

The Coast Guard Advances its Arctic Readiness in 2015, but Challenges Remain

By Craig H. Allen Sr.

IN 2015, AS THE UNITED STATES ASSUMED ITS TWO-YEAR chairmanship of the Arctic Council, the high-level intergovernmental forum for the region, the US Coast Guard planned and executed a number of initiatives to advance maritime safety, security, and stewardship mission readiness in the Arctic.

Yet the failure of Congress to provide the level of support necessary for the Coast Guard to adequately recapitalize its small and aging polar icebreaker fleet casts doubt on the service's ability to fully meet its mandate to provide year-round, assured access and self-rescue in the polar regions. Hopefully, that trend will be reversed in the coming years.

Leadership Transitions and Challenges

On May 30, 2014, Admiral Paul Zukunft relieved Admiral Robert Papp as the Commandant of the Coast Guard. The following month,

Recapitalization challenges.

At his 2015 State of the Coast Guard address, Admiral Zukunft pointed out that the Coast Guard lost nearly 40 percent of its acquisition budget over the past four years. Over roughly that same period, the service's discretionary budget shrank by



Coast Guard Commandant Adm. Paul Zukunft joins leaders representing all eight coast guard agencies of the Arctic nations to sign a Joint Statement officially establishing the Arctic Coast Guard Forum at the Coast Guard Academy in New London, Connecticut, Oct. 30, 2015. Coast Guard photo by Petty Officer 2nd Class Patrick Kelley.

\$300 million and its personnel strength was reduced by 4,000. Nevertheless, the Coast Guard has made some progress with its Sentinelclass Fast Response Cutter (FRC) and Legend-class National Security Cutter (NSC) acquisitions.

Fifteen of the planned 58 FRCs have now been delivered to the Coast Guard. Construction of USCGC Munro, the sixth of the Coast Guard's NSCs, is nearly complete, a seventh (USCGC Kimball) is under construction, and a contract to build the eighth (USCGC Midgett) was awarded to HII's Ingalls Shipbuilding

Rear Admiral Dan Abel relieved Rear Admiral Tom Ostebo as Commander of Coast Guard District 17, with responsibility for all Coast Guard missions in the Alaska region. On August 6, 2015, Vice Admiral Charles Michel fleeted up from the Deputy Commandant for Operations to Vice Commandant. To prepare for his newly expanded responsibilities, Michel embarked on an extensive familiarization tour of the Alaskan Arctic region and deployed aboard the Coast Guard Cutter Healy.

Although the Coast Guard is tasked with 11 statutory missions in the Arctic, along with more focused Arctic tasking under the President's National Strategy for the Arctic Region, the major operational challenge facing the Coast Guard in the Arctic in 2015 was preparing for and then monitoring Royal Dutch Shell's offshore oil exploration activities in the Chukchi Sea. Shell's 2015 exploration fleet included two drill rigs and 30 support vessels. Shell successfully drilled the Burger J exploration well to a depth of 6,800 feet; however, the indications of oil and gas were reportedly not sufficient to warrant further exploration in the prospect. As a result, in late September Shell announced that it was indefinitely suspending its Arctic North Slope exploration activities and would seal and abandon the Burger J well in accordance with US regulations. yard in Pascagoula in April of 2015. The eight planned NSCs, built at an average cost of \$684 million per ship, will replace the retiring fleet of twelve high endurance cutters built in the 1960s and early 1970s. The Commandant has made it clear that his top recapitalization priority is now the 25 Offshore Patrol Cutters (OPC), which will replace the aging fleet of sixteen 210-foot and thirteen 270-foot medium endurance cutters, the average age of which is nearly 50 years. The 25 OPCs are expected to cost more than \$12 billion (\$484 million per ship), an enormous commitment considering the service's annual acquisition, construction, and improvements budget for vessels, aircraft, aids to navigation, and facilities has historically been well below \$2 billion.

