

Van Arty Association and RUSI Van Members News Feb 8, 2022

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 online. 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>

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

- Feb 09** Wednesday ‘Zoom’ Lunch meeting
Feb 16 Wednesday ‘Zoom’ Lunch meeting
RUSI(NS) - Distinguished Speaker - RCAF Strategy: Air and Space in Formation
Feb 23 Wednesday ‘Zoom’ Lunch meeting

Note: Still no word on when facilities at the Armoury will open to non-serving people but you can be sure that the military will be the last to remove COVID restrictions. Keep watching this newsletter for more information. With the new surge, it will probably be 2-3 months before we see any changes in policy. Ed.

RUSI(NS) - Distinguished Speaker 16 February 2022

RCAF Strategy: Air and Space in Formation

The Royal United Services Institute of Nova Scotia extends an invitation to members of your association to a presentation Wednesday, 16 February 2022, by Colonel Meaghan Setter, Royal Canadian Air Force. The topic of her presentation is "RCAF Strategy: Air and Space in Formation." Colonel Stetter's bio is attached. Colonel Setter will provide an overview of the RCAF approach to its next strategy and how the strategy, organizational culture change, CAF reconstitution efforts and previous Operations EXPERIENCE and TALENT all fit together moving forward.

The talk will start at 1 pm Halifax time, Wednesday, 16 February 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, 13 February. As the subject

line for your registration email, put: RUSI(NS) Distinguished Speaker 16 February 2022 Registration. In addition to your name, please provide your organization (association, company or unit). Participation is limited and later registrants may have to be put on a waiting list. If after registering your availability changes and you are no longer able to attend, please advise RUSI(NS) as soon as possible so your spot can be re-assigned. The event will be done by Zoom. Instructions will be emailed to registrants by end Monday, 14 February. If you have not received them by end-of-day 14 February, please check your spam folder and, if necessary, email RUSI(NS).

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

What The US Army's High-Tech Goggles Can Do

Straight outta science fiction. *Max Hauptman Task & Purpose Feb 3, 2022*



The Army's next-generation goggles, the Integrated Visual Augmentation System (IVAS), sounds like something out of science fiction: Soldiers can outline friendlies and enemies, navigate the battlefield easily thanks to a compass and a mini-map, drop objective markers and pings, all while also doubling as night vision goggles. Based on Microsoft's HoloLens technology, US troops have been testing the futuristic heads-up display since 2019, but only now are we getting a look at what soldiers will *see* when they look through the goggles. Through a series of slides at a presentation in December, IVAS technical director Jason Regnier detailed some of the latest updates to the program, the fielding of which has been delayed for more than a year.

During both day and night and in all weather conditions, soldiers wearing the IVAS will be looking at the battlefield with the ability to access essentially all the information an operations shop can provide, or at least, that's the Army's hope. (Screenshot via YouTube).



The IVAS uses augmented reality, a technology that overlays digital information onto the screen soldiers are looking through while wearing the goggles. That information includes training and on-the-spot language translations; high-resolution night and thermal sensors; facial recognition software; and the ability to see what a location or objective looks like before they get there. It even gives soldiers the ability to see outside of a vehicle before they exit, providing greater awareness of what they're walking into. The slides from Regnier's presentation detailed specifics of the IVAS' capabilities and suggested plans for use in combat and training. Soldiers can toggle through the functions of the IVAS using a chest-mounted control pad, or "puck." Regnier said that while the process was still going through its teething phase, soldiers testing out the goggles had planned entire missions within the IVAS system. The headset also boasts a range of features that seem to be focused on the needs and concerns of the folks who will actually be using them. For example:

the goggles are far less likely to get fogged up than other wearable optics, and they can function in full sunlight as well at night.

