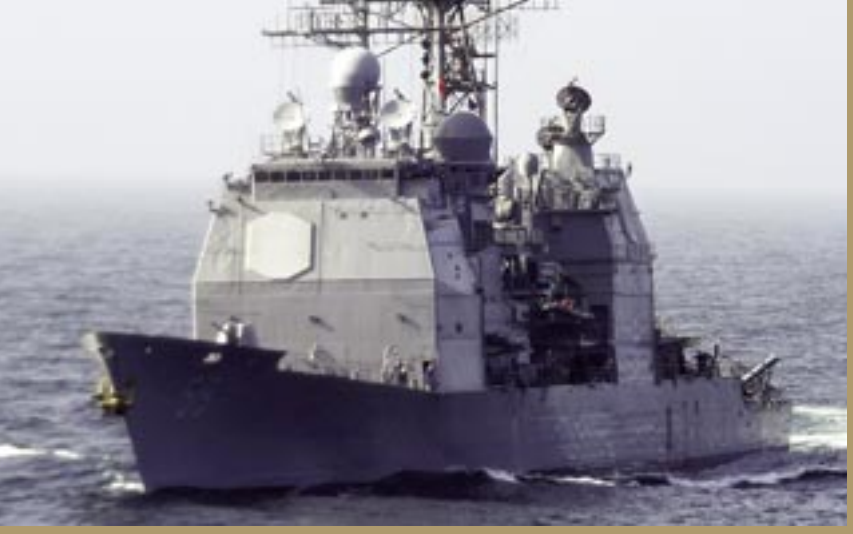
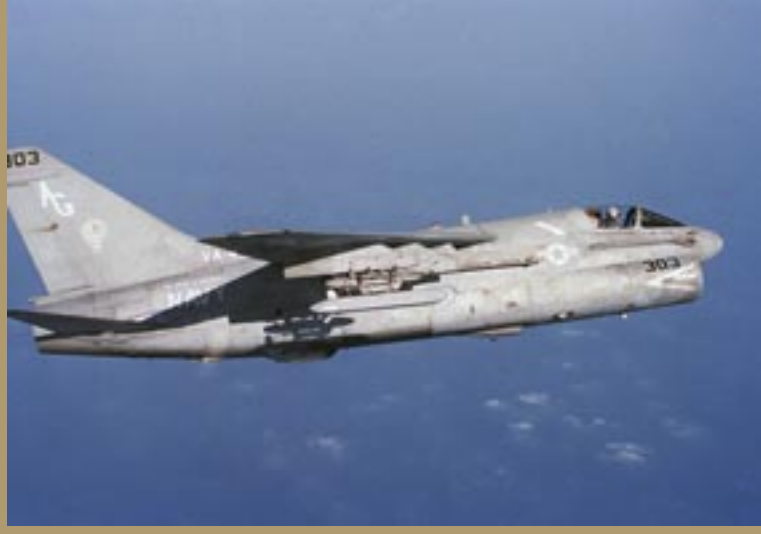
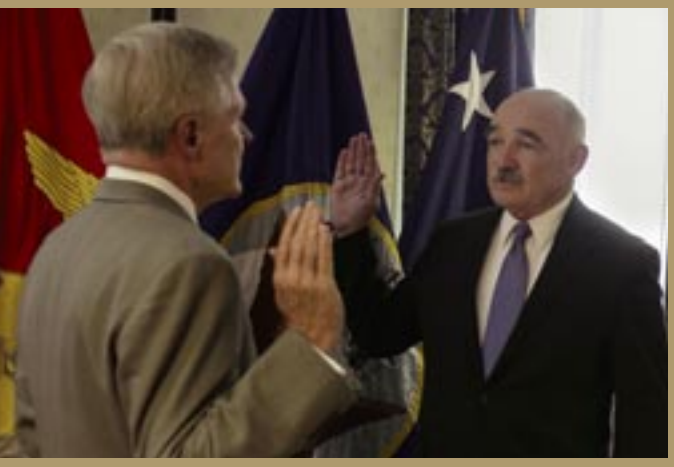
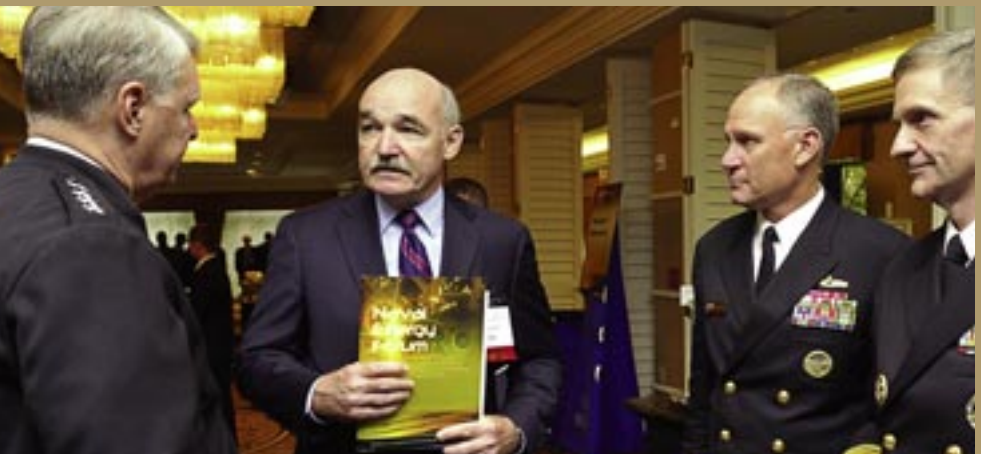
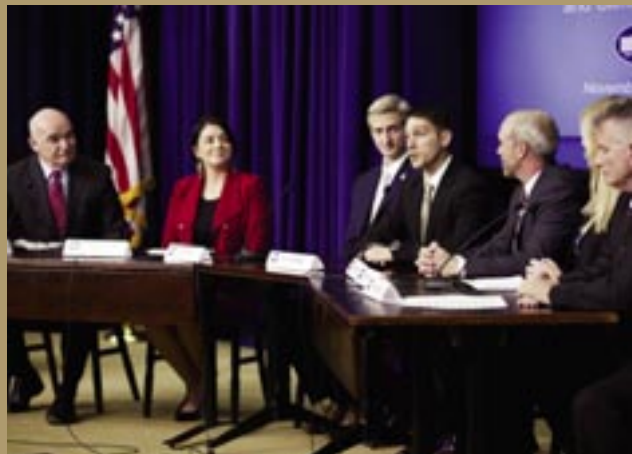