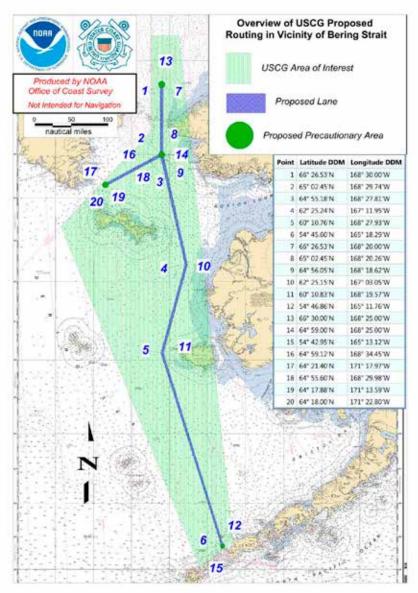
Recapitalization of the Coast Guard's polar icebreaker fleet to a level adequate to even minimally meet the nation's announced policy and strategy requirements has been a chronic source of frustration for Coast Guard leadership, other federal agencies that rely on the Coast Guard to meet their icebreaking demands, and the Congress. The service's only active heavy polar icebreaker, **Polar Star**, built at the Lockheed Seattle shipyard, was commissioned in 1976. After 30 years of service, the ship was placed in caretaker status in 2006, but was restored to service in 2013 following a three-year overhaul at Vigor's Seattle shipyard. Those repairs were designed to enable the ship to operate for an additional 7-10 years, primarily if not exclusively in support of US polar research activities in Antarctica. Her sister ship, Polar Sea, was commissioned in 1977, and completed a service life extension program in 2006, but has been out of service since 2010, following major casualties to five of her six diesel engines. In November 2015, Polar Sea was towed to Vigor's Portland, Oregon, shipyard to undergo a threemonth "preservation drydocking." The vessel's return to service remains questionable. With Polar Star's extended service life set to expire not later than 2023, Congress continues to deliberate over funding the nation's polar icebreaking requirements. Unless the **Polar Sea** is returned to service or the Polar Star's service life can somehow be further extended, it appears inevitable that the nation will suffer a loss of heavy icebreaking capacity in less than a decade.

The service's newest icebreaker, *Healy*, was funded from the Navy's ship construction account and launched at the Avondale Industries yard in New Orleans in 1997. The cutter was commissioned in Seattle in 2000. As a "medium" icebreaker, she serves exclusively in the Arctic. On June 29, 2015 she deployed for four months on her Arctic West 2015 cruise, during which she completed her third transit to the North Pole, the first by an unaccompanied US surface ship (see sidebar). So far, serious consideration of the need to recapitalize or augment the 15-year old *Healy* has been largely missing from Congress's polar icebreaker debate.

On September 1, 2015, during his three-day tour of Alaska, President Obama called upon Congress to accelerate funding for a (i.e., one) polar icebreaker replacement by two years

(with an acquisition goal of 2020 instead of 2022), and to begin planning for construction of additional icebreakers. In his November testimony before Congress, Vice Commandant Charles Michel explained that the Coast Guard needs at least two heavy icebreakers to meet its mandate to provide yearround, assured access and self-rescue capability in the polar regions. He added that the Coast Guard is moving forward at best speed to meet the President's intent of recapitalizing the icebreaker fleet.

Some good news arrived in late 2015. On December 18, Congress enacted and President Obama signed into law an omnibus appropriations bill that appropriated a total of \$10.6 billion for the Coast Guard in FY16, \$933 million more than in FY15. The FY16 appropriation includes \$1.26 billion for Coast Guard shipbuilding programs – more than double the amount requested by the President (the bill encourages the



Bering Sea/Strait traffic lanes proposed by Coast Guard (from 80 Fed. Reg. 8892).