Thus far, in terms of combat functionality, soldiers testing the IVAS have worked their way up through Battle Drill 6 – entering and clearing buildings. Developers are also planning on releasing a development kit, meaning soldiers using the IVAS system can create apps to further augment its capabilities. As Regnier detailed, the IVAS provides a 70-degree field of view, which is nearly twice that of current night vision and thermal devices, over which ranges, routes, and phase lines can be displayed. Soldiers can also share 3-D maps displayable to an entire unit. The IVAS functions very similar to the heads-up display (HUD) commonly found in first-person shooter games like “Halo,” “Call of Duty,” or “Battlefield” where players can see a minimap, a compass on the top of the screen, objective markers, and the positions of friendlies, as well as enemies.



The IVAS would function almost like the HUD, or heads-up display, commonly found in first-person shooter video games, with targets, objectives, and a map readily visible to soldiers.

(Screenshot via YouTube)

Regnier also noted that soldiers testing the IVAS last summer set records on land navigation courses. “You never have to stop to do a map check or anything like that because, with just the push of a button, you have an arrow that’s in the bottom of your screen and you walk the arrow to your point, so there’s no accidentally drifting left or right,” said Sgt 1st Class Brian Hayman — a platoon sergeant in 3rd Battalion, 75th Ranger Regiment who was among those testing out the IVAS — in a recent Army release. To prevent fogging up, the goggles are treated with a commercial anti-fog coating that had withstood “95 degree, 100 percent humidity” conditions during testing last summer. The goggles have also passed Chemical, Biological, Radiological and Nuclear (CBRN) integration during testing at Fort Bragg, where soldiers were still able to use the IVAS while wearing gas masks and wearing their protective equipment. The IVAS also connects to thermal devices mounted on weapons, essentially allowing a soldier to point their rifle around a corner and see the view from the thermal device in the IVAS.

Sowing Darkness for Military Advantage: Deception

Charles B Vandepier and James L Regens The Wavell Room. January 28, 2022

O divine art of subtlety and secrecy! Through you we learn to be invisible, through you inaudible, and hence we can hold the enemy’s fate in our hands. Sun Tzu

The rise of China and resurgence of Russia suggest that an era of great power competition has returned. Diminishing technological advantage over such peer and near-peer competitors as well as pressures on defence budgets present challenges for Western militaries such as Britain, the United States and Australia. Within this context, history provides numerous examples of the successful use of deception on the battlefield enabling forces to achieve physical and

psychological effects against peer and near-peer adversaries. Recognition of the opportunities presented by deception, surprise, and stratagem in warfare are evident in recent publications in the UK, US and Australia, presenting a growing interest and an opportunity to rapidly develop capabilities and expertise in these areas.



*Unmarked Russian soldiers
in the Crimea 2014.*

*By Anton Holoborodko
(CC BY-SA 3.0,*

The rapid rise of China coupled with the resurgence of Russia entering the 3rd decade of the 21st century evokes echoes of the Cold War that dominated the period from 1946 to 1991. It signals a new era of great power competition. In parallel, the

technological pre-eminence that the US enjoyed at the end of the Cold War and displayed with devastating effect in the first Gulf War, has eroded steadily over the past 20 years. This has generated renewed interest in how the United States and its allies can maintain or achieve military advantage as part of a containment and deterrence strategy to counter Chinese and Russian ambitions. For example, the US 2018 *National Military Strategy* emphasises that the Joint Force needs to work to retain a competitive advantage over China and Russia, while acknowledging “... our competitive military advantage has been eroding” coupled with the need to “... restore America’s competitive edge by blocking global rivals Russia and China from challenging the US and our allies.” Going forward, developing and sustaining a coherent approach to meet that goal is a significant challenge because demands on resources, expansion of responsibilities, technological parity, and the need to adapt quickly to evolving geopolitical circumstances are not going to diminish and probably will grow.

