



# RUSI

Newsletter of the Royal United Services Institute of Vancouver Island

## Patron

Lieutenant Governor of  
British Columbia,  
The Hon. Judith Guichon, OBC

## Board of Directors

**President** Mr Roger Love  
**Past President** LCol C.I. (Clive) Caton  
(Ret'd), CD

**Secretary**  
Cdr M.B. (Mike) Ellis (Ret'd), CD

### Treasurer

Mr Roger Love

**Membership:** LCdr Kathie Csomany,  
(Ret'd), CD

**Speakers:** Major S.H. (Scott) Osborne,  
CD (Ret'd)

**Awards:** Maj J.L. (Janice) Malainey  
(Ret'd), CD

**Military Oral History** (Veteran liaison): Maj  
L.G. (Gary) Del Villano (Ret'd), OMM, CD

**Functions:** Maj J.R. (Ray) Webber,  
(Ret'd) CD

**Newsletter Editor:** Capt L.E. (Skip)  
Triplett (Ret'd), CD

**Newsletter Publisher:** LCol C.L.  
(Craig) Cotter (Ret'd), CD

**RCN rep:** Cdr M.B. (Mike) Ellis (Ret'd),  
CD

**Army rep:** LCol J.R. (John) Bishop  
(Ret'd), CD

**RCAF rep:** Maj J.L. (Janice) Malainey  
(Ret'd), CD

**RCMP rep:** Capt J (Jack) Gallop (Ret'd)

**Civilian rep:** Mr Roger Love

**Director without Portfolio**

Capt W.R. (Bill) Donaldson, CD (Ret'd)

**Webmaster:** Capt DA Booker (Ret'd),  
CD

Published quarterly for distribution to  
the members of the **RUSI of  
Vancouver Island**  
Suggestions are encouraged.

**The RUSI-VI Office** is located at:  
Bay Street Armoury  
715 Bay Street,  
Victoria, BC V8T 1R1

### Email:

RUSIVICCCA@islandnet.com

### Web site:

<http://rusiviccda.org>

## An Arms Race Toward Global Instability

*worldview.stratfor.com/article/arms-race-toward-global-instability 23 Feb 2018*

The United States is gearing up once more for a struggle between giants. On Jan. 19, the Pentagon released a new National Defense Strategy, the first in 10 years, in which it called strategic competition the "central challenge to U.S. prosperity and security" as Russian and Chinese military capabilities expand. U.S. Secretary of Defense James Mattis echoed that concern Feb. 2 in the preface of the Nuclear Posture Review, arguing that the United States could no longer afford to pursue a policy of nuclear arms reduction given the steady growth of the Chinese and Russian nuclear arsenals. The U.S. Ballistic Missile Defense Review, due for publication soon, is expected to emphasize the same key points, namely that the United States should bolster its missile defenses to better repel threats as strategic competition builds.

Among these documents, the common thread is that great power competition, and not terrorism, will be the next focus of the U.S. security strategy. Washington has outlined how it will move to redirect its resources, capabilities and approach to overcome the challenges that the growing confidence and abilities of China and Russia pose. Beijing and Moscow, however, show no sign of backing down. And new, destabilizing weapons technology is entering more common use, while long-standing arms control agreements are deteriorating. These developments together promise to usher in a new era of international competition that could rival the Cold War.

Even before the latest string of U.S. defense and policy reviews, the emerging power competition with China and Russia was on Washington's radar. The United States pursued a "pivot to the Pacific" during President Barack Obama's administration, mostly in an effort to counter China's growing dominance in the region. Similarly, since Russia's intervention in Ukraine, the United States has bolstered its military deployments in Europe, reversing its drawdown on the Continent. The Pentagon also touted the "Third Offset" strategy — an initiative to encourage the development of promising military technologies such as robotics and artificial intelligence — during the previous administration in an effort to stay ahead of its mounting competition.

Yet counterterrorism was the true focus of the U.S. security strategy, not only under the last president but also under his predecessor. Enduring conflicts in the Middle East and South Asia continue to draw the lion's share of military deployments, resources and focus to this day. China and Russia, meanwhile, have taken advantage of the United States' diverted attention, making great strides in building arsenals and honing their military capabilities. In a few areas — such as anti-ship missiles, rocket artillery and ground-based air defense — the two Eurasian countries may even have surpassed the United States.

In light of these trends, Washington has every reason to be worried about a great power rivalry. But trying to stay ahead in the competition will only accelerate it. As

See the **RUSI Calendar of Events**  
on last page .

the United States works to fortify its defenses, China and Russia will redouble their efforts to strengthen their own capabilities. The two countries — revisionist powers that want to alter the current geopolitical balance, whether in the South and East China seas or in the former Soviet Union — won't give up their geopolitical ambitions just because the United States tries to foil them.