Department and the Administration to provide more realistic budget requests in the future). The shipbuilding figure includes funds for the construction of a ninth National Security Cutter (NSC) and to outfit the NSCs to support deployment of unmanned aircraft systems (UAS). Additionally it appropriates \$6 million for "survey and design work associated with reactivation of the **Polar Sea**" and adds \$3.5 million to begin acquisition of a new polar icebreaker. The omnibus act also lifted the ban on oil exports that has been in place since 1975.

Coast Guard Headquarters Developments

2015 was another busy year for Coast Guard strategy drafting teams. The Implementation Plan for the National Strategy for the Arctic Region tasks the Coast Guard with lead agency responsibilities for seven broad areas – a very tall order. The Coast Guard released its own Arctic Strategy in 2013, espousing



Route of the 2016 Crystal Serenity excursion by Crystal Cruises. Artwork courtesy of Crystal Cruises.

its vision for safe, secure, and environmentally responsible maritime activity in the Arctic. In March 2015, the Commandant of the Coast Guard joined the Navy and Marine Corps service chiefs in releasing the "refreshed" Cooperative Strategy for 21st Century Seapower. The Coast Guard released its Cyber Strategy in June of 2015. It followed the service's Western Hemisphere Strategy, which was released a year earlier. The latter two strategy documents will likely have far-reaching implications for tasking and resource availability for the service's Arctic operations. Of more immediate relevance is the Coast Guard's Arctic Strategy Implementation Plan, which was scheduled for release in late December of 2015. After the International Maritime Organization gave its final approval to the Polar Code in 2015, the Coast Guard turned its attention to implementing the new requirements, which will begin to enter force in 2017.

Coast Guard Academy and the Center for Arctic Study and Policy

In May 2015, Rear Admiral James Rendon succeeded Rear Admiral Sandra Stosz as Superintendent of the US Coast Guard Academy (Stosz was promoted to Vice Admiral and fleeted up to become Deputy Commandant for Mission Support). Under Admiral Stosz's leadership, the Coast Guard launched its Center for Arctic Study and Policy (CASP) on the Academy campus in September 2014. The CASP mission is to promote academic research on Arctic policy and strategy by facilitating collaboration, partnerships, and dialogue among specialists from academia, government, tribal organizations, NGOs, industry, and the Coast Guard. Rachel Perron was appointed executive director of CASP on October 18, 2015, and Dr. Rebecca Pincus was selected to be the first holder of the Class of '65 Endowed Chair in Arctic Studies. The latter position was made possible by a generous gift by members of the Academy's Class of 1965.

On October 28-30, 2015, the Academy hosted delegates to the inaugural meeting of Arctic Coast Guard Forum (ACGF). The heads of agencies performing Coast Guard functions for Canada, Denmark, Finland, Iceland, Norway, Russia, and Sweden joined the Commandant of the US Coast Guard for the event. The delegates adopted the ACGF Terms of Reference and issued a Joint Statement of Intent to Further Develop Multilateral Cooperation of Agencies Representing Coast Guard Functions. The ACGF will be an operationallyfocused organization that strengthens maritime cooperation and coordination in the Arctic. The Terms of Reference call for one experts' meeting and one principals' meeting each year. Decisions will be made by consensus. In contrast to the 1996 Ottawa Declaration, which established the Arctic Council, the ACGF Terms of Reference do not expressly exclude consideration of military security issues. In fact, facilitating "safe and secure maritime activity in the Arctic region" is one of the forum's ten strategic objectives. Although the ACGF will be independent of the Arctic Council, the forum's chair will rotate among the member-states to coincide with the chairmanship of the Arctic Council. Accordingly, the United States will chair the ACGF for the 2015-2017 biennium.

Coast Guard District 17 (Alaska)

For nearly a decade, the Coast Guard has purposefully expanded its reach into the Arctic, pledging a mobile and seasonal presence in the coming decade. The most visible demonstration of its commitment to the Arctic has been the annual Arctic Shield exercises. Arctic Shield 2015 began on July 10 and concluded on October 20. The focus of the year's activities included protecting lives and property at sea, enforcement of laws and regulations in the region, tribal engagement and assistance, service to aids to navigation, performance and evaluation of science missions, and a range of marine safety activities in many Arctic communities. Participating units included forward-deployed aircraft and crews from Air Station Kodiak and Coast Guard Cutters Healy, Waesche, Boutwell, Alex Haley, Sycamore, and Maple. The units engaged in a variety of search-and-rescue (SAR) exercises, oil spill response drills, and scientific missions.