Ignoring this reality inevitably, and unfortunately, has a high likelihood of constraining the Pentagon’s ability to focus on its core mission of deterring or defeating adversaries, especially as DoD’s share of the budget shrinks. Similar concerns have been voiced in Australian and British defence circles. The complexities inherent in this strategic environment also simultaneously create obstacles to consciously prioritising the allocation of time and resources between competing threats and political priorities, practicing strategic patience, and engaging in concerted cooperation like the AUKUS partnership with Australia and Britain. Moreover, as full-spectrum competitors, China and Russia on a global scale, or for that matter adversaries such as Iran and North Korea on a regional scale, pose a unique problem because they can combine strategic intent and adaptive behaviour to thwart Western objectives. Fortunately, the historical record offers insights for crafting a strategy with deception – providing false information within the bounds of what may be thought reasonable or probable – as one of its cornerstones to successfully counter peer or even peer+ competitors. The objective of deception is to “Always mystify, mislead, and

surprise the enemy” thereby destabilising the enemy’s ability to succeed. As Michael Handel notes: “Deception in war must be considered a rational and necessary type of activity because it acts as a force multiplier, that is it magnifies the strength or power of the successful deceiver. Forgoing the use of deception in war undermines one’s own strength.” *“From the earliest accounts of warfare to the modern era, deception is a consistent feature of the preparation and execution of plans”*

Multiple examples from antiquity to the present illustrate this point including the Greeks use of the Trojan Horse; Napoleon’s victories over the Prussians in the February 1814 battles of Champaubert, Montmirail, and Vauchamp; ‘Stonewall’ Jackson’s campaigns in the Shenandoah Valley and Chancellorsville; German deception against the French on the Meuse in May 1940 and the Americans in the Ardennes in 1944; a series of Allied operations during World War II including the battle of Midway and the invasions of North Africa, Sicily, and Normandy; the US Marine Corps landing at Inchon and China’s subsequent intervention in the Korean War; the 1968 Tet offensive during the Vietnam War; the Egyptian crossing of the Suez Canal in the opening days of the 1973 Yom Kippur War; and the 1991 Gulf War’s *Operation Desert Storm*. In fact, from the earliest accounts of warfare to the modern era, deception is a consistent feature of the preparation and execution of plans as commanders sought to achieve surprise over their adversaries and exploit the subsequent confusion and fear to achieve battlefield victory.

Those cases offer lessons learned and a template for using deception as a stratagem. In each instance, deception produced a physical effect and a psychological effect. The target of deception is the mind of opposing decisionmakers, and the aim of deception is to get them to act in certain ways. Deception goes beyond simply lying. A successful deception campaign requires an audience that wants to believe something which is *false* about military capabilities or intentions at the strategic, operational, or tactical level. To accomplish this, deception also requires a plausible scenario (i.e., error mixed with truth) that fits audience expectations and embeds the basis for a false inference within the plausible anticipated future to achieve a desired response – action or inaction – that is exploited at the centre of gravity on the battlefield.



A computer graphic simulation of a Future Protected Vehicle called Cammo. But deception should be more than hiding.

Echoing the recent observation by General Sir Patrick Sanders, Head of UK Strategic Command, that the military needs more Qs than 007s, cognitive degradation of an adversary acts as a force ratio multiplier helping achieve an advantage. Successful deception causes resource misallocation (eg, accepting the false scenario, hedging against the possibility of it occurring), confusion, overconfidence, and indecision. This invariably happens because successful deception means an adversary is unable

to understand, plan, or act in accordance with reality. Making appropriate decisions becomes increasingly unlikely regardless of the speed of decision making. Indeed, inducing a peer or near peer competitor to make rapid incorrect decisions might advantage one's own position since those incorrect choices can have a compounding effect.

