Striving for Efficiency, Aligned for Success

WELCOME TO THE summer 2011 issue of *Currents*. There is a lot going on at N45 right now, and I'd like to briefly share some highlights with you.

As I write this, our office has been in the Pentagon for just over a month, having relocated from our Crystal City offices in late April. As we orient ourselves to this new working environment, I am excited about the improvements I can already see in our workflow. By virtue of our closer proximity to N4 and the fact that the N45 staff is now co-located with N40 (Logistics Planning & Innovation), N41 (Supply, Ordnance & Logistics Operations), N43 (Fleet Readiness), and N46 (Ashore Readiness), our teams are benefitting from quicker visibility on energy, environmental, and sustainability issues that impact readiness. Efficiency and alignment of mission objectives are vital for any organization, and I believe this move is helping us to be more efficient and better aligned as we continue to seek solutions for enhanced combat capability and grapple with complex issues related to energy and the environment.

This past March, in a speech at Georgetown University, President Obama mentioned his administration's interest in having the Navy and other federal agencies work jointly with private industry to create advanced biofuels that are viable for commercial use. Over the past 18 months, the Navy has successfully tested "drop-in replacement" biofuel blends in the Green Hornet (F/A-18), an MH-60S helicopter, an experimental riverine command boat, and shipboard gas turbine engines. In the coming months, we will test biofuels in engines for the V-22 Osprey, AV-8B Harrier, EA-6B Prowler, and Self-Defense Test Ship. All of these initiatives require robust coordination with industry, so we continue to build effective business relationships and seek new ones to that end.

When the Secretary of the Navy (SECNAV) spoke at the Advanced Research Projects Agency – Energy (ARPA-E) Energy Innovation Summit at National Harbor, MD, also in March, he discussed the strategic vulnerabilities that arise from our nation's dependence on petroleum and outlined some of the Navy's initiatives that are making strides to reduce that dependence. Tests of energy-saving technologies such as foul-release hull and propeller coatings, hydrodynamic stern flaps, and solid state LED (light-emitting diode) lighting are currently underway aboard our surface ships. Naval Maritime Forecast Centers in Norfolk and Pearl Harbor are also testing a "smart voyage planning decision aid" system to improve fleet fuel efficiency and tracking and avoid weather related hazards to safe navigation. Finally, a hybrid electric drive propulsion system is being developed for Arleigh Burke class (DDG-51) destroyers. This proof-of-concept system is scheduled for demonstration at sea in 2012 aboard the USS Truxtun (DDG-103). Once fully implemented, the system is expected to save at least 8,500 barrels of fuel annually per ship.

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We continue making progress on environmental planning and permitting for our at-sea training and testing. With the Record of Decision for the Gulf of Alaska issued in May, we have completed the first round of planning for 12 of 14 range areas. Now only the Keyport Range Complex and the Silver Strand Training Complex remain "on the radar" to complete for Phase I. As that work proceeds, we are developing our approach for Phase II. During our Phase II planning, we will create efficiencies by merging nearby and overlapping geographic areas for environmental planning purposes. This will consolidate the current study areas for which we produce Environmental Impact Statements from 14 down to five. We will also integrate environmental planning for our research, development, testing and evaluation (RDT&E) and maintenance with our training activities to a much greater extent than we did in Phase I. With these activities covered under the same

environmental planning documents, Navy and the National Marine Fisheries Service (NMFS) will have the opportunity to more efficiently evaluate the full spectrum of Navy actions that have the potential to affect the environment. In addition, based on new, Navy-funded research, the Navy and NMFS are working to refine the threshold criteria used to estimate the numbers of marine mammals that may be affected by Navy activities.

In recent months, my office has been analyzing current practices for earlier integration of energy and environmental considerations into the acquisition process. In cooperation with the Deputy Assistant Secretary of the Navy (Environment) and Deputy Assistant Secretary of the Navy (Energy) staff, we are providing expertise to Program Executive Offices and other acquisition community members regarding energy and environmental requirements and regulatory trends that may impact future design requirements. We are also sharing key information about SECNAV energy goals to ensure that energy and environmental factors are considered early in the acquisition process. Early integration can better influence material solutions as they relate to costs, environmental risk, schedules, and fleet readiness.

The Navy and the nation celebrated Earth Day this past spring on and around April 22. Under the general theme of "Partnering for a Greener Future," commands worldwide participated in over 100 Earth Day-related events and activities this year. My office released an Earth Day video podcast—our first—that was available for viewing on Navy.mil, YouTube, the Navy's Green Fleet web site, and our social media pages, providing background on Earth Day and stressing the Navy-wide culture change that will be needed for energy to achieve its full potential as an enabler of combat capability. You can still view it this podcast at http://www.navy.mil/search/display.asp?story_id=59876.

In the spirit of Earth Day, Navy volunteers from Boca Chica Naval Air Station helped marine mammal experts keep pilot whales alive after the whales stranded off Cudjoe Key, FL on 5 May, just two weeks after Earth Day (See our article entitled "Seabees Jump In to Help Save Pilot Whales: Military Training an Asset in Rescue Effort" in this issue of *Currents* and a link to a Miami Herald story at http://greenfleet.dodlive.mil/environment in the Environment News Highlights section). Twenty whales stranded for unknown reasons, and 12 of them tragically died, but eight were saved through the efforts of local Navy, NMFS, and community volunteers. As we often say in the Navy, we may celebrate Earth Day in April, but in practice, every day is Earth Day. We take aggressive steps to protect our planet daily, both for national security and from a "natural security" standpoint.

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The Navy continues to support the President's National Ocean Council (NOC) at many levels, providing expertise on national security issues, international law, biodiversity and ecosystems-based management, marine spatial planning, marine infrastructure, issues related to climate change adaptation, and public outreach. Currently, the NOC is coordinating a series of regional listening sessions to inform people about the National Ocean Policy and obtain public input on priorities and draft strategies for protecting the ocean, coasts, and Great Lakes. On behalf of the Office of the Secretary of Defense, the Navy hosted two of these sessions in June, one in Washington, D.C. (9 June) and one in Jacksonville, FL (15 June). Our office also hosted a roundtable discussion on the NOC with representatives from Navy commands and several environmental non-governmental organizations on 15 April. The lively discussion was valuable for sharing information about the topic and building positive dialogue. More roundtables will follow.

Finally, I want to take a moment to congratulate the winners of the FY 2010 Chief of Naval Operations Environmental Awards. These installations, ships, teams, and individuals have met the mission, and at the same time accomplished remarkable things for the environment. To each winner, I offer my personal and professional thanks for all you do.

And to all *Currents* readers, thanks for your continued interest in the Navy's energy and environmental initiatives. ⚓

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Director, Energy and Environmental Readiness