As the power competition between Russia, China and the United States intensifies, the emergence of disruptive weapons technologies will drive them deeper into a destabilizing arms race. Increasingly capable missile defense systems, for example, will play a central role in the struggle going forward, though the technology is still evolving to better address ballistic missiles. To appreciate the disruptive effect of ballistic missile defense, one must consider the limited inventory of ballistic missiles available to the United States, Russia and China. The fear among these countries is that as missile defense technology improves and becomes more prevalent, it will render their modest arsenals ineffective. A disarming nuclear strike from one power would further reduce the number of viable missiles in the target state's holdings, and the remaining weapons may not be powerful enough to overcome the aggressor country's missile defenses in a retaliatory strike. Consequently, while the United States' early lead on missile defense technology will spur Russia and China to keep working on their own missile defenses, it will also push them to beef up their offensive weapons.

Nuclear weapons will be another point of contention. According to the U.S. Nuclear Posture Review, the United States is preparing to shift its stance on the use of nuclear weapons and to introduce new ones, including a low-yield warhead for submarine-launched ballistic missiles. Low-yield nuclear weapons aren't a new development for the United States, but putting them on a ballistic missile submarine is. The move is intended to address the growing concern that a potential enemy — be it a great power such as Russia or a rogue state like North Korea — would resort to an "escalate to de-escalate" strategy. Under that strategy, the inferior military power would use a low-yield or "tactical" nuclear weapon to discourage continued attacks from the United States on the assumption that Washington wouldn't strike back with its strategic nuclear arsenal for fear of starting a devastating war.

Positioning low-yield nuclear weapons on ballistic missile submarines will give the United States greater speed and flexibility in their use. The decision is not without its risks, however. For one thing, a single strike with a low-yield nuclear warhead may well escalate to a full-blown war with strategic weapons. For another, since the U.S. ballistic submarine fleet carries a large portion of the country's strategic nuclear weapons arsenal, adding low-yield nuclear weapons to the mix could create a

discrimination problem for adversary states in the event of a launch. An enemy would detect an incoming ballistic missile fired from a submarine without being able to tell whether it carried a low-yield warhead or it was the opening salvo in a massive first strike with strategic nuclear weapons.



The advent of super-fuze warheads will compound the risk. Super-fuze technology dramatically enhances the effectiveness of weapons against hardened targets, such as nuclear missile silos, by optimizing a warhead's ability to home in on and detonate directly on top of its mark. Although it's currently in use only on U.S. W76 strategic nuclear warheads, the super-fuze could conceivably work for low-yield nuclear weapons as well. And because low-yield nuclear weapons are not subject to the same arms treaty restrictions that limit the number of strategic nuclear weapons a country may hold, improving their accuracy with super-fuze technology could upend the current nuclear balance. The more countries acquire low-yield nuclear weapons — much less super-fuzed warheads — the greater the potential for their use.

Further complicating matters are hypersonic missiles. The missiles' high speed — at least five times the speed of sound — facilitates their rapid use and boosts their rate of survival by making them difficult to intercept. In addition, some hypersonic weapons come equipped with a glide vehicle that extends their range, enabling forces to launch the weapons from beyond an enemy's reach. These factors offer militaries great incentive to incorporate hypersonic missiles into their arsenals. As more and more countries adopt hypersonic missiles, the weapons' offensive abilities may prove destabilizing. States may opt to strike first — perhaps with nuclear weapons — to take out an adversary's hypersonic missile caches before the enemy has a chance to use them.

## Mary Ellis. A Great WW2 Story

*Van Gunners and RUSI VI News 13 Feb 2018*



*MaryEllis (pictured during her time as an Air Transport Auxiliary pilot in WW2) has celebrated her 100th birthday*

Mary Ellis was in a select group of female pilots who flew during World War II. She has now celebrated her 100th birthday by flying a plane over West Sussex and she flew next to one of the Spitfires she was in more than 70 years ago. Tearing through the skies above the South Coast, two Spitfires evoke powerful memories of Britain's wartime resilience. But this stirring image holds a further poignancy – for in the cockpit of the lead aircraft sits Mary Ellis, celebrating her 100th birthday by recreating her time as one of the 'Ata-girls', the select group of female pilots who flew Britain's fighters during the war. And over her shoulder is one of the actual Spitfires she flew during her 1,000 flights as a First Officer with the Air Transport Auxiliary. 'Wizard, this is wizard!' yelled the delighted centenarian through her intercom. Mary was handed the controls of the 275mph twin-seater as it swooped over West Sussex.



After about 15 minutes, she turned for home, and told her co-pilot Matt Jones: 'Goodwood on the nose, you have control ...' Then she settled back to enjoy the ride back to base. Mary Ellis (circled) was handed the controls of the 275mph twin-seater as it swooped over West Sussex.

Earlier, Mary watched in delight as Spitfire MV154 took its place beside her in an extraordinary airborne tribute. It was a plane she had delivered to RAF Brize Norton from Southampton on September 15, 1944, and it hides a sentimental secret. For at the end of the 25-minute wartime flight, she signed the cock-

pit, scrawling her maiden name Wilkins and the initials ATA. She hoped her tag might be spotted by a handsome pilot and lead to a wartime romance – although the impulsive act, a career one-off, didn't bag her a boyfriend.

Mary, originally from Oxfordshire, had her first flying lesson in 1938, and flew for pleasure until 1941 when she heard a BBC radio appeal for women pilots to join the auxiliary service and so release male pilots for combat duty.