Clausewitz's argument that everything in war is difficult underscores another factor favouring countering peer and near peer competitors with deception. Modern militaries, especially Western ones and their peer or near-peer competitors, increasingly rely on digital schemata (e.g., common operating pictures) to provide a situational awareness of the battlespace. The *breadth* of the battlespace means that such schemata are necessary. However, increased reliance on sensors rather than direct observation means that a commander increasingly views, and cognitively processes, a *representation* of reality. They do not directly experience that *reality* itself. Hence, despite conventional wisdom that it becomes *harder* to conduct deception because of multiple sensors, the sheer volume and velocity of data bring collected might well prove to make deception more possible.¹⁹ As a result, it is plausible in a kinetic conflict between peer or near-peer adversaries that "... the factors of confusion and high operational tempo, the multiple dimensions of threat and uncertainties, the degradation of intelligence and communications" all present opportunities for deception.

Simply put, given the emergence of peer and near-peer rivals combined with the weight-of-evidence demonstrating the efficacy of purposeful deception as a stratagem, it is time to emphasise deception and make it a central feature of Western doctrine and tactics, techniques, and procedures (TTPs) especially as reliance on hybrid and asymmetric warfare has proliferated.²¹ Increased concerns about the military capabilities of peer competitors (ie, China and Russia) combined with fiscal constraints, provide powerful incentives to enhance deception capabilities. Moreover, as Michael Handel noted roughly 40 years ago "... there is never a reason to make life easier for the adversary or more difficult for oneself ... even if deception is not always used as part of a military plan or strategy (which would be a mistake) the adversary must always live under the impression that deception is being practiced.'

Because deception works at a personal and cultural level, deception operations require a nuanced approach, are resource intensive, and must be tailored to specific countries, services, and commanders. This underscores need to generate credible, accurate intelligence to better understand potential future adversaries and build capacity for deception operations now. The difficulty of achieving such knowledge of adversaries cannot be overstated. And knowledge and expertise in any field atrophies when not a primary focus or point of consistent practice. A standing start at the outbreak of hostilities needs to be avoided if deception is to achieve decisive advantage. It is clear that the Chinese, Russians, Iranians, North Koreans and other state actors already are aggressively pursuing those capabilities. The question is what is being done now to develop the necessary knowledge and expertise in the West? Given ongoing uncertainties about the future trajectory of great power competition between Western democracies and autocratic regimes in China and Russia, now is the time to reinvigorate deception. This requires both effort and expertise in capability in the understanding, design and application of deception operations and their effectiveness against a variety of opponents. *"It is clear that the Chinese, Russians,*

Iranians, North Koreans and other state actors already are aggressively pursuing those capabilities.” Fortunately, promising signs of a renewed emphasis on deception and its importance as a stratagem in warfare are evident in recent American, Australian, and British military circles and publications. This includes, for example, the 2019 publication of FM 3-13.4 *Army Support to Military Deception*. Moving aggressively to develop this capability and expertise will further demonstrate the West’s resolve, and more significantly, ability to deceive adversaries in order to meet successfully the challenges posed in the 21st Century.

Cameron Cathcart Youth Poem of Remembrance Award

Note new addresses for donations

A bursary has been established in Cam's name to generate funds annually for the Student Remembrance Day Poem. This will provide a bursary of \$250.00 to the winning poet each year. We invite you to become a donor to the Cameron Cathcart Youth Poem of Remembrance Award. Cam was a visionary and a true Canadian patriot. He was determined to tell the stories of this great nation in a creative and meaningful way. Among his many projects, Cam wanted to make sure that programs were established, aimed at our youth, to make them aware of the legacy our veterans have provided to Canadians because of their service.

In 2006 Cam decided a competition should take place annually in which young writers could submit poems with a Remembrance Day theme. A winner would be chosen, and the poem would be read at the November 11 Service. In recognition of the importance of this project, the Cameron Cathcart Youth Poem of Remembrance Award was established in 2021 through the generosity of a grant provided by Great Lakes Productions. The intention of the Bursary program is to raise \$20,000.00 to ensure this initiative continues in perpetuity.