From October 19-22, 2015, the Coast Guard, Department of Defense (US NORTHCOM and Alaska Command), and Department of State led Arctic Zephyr, a multinational tabletop SAR exercise. The exercise drew officials from Canada, Denmark, Finland, Iceland, Norway, and Sweden, along with representatives from the Arctic cruise industry and the North Slope and Alaska Northwest Boroughs. The exercise served as a test of the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, signed by the Arctic Council member-states in 2011. At the conclusion of the exercise, the United States announced plans to host a live international SAR exercise in 2016.

The remote and expansive geography and limited oil spill response infrastructure in Western Alaska make it virtually impossible for vessel operators to develop oil spill response plans using the national planning criteria required by US statutes. The Coast Guard recognized this challenge and created a limited option known as alternative planning criteria (APC). The Coast Guard approved APC for tank vessels sailing within US waters in the Western Alaska region in 2012, and for non-tank vessels in 2013. The APC were scheduled to expire in 2015; however, on September 1, 2015, the Coast Guard extended the APC for both tank and nontank vessels through December 31, 2017. Critics fear that the less stringent APC approach may, through serial extensions, become permanent, exposing one of the nation's most biologically productive and ecologically vulnerable regions to oil spills that will far exceed the region's ability to adequately respond.

Initiative 6 of the Implementation Plan for the Coast Guard Arctic Strategy seeks to promote Arctic waterways management. In 2014, the Coast Guard completed a Waterways Analysis and Management System (WAMS) assessment of the North Slope, to plan and implement its aids to navigation program in those waters. The Coast Guard also established an Arctic Waterways Safety Committee (AWSC). The AWSC, which held its first meeting on June 8, 2015, is a focused non-governmental committee dedicated to addressing safety, security, subsistence, and



Photo courtesy of USCG.

HEALY'S ARCTIC WEST 2015 CRUISE WAS DIVIDED BETWEEN TWO PHASES. The first phase took her to the Chukchi and Beaufort Seas for shipboard testing of unmanned aerial vehicles in the Arctic environment and their interoperability with manned aircraft for search-and-rescue. *Healy* also tested the extent and reliability of Arctic communications networks. In the second phase, *Healy* embarked scientists supporting the National Science Foundation-funded Arctic Geotraces 2015 project, an international effort to obtain baseline data on the geochemistry of the world's oceans. Phase II took *Healy* to the North Pole, observing whales, walruses, seals, sea birds and polar bears along the way. En route, *Healy* also conducted bathymetric surveys of the proposed traffic lanes leading from Unimak Pass through the Bering Strait.



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environmental issues facing the Arctic. Stakeholders work collaboratively to solve Arctic waterway related issues without adding new regulations.

At its June 2015 meeting, the International Maritime Organization's Maritime Safety Committee approved five 50-mile "areas to be avoided" around certain vulnerable areas of Alaska's Aleutian Islands. The new safety measures enter into effect on January 1, 2016. As part of an ongoing Port Access Routing Study, the Coast Guard announced on February 19, 2015 a proposal to establish fourmile wide traffic lanes running from Unimak Pass in the Aleutian Islands through the US side of the Bering Strait and into the Arctic Ocean. As presently proposed, the traffic lanes through the Bering Strait – which serves as a narrow gate between the Pacific Ocean and the Arctic's Northern Sea Route, Northwest Passage, and Transpolar Route – will be voluntary, a concession made necessary for the present by its status as a "strait used for international navigation" under the 1982 UN Convention on the Law of the Sea. The public comment period for the proposal closed last August. If adopted, the measures are expected to enter force in 2017.

