Arctic Nations Cope With Ramifications of Rapidly Warming Region

Rear Adm. Ewa Skoog Haslum, chief of Navy for Sweden, discusses the expansive needs of the Arctic, noting current military cooperation may not be enough to tackle its challenges. *LISA NIPP*

NATIONAL HARBOR, Md. — The Arctic is getting hotter, both literally and figuratively, and allied Arctic nations are grappling with the issues posed by increased access to the region by industry and hostile nations such as Russia and China.

“No doubt, the level of activity in the Arctic is continuing to grow,” said Rear Adm. Ronald J. Piret, commander of Naval Meteorology and Oceanography Command, speaking as a panelist on “The Geostratic Importance of the Artic” on April 4.

Piret and fellow panelists from Canada, Sweden and the Joint Arctic Command, agreed that international cooperation in the region is vital and more of it will be needed as the Arctic

grows more accessible due to climate change.

Adm. Linda Fagan, vice commandant of the U.S. Coast Guard, said great partnerships in the region already exists and the United States is seeking more of them, but she said, “We need to be thinking beyond coast guards and navies to industry and academia.”

In some cases, even the current level of military cooperation isn’t enough, some speakers said. Rear Adm. Ewa Skoog Haslum, chief of Navy for Sweden, said “we [the Swedish navy] need to be a little bit bigger and to share the burden.”

Chris Henderson, deputy commissioner for the Canadian Coast Guard, said having enough access to be able to increase cooperation is a challenge, as all his assets are spoken for, so if an international exercise opens up it can be a challenge to find a ship able to participate.

There’s also the issue of increasing activity from Russia and China. Just as traditional allied nations are operating, “all the autocratic nations are present in the Arctic as well,” Haslum said.

NAVSUP Continues to Refine Critical Supply Chain Support

Karen Fenstermacher, executive for strategic initiatives at NAVSUP

The pandemic has taught people around the world about the importance of efficient supply chains. They are even more critical for armed forces, as without reinforcement and

supplies even formidable militaries can be stymied or defeated.

When the pandemic hit more than two years ago, Naval Supply Systems Command (Booth 1701), or NAVSUP, was already moving out with a wartime acquisition response plan.

“We were already underway, focused on what I’ll call our strategic portfolio of suppliers,” said Karen Fenstermacher, executive for strategic initiatives at NAVSUP. “That’s really our, our top 10, which reflects about 80-plus percent of our spend.”

COVID-19 largely shut down the United States by March 20, 2020, but thanks to those ongoing efforts, “by that weekend we were up and running with a survey mechanism to pulse our 900-plus suppliers,” she said.

The idea was to ensure NAVSUP had the necessary sensors or triggers “to do everything that we can to ensure that everybody that came into the crisis comes out of the crisis.”

The maritime supply base is prone to very cyclical demand, so “it was very important to keep a bead on the overall supply base, despite whether or not we had an active contract with these suppliers” by using a survey.

That tracked about 14 different dimensions, largely focused in the beginning on the companies’ access to personal protective equipment, or PPE, to enable them to get back to work. It also monitored how the impact on other industries, such as airlines and cruise ships, was affecting the defense industrial base, as many of those companies supply the airline and cruise industries as well.

Speeding Processes

The president invoked the Defense Production Act to help companies financially “and there were a number of other

efforts that were underway to be able to provide the defense industrial base, in particular, with the opportunity to access monies," Fenstermacher said.

One such effort was to speed up the payment system so contractors could get paid sooner. Another used the NAVSUP survey to identify at-risk companies to have better access to business loans and investment dollars "to help these companies weather the storm, so to speak."

In recent years, the government has adopted a "whole of government" approach to build resilient supply chains and revitalize manufacturing, such as by expanding key capabilities and capacity, especially in critical areas such as semiconductors.

The ongoing chip shortage is another headwind faced by defense and other industries, but Fenstermacher says she's confident the whole-of-government approach will help, although there will continue to be supply chain challenges.