## RCAF Hints at Capabilities that may Guide Future Fighter Acquisition

Skies Magazine ([www.skiesmag.com](http://www.skiesmag.com))

Posted on [April 24, 2018](#) by [Chris Thatcher](#)

The Canadian government is still a year away from issuing a request for proposals for its next fighter jet, but the general leading the future fighter capability project has indicated what capabilities may drive the Royal Canadian Air Force's (RCAF's) eventual statement of requirements.

In a presentation to the Aerospace Innovation Forum in Montreal last week, MGen Alain Pelletier, chief of the Fighter Capability Program, emphasized the importance of a platform with the flexibility to adapt to changing threats over a period of at least 30 years.

Setting the future fleet of 88 jets in the context of NATO and NORAD missions, he emphasized the challenge of anticipating, adapting and acting in a threat environment where potential adversaries are investing heavily in longer-range "anti-access/area denial" capabilities, surface-to-air missile systems, exploitation of the electro-magnetic spectrum, and cyber weapons.

Pelletier, a CF-188 Hornet pilot with two tours in the Balkans, noted the "operational disadvantage" Canadian pilots currently face from anti-aircraft and surface-to-air threats. In recent NATO air policing missions over Romania and Lithuania, "we fly to a potential threat area knowing that our location and number is known by the adversaries while the intent and willingness...to employ their weapon systems remains unknown," he said.

This was especially true during the CF-188 deployment on Operation Impact over Iraq and Syria.

Though the theatre was considered a semi-permissive environment, “had the Syrian government intent changed regarding the use of their airspace, only effective self-protection systems and exploitation of the electro-magnetic spectrums could have protected our fighters against a 20 second engagement by a surface-to-air missile,” he observed.

The current NATO environment features a range of advanced surface-to-air systems that “are mobile, digitized, passive, and carry missiles with a cruise speed capability and a classified range in excess of 300 kilometres,” he said.

A sortie might begin in a permissive environment but end in a contested one, so the “capabilities of the aircraft at the beginning of the mission [will] define if the future fighter will have an operational advantage.”

The NORAD picture is equally challenging. Russian activity in the North has increased in the past several years, Pelletier noted, “with Russian bombers potentially armed with low observable cruise missiles being escorted by fighters...like the advanced [Sukhoi] Su-35 and eventually the Su-57 [first seen] in the Syrian theatre of operations.”

“Exploitation of the electro-magnetic spectrum allows Russian platforms to know where Canadian NORAD fighters are,” limiting Canadian options to respond, he added. “The bottom line remains that the defence of Canada and North America requires a future fighter that can adapt and act decisively.”

Consequently, a critical requirement of the next fighter jet will be interoperability with NORAD and NATO partners. In particular, Pelletier underscored the importance of being able to share intelligence among 2 Eyes and 5 Eyes partners collected by their respective national assets.

The 2 Eyes partnership of Canada and the United States, and the 5 Eyes group of Canada, Australia, New Zealand, the United Kingdom, and the U.S., has been essential to understanding and operating in conflict zones.

He also emphasized that operations are heavily dependent on the systematic collection, coordination, fusion, production and dissemination of defence intelligence.

“In a fighter aircraft, all systems employ or exploit this information for the use of mission data files, threat libraries, all of which allow the pilots to effectively conduct their mission. Commonality and a growth path are required to ensure the seamless fusion of all systems through the life of the fleet to 2060 and beyond.”

NATO and NORAD systems and intelligence interoperability requirements are not new, but the

RCAF’s demand for 2 Eyes/5 Eyes compatibility could present a barrier for countries and manufacturers that are not part of those closed groups.

Several times during his presentation, Pelletier also repeated the need for an aircraft and mission and weapons systems that could be “continuously” upgraded well into the 2060s.

Given the innovation forum’s focus on disruptive technologies, Pelletier noted the opportunities and threats posed by autonomous systems operating in an integrated and networked fashion, swarming unmanned systems, advanced exploitation of the electro-magnetic spectrum, hypersonic speed, directed energy, quantum technology, and artificial intelligence.

All may eventually be part of the next fighter, but he cautioned industry that any advantage would only happen if the technology could be rapidly implemented and integrated and supported by government policy and rules of engagement.

## This Gun Shoots Drones Out of the Sky

**By: [Kyle Rempfer](#)** Defense News 11 Apr 2018

Ground pounders may soon be swatting those pesky drones from the battlefield’s airspace with the help of a new hand-held device.

The IXI Dronekiller is the first and only hand-held counter-drone technology employing the use of software defined radio, according to IXI Technology representatives at the Sea-Air-Space Exposition in Washington, D.C., this week.

“This is not a broadband jammer, like what you can buy online,” a company official told Defense News. “This is software defined radio, so we’re targeting whatever specific frequency drones are operating on.”

Each drone has a different type of frequency, for example the DJI Phantom — a common commercial-use drone — operates on the 2400 to 2483 MHZ frequency, or 2.4 GHZ band. Within that 2.4 band, an operator selects different channels to link between them and the drone itself.

“And the latest DJI Phantom drone has a channel hopping capability,” the company official said. “And our device can also counter that.”