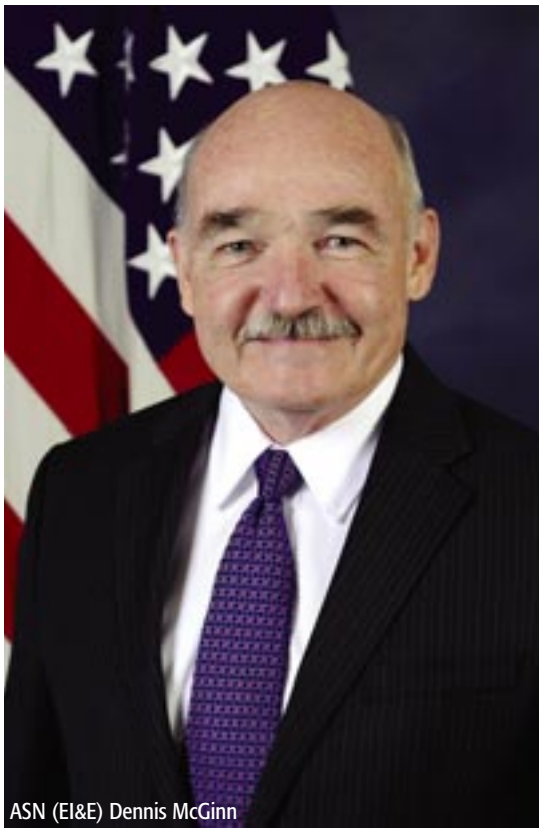


Retired Admiral and Renewable Energy Advocate Shares His Perspectives on Current Energy, Installations, Environmental & Safety Challenges

IN THE SPOTLIGHT for this issue of *Currents* is the Honorable Dennis McGinn, who was recently named Assistant Secretary of the Navy for Energy, Installations & Environment (ASN (EI&E)). On October 21, 2013, Kenneth Hess, director of communication and outreach for the Chief of Naval Operations Energy and Environmental Readiness Division (CNO N45) and Bruce McCaffrey, managing editor of *Currents* magazine, sat down with Mr. McGinn in his Pentagon office to get his perspectives on the current energy, environmental, installation and safety challenges facing the Navy and Marine Corps team.

CURRENTS: Please describe your primary responsibilities in your new position.

MCGINN: I feel really fortunate to come to the position of Assistant Secretary of the Navy with the benefit of more than 35 years in uniform. That gives me a tremendously valuable context in which to carry out the policies, planning and procedures necessary to assist Secretary Mabus manage the energy, installation, environmental and safety portfolio for the department. In this job, it's all about reaching the energy goals that the Secretary established in 2009. It's about caring for the Navy's infrastructure, building, piers, runways, and utility systems that allow us to operate globally, and doing that in an environmentally responsible and safe manner. At the same time, we are working to clean up areas of past environmental ills that occurred decades ago. We want to prevent future clean-ups by being really good stewards of the environment.


ASN (EI&E) Dennis McGinn

I don't want this country to ever lose the environmental quality that we have achieved. We're far from perfect, but we lead in so many ways—in the quality of air, water, and soil.

SECNAV Energy Goals

AS THE DEPARTMENT of the Navy works to reduce energy consumption and lead the Nation toward energy independence, the Secretary of the Navy (SECNAV) has outlined five energy goals. These goals seek to enhance and better enable our combat capabilities, to provide greater energy security. Outlined below are examples of how the Navy is moving forward to achieving each of the goals.

1. **Increase Alternative Energy Use Department of the Navy (DON)-wide**

   By 2020, 50 percent of total DON energy consumption will come from alternative sources.

   - Continue aggressive pursuit of both large and small scale renewable energy projects on or near DON installations.
   - Partner with industry, commercial aviation, and other government agencies to develop a demand signal to alternative fuel industry and encourage growth of a domestically produced, cost competitive biofuel industry.
   - Decrease energy consumption, both ashore and afloat, through installation of energy efficient technologies and development of policies that encourage energy awareness and conservation.

2. **Increase Alternative Energy Ashore**

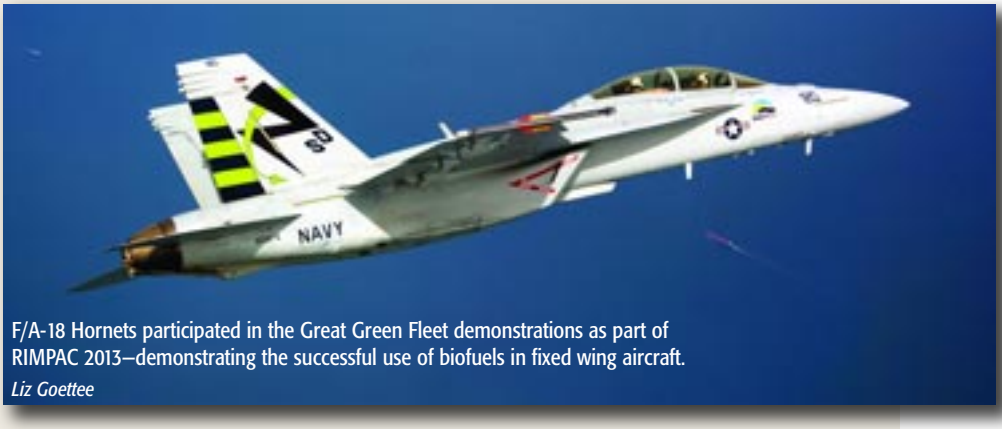
   By 2020, DON will produce at least 50 percent of shore-based energy requirements from alternative sources.

