centre Venture, Canadian Forces Naval Engineering School, Canadian Forces Fleet School Quebec, and HMS SULTAN. She participated in Op PERSISTENCE (1998) and STANAVFORLANT (1999). She was promoted to

Lieutenant in 1999.

In 2000, she was posted inland as a staff officer at Canadian Forces Leadership and Recruit School and then, in 2001, to the Royal Military College as a Squadron Commander. In 2003, she was appointed as the Marine Systems Engineering Officer of HMCS IROQUOIS. After two years which went by far too quickly, she was promoted to Lieutenant-Commander (2005) and posted ashore. As a Lieutenant-Commander, she was a Technical Services Manager at the Fleet Maintenance Facility Cape Scott (2005/06), completed her MSc in Naval Architecture (UCL 2006/07) and held the positions of Surface Naval Architect (2008/09) and Submarine Naval Architect (2009/12) within DGMEPM. She then again went into the personnel domain in Director Naval Personnel and Training as the Occupation Manager for the Naval Technical Officers (Nav Eng/MS Eng/NCS Eng) (2012/14). She then was selected for the Advanced Command and Staff College (UK equivalent of JCSP) where she earned the professional qualification as well as an MA Defence Studies (KCL).

She returned to Halifax, Nova Scotia as the Senior Staff Officer Surface within the Formation Technical Authority (2015/17). Cdr Budden was promoted to her current rank in July 2017 and posted to CFC Toronto as Directing Staff/Military Faculty for JCSP Residential. After two very joint years working with the CAF's future leaders and dedicated faculty, she was appointed as the Commanding Officer Canadian Armed Forces Transition Unit Nova Scotia/Newfoundland and Labrador. She enjoys music (both playing and listening), reading, knitting, handicrafts of many sorts, and most of all, baking. She also enjoys fencing, sailing, and a moderate amount of other more traditional physical training pursuits.

Virtual Remembrance Run in Support of the JBC

August 9 - November 28, 2020



Members of the Royal Canadian Army Service Corps participate in a one-mile race as part of a wider I Canadian Corps sports meet in the United Kingdom, 1943 (Canadian Army Newsreel No. 12).

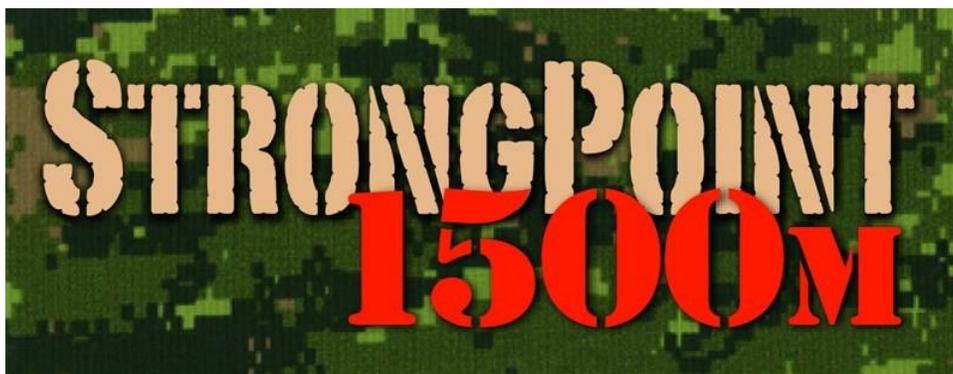


The Juno Beach Centre Association is partnering with VR Pro (<https://www.vrpro.ca/events/Home.html>) for our first Remembrance Run fundraiser! This is a virtual running (or walking) event for participants of all ages.

Registration is available on the Running Room website.
<https://www.events.runningroom.com/site/17167/>

DISTANCES

Click on a logo to register for that distance.



<https://www.events.runningroom.com/applications/?raceId=17167&eventId=50553&vrindex=3>



<https://www.events.runningroom.com/applications/?raceId=17167&eventId=50554&vrindex=3>



<https://www.events.runningroom.com/applications/?raceId=17167&eventId=50554&vrindex=3>

Scroll down to learn about the significance of these distances.