One of the few major pieces of legislation to be approved this year was the infrastructure bill, which includes $550 billion in new spending to improve the nation's roads, bridges, transit systems and internet access.

"That's going to be a piece of it [the whole-of-government approach]," Fenstermacher said. "Time will tell as the infrastructure bill evolves and continues to execute, how that specifically impacts us. But I'm anticipating it to be in a positive way."

Roundtables

Another tool NAVSUP has employed are roundtables with industry. In 2021, NAVSUP held a session with its 50 top industry partners focused on speeding the end-to-end supply chain, particularly for repair turnaround time, and then followed that up by working with the individual companies.

“We found that to be tremendously successful,” Fenstermacher said.

Roundtables help bring industry up to speed on what’s been accomplished already in bolstering the supply chain and what’s coming next. One pending effort will be to leverage public-private partnerships with aviation and ship repair depots.

“So, that’s something that we have on the horizon and are beginning to prepare. We found it [using roundtables] to be a very effective way to communicate and to create these calls to action, if you will, that are required in our space,” she said.

HII Executive Addresses Trickle Down Effect of CRs on Defense Workforce

HII Executive Vice President and President of Ingalls Shipbuilding Kari Wilkinson addressed her company's steadfast workforce, despite pandemic challenges. LISA NIPP

NATIONAL HARBOR, Md. – The extended continuing resolutions in place of enacted funding affect shipbuilders "much the same as our customers," but HII deals with it by working closely with the Navy and trying to get an earlier start on programs, Kari Wilkinson, executive vice president of HII and president of Ingalls Shipbuilding, said at the April 4 lunch keynote.

HII is the new brand name for the company formerly known as Huntington Ingalls Industries. Speaking at the Navy League's 2022 Sea-Air-Space exposition, Wilkinson said an increasing priority for the shipbuilder is retaining its skilled work force and attracting a new generation of workers. Even through the months of pandemic restrictions when many other employees

were working from home, 64,000 shipbuilders walked through the gates at HII facilities every day. “They are the best of America,” she said.

To keep that essential work force, HII is reaching out to different communities to recruit new workers. As a result, “Today, we have the most diverse work force ever,” Wilkinson said, and none of those skilled craftsmen and women are easily replaced.

The chronic problem of congressional failure to pass defense appropriations bills on time complicates the effort to keep HII’s work force, on top of the problems it creates in production efficiency and program affordability, she told the audience. Wilkinson also cited the challenges of keeping costs down when the Navy or Congress extends the time between new production of existing ship classes. In the interest of efficiency and affordability, “we like to see ships a lot closer” in start times, she told reporters after her speech.

Service Chiefs: ‘Keep Your Eye on China’

All three service chiefs discussed the newly released defense budget, which Marine Corps Commandant Gen. David Berger described as "strategy-driven." *LISA NIPP*

NATIONAL HARBOR, Md. – The top leaders of the Navy and Marine Corps sought to justify their force structure decisions, arguing April 4 that it was necessary to cut some current platforms and systems to be able to buy the capabilities they believe will be needed for a likely future fight against a new peer competitor.

"I think the three of us are saying, keep your eye on China," said Chief of Naval Operations Adm. Michael Gilday, which was echoed by Marine Corps Commandant Gen. David Berger and Coast Guard Commandant Adm. Karl Schultz in the opening session of the Navy League's 2022 Sea-Air-Space exposition.

All three of the maritime leaders highlighted their priorities in the newly released 2023 defense budget, which Berger noted was released within days of the new National Defense Strategy and the Nuclear Posture Review.

"It's very clear to me this is a strategy-driven budget," Berger said. "If we need to fight in the South China Sea, the force has to be relevant."

"In order to understand how you resource the fleet, you have to think about how you plan to use the fleet, how you will fight the fleet," Gilday said, adding that that was done "in

the content of strategy.”