*The IXI Dronekiller is advertised as able to disable Unmanned Air Vehicles of all types, enabling the operator to thwart the use of drones by criminals and enemy combatants for surveillance and direct attacks to drop bombs, grenades, and improvised explosive devices (IEDs) on fighting forces. (IXI Technology)*

"So what we're doing is not blocking a whole channel. We're inserting a bit of noise or additional data to break the link between the drone and operator," he added.

The IXI Dronekiller will be able to target all Type I and Type II commercial drones, which are exactly the type you'd see non-state, and even some state, actors employ on battlefields like Syria, Iraq and Afghanistan.

"Many terror groups are trying to use smaller drones for surveillance, or maybe adding a payload to it like a bomb and drop it," the company official said.

In battlespaces like Syria, drone use has become increasingly common. Fighters from the Syriac Military Council — a Christian militia closely allied with Syrian Kurd fighters — even uncovered what they claimed was an Islamic State drone factory in July 2017.

But whatever an ISIS fighter is trying to gin up from spare parts isn't going to be able to stop the IXI Dronekiller from knocking it down, according to IXI Technology.

"As long as we can identify the frequency a targeted drone is using, we can hit it," he said.

Thanks to a radio frequency sensor, the IXI Dronekiller can acquire "all drone signals" in roughly 3 seconds.

Even better for the warfighter, the gun is as simple as point-and-shoot, with a 30 degree cone of effect on whatever target is being aimed at. And a newer version of the device is even attachable to an assault rifle, similar to how one would attach an M203 grenade launcher.

"You point in that direction, and when the drone flies into the cone ... the cheaper drones would just crash. But the better ones will fly back to base," he added. "It can also track the drone and follow it back to home and see who was actually flying it."

Oceanside Police Department in San Diego, California, as well as the Los Angeles County Sheriff's Department, already use a version of the device to knock commercial drones violating airspace regulations during events like the Golden Globes and Rose Bowl.

"Two weeks ago, we sent them to Camp Pendleton, [California], where the Marines were testing it," the official said. "And this week at Ft. Bragg, [North Carolina], the Army is testing it."

The IXI Dronekiller's specifications state that it has battery life allowing four hours of active mode use, a rechargeable Lithium-ion battery, right or left hand operation, an environment-resistant frame, a weight of 7.5 pounds and a range of 1 kilometer.

Even better for the ground-pounder, the gun is easy to use, with user training topping out at less than a minute.

## The Logistical Challenges of a Military Operation in Canada's Arctic

*David Pugliese, Ottawa Citizen, 21 March 2018*

RESOLUTE BAY, Nunavut — The worry most defence analysts from the southern parts of Canada share about this country's Arctic territories is about the Russians and the Chinese making inroads. But as temperatures here dip to -55 C, it's the image of a finger, blackened and dead as a result of frostbite and severed from its owner, that makes more of an impression about the dangers of Canada's north. That severed finger — a photograph of it, at least — is part of a briefing about the realities Canadian military personnel face while taking part in Operation Nunaliut, the month-long annual defence exercise in Canada's Arctic. During this exercise two years ago, there were 80 cases of frostbite among the soldiers, and though many were minor, it drives home the point: to those habituated to the south, this might as well be the far side of the moon. In January and February, temperatures at Resolute Bay dropped to around -70 C, but by the time the Forces deployed at the end of February temperatures hovered around -40 C. At night, factoring in wind chill, they faced lows between -55 and -60 C. In -65 C weather, frostbite can develop on exposed skin in as little as two minutes, Canadian Forces personnel warn their soldiers. The troops wear goggles and face masks making them look like extras from the ice planet Hoth in *The Empire Strikes Back*. The military keeps its trucks running around the clock to keep their engines warm, lest they not start again in the cold. "The Arctic is unforgiving," explains Capt Shawn Claire, a platoon commander with 2<sup>nd</sup> Battalion, Princess Patricia's Canadian Light Infantry, one of the units taking part in the operation. "She will claim lives and she will claim limbs."

Some 350 Canadian Forces soldiers — along with the Princess Pats, the Arctic Response Company Group from 38 Canadian Brigade Group and the 1<sup>st</sup> Canadian Ranger Patrol Group are part of the operation, which runs through March 23 — have spent the month conducting Arctic survival training, sovereignty patrols and scientific research while Royal Canadian Navy personnel tested their abilities in diving under ice. This year's edition comes amid ever-increasing international interest in the far north. In late January, China's government released an official Arctic strategy, laying out plans to spend up to \$1 trillion to develop polar regions economically. While

the document pointed out that China has no territorial claims on the area's oil, gas or mineral resources, it made clear the nation's keen desire to develop new trade routes and ports in the north. The Russians, meanwhile, are expanding the military bases in their northern territory and have created new battalions to operate in the Arctic, sparking warnings of a new Cold War in one of the coldest parts of the world. BGen Mike Nixon, commander of Joint Task Force North — which is in charge of Operation Nunaliut — dismisses both countries' gestures as so much sabre-rattling. The Chinese are interested in economic ventures and partnerships, he said last week, and as for the Russians, he said, their investment in new infrastructure and bases is a fraction of what was spent during the Cold War. "I've been asked if I'm worried about one of those Russian Arctic battalions marching in here," Nixon said. "I am worried — but it's because if they did that we would have to launch the biggest search-and rescue mission we've ever done."