Donations can be made to:

Crowd-sourcing donations can be made electronically to: <https://fundrazr.com/31wFD1...>

Or by mail to:

BC Regiment (DCO) Association Charitable Trust

620 Beatty St

Vancouver, BC

V6B 2L9

All donations are eligible for federal tax receipts. Please join us in supporting this endeavor in the memory of Cam and to keep youth involvement a vital part of the Ceremony.

Vancouver Artillery Association Yearbook Updates

Excerpts from Corporal Helmcken's Diary

Sunday 20 January 1918 - Bucked quite a lot of wood in the morning. Tonight, two men were killed and three wounded at Napoo corner. I never go by that corner now and I've never done so for the past few 3 days because of his firing around. Went up to the battery in the evening. Two

guns were expected to be put into our original position tonight. They have been firing it up for the last past few days.

Monday 21 January 1918 - Paid today. 20 Francs. I have now got practically 80 Francs. Got a letter from Evan who has just been on leave in Blighty. I am wondering whether he was over there when I was. Today the battery was heavily shelled from 8.00 A.M. until 4:30 P.M. Two gun pits were driven in but no one was hurt although three men were buried and fortunately got out unhurt.

Friday 25th January 1918 - This afternoon I went to the baths and had quite a good one. I really think I have developed scabies so if I can get baths often, I should be able to get rid of them.

Tuesday 29th January 1918 - Today we woke to find everything covered with frost but a fire in the dugout soon warmed us up. A beautiful warm day. Lievin is quite a beautiful place in spite of its destruction.

Check out the details here. <https://www.vancouvergunners.ca/helmcken-diary.html>

Major Gonnason Diary - December 1916

The final month of Major Gonnason's diary that we have is now online. He is still in training in England and actually won't be sent to France until September 1917! The social life continues. Help us find other parts of his diary. <https://www.vancouvergunners.ca/gonnason-diary.html>

Would you like to participate in the search of our regimental history? Send me an email to president.vcrgunners@gmail.com. Always looking for new members to the team.

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

The Museum is adding an Afghanistan display and have a mannequin dressed in CADPat. They are looking for a set of the type of webbing used in that theatre. Anybody have a set they would like to donate?

Who (or What) Is It?

Last Week: The Supermarine P.B.31E Nighthawk was a British aircraft of the First World War



and the first project of the Pemberton-Billing operation after it became Supermarine Aviation Works Ltd. One of those who worked on it was RJ Mitchell, the designer of the Spitfire. It was an anti-Zeppelin night fighter operated by a crew of three to five in an enclosed, heated flight deck, had a planned flight endurance of 9–18 hours, a searchlight in the nose (powered by the world's first APU) and a recoilless rifle in the top position. The prototype flew in February 1917 with Clifford Prodder at the controls. It proved to not

meet the promised specification and no more were built.

https://en.wikipedia.org/wiki/Supermarine_Nighthawk

This Week: This week, as promised, we are getting back to earth with a clanky, greasy, noisy thingie that should appeal to those of you used to khaki, combats, or CADPAT, depending on your age. As an avowed fan of “Tank Chats” on YouTube, the weekly series from the Tank Museum in Bovington, UK, I figured I knew much of the history of armoured and tracked fighting vehicles, thanks to the excellent potted histories provided by the various experts, foremost amongst whom is the moustachioed David Fletcher. They have presented on everything from Little Willie, the ancestor of all tanks, to the latest updates on the Challenger and the Leopard.

However, when I came upon this object, in a book by another YouTuber of note, whose name

may give the game away, I was surprised that I hadn’t seen it before. Was this Little Willie’s illegitimate son or daughter? Was it the winner of the latest committee design competition by our own Department of National Defence, combining the best bits of everything, at the cheapest possible price? Well, the answer might surprise you. Suffice to say that you can sleep more peacefully thanks to those who used this armoured object in combat.



So, what is this, and who used it? How did their efforts help you? If you know, let us know, by contacting the editor, Bob Mugford (bob.mugford@gmail.com), or the author, John Redmond (johnd._redmond@telus.net). Sleep tight!