   - Continue installation of energy efficient upgrades to buildings and facilities.
   - Encourage military members and families to conserve energy through incentives and other programs to empower them to save and be aware of their own energy consumption.
   - Produce or consume one Gigawatt of new, renewable energy to power naval installations across the country using existing authorities such as Power Purchase Agreements, enhanced use leases, and joint ventures.

3. **Sail the "Great Green Fleet"**

   By 2012, DON will demonstrate a Green Strike Group in local operations and sail it by 2016.

   - In 2012, DON successfully demonstrated a Green Strike Group at the Rim of the Pacific (RIMPAC) exercise off the coast of Hawaii.
   - The DON remains focused and on track to sail the Great Green Fleet by 2016–ushering in the "new normal" where biofuels will be a constant and regular part of our operational platforms.



F/A-18 Hornets participated in the Great Green Fleet demonstrations as part of RIMPAC 2013—demonstrating the successful use of biofuels in fixed wing aircraft.
Liz Goettee

4. **Reduce Non-Tactical Petroleum Use**

   By 2015, DON will reduce petroleum use in the commercial vehicle fleet by 50 percent.

   - Increase purchase and use of flex fuel vehicles, hybrid electric vehicles, and neighborhood electric vehicles.
   - Expand alternative fuel infrastructure to support these vehicles.

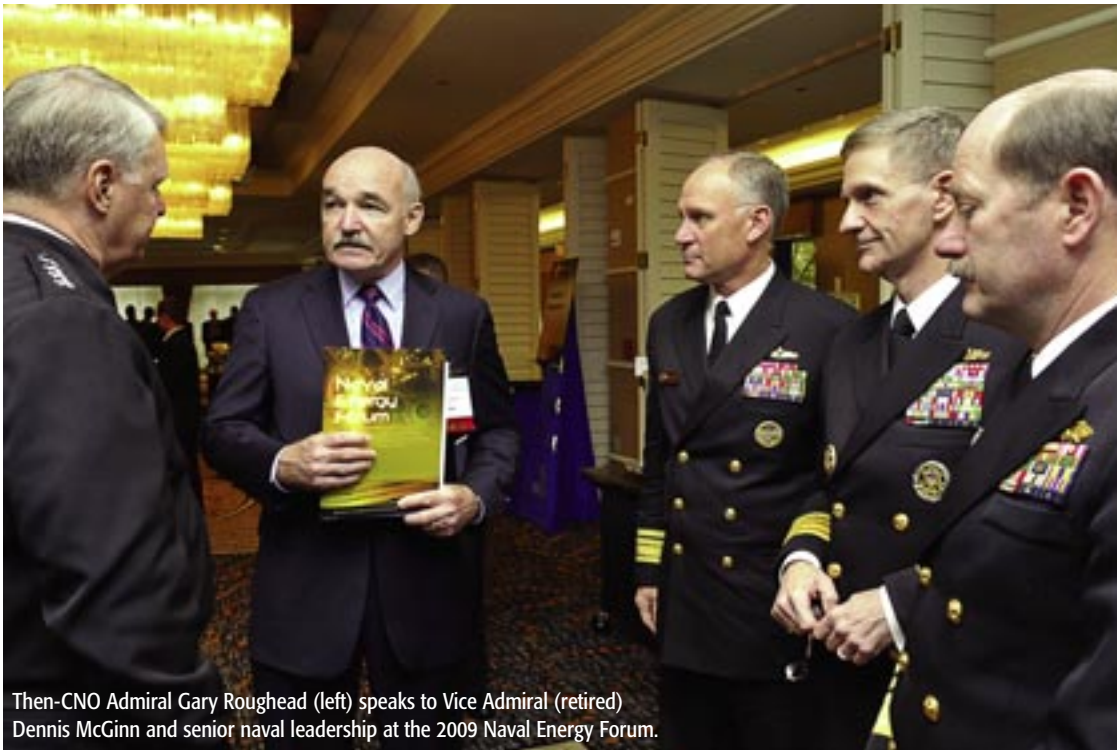
5. **Energy Efficient Acquisition**

   Evaluation of energy factors will be mandatory when awarding contracts for systems and buildings.

   - Create a standardized process for determination of life-cycle energy costs, fully-burdened cost of energy and other energy related characteristics of potential platforms, weapons systems, and buildings.
   - Encourage contractors to minimize energy footprint and factor energy into the acquisition decision making process.

CURRENTS: In your own words, what is the mission of ASN (EI&E)?

MCGINN: To have a Navy and Marine Corps team that is as energy-efficient as possible. This means getting as much combat effectiveness and operational efficiency out of every unit of energy as possible—whether it's a kilowatt hour, a megawatt hour, or a gallon of liquid fuel—to squeeze out as much capability as we can for combat, operations, and training. We also seek to provide the highest quality of life that we can for our Sailors and Marines and their families by using energy as efficiently as possible. We don't accept "business as usual" for the sources of our electricity and the fuels we use.



Then-CNO Admiral Gary Roughead (left) speaks to Vice Admiral (retired) Dennis McGinn and senior naval leadership at the 2009 Naval Energy Forum.

We don't accept "business as usual" for the sources of our electricity and the fuels we use.

We want to diversify our energy portfolio. We want to bring in more renewable energy for the production of our electricity. In particular, we want to diversify our liquid fuel portfolio by incorporating biofuels. Strategically, this is going to make us a much stronger and more effective naval force and will also contribute to our nation's energy security by delivering alternatives to a continuing dependence on oil that is a strategic and economic vulnerability.