The challenge of operating in the Arctic is in large part simply the challenge of getting stuff there. Giant C-17 and Boeing 737, as well as C-130 Hercules aircraft, transport equipment and food up to Canada's Arctic Training Centre in Resolute Bay and to other locations. Each summer ships bring in some 60,000 litres of fuel, needed in part for the military's many snowmobiles and all-terrain vehicles. The training centre, opened in 2013, is a major hub for northern military operations. But its electricity, as well as the power for some 25 residential communities in Nunavut, comes from giant diesel-powered generators which need hundreds of thousands of litres of fuel. Although it's a considered a domestic mission, deploying troops to the far north is similar to an international operation in Africa or Afghanistan. It takes eight months to plan the deployment into the Arctic of just these few hundred military personnel. "Logistics is the Achilles heel for everything in the North," said Nixon. Nixon points out that while Russia is expanding its northern infrastructure, it has about 13 million citizens living near or in its Arctic region. "If that was my sovereign territory I'd do the same," he said. Canada, by contrast, has a population of a little more than 100,000 in the north, but most are located in just a few population centres like Yellowknife and Whitehorse. The rest are in small communities. Resolute Bay has a population of about 200 people. Cambridge Bay is a relative metropolis of around 1700.

At Intrepid Bay, north of Resolute, soldiers experienced first-hand the challenges of surviving in the Arctic. They established a small camp to conduct sovereignty patrols and test the military's resupply

system. Their patrols were on snowmobile, since moving on foot risked working up a sweat — which in the frigid temperatures can cause problems with frostbite. But the vehicles often break down in the extreme weather, and the amount of fuel they can carry dictates how far from base they can operate. The troops rely on the Canadian Rangers, the largely Indigenous group of some 5000 reservists that operates across Canada's north. Rangers like MCpl Matthew Manik, a 36-year-old Inuit, teach the troops how to build a wind block from snow and how best to keep their snowmobiles running in the extreme temperatures. "We're learning a lot from the Rangers," said Maj Jason Hudson of 2PPCLI. "It's wild here. It's a big eye opener to see the High Arctic." Scientists from Defence Research and Development Canada and Natural Resources Canada are starting to examine whether technology, such as batteries that can be recharged from a snowmobile, could help make life easier for the troops when it comes to light, heat and cooking. But for this exercise the troops had to keep to a tried-and-true method. In the 10-person military tent, the Coleman gas stove and lantern was kept going all night. While it may be -55 C outside, the heat from the stove and lantern had the temperature inside the tent around freezing. Soldiers took turns minding the stove throughout the night. But the erratic weather patterns affecting the Arctic have brought with them challenges of their own. For a short period in late January, temperatures at the North Pole jumped as high as 2 C. The Rangers, who are the eyes and ears for the Canadian Forces in the Arctic, have noticed changes as well. "One day it's nice, the next it is foggy and we have difficulty travelling," said Allen Elatiak, a 69-year-old Inuit who has been a Ranger since 1987. Climate change has affected wildlife too, Elatiak said, which seem to be moving closer to inhabited locations.

Maj Gary Johnson, who lives about seven months of the year at the Arctic Training Centre in Resolute Bay, echoed Elatiak's observations about the effect of the unpredictable weather. On Aug. 24, intense rain created a mud bowl on the tundra, trapping one of the military's all-terrain vehicles up to its handlebars in muck. Several days later the balmy temperatures turned, dropping to -20 and freezing the ATV in the mud. It took crews several days to recover the vehicle, using pickaxes to free it from the frozen ground. Before it could be recovered, however, a curious polar bear had torn off some of its parts. Even as rising temperatures make the Arctic sea ice recede, the Canadian Forces aren't expecting operations in the Arctic winter to become easier, availability of supplies and fuel still a challenge. But the summer months will be different as travel to the region increases. The 1,000-passenger Crystal Serenity cruise ship toured through the Northwest Passage in 2016 and 2017, stopping in Cambridge Bay.

Construction is underway for a polar-class mega-yacht that will be able to carry 200 passengers and ship traffic is only expected to increase. The Canadian Forces is helping conduct an emergency preparedness audit for the area, looking at how, for instance, Cambridge Bay could respond to a crisis. But again, that crisis won't come from Russian paratroopers landing on the tundra. The focus is what would happen if the giant generators which provide energy for Arctic communities malfunction or if a cruise ship like Crystal Serenity were to run aground or sink. BGen Nixon says it's those types of threats over which the military and various partners in different levels of government and at the community level keep a close watch. "It's not about 'fixed bayonets' in the North," he said. "The territories will ask for help if a crisis occurs. But at the same time, the people who live in the North are extremely resilient."



## From Our President

The lunch program is drawing to a close. We have had a successful year in terms of both turnout and relevance of the speakers' topics to current events. The high turnout indicates that Scott Osborne has done a strong job in identifying topics of interest to members.

This year, membership has been held at the previous level, despite a few resignations; we should all endeavour to recruit new members, both military and civilian, where our lunch program can be a draw.