From the ‘Punitary’

What happens when a dog eats garlic? His bark becomes worse than his bite.

Murphy’s Other Laws

When it is not necessary to make a decision, it is necessary not to make a decision.

Quotable Quotes

It is during our darkest moments that we must focus to see the light. -Aristotle

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 our Wednesday lunches.** Join us to check up on your old lunch buddies.

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

Password:- Ubique



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.

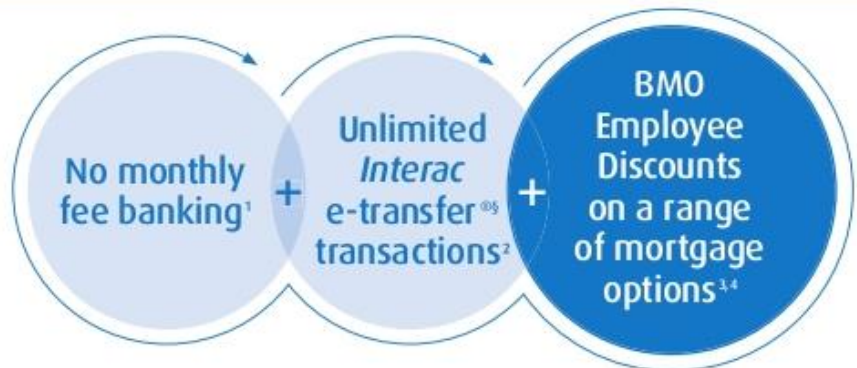
Bank of Montreal

The official bank of the Defence Community

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

- Save money with a Performance Plan chequing account with no monthly fees¹
- Unlimited Interac e-transfer⁵⁵ transactions²
- OnGuard[®] Identity Theft Protection Service at no charge^{7,8}
- Keep the same accounts no matter how many times you relocate
- Access to CreditView[®] – 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 CashBack^{®**} or AIR MILES^{®†} MasterCard^{®‡}
- 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

Frequently Asked Questions

What is the Canadian Defence Community Banking (CDCB) Program?

BMO and Canadian Forces Morale and Welfare Services have teamed up to offer the CDCB Program to eligible members of the defence community and their families.

Who is eligible for the CDCB Program?

Program benefits are exclusive to regular force personnel, reserves, recruits, military families, Veterans and retirees, as well as Department of National Defence (DND) and Staff of the Non-Public Funds civilian personnel, the RCMP and the Canadian Coast Guard.

Can BMO help me if I am relocated or deployed?

One way BMO can help is by covering your prepayment charges when you are relocated or deployed through the Integrated Relocation Program, and have to move or break your mortgage.

How does Canadian Forces Morale and Welfare Services (CFMWS) get funded by the BMO Support Our Troops MasterCard[®] program?

BMO pays royalties to CFMWS each quarter. CFMWS uses the royalties to fund the Support Our Troops National Summer Camp Programs and more.

How can I get help with home financing?

Visit a branch, find a Mortgage Specialist at mortgagelocator.bmo.com or call 1-866-548-7490 or collect from overseas at 514-877-7738 to get help with home financing.

How much can I save in bank fees with the CDCB Performance Plan Chequing Account?

You can save \$191 each year in monthly plan fee, \$120 each year with 5 non-BMO ATM withdrawals included each month, and \$155 each year in Identity Theft Protection at no charge.¹²

How can I contact BMO to learn more about the CDCB Program?

- Visit any BMO branch
- Call 1-866-548-7490
- International customers can call collect at 514-877-7738
- Find us on Social Media

Visit us in branch or at bmo.com/cdcb to learn more.



Scan the QR code to get more information.