CURRENTS: What do you think your top challenges will be, and how do you plan to meet those challenges?

MCGINN: A major challenge that comes to mind is the budget—a big change since I was in uniform. We always wondered if we would have enough of a "top line" on our budget to meet our priorities. And that's certainly the case now, especially with our "top line" coming down. But the added challenge today—on the Navy Secretary's staff, on the Commandant's staff, and on the CNO's staff—is the uncertainty about what that "top line" is going to be. Sequestration, operating on a continuing resolution, the government shutdown, and furloughs have all contributed to this uncertainty. It's really hard for the Navy and Marine Corps team—the greatest naval force in the history of mankind—to maintain its edge when there's that much uncertainty in the budget.

We have to make decisions between today's combat readiness—which must always take priority—and making trade-offs on the investments that we want to make to improve our capabilities and future capacity.

CURRENTS: We do see hesitation that results from that uncertainty. When people are not sure of what they are allowed to do in an uncertain budget environment, the default may very well be, "Well, we won't do anything until we know for sure." Do you think this uncertainty is causing risks to the Navy and its mission?

MCGINN: Well, it certainly is posing risks to the maintenance of our infrastructure, utilities, and inventory. You

must give priority to combat readiness. And when there isn't enough money to operate the Navy and Marine Corps force structure that we have today, you have to set some priorities. And the place to take risk is not with our combat readiness and safety. We might be able to defer maintenance, but that can be a challenge down the road. Everything works until it doesn't work anymore. And when it doesn't work anymore, it can cause the lights to go out, water pipes to break, and other failures to occur. When you have to make tough decisions regarding maintenance, you are increasing the risk to the organization's capabilities. In a declining budget environment, you just have to take some risks. It's managed risk—risks that we manage prudently. We have a great team of professionals, both military and civilian, who make sure those risks are made known and managed as carefully as possible.

CURRENTS: How have your past experiences prepared you for your current assignment?

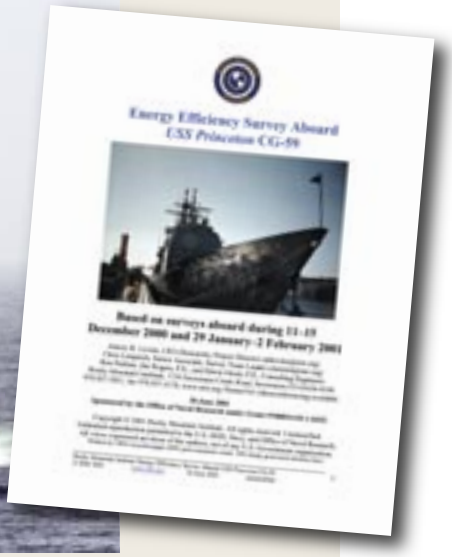
MCGINN: My personal story on energy begins when I returned from two combat deployments in 1973. I found myself sitting in gas lines. In the wake of the 1973 Yom Kippur war, the Organization of the Petroleum Exporting Countries imposed an oil embargo on the United States. It was the first time that gasoline rationing had been put in place since World War II. I thought to myself, "Wow. Energy and national security. There's a link there." I never forgot that throughout my Navy career. So I always had it in the back of my mind that we've got to be mindful of energy consumption and energy prices.

As budgets went up and down over the years, we would get really tight on ship steaming days. We looked for opportunities to get the maximum amount of training effectiveness out of every gallon of JP5 (jet fuel) or DFM (diesel fuel marine) that we could. Our focus has been not so much on alternative energy as it has been on energy efficiency. When I was a Corsair (A-7) squadron commander, we got permission to remove two of our six weapons pylons to reduce drag. We had the ability to put them on quickly if needed—but we saved a tremendous amount of fuel and got a lot more combat readiness training by getting rid of one-third of our external weapons stations. And the airplane performed better, too.

The USS Princeton Study

FOR MORE INSIGHTS into Rocky Mountain Institute's survey of energy efficiency potential aboard the USS Princeton (CG-59), visit www.nps.edu/Academics/Institutes/Meyer/docs/SI4000/Amory_Lovins/S01_09_EnergyEffSurveyCG59.pdf.

The guided-missile cruiser USS Princeton (CG 59).
MC2 Class Devin Wray



When I commanded an oiler (the USS Wichita), I was in charge of seven million gallons of liquid fuel. As a result, I got a real appreciation for how much fuel we actually use. When I was in senior positions in the Navy, I'd bring in experts like Amory Lovins from Rocky Mountain Institute to speak with our Secretaries, CNOs, and others about energy. When I was the Third Fleet commander, Dr. Lovins led a team of experts to address energy efficiency issues in the Navy using the USS Princeton (CG 69) as the subject for a study. They assessed our operations while in-port and underway and made recommendations in areas where energy efficiency could be improved. The recommendations, in what became known as the "Princeton Study," fall into the following three broad categories:

1. Operating procedures

   These recommendations focus on procedures on Navy ships—procedures that could be modified without changing any of the technology—educating and address cultural issues that resulted in ships operating more efficiently.

2. Overhaul

   There are things that can be done to Navy ships while they are in overhaul that result in energy savings—things like installing stern flaps or engineering auxiliary systems that are more energy efficient.

3. Design

   When designing a ship, total lifecycle costs and total energy costs should be built into the lifecycle. Combat effectiveness, weapons load, the man/machine interface are also key. All these things can be achieved with increased energy efficiency.

CURRENTS: What in your career drove home for you the importance of protecting the environment?

MCGINN: I can remember going on many deployments and looking forward to those very important visits to ports around the world. And I remember being absolutely appalled at some of the conditions that I encountered in terms of debris in the harbor, on the beaches, and even in national parks in some cases.