RACE DETAILS

Register now for one of three virtual race distances and receive a race kit including this beautiful, oversized, commemorative medal (pictured below) along with a Juno Beach collector coin, race bib, an imprinted neck gaitor, a Remembrance Day Poppy, and a beautifully printed Juno Beach

D-Day souvenir map, and more! Then, run or walk your event distance of choice anytime between September 1 and November 28, 2020. \$10 from each entry will go to support the Juno Beach Centre honouring those brave men and the sacrifices they made. (Click any one of the race event logos above or the registration button below to register.) Applicants can set up a fundraising page through your Running Room account, after you have registered for the Run.



All you need to do is go to the Fundraising tab (at the top of the registration page) and select Raise Funds to set up your fundraising page. Each participant will receive a unique Remembrance Day / Juno Beach commemorative medal. The design features the image of a Landing Craft,

Assault (LCA) manned by Royal Canadian Navy sailors on D-Day approaching Juno Beach with a load of troops. The medal's ribbon is inspired by the France & Germany Star, the campaign medal received by those who landed at Juno Beach and/or served in France, Belgium, Holland, or Germany between D-Day (6 June 1944) and Victory in Europe or V-E Day (8 May 1945).

CONTACT INFORMATION

For more information please contact Kelly Hendry-Arnott

- Email: kelly@vrpro.ca
- Phone: 905 512-2488



REMEMBRANCE RUN DISTANCES EXPLAINED

What is the “Strongpoint 1500m”?

Juno Beach (Normandy, France) was well fortified. Mines, barbed wire, and beach obstacles to Allied tanks and landing craft littered the sands. German machine guns, mortars, and artillery, often positioned in concrete bunkers, overlooked the likely Allied landing areas. Strongpoints in the German-held towns of Courseulles-sur-Mer, Bernières-sur-Mer, and Saint-Aubin-sur-Mer dominated the beaches. Courseulles was the most heavily defended area attacked by British and Canadian forces on D-Day. The strongpoints at Courseulles and nearby Graye-sur-Mer contained a dozen concrete machine-gun posts covering a total of six artillery pieces overlooking the beach. Today, the Juno Beach Centre stands on the same ground as *Stützpunkt (Strongpoint) 31*, located on Mike Red Sector of Juno Beach. This shorter distance event (1500m) is for ideal children, older participants, and anyone else who does not want to run or walk the 8k or 21k distances. It is named for the strongpoint and 1500 metre stretch of beach overcome by the Royal Winnipeg Rifles, the 1st Hussars (6th Canadian Armoured Regiment), and the 6th Field Company, Royal Canadian Engineers on D-Day.

What is the significance of the “Juno Beach 8K”?

D-Day, June 6, 1944, was among the greatest moments of the 20th century. The landings started the battle to liberate France from Nazi Germany. The Canadians stormed an 8-kilometre stretch of sand featuring coastal villages fortified into German strongholds. Code-named JUNO, some 14,000 Canadian soldiers with hometowns from coast to coast landed here. A further 7,000 British

troops joined them. When you run this fall, you are running in remembrance of every Canadian or Allied soldier who landed at Juno Beach.

Why is it named the “Remembrance 21.1K”?

The total number of troops landed on Juno Beach on D-Day was approximately 21,000. We offer a half-marathon (which is 21.1 kilometres long), in honour of those troops.



<https://www.events.runningroom.com/site/17167/>

Local entrants who enter any of these events – please send me your ‘Donation’ links and I will put them in this newsletter. – Ed.

Fellow Gunners

I am running/walking a half-marathon to raise money for the Juno Beach Centre. A half-marathon is approximately 21 kilometres and I am running/walking this distance in honour of all 21,000 Allied troops who landed on Juno Beach on June 6, 1944. You can support the Juno Beach Centre by pledging in support of me or by registering for this Remembrance Run fundraiser.