Our continued thanks are due to Skip Triplett for his efforts in obtaining articles of interest for the RUSI Newsletter. As previously mentioned, Skip will be retiring from his position and Bill Donaldson will become involved with the Newsletter later this year.

Our finances remain stable and we can continue to add to the Military Oral History Program endowment. If you wish to make a donation - and all are very much appreciated as we strive to reach our goal - please contact Gary del Villano, [delvillano@shaw.ca](mailto:delvillano@shaw.ca), who works tirelessly during the UVic academic year to make the program a success for the students.

Have a good summer; your directors look forward to seeing you again in the Fall.

**Roger Love**

## Whence Goest RUSI VI?

A comment from RUSI VI member Scott Osborne on why we need RUSI VI to endure.

We need to look at the next year, or perhaps even over the next two years, that RUSI-VI devotes a maximum effort to rebuilding our membership, so we can stay healthy making our unique contribution to Canadian society. That contribution goes beyond keeping our members engaged with up to date topics of interest and importance with expert speakers. As important and as valuable as that is. RUSI however, is the only organization in Victoria that contributed to the Minister of National Defence's call for submissions to his Defence Policy Review in 2016. RUSI-VI also submitted a carefully crafted Op Ed on Defence Policy to the Times-Colonist at

the same time. RUSI has an excellent veteran's Oral History program that has interviewed and preserved the stories of over 700 veterans via funding to the University of Victoria. If RUSI becomes unhealthy and fades away, then all that is gone. If we do not make such contributions and defence commentary, then who? No one else in Victoria has, or is prepared to do that. Only RUSI. Therefore, we need all our members, to not only solicit new members over this summer, but also starting in the Fall, to bring guests to our luncheons to show off our interesting topics and expert speakers, but also to show off the good comradeship and conviviality of our quality membership.

## Letters to the Editor

Dear Editor

The last Newsletter was a good, if frustrating, read. Maybe next time you can get the OK to reprint (I think it was) Scott Gilmour's recent Maclean's article suggesting we just face reality and abandon the concept of having armed forces because politicians aren't willing to fund them properly. The reality is that the Americans are going to defend their country on our soil, anyway.

Roger Love, 1 Feb 2018

Here's the link to Scott Gilmour's article: <http://www.macleans.ca/politics/ottawa/weve-given-up-on-canadas-military-so-lets-abandon-it-altogether/>

(editor)

Dear Editor

I wonder if Canada has been part of the discussion below.

John Appleby, 17 Jan 2018

## Arctic cold war? Coast Guard prepping to carry cruise missiles on icebreakers amid Russia build up

By Carlo Muñoz - *The Washington Times* - Wednesday, January 17, 2018

Supporters of arming icebreakers note that the Coast Guard ships are the only American heavy vessels able



to traverse the massive glaciers and ice drifts that pockmark the Arctic waterways, but opponents say it sends a dangerous signal to Russia.

The Coast Guard's proposed heavy icebreaker for the Arctic comes with something no previous model ever had: room for cruise missiles.

While military control of the frozen tundras at the top of the world has become a political and national security imperative to Washington and Moscow for years, Coast Guard Commandant Paul Zukunft quietly confirmed last week that the service's newest fleet of heavy icebreaker ships will be designed for the first time to carry heavy weapons.

That announcement, just as Russia is beefing up its much-larger fleet of icebreakers plying the Arctic waters, is the clearest sign that a literal and figurative Cold War may be heating up at the top of the world.

Backers of arming American icebreakers say the move is long overdue because the Coast Guard ships are the only American heavy vessels able to traverse the massive glaciers and ice drifts that pockmark the Arctic waterways.

Opponents say arming the Coast Guard vessels sends a dangerous signal to Moscow that Washington is looking for a fight over the Arctic while there is a wary but real cooperation in place among the nations of the region. "This is not just about [new] icebreakers; this is part of a broader competition just below the surface," said former Navy Capt. Jerry Hendrix, now a senior fellow at the Washington-based Center for a New American Security.



Budget hawks also say the cash-strapped Coast Guard may be trying to take advantage of rising tensions in the polar regions to pursue a potentially costly and ultimately unnecessary weapons program. Service leaders, including Adm. Zukunft, have pushed back, arguing that the U.S. cannot afford not to have an armed presence as the Arctic's natural resources become more accessible and potentially strategic sea lanes open up.

The Coast Guard now has just three icebreakers, including one that does primarily scientific research. Russia, with the world's largest Arctic coastline and ports across the region, reportedly has at least 40 icebreakers, including four operational nuclear-powered icebreakers and 16 medium-sized craft.

At a defense conference last week, the Coast Guard chief said the first of the new icebreakers could be ready in five years and cost less than \$1 billion. All told, the service is seeking six new icebreakers, including three of the largest size. "We've been able to find offsets to drive the cost down ... [and] reserve the space weight and power necessary to fully weaponize these and make these a capable platform offensively in the event this world changes in the next five, 10, even 15 years from now," Adm. Zukunft said. "You can't project out the status quo," he added, according to a report from [Breakingdefense.com](http://Breakingdefense.com).

Aside from Russia, other Arctic nations have already outfitted their icebreaker fleets with various types of weapons.