You get to see how some other parts of the world live in terms of a greatly degraded environmental quality. You go to a large international city and are not able to see the sights because of the smog or realize that the water is not very drinkable. You come back to the United States and say "This is my country and this is why I defend it."

I don't want this country to ever lose the environmental quality that we have achieved. We're far from perfect, but we lead in so many ways—in the quality of air, water, soil, and our care for all natural and cultural resources. I think that folks in the Navy and Marine Corps who get to see different parts of the world come to appreciate that we are, in fact, good stewards of the environment as we train or operate around the globe.

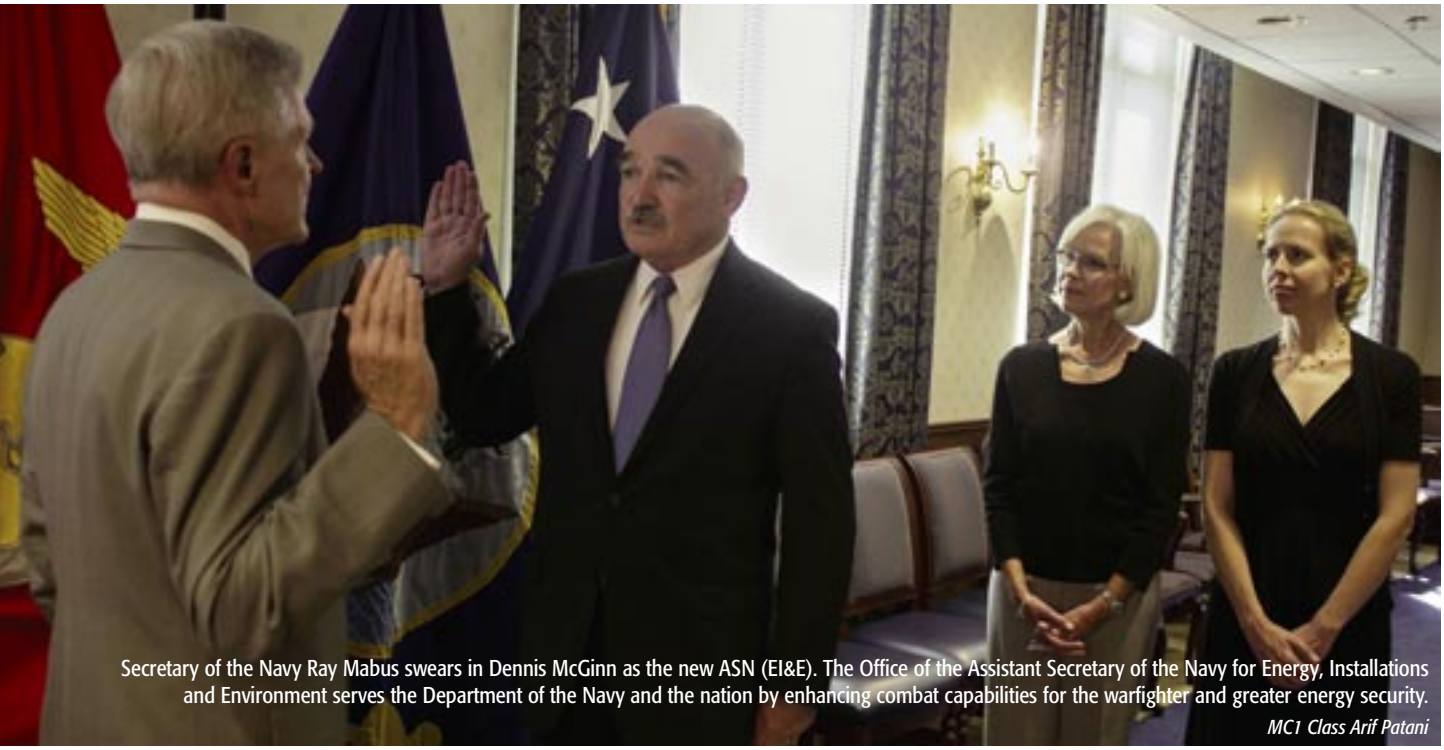
The Basics About Dennis McGinn

MR. DENNIS MCGINN was sworn in as ASN (EI&E) on September 3, 2013. In this position, Mr. McGinn develops Department-wide policies, procedures, advocacy and strategic plans. He also oversees all Department of the Navy functions and programs related to installations, safety, energy, and environment. This includes effective management of Navy and Marine Corps real property, housing, and other facilities; natural and cultural resource protection, planning, and compliance; safety and occupational health for military and civilian personnel; and timely completion of closures and realignments of installations under base closure laws.

Mr. McGinn is the former President of the American Council On Renewable Energy (ACORE). While at ACORE, he led efforts to communicate the significant economic, security and environmental benefits of renewable energy. Mr. McGinn is also a past co-chairman of the CNA Military Advisory Board and an international security senior fellow at Rocky Mountain Institute.

In 2002, after 35 years of service, Mr. McGinn retired from the Navy after achieving the rank of Vice Admiral. While in the Navy, he served as a naval aviator, test pilot, squadron commanding officer, aircraft carrier commanding officer (of the USS Ranger (CV 61)), and national security strategist. His capstone assignment was as the Deputy Chief of Naval Operations for Warfare Requirements and Programs, where he oversaw the development of future Navy capabilities. In a previous operational leadership role, he commanded the U.S. Third Fleet.

Mr. McGinn is a past member of the Steering Committee of the Energy Future Coalition, the United States Energy Security Council, and the Bipartisan Policy Center Energy Board. He earned a B.S. degree in Naval Engineering from the U.S. Naval Academy; attended the national security program at the Kennedy School of Government, Harvard University; and was a Chief of Naval Operations strategic studies fellow at the U.S. Naval War College.