In late October, more than 100 federal and Alaska dignitaries convened at the University of Alaska Anchorage campus for the ribbon-cutting ceremony for the Department of Homeland Security's (DHS) Arctic Domain Awareness Center (ADAC). The ADAC is funded by a \$17 million DHS grant. The center will support Initiative 2 of the Implementation Plan for the Coast Guard Arctic Strategy - improve maritime domain awareness. Rear Admiral Dan Abel, the outgoing Commander for Coast Guard District 17, was on hand for the event and highlighted the center's mission to provide data-driven tools necessary for the Coast Guard to conduct its missions in the Arctic.

Forecast for 2016

The US Coast Guard is tasked with providing maritime security, law enforcement, and prevention and response activities for more than 4.5 million square miles of ocean, 95,000 miles of coastline, 26,000 miles of commercial waterways, 361 ports, 3,700 marine terminals, and 25,000 miles of inland and coastal waterways - the largest system of ports, waterways, and coastal seas in the world. The 2017 appropriations bill pushes those limits even further, with its requirement that the Commandant report to Congress on how he will ensure that "at least one mission-capable cutter maintains a presence in the Bering Sea and Arctic Region at all times." Clearly, the Coast Guard's capacity to adequately meet its mission demands will be tested in the coming years.

With new leadership planned for the Coast Guard's Alaska district (Rear Admiral Michael F. McAllister, currently serving as Deputy Director of Operations for Headquarters US Northern Command, replacing Rear Admiral Dan Abel); new initiatives might be in the works for the American Arctic region in 2016. The Coast Guard is also expected to make a final decision on the fate of the Polar Sea and begin the long process to acquire its first new heavy polar icebreaker in over 40 years. However, it seems clear that the service will not sacrifice its Offshore Patrol Cutter acquisition plans for a new icebreaker.

The Coast Guard is scheduled to publish the long-awaited final rule promulgating inspection requirements for towing vessels in the first quarter of 2016. The regulations will apply to all US flag towing vessels 26 feet and over and to vessels less than 26 feet when towing a barge carrying oil or other dangerous or combustible cargo. Given the pervasive and indispensable role served by towing vessels in Alaskan Arctic waters, the new regulations will pose a major challenge to the industry and Coast Guard in the region, to facilitate compliance without disrupting the short Arctic summer resupply season upon which Alaskans depend.

With Shell suspending offshore exploration activities on the North Slope for the foreseeable future, the Coast Guard's major challenge in 2016 will likely be the planned Northwest Passage voyage of the cruise ship *Crystal Serenity*.

With a capacity of 1,070 passengers and a crew of 685, the 68,000-ton, Bahamian flag vessel will be the largest passenger vessel to sail that route. The 32-day Arctic 2016 cruise will begin August 16 (well before the Polar Code enters force) in Seward, Alaska, and end September 17, in New York City. As public and private sector planners prepare for the cruise, the recent *El Faro* and *Costa Concordia* tragedies provide stark reminders that even in temperate waters, major marine casualties remain a threat. On the other hand, a successful, incident-free cruise could encourage cruise lines to schedule multiple transits through the Northwest Passage in the coming years, perhaps exposing the nation's woeful lack of infrastructure and related resources essential to meet our responsibilities under the International Convention on Maritime Search and Rescue.

Finally, Russia's military buildup in the Arctic may require the Coast Guard to devote more resources to its national security missions. A recent Naval Institute Proceedings contributor highlighted "Russia's growing proclivity to challenge the international order through its militarization of its northern coast." Others point to the destabilizing effect of Russia's unannounced "snap" exercises, in violation of established confidencebuilding norms. Perhaps, then, it is no coincidence that the new Coast Guard district commander for the Alaska region will be coming off a flag officer assignment at US Northern Command. How the evolving Arctic security climate will affect relations within the fledging Arctic Coast Guard Forum, as its member states work to address common concerns, remains to be seen.