The Norwegian KV Svalbard heavy icebreaker is armed with a Bofors 57-mm multimirage deck gun that can be used to take out incoming missiles, attacking aircraft and light warships. Canadian forces are reportedly modeling the armaments for its new Harry DeWolf-class Arctic patrol ships on Norway's Svalbard.

The arsenal aboard Denmark's Kund Rasmussen-class Arctic patrol ships, however, is much more advanced than those of its regional neighbors. The ship sports an Otobreda 76-mm super-rapid gun and two machine guns. The Danish icebreaker can also fire anti-air missiles and MU90 anti-submarine torpedoes.

Adm. Zukunft declined to provide specifics on the types of weapons the new icebreaker ships would be able to carry during his remarks to the Surface Navy Association's annual symposium in Crystal City, Virginia, last week. But he has previously called for the ships to be equipped with cruise missile technology in the coming years.

Coast Guard ship designers and engineers are drafting plans for the icebreakers, which are not expected to hit the fleet until 2030, with the modular weapons concept in mind.

Moscow has unveiled plans to develop two new icebreaker vessels armed with cruise missiles, which are expected to enter the Russian fleet within the next two years.

While remaining mum on the types of weaponry needed for the Coast Guard fleet based in the Arctic, Adm. Zukunft did note that the new icebreaker ships could be outfitted with a modular weapons system — one that can be installed and removed from the vessel's decks with minimal effort, depending on the mission's requirements.

The Russian icebreaker vessels will not sport modular weapon systems, but rather embedded systems permanently affixed to the warship.

### Turning up the heat

Analysts say U.S. and Russian military strategists are responding to the evolving challenge of the Arctic — and the possibility that it could soon become much more valuable territory economically and militarily.

The glacial territories in the Arctic remain “the quickest route between Russia and the U.S. It is even the quickest route between North Korea and the U.S.,” said Bryan Clark, former special assistant to the chief of naval operations.

“There are a fair amount of military operations that happen in and around the Arctic,” said Mr. Clark, now a senior fellow at the Washington-based Center for Strategic and Budgetary Assessments. In any international conflict involving the U.S., Russia or other state actors, “the Arctic would be at play.”

The Coast Guard’s call for arming icebreakers “certainly confirms [the threat] is real,” in the polar regions, said Capt. Hendrix.

While the situation in the Arctic Circle poses challenges to Washington and its allies in the region, the U.S. “is not really in an arms race with Russia” for control of the polar regions, despite the Coast Guard’s call for weaponized icebreakers, said Mr. Clark.

Russia’s expanding icebreaker fleet is driven more by domestic needs than the Kremlin’s desire to flex its military might in the region, he said.

The Russian Arctic coastline dwarfs that of the U.S. and its allies, requiring Moscow to invest in more and more capable icebreakers. Aside from traditional defensive operations, a significant portion of Russia’s surface and submarine fleet are based in cold water ports, requiring a number of icebreaker ships to be on hand to ensure operations are carried out, said Mr. Clark.

But Russian President Vladimir Putin’s aggressive military moves in Ukraine and Syria have some Western strategists wary of his ultimate plans for the Arctic as well.

“The Russians have tried to assert a territoriality” in the Arctic, Mr. Hendrix said, to preclude the U.S. or its allies from operating in the region militarily while ensuring Moscow has exclusive mining and drilling rights into the seabed below the North Pole and surrounding areas. The move is similar to China’s overtures against the U.S. and its Pacific partners in the South China Sea, Mr. Hendrix said.

Russia has already petitioned the United Nations to recognize the entire continental shelf, portions of which al-

ready reside within the country’s borders but extend into the polar regions, as Russian sovereign territory.

“We can only assess [Russia] will behave as aggressively [in the Arctic] as they have in their other territorial claims,” Mr. Hendrix said.

But comparing the competition in the Arctic to the scramble in the South China Sea “is a lot like apples and oranges,” said CSBA’s Mr. Clark. Unlike the South China Sea, many of the projected oil and natural gas reserves in the Arctic fall in non-disputed areas with various nations holding certified claims to those areas.

The level of uncertainty in the Arctic is not the same as in the Pacific, Mr. Clark said.