Secretary of the Navy Ray Mabus swears in Dennis McGinn as the new ASN (EI&E). The Office of the Assistant Secretary of the Navy for Energy, Installations and Environment serves the Department of the Navy and the nation by enhancing combat capabilities for the warfighter and greater energy security.
MC1 Class Arif Patani

CURRENTS: What perspectives did you gain during your tenure at the American Council On Renewal Energy (ACORE)?

MCGINN: As a result of my interest in energy, back around the time I retired, I was invited to serve on ACORE's board of advisors. Over the years, I participated in many of their events and, about three years ago, I was asked to be their president and Chief Executive Officer.

Working at ACORE really appealed to me because I realized that it isn't just one technology that's going to lead our transformation into a clean energy economy. It's a little bit of this and a little bit of that depending on where your renewable energy resources are and where the needs are greatest.

CURRENTS: Your biography on the ACORE web site mentions the online "Energy Fact Check" resource the organization created under your tenure. Could you speak to the need for sharing that type of information?

MCGINN: We were really proud of that initiative which was rolled out in June 2012. There was so much misinformation about renewable energy out there that we wanted to say, "Okay, what are the facts?"

What are the forms of renewable energy? What do they really cost to implement and use? Can you scale them up? How do they work in conjunction with traditionally produced electricity? What are the facts about biofuels compared to petroleum?

We always cited original sources, using as objective a source as possible—basically put the facts out there. So you address a myth like "Renewable energy is strictly a government program. It will never scale up. It's too expensive." Then you start to cite real, large-scale projects in wind, solar, biomass, or biofuels and provide real numbers, real dollar investments, and real dollars returned. It is these facts that are an asset for journalists and people making policy decisions in State legislatures and up on Capitol Hill.

The best kind of policy is informed policy. Start with the facts. Do the objective cost benefit/risk analysis to get to the best policy or the best investments going forward. Those policies and investments will be much clearer and more effective if you start with the facts—instead of trading bumper sticker slogans back and forth across opposite ends of the political spectrum.

CURRENTS: Is there a way of leveraging that kind of thing on the Navy side?

MCGINN: Well, the good news is that in the Navy and Marine Corps we deal with facts. If you don't deal with facts in combat, you don't live very long.

We are a talented engineering, data-driven service, whether it's related to financial management or putting rounds down-range. We can use our fact-based culture to advance our energy and environmental programs. The point is, when you do the cost benefit/risk analysis, it shows that a "business as usual" approach to our energy portfolio isn't a viable option. We want to lead and have a better outcome. We don't want to be succeeded by folks who look back in five or ten years and question the investments we made or didn't make in our energy, installation, environmental, and safety programs. We want to leave a better and stronger Navy and Marine Corps team than the one we found. And that's what the Secretary is all about. That's what the Service Chiefs are all about. And that's the message that we're getting across down to the deckplate level.

CURRENTS: What are your top priorities (in the EI&E's portfolio)?

MCGINN: Our first priority is to help meet Secretary Mabus' energy goals. Secondly, we need to produce the most efficient, combat-ready installations possible. And thirdly, we need to carry out the Navy and Marine Corps mission in as responsible and safe a manner as possible—minimizing our impact on the environment.

CURRENTS: There's a lot of interest and effort from senior leadership, including yourself, to adjust our energy culture—adopt a more resilient approach to saving energy through cultural change. Can you speak to that?

MCGINN: Sure. We are conducting classes at the highest levels including flag officers and personnel from the Senior Executive Service. Be it at the Naval Academy or through our recruit training, we need to get the word out so that everyone is aware of our energy goals and related initiatives.

Energy isn't free. Energy can either be an asset or a liability in terms of operations and quality of life. Energy awareness through education is so important in helping us to change from a culture of "Energy is always going to be available. The lights are always going to come on. There's always going to be enough fuel." to "We are going to be a more effective combat force if we squeeze more combat effectiveness and operational efficiency out of every unit of energy." That awareness is necessary to change our culture.

If we measure combat effectiveness in an aviation unit by the number of hours flown, that's not a good metric. It's more important to ask ourselves, "What are we doing with every hour of flight operations training?" If you have spent some time in a realistic combat simulator, once you go

Mr. McGinn commanded an oiler (the USS Wichita) during his years in the Navy.
PH3 Brewer

airborne you are much more adept at being able to manage those weapons systems, to fly that plane and to really "get it." I'm not saying there's a one-for-one substitution. I'm just saying that the things that we do on the ground can enhance the combat return on investment that we get from every gallon of fuel that we use. That's true in the air or at sea. The same goes for the use of tactical vehicles. If I use a small sedan instead of a Hummer to go from one part of an installation to another, I still get there but I get there with a lot less fuel.

If I'm going out into the field and I need the Hummer, I want to have the Hummer available and the right fuel to use it. The idea is to use the right kind of energy with the right kind of vehicle at the right time. We want to have that energy available—in all of its forms—when and where we need it.