The new Navy budget proposes deeper cuts in the surface fleet than previous proposals, and the Marine Corps’ funding plan continues the reductions and changes in the Corps’ forces to make it lighter and more mobile to operate in a contested littoral environment.

Gilday said the Navy needs “a more ready force rather than a less ready larger force. If you look at the budget, we’re trying to buy back a ready force,” that has ammunition in its magazines with a priority on longer range weapons.

“I personally think we are on the right path.,” he said, while acknowledging that the budget “is not popular with many in the fleet and in this room.”

If you are going to match the change in the character of warfare, Berger said, “you have to divest some resources.”


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Meredith Berger, performing the duties of Undersecretary of the Navy, kicked off the opening ceremony prior to the chiefs panel on Monday. She said the Navy's priorities "are empowering our people" with a focus on warfighting and "strengthening our maritime power." She noted the areas the Department of Navy is operating in are changing to include the information environment and cyberspace. *LISA NIPP*

Schultz noted the recent signing by all three of the maritime leaders of a new maritime security strategy, which continues the growing integration of his service with the Navy and Marine Corps in the efforts to counter a stronger and more aggressive China.

Schultz said the changing national security and global economic growth has put unprecedented demands on the Coast Guard.

He emphasized the Coast Guard's uncommonly strong shipbuilding program, which includes finishing the National Security Cutter fleet, buying more of its Offshore Security Cutters and planning a new ice breaker.

Gilday said the long-term shipbuilding program would produce increased capabilities in the surface and undersea fleets with the new models of the Arleigh Burke destroyers and Virginia-class attack submarines, the future guided missile frigates and a wide variety of unmanned surface and subsurface systems.

Collins Aerospace Awarded Risk Reduction Contract for

Navy’s E-XX Program

Mark Cejer sits at the controls of a flight simulator as Tracy Miller of Collins Aerospace gives him instructions. The simulator showcases Collins Aerospace’s avionics. *SOLARES PHOTOGRAPHY*

NATIONAL HARBOR, Md. – Collins Aerospace (Booth 701) has been awarded development of a very-low-frequency communication system for the E-6B Recapitalization Program (E-XX) as part of the Navy’s Take Charge and Move Out Weapons System, the company said April 4.

The contract provides developmental design and risk reduction engineering efforts for airborne VLF system modernization in support of Airborne Strategic Command, Control, and Communications Program Office (PMA-271) capability requirements. The development efforts and resulting system features enhanced security measures to address advanced and emerging threats.

This award is the first award of a series for the new E-XX test program. The open systems approach ensures that the terminal and remaining portions of the weapons systems can be easily integrated on the platform. Additionally, the new systems are easier to maintain and upgrade over the life of the aircraft making it a potential long-term solution for the Navy.

“This sole-source award underscores the recognized technical expertise that Collins brings to the TACAMO community,” said Heather Robertson, vice president and general manager of Integrated Solutions for Collins Aerospace. “As we are seeing the accelerated need for command, control and communication capabilities, our DoD partners can rely on Collins to deliver ready-now, comprehensive, integrated and durable solutions.”

The work will be completed at Collins’ Richardson, Texas, and Cedar Rapids, Iowa, facilities.

Admiral on EMALS and AAG Programs: ‘It Works’

Chief Aviation Boatswain’s Mate (Equipment) Louis Mountain Jr., from Seat Pleasant, Maryland, assigned to USS Gerald R. Ford’s (CVN 78) air department, signals the EMALS to launch during no load testing on the ship’s flight deck. *U.S. NAVY / Mass Communication Specialist 3rd Class Zachary Melvin*

A Navy admiral says that despite reports to the contrary, the Electromagnetic Aircraft Launch System and Advanced Arresting Gear systems aboard the USS Gerald R. Ford (CVN-78) are working just fine.

Rear Adm. Shane G. Gahagan, program executive officer for tactical aircraft programs (PEO-T) at Naval Air Systems Command, said Monday, April 4 at Sea-Air-Space that the system had achieved 8,500 “cats and traps” on the Ford over the past two years.