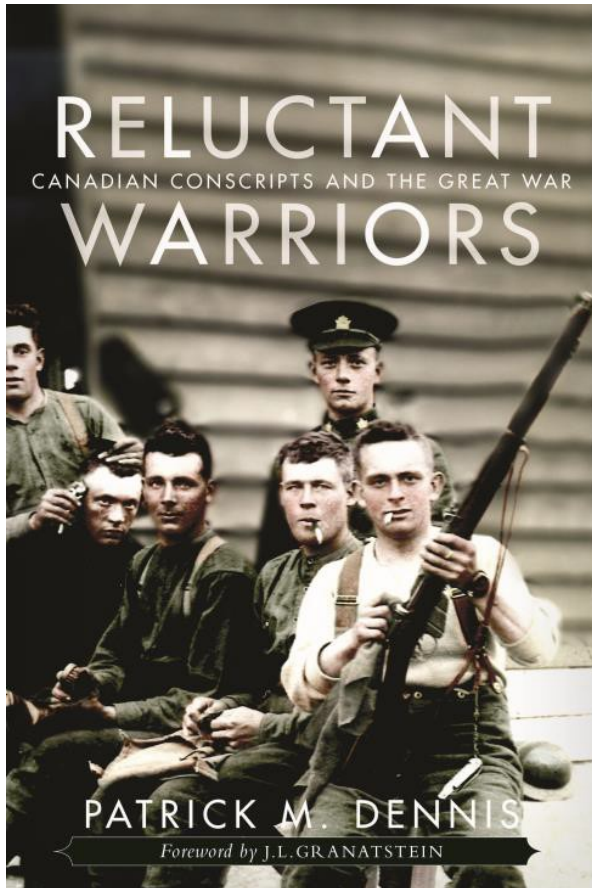
Further, Washington and Moscow have pursued a strategy of cooperation and bilateral engagement between their naval forces in the region. Weaponized icebreakers in the polar region have “nothing to do with the military situation in the Arctic,” which is more focused on submarine operations and intelligence, surveillance and reconnaissance missions, Mr. Clark said.

The siren call from the Coast Guard for modular cruise missiles aboard their icebreakers, to ward off Russian aggression akin to Chinese actions in the Pacific is guard officials “jumping on this South China Sea bandwagon” to generate support for the ships among congressional appropriators, Mr. Clark said.

Adm. Zukunft “may have leaned a little too far out ahead of his skis” in calling for cruise-missile-equipped icebreakers, said Mr. Clark, adding that the Coast Guard is essentially “creating a demand signal [for weapons] that just is not there.”



Concept drawing of Russian armed icebreaker



*Reluctant Warriors* is the first in-depth examination of the pivotal role played by Canadian conscripts in the final campaign of the Great War. During the “Hundred Days” of the First World War, over 30 percent of conscripts who served in the Canadian Corps became casualties.

*Reluctant Warriors* sheds new light on the success of the Military Service Act and provides fresh evidence that conscripts were good soldiers who fought valiantly and made a crucial contribution to the success of the Canadian Corps in 1918.

The WFA –Pacific Coast Branch  
and  
RUSI Vancouver Island  
Present

**Free Public Presentation  
and Book Signing by Author  
Patrick M. Dennis**

**Thursday  
17 May 2018  
7:00 pm**

**Christ Church Cathedral  
Victoria, BC—Chapel of the  
New Jerusalem**

**Enter via side door off Burdett Street. Parking lot off Burdett east of (behind) the cathedral and on street.**

**Colonel (Ret'd) Patrick M. Dennis, OMM, CD** is a retired Canadian Air Force fighter controller who served abroad for over twenty-two years, including tours as Canada's deputy military representative to the NATO Military Committee in Brussels, Belgium, and as the Canadian defence attaché to Israel.

His life-long interest in the First World War has led to his first book, *Reluctant Warriors: Canadian Conscripts and the Great War* (University of British Columbia Press in cooperation with the Canadian War Museum), which was published in September 2017.

## Mark Your Calendar

Wednesday 9 May 2018

**Speaker -Major (Retd) Janice Malainey**

**Topic - Observing From Above: UAVs in an International Civilian Mission**

The Special Monitoring Mission to Ukraine (SMMU) of the Organization for Security and Cooperation in Europe (OSCE) is unique because of its size, but also because it is an unarmed, civilian mission, with monitors present on the ground 24/7 in all regions- and on both sides of the conflict. Its main tasks are to observe and report in an impartial and objective way on the situation. Specifically, Janice was assigned to the SMMU Long-Range Unmanned Aerial Vehicle (UAV) Team. This presentation will introduce you to the mission, but with a focus on the role UAVs have come to play for monitoring conflict activities in the Ukraine. This presentation will also highlight issues related to the introduction of such technology into an international civilian mission. Information on the SMMU can be found at <https://www.osce.org/special-monitoring-mission-to-ukraine>.

Major (Retd) Janice Malainey previously served in the Canadian Armed Forces (CAF) for 22 years, but since retiring in 2010, has continued to support CAF deployment and career training as an international conflict and security sector professional. She was also deployed as an accredited observer in two election observation missions in the Ukraine in 2012 and 2014. Janice, a former Director with RUSI-VI, is returning to Canada after more than three years with the Organization for Security and Cooperation in Europe- Special Monitoring Mission to the Ukraine. Janice holds a BA in International Relations and an MA in Conflict Analysis and Management from Royal Roads University.

- 
- ⇒ **Place:** 5th (BC) Field Regt RCA Officers' Mess, Rm 312, Bay Street Armoury
  - ⇒ **Time:** 1130 for 1200 Luncheon
  - ⇒ **Cost:** \$25 (pay at the door)

### Up Coming speakers

12 Sep- Viking Air Projects- Exact title and speaker TBC

10 Oct- India's Vietnam- Dr. Chandar Sundaram

14 Nov- Remembrance Day Theme- Alan MacLeod

9 Jan 2019- The Cinderella Campaign- Mark Zuehlke

**Next Meeting September 2018**  
**Next Newsletter Early September**  
**Enjoy your summer!**