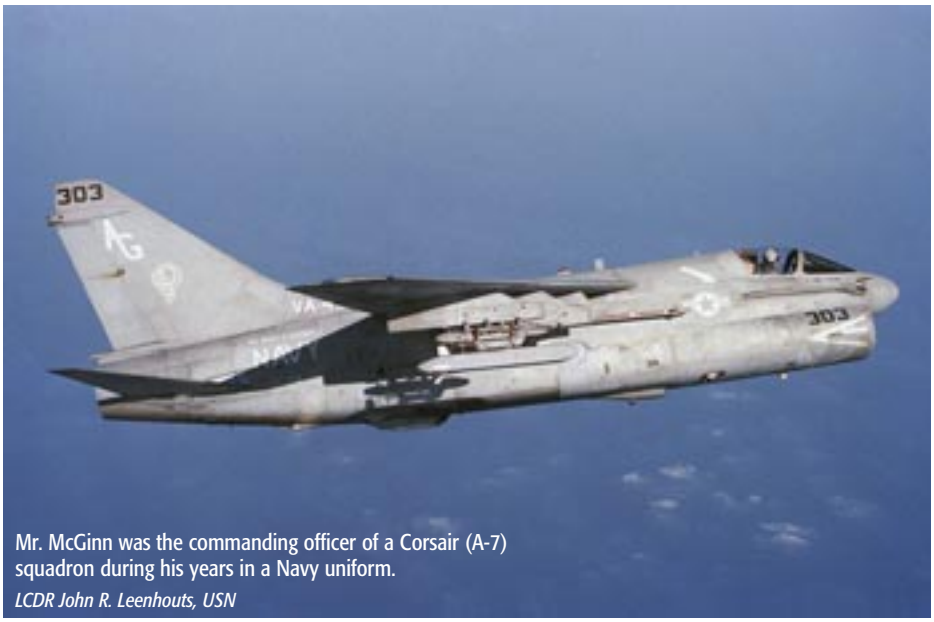
CURRENTS: As you know, many of our shore installations are using electric golf carts for flight line maintenance and other operations.

MCGINN: Yes. We're going to be taking a good look at how we procure and manage our non-tactical vehicles. We've been working with the General Services Administration for a number of years to figure out how we can modify our non-combat tactical fleet so that it is more energy efficient—for every class of vehicle from school buses to the golf carts you mentioned.

We'll find that there are going to be more and more commercial off-the-shelf choices available. In the civilian automotive industry, internal combustion vehicles are getting more energy-efficient. We're also getting more choices of plug-in electric hybrids and affordable electric vehicles. The ultimate solution will be a mix of all of these things.

In civilian shipping fleets, we are starting to see a move away from diesel fuel to compressed natural gas. It doesn't make sense across the board, but it does make sense for certain applications—like trucking. You can pay 25 percent less for compressed natural gas than for diesel—and the environmental footprint is so much better. So it's a great time for our own teams to look at other options for our non-tactical vehicle fleets.

This has to be an iterative process. You can't suddenly change from one energy source to another overnight. You have to think about what natural gas or hydrogen distribution looks like in the years to come. If you want to use more biofuels, you've got to have a distribution system to make those fuels available. What you should not do—what we will not do—is just stand still. You can't say, "We can't get these types of vehicles because of our infrastructure, and we can't build the infrastructure because there aren't enough vehicles available."



Mr. McGinn was the commanding officer of a Corsair (A-7) squadron during his years in a Navy uniform.
LCDR John R. Leenhouts, USN

We've got to break through that and say, "We are going to make these changes where it makes sense from a cost benefit/risk analysis point of view." That goes to organizational culture.

CURRENTS: In your mind, what are the most significant economic, security and environmental benefits of renewable energy?

MCGINN: There's clearly a direct link between our energy choices and our energy usage and the environment. We can improve local, regional, and global environmental quality by making wise energy choices and using all forms of energy as efficiently as we can.

Renewable energy is good for energy security because energy security means having as much energy as you need to do the job when and where you need it. By having a more diverse portfolio of energy, you're going to be more secure, especially as we go forward and have larger portions of our total energy pie coming from different sources. From an economic standpoint, thinking about declining budgets, renewable energy is, at a minimum, a hedge against price vulnerability on the global oil market.

Going forward five or 10 years, we are going to be able to produce biofuels and electricity from alternative sources at par or below the cost that we would be paying if we went along with "business as usual."

Globally and locally, you get better environmental outcomes and environmental security by increasingly using clean sources of fuel and energy. The Secretary is devoted to pursuing this in the most cost-effective way possible. We're going to be making very good business-based choices about our forms of energy going forward as we diversify our portfolio. The only reason we are changing the mix of energy that we use is to maximize our combat readiness and operational efficiency.

to operate more of their own ships and helicopters on biofuels. We're using lessons learned from that event to plan for sailing the Great Green Fleet in 2016. We have a lot of work to do to achieve that goal, but it is a high priority and I believe we can achieve it.

I think that many nations are starting to realize that "business as usual" isn't a viable option, especially in navies and Marine Corps. We need to plan for a future that's five or 10 years out—and that doesn't just happen. You have to make it happen by making some wise investments. One of our biggest successes toward the implementation of Secretary Mabus' energy goals has been the awareness those goals have created, not just within our Navy and Marine Corps team but with the navies and marines that we work with in international operations like RIMPAC.

CURRENTS: Can you share some examples from your career (in the Navy and elsewhere) where energy created challenges for your mission? What did you do to address those challenges?

MCGINN: Energy can be a liability if you don't have the right kind of energy to get the job done whenever and wherever you need it. If you have an inefficient force, you have to refuel more often whether you're on the ground or in the air. When you're refueling, that's time off-station. Anything you can do—with better technology or enhanced operating procedures—that reduces the amount of time you spend refueling, that's a good thing. And it directly translates into combat effectiveness.

The only reason we are changing the mix of energy that we use is to maximize our combat readiness and operational efficiency.

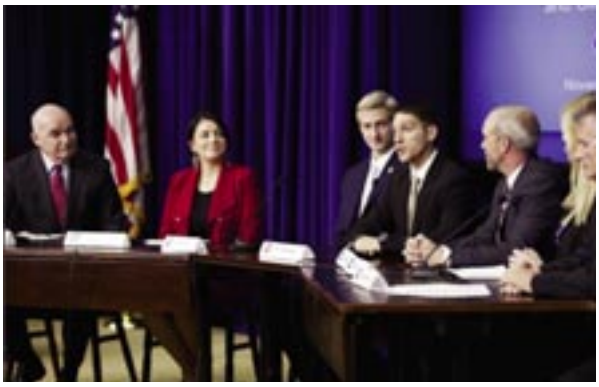
CURRENTS: What are your thoughts about the deployment of the Great Green Fleet?