¹²The monthly Performance Plan fee is waived. You are responsible for all transaction, service and product fees not included for free in your Bank Plan. ¹The monthly Plan fee may still apply. Other transaction fees may apply if you have a Bank Plan that does not include unlimited everyday banking transactions. A cancellation fee may still apply when you cancel the transaction. ²Interac e-transfer[®] transactions are subject to maximum transfer dollar amounts. ³Applications and the amount you can borrow are subject to meeting BMO's usual credit criteria. ⁴Some conditions may apply. These special offers are not available for the 5-year or 10-year BMO Smart Fixed Mortgage or a Homeowner Readline. To qualify for the CDCB special rates on 5-year fixed and 5-year variable rate mortgage, you must have a Canadian Dollar Primary Chequing Account (Chequing Account) with a CDCB Performance or Premium Plan; and set up the Chequing Account as the funding account for the BMO Mortgage; and have one (1) recurring direct deposit into the Chequing Account. ⁵Some conditions may apply. ⁶We guarantee your interest rate for the selected fixed rate mortgage type and term for up to 130 days from the rate guarantee start date. If the mortgage is not funded within the 130-day period, the interest rate guarantee expires. ⁷Applicable to residential mortgages only and subject to Bank of Montreal standard lending criteria for residential properties. Longest rate guarantee of any major bank as of November 18, 2020. ⁸Plan, transaction, service and product fees may still apply. ⁹You're eligible for OnGuard[™] if you are a BMO customer who has a lead account¹⁰ with one of the following Bank Plans: Performance Plan, Premium Plan, Platinum Plan or Employee Plan. In addition, to qualify for OnGuard, you must be a Canadian resident who has reached the age of majority for your province or territory, and you must be registered for BMO Online Banking and/or Mobile Banking and you must have a valid email address on your BMO profile and your lead account must be in good standing. Customers with an eligible Bank Plan with the Kids or Teens discounted banking program do not qualify for OnGuard. All accountholders of a lead account with an eligible Bank Plan qualify for OnGuard[™] provided they meet the above-eligibility requirements. If you switch your lead account to an ineligible Bank Plan, then you will no longer qualify for the OnGuard[™] service. ¹¹The lead account is the one you designate to pay any fees required by your Bank Plan, for example, your monthly Plan fees and transaction fees. ¹²OnGuard[™] retail value is \$155.88 annually (charged at \$12.99 per month). ¹³OnGuard[™] is provided by Sigma Loyalty Group and Interactions Inc. Sigma Loyalty Group and Interactions Inc. Terms and conditions can be found at www.bmo.com/onguard/SIGconditions. ¹⁴CreditView[™] is a service provided to you by TransUnion. Using this service does not impact your credit score. This service is being made available to you as a customer of BMO ("Bank of Montreal") at no additional charge. ¹⁵You must be a Canadian citizen or landed immigrant enrolled in a Canadian or non-Canadian post-secondary school or university. Co-signer may be required. Subject to credit availability and verification of identity. ¹⁶Ongoing interest rates, interest-free grace period, annual fees and all other applicable fees are subject to change. Cash advances include balance transfer, cash-like transactions and Mastercard cheques. Visit your branch, call the Customer Contact Centre at 1-800-263-2263, or visit bmo.com/rates-fees for current rates and fees. ¹⁷The monthly Performance Plan fee is waived. You are responsible for all transaction, service and product fees not included in the Performance Plan. Some non-BMO ATMs may charge you a convenience fee. The convenience fee is not a BMO fee and is added to the total amount of your withdrawal. You are responsible for the convenience fee that may be applied to your transaction.

¹⁸Registered trademark of Bank of Montreal. ¹⁹Interac e-transfer is a registered trademark of Interac Inc. ²⁰OnGuard is a service of Sigma Loyalty Group. OnGuard[™] is a trademark of Sigma Loyalty Group Inc. Identity Guard[™] is a registered trademark of Interactions Inc. ²¹CreditView is a trademark of TransUnion LLC. ²²MasterCard is a registered trademark, and the circles design is a trademark of Mastercard International Incorporated. Used under license.