The EMALS system has struggled with reliability issues over the years, but Gahagan insisted that it is performing well today.

“It works,” Gahagan said. “I read in the press … that it doesn’t work. It works day in and day out with cats and traps, and now it’s like every other program: How are we going to sustain it for the fight we need?”

He said the EMALS and AAG systems have a “lot of great capability” and that Sailors “love it.”

Bell Offers Manned, Unmanned Tiltrotors for Navy’s Next Rotorcraft

The Bell 280 Valor is currently offered as a replacement for the U.S. Army’s H-60 helicopters, and Bell proposes they would be an ideal component of the Navy’s DMO concept. *Bell*

NATIONAL HARBOR, Md. — Bell, a Textron company, is marketing its manned and unmanned tiltrotor aircraft to be the eventual

replacements for the Navy’s MH-60R/S helicopters.

Carl Forsling, Bell’s senior manager for military sales and strategy, told *Seapower* April 4 at the Navy League’s Sea-Air Space expo that the Bell tiltrotors would be ideal for implementation of the Navy’s Distributed Maritime Operations concept because of their speed, range and payload.

The two tiltrotors are the versions of the unmanned Bell 247 Vigilant and the manned Bell 280 Valor.

The Valor, currently offered as a replacement for the U.S. Army’s H-60 helicopters, is larger than the 247 and is designed to carry 8-12 passengers. It has two engines, one each at the wingtips driving a tiltrotor. Unlike those on the Bell-Boeing V-22 Osprey, the engines do not pivot, simplifying the mechanics of the movement and reducing cost. The marinized Valor would have a pivoting wing like the V-22 for storage in a ship’s hangar. The aircraft would be hardened for electromagnetic protection and be marinized for corrosion control in the salt-water environment. It would assume the roles of the MH-60S, including plane guard, rescue, medical evacuation and logistics.

The marinized unmanned Vigilant would replace the MH-60Rs on surface warships such as guided-missile destroyers. The folding rotors and pivoting wing would allow storage in a warships’ small helicopter hangars. The Vigilant could be used for roles including surveillance, antisubmarine warfare, precision strike and aerial refueling.

With both aircraft replacing helicopters, the speed and range advantage would allow the tiltrotors to cover more area at a faster rate, Forsling said, while carrying heavier payloads.

Navy’s CVM-22B Aircraft Adds Medevac Speed to Carrier Strike Group

A CVM-22B Osprey, from the “Sunhawks” of fleet logistics multi-mission squadron (VRM) 50, lands on the flight deck of the aircraft carrier USS Nimitz (CVN 68). At a Sea-Air-Space briefing, the V-22 program manager discussed the aircraft’s usefulness as a medevac solution. *U.S. Navy / Mass Communications Specialist 3rd Class Joseph Calabrese*

NATIONAL HARBOR, Md. — The U.S. Navy’s new CMV-22B Osprey tiltrotor carrier-onboard delivery aircraft’s capabilities have been a game-changer for medical evacuation from a carrier strike group, the Navy’s V-22 program official said.

The CMV-22B, which is replacing the catapult-launched C-2A

Greyhound COD aircraft in the fleet, takes off and lands vertically. It is less dependent on carrier launch-and-recover cycles and, therefore, more flexible in its ability to quickly launch from the aircraft carrier and carry a medical patient to facilities ashore.

In addition to quicker launch capability, the range of the CMV-22B – which can be refueled in flight—give it an added ability to reach land-based medical facilities from farther out.

Marine Col. Brian Taylor, the Navy's V-22 program manager, speaking April 4 to reporters at a Naval Air Systems Command (Booth 947) briefing the Navy League's Sea-Air Space expo at National Harbor, Maryland, spoke of a medevac from the one of the two CMV-22B detachments from that have deployed on aircraft carriers to the Indo-Pacific region so far from Fleet Logistics Multimission Squadron 30 (VRM-30). A CVM-22B launched from the carrier with a medevac patient and was able to land in a helicopter landing pad at the naval hospital in Camp Foster, Okinawa, a feat that the C-2A would not have been able to accomplish.