MCGINN: The demonstration during the 2012 Rim of the Pacific (RIMPAC) exercise was a success. It was a tremendous end-to-end test operating everything we had—combat vehicles, ships, airplanes and helicopters—on a 50-50 mix of biofuel and petroleum. From delivery points to our combat logistics force to our Military Sealift Command ships, across the hose lines into the tanks of ships and aircraft—it really worked. It was a test across the entire system for what we call drop-in fuel—fuel that meets all the specifications of our traditional forms of liquid fuel without requiring any modifications to any equipment. That was so impressive to the other navies that we've already signed an agreement with the Australian Navy and other RIMPAC participants who want

CURRENTS: As you know, the Navy is currently working to renew its permits and authorizations for training and testing activities in several areas. As the Atlantic Fleet Training and Testing and the Hawaii-Southern California areas cover about 80 percent of the Navy's training and testing worldwide, these permits are vital for Navy readiness. Any comments about those or other projects?

MCGINN: On the one hand, this is so complex, it can make your head hurt. There are many things to factor into these environmental impact statements and many reviews

to conduct inside the Navy and the Department of Defense and then with the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and other agencies. On the other hand, this is the hard work that needs to get done to make us good stewards of the environment. We want to be compliant with the National Environmental Policy Act, the Marine Mammal Protection Act, and every other federal, state, and regional statute that we have to comply with. So in our pursuit of combat effectiveness, we want to minimize the impact that our activities have on our environment—our water, land and air and the natural resources they support and maintain. In the Atlantic and Southern California/Hawaii operating areas, we are being very deliberate and studious in our approach to make sure we are protecting the environment without sacrificing the effectiveness of our combat training.



Mr. Dennis McGinn (far left) participated in a panel discussion at the White House Champions of Change Veterans Advancing Clean Energy and Climate Security Event in November 2013.
Matty Greene

We're good partners with a number of environmental groups. We don't want to be perpetually involved in lawsuits brought against the Navy for any real or perceived environmental violation. We'd really rather partner with these groups. We also want to reach out wherever we can and share the environmental information that we gather in the course of our ongoing training and operations with other parts of the government including the National Marine Fisheries Service and the Bureau of Land Management. We want to be able to contribute to the body of knowledge that allows us to maintain a healthy balance between our operations and the preservation of the environment.

CURRENTS: Could you speak briefly about the way forward for acquisition, from both an energy and an environmental standpoint?

MCGINN: We're working with the acquisition community, Assistant Secretary Stackley and his team, and the Systems Commands, to review the energy and environmental impact of certain programs going forward. It takes a long time to design, build and operate a weapons system, particularly major systems like the Joint Strike Fighter and the Littoral Combat Ship. We need to slowly and surely consider energy consumption as a key performance parameter throughout the acquisition lifecycle.

In our pursuit of combat effectiveness, we want to minimize the impact that our activities have on our environment.

CURRENTS: What are your views on preparing for the impacts of climate change?

MCGINN: We're working with Rear Admiral White, Rear Admiral Slates, and others to elevate the visibility and effectiveness of Task Force Climate Change and what we can do to adapt our infrastructure and operations to the potential impacts of climate change. It's more than just rising sea levels. Right now, we're looking at the impacts of tidal surges and need to develop a set of principles for adapting our infrastructure accordingly.

For example, if we believe that we are going to have more frequent and severe storms going forward, it might be a good idea to position our computers and backup power generators in places that are appropriately elevated and sheltered so that when you most need that backup power it's going to be available and it won't be knocked out during a storm surge. It isn't just about building higher piers and seawalls. It's about practical positioning. It's working with the civilian communities in which we live and operate and taking some very practical steps. I've had some discussions with senior officials in the Office of the Secretary of Defense who share this view.

In dealing with climate change and more frequent severe weather events, it comes down to resiliency. Our Navy and

The aircraft carrier USS Ranger (CV 61).
PH2 Henry

Marine Corps are resilient. You need resilience in how we plan our installations and how we plan our forces. As severe weather poses greater challenges for us, we need a culture and technologies that are sufficiently resilient.

CURRENTS: What else would you like *Currents* readers to know?

MCGINN: I would simply like to say that a healthy organization like the Navy and Marine Corps team constantly questions itself in terms of what are we doing, how we are doing it, and whether there is a better way to do it. In other words, being dynamic and not so wedded to the status quo that there's an unwillingness to change. Just because we've always done things one way doesn't mean that it's the only way. Our Navy and Marine Corps has a rich history of innovation and adaptation and that's the way you stay ahead in life.

Life is constantly changing and you need to adapt with it. You need to lead that adaptation with innovation whenever you can. We've changed the ways we power our Fleets and the kinds of Fleets that we have out there to bring even more combat readiness and operational efficiency to our mission. That's what we're doing now in terms of environmental stewardship and the development of our energy portfolio. We are relying on 238 years of Navy history to do so.

We welcome new ideas. We never assume that things are going as perfectly as planned. There are real world challenges out there but there are also real world solutions. So we are always interested in having a dialogue about how we can do things better in terms of energy, the environment, and safety. Safety is a key part of my portfolio both ashore and operationally, making sure that our safety policies allow us to do our training, operate our installations, and go to sea.

We welcome suggestions from the Fleet. This isn't a Navy that operates in Washington. This is a Navy and Marine Corps that operates globally. When you're out there in the real world as I have been when I was in uniform, you get a much finer appreciation for some of the challenges that are out there—whether they're budget-driven or enemy-driven—and what some of the solutions to those challenges might be.

We want to encourage innovation and the free flow of information, whether it's a discussion at the squad level, in a marine platoon, in a squadron ready room, or a wardroom on a ship. We want those discussions to lead to a better understanding of what we are trying to accomplish.

CURRENTS: Thanks for speaking with us today, sir.

MCGINN: Happy to do it. ⚓