To donate and help us achieve our fundraising goal, please go to my fundraising home page at this link:

<https://www.runningroom.com/dashboard/giving/?raceId=17167&eventId=50555&memberId=UDVXZA9pWzoAa1dgUWA%3D>

You will see a box that says “**Make a Donation**” – do so, and follow the instructions

Thanks! UBIQUE!

HLCol Don Foster P.Ag, CIM, FCSI
Director | Juno Beach Centre Association



2020 BMO CDCB Customer Appreciation Contest



The contest for the defence community is back!

Service members and their families, reserves, recruits, veterans and retirees, as well as staff of Department of National Defence, the RCMP and the Canadian Coast Guard are eligible for **FREE* banking** with the Performance Plan chequing account - no minimum balance required.

Visit bmo.com/cdcbcontest for offer details.

Open an account between June 15 and October 12, 2020 and you will automatically be entered into the "CDCB Customer Appreciation Contest" for a chance to win a **grand prize of \$20,000 cash** or one of **12 prizes of \$5,000 cash!**

Already a BMO CDCB customer?

Don't miss out on your chance to win.

Visit bmo.com/cdcbcontest to enter the contest.

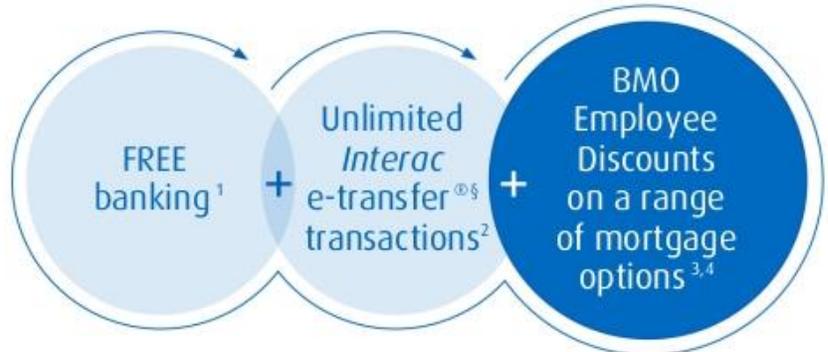
BMO  Official bank of the
Canadian Defence Community

*No purchase necessary. The 2020 CDCB Customer Appreciation Contest (the "Contest") begins on June 15, 2020, at 12:00:01 a.m. Eastern Time and ends on October 12, 2020, at 11:59:59 p.m. Eastern Time (the "Contest Period"). There are thirteen (13) prizes in total (each a "Prize"), with total prizes valued at \$80,000 available to be won. There will be one (1) Grand Prize of \$20,000 cash and an additional twelve (12) prizes of \$5,000 cash. Odds of winning depend on the number of eligible entries received. Before being declared a winner, a correctly answered mathematical question is required. Full contest details are available at bmo.com/cdcbcontest. The monthly Performance Plan fee is waived. You are responsible for all transaction, service, and product fees not included in the Plan.

Our strategy is simple –
Do more for you.



BMO is proud to be the official bank of the **Canadian Defence Community**, and to provide exclusive offers to you.



Mortgages

- BMO Employee Discounts on a wide range of mortgage options^{3,4}
- Flexibility to move or break your mortgage through the Integrated Relocation Program⁵
- 130-day mortgage rate guarantee – the longest of any major bank in Canada⁶



Bank Accounts

- FREE banking with the Performance Plan¹
- Unlimited *Interac* e-transfer[®] transactions²
- OnGuardSM Identity Theft Protection Service at no charge^{7,8}
- Keep the same accounts no matter how many times you relocate
- Access to CreditViewSM – the free, instant way to get your credit score⁹



Lines of Credit

- BMO Employee Discounts on unsecured and secured personal lines of credit³
- Student line of credit with preferential pricing and flexibility¹⁰



Credit Cards

- Choose the BMO Support Our Troops CashBackSM or AIR MILESSM MasterCardSM
- No annual fee¹¹
- Support Canadian Forces Morale and Welfare Services with every purchase you make
- Visit bmo.com/sot to find out about the welcome offers