Taylor MV-22B integrated well with carrier operations. He also said the Marine Corps' MV-22B Osprey has qualified to operate from the hospital ship USNS Mercy.

The Osprey is operated by the U.S. Marine Corps, Air Force, and Navy and by the Japanese Self-Defense Force.

Taylor said the Osprey is expected to be in service through 2055. It reached initial operational capability in 2007. Under current contracts, production is expected to end in late 2024. The program office is focusing on sustainment and keeping the flow of parts and other resources necessary to keep the Osprey fleet operational through its service life.

Last year the Marine Corps deactivated one MV-22B squadron – VMM-166 – as part of Commandant Gen. David Berger's Force

Design 2030 initiatives. Faced with the possibility of excess MV-22Bs in inventory, Taylor said his office is looking at inventory management of the fleet to develop a long-term plan, with an option that some Ospreys may be placed in storage, available as attrition aircraft.

CMS Outlook: What's in a Name? Understanding the Indo-Pacific and Its Challenges for the U.S.

Mineman 2nd Class Jeffrey Langston stands security watch during sea-and-anchor aboard the Independence-class littoral combat ship USS Tulsa (LCS 16). Tulsa, part of Destroyer

Squadron Seven, is on a rotational deployment, operating in the U.S. 7th Fleet area of operations to enhance interoperability with partners and serve as a ready-response force in support of a free and open Indo-Pacific region. *U.S. NAVY / Mass Communication Specialist 1st Class Devin M. Langer*

NATIONAL HARBOR – We have often seen the rise and fall of new terminology to express renewed, or sometimes diminished, value placed upon different regions of the globe as the geography of national interests waxes and wanes. Until recently, the geographical expression that dominated foreign and national security policy documents of the United States in the Pacific region was "Asia-Pacific." This term, however, is increasingly giving way to "Indo-Pacific" in national security policy documents and discourse, as can be seen in the Sea-Air-Space Show Guide and Directory.

What is prompting this evolution in geospatial conception? In large part, the shift to Indo-Pacific has been driven by two key factors: an observed increase in China's interests in the Indian Ocean region and the increasing commercial, cultural, political, and security interconnections between the Indian and Pacific Ocean communities. The symbolic change to recognizing the Indo-Pacific as the now-dominant strategic region in the areas adjoining eastern Asia began with the Obama administration's late 2011 "Pacific Pivot," and continued with the Trump administration's 2017 concept, the "Free and Open Indo-Pacific." A year later, U.S. Pacific Command was renamed as the Indo-Pacific Command. Now, the Biden administration has published its own "Indo-Pacific Strategy of the United States," with remarkable similarities to the strategies of the previous administrations.

It's worth considering though, what does the "Indo-Pacific" entail? Geographical concepts are inevitably contestable, as their construction is tailored to suit the purposes of the name-giver. In its most expansive interpretation, the Indo-Pacific can be thought of as the world's largest region, spanning the distance from Russia's Siberian coastal frontier

and the beaches of California to the shores of South Africa and Oman. The broadly defined Indo-Pacific covers roughly half of the Earth's surface and more than half its population. It is home to the world's largest economies – the United States, China, Japan – and its smallest – Palau, Nauru, Tuvalu. The world's two largest countries by population, India and China, and some of the smallest also reside within the scope of the Indo-Pacific.

What this vast expanse of sea and land holds for the United States is the largest and perhaps most dynamic international environment where American companies and military units operate. While the United States is undoubtedly a Pacific power, its ability to access the epicenter of Pacific activity in East and Southeast Asia is severely constrained by the nature of the same expansive geography. The continental United States is some 6,600 miles removed from Taiwan, 6,200 miles from Okinawa, 6,000 miles from Guam, 5,800 miles from South Korea and 5,300 miles from the main islands of Japan. The realities of these distances between the United States and its major Pacific allies, outposts, and partners are seldom considered, let alone understood. That a voyage by ship from San Francisco to the American military base at Okinawa may take anywhere from six to more than 14 days is a major complicating factor in the ability of the United States to fulfill its commitments to Pacific allies and partners.

The physical separation of the United States from its many allies and partners in the Western Pacific serves as the foundation for the forward positioning of major military assets. Indeed, the military, joint INDOPACOM command oversees roughly 375,000 military and civilian personnel across its area of responsibility. The primary naval means of maneuvering personnel and material as well as projecting power across the vast seascape of the region, the U.S. 7th Fleet, must operate with between just 50 and 70 vessels to manage almost 50 million square miles of sea, the largest area of

responsibility of any forward-stationed American fleet. The strain on the fleet is compounded when one considers the need to counter the rapid and continuing expansion of the People's Liberation Army Navy, coast guard and maritime militia.

The result has been a continuing fixation of American regional assets on the Western Pacific despite Washington's ostensible recognition of the Indo-Pacific as a region of much greater scope in its official policy documents. Perhaps the most promising solution is the revival of the 1st Fleet, a concept most recently suggested by former Navy Secretary Ken Braithwaite to be based in both Singapore and Darwin, Australia. This new formation would take over the area of responsibility in the Indian Ocean and Southeast Asia from the 7th Fleet, thereby alleviating its divided attention between China and the Indian Ocean region – a region of growing interest but where little force structure or action has thus far been applied. Even if the 1st Fleet is returned to service, the massive mandate of American forces in the Indo-Pacific necessitates greater presence and mobility that can only be provided by more naval platforms. If the "Indo" of Indo-Pacific is to be anything more than a genuflection towards the Indian Ocean's existence, the Navy needs to be empowered to maintain a credible presence in the West Pacific as well as the Indian Ocean.

The Center for Maritime Strategy, housed inside the Navy League of the United States, conducts and supports policy research and advocacy efforts across a broad spectrum of issues that impact the United States' position as a maritime nation. CMS is hosting a ticketed breakfast at Sea-Air-Space 2022 on Tuesday, April 5.

Kid-Friendly Expo Showcases STEM to Kick Off Sea-Air-Space 2022

(Left to right) Trisha Anand, 8, and Mary Bodoh, 9, enjoy playing with bubbles after a science experiment at STEM Expo 2022. *SOLARES PHOTOGRAPHY*

The 2022 STEM Expo, which kicked off Sea-Air-Space 2022 April 3, marked the largest crowd yet for the science- and fun-focused event, geared to students in the fifth to 12th grades.

The popular expo featured hands-on "mad science" demonstrations with dry ice, electricity, chemical reactions, robots, military animals and more, including nearly two dozen exhibits.

A performance by the U.S. Coast Guard Drill Team led the event, which also included a large and very popular version of the game Battleship; a nitrogen ice cream station, an edible

version of some of the mad science experiments; and a unique building event with Tinker Man, who builds large, complex structures from children's toys.

"It is great to see so much attention at the booth," said Heather Deagle, a member of HII's STEM team. "These kids are the future. It is their talent and contributions that will have an impact on shaping future technologies – and being part of this STEM event is a great opportunity to display our commitment to the education of these future generations."

The expo encourages students to pursue coursework and careers in STEM and reaches underserved communities to promote STEM education.

The "champion" sponsor for the event was HII, whose booth included everything from a 3D printer to a REMUS unmanned underwater vehicle. Sponsors included CACI, L3Harris, Raytheon Technologies and Lockheed Martin.

Through the years, HII has made numerous investments in STEM education programs; partnerships with local high schools, community colleges and technical schools to develop trade-based curriculum; summer internships for both students and teachers; and industry-leading apprentice schools at the company's two shipyards.