

Remarks by the Honorable Ray Mabus  
Secretary of the Navy  
Energy Signing  
Naval Air Station Oceana  
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Thank y'all very much. And I'm so glad you're being such a wonderful partner. Thanks again, assistant secretary of the Navy. Mr. Mayor, thank you. And, you know, we have a similar chant. (Laughter.) But we add something to it: Go Navy, beat Army, again. (Laughter, applause.) Forgive me, I will not take advantage of this occasion to talk about how many years they have beaten Army – about 14. (Laughter.)

But I too have an uncle who went to West Point. And he sadly passed away before I got this job, so there was not an inter-service rivalry at home. I particularly want to thank Governor Terry McAuliffe, who had to leave to go to a memorial service, for his partnership, and to all you for coming today. I'm really happy to be here to talk about how the Navy and Marine Corps lead this country in energy innovation, how we're partnering with state and local communities, with private businesses, and how doing every one of these things makes us better war fighters.

At a hearing early in my term in this job, I had a congressman look at me and he said: You're the Secretary of the Navy. You're not Secretary of Energy. Why do you care about this so much? Well, the truth is, energy dictates everything that we do. Energy is the lifeblood of the world's only global Navy and the world's only global Marine Corps. And our approach is to provide that presence, being where it counts, when it counts. To operate continuously worldwide is of great strategic value to our country.

We uniquely provide presence – being in the right place not just at the right time, but all the time. And that that presence is built on four fundamentals: people, our Sailors, our Marines, their families, the civilians that work for the Department of the Navy; platforms, our ships, our aircraft, our systems; power, how we use energy to make us better war fighters, and how we keep energy from being used as a weapon against us; and partnerships, our relationships with industry, with our international friends and allies and, most importantly, our partnership with the American people. And since today is all about power, the third P, I want to touch on each of these fundamentals in that context.

When I took this job in 2009, oil was at \$140 a barrel. We were forced to prioritize overseas operations at the expense of training at home, a reality that people in this audience know all too well. We were losing a Marine killed or wounded for every 50 convoys of fuel we took into Afghanistan. That's too high a price to pay. As our fleet steamed around the globe, and supplied with oil and gas from countries that may not have shared our interests. So that's when I decided to take a new approach to energy, and establish a series of goals for the Navy and Marine Corps, the biggest of which was that by no later than 2020 at least half of all of our

power, at least half of our energy that flowed downstream and would come from non-fossil fuel sources.

Like any initiative, you have to start with people. There's a huge cultural shift that's taking place in the Navy and Marine Corps. Deck plate Sailors and Marines in the field are the ones driving this innovation now. I'll give you just a couple of examples. A few years ago a Navy chief made a suggestion. Change the lightbulbs. Replace traditional bulbs with LEDs. We're doing that as part of our normal maintenance now. And we found for one destroyer, we changed the lightbulbs and save 20,000 gallons of fuel every single year.

And the Marines – and I know that in this audience nobody when they first think of Marines think of ardent environmentalists. But they're pioneering alternative energy to gain tactical advantage. Solar panels that can be rolled up and put in their pack to power their radios and their GPSs saves a company of Marines 700 pounds of batteries. That's 700 pounds they don't have to carry. It's also batteries they don't have to be resupplied with. And since Marines tend to walk a lot of places, they're using knee braces and things in their pack to harness energy they use walking, to turn it into energy to power things like the radio.

Our special forces are using alternative energy as a competitive advantage, allowing them to operate far longer and more quietly. A SEAL team commander told me: When we got a generator running two things happen. One is, when the bad guys are sneaking up on you, you can't hear them. And two, it's just like putting a target on yourself. Go to where the noise is, that's where the SEALs are. Now we've got SEALs in the field that are close to net zero in both power and water, using alternative energy to purify the water. And they get to stay out and operate far longer.

Since our Sailors and Marines are doing their part, it seems more important we do our part, by providing them the right number, right type of platforms to do their jobs. From 2001 to 2008, the U.S. Navy contracted 41 ships. During that time, our fleet went down from 316 ships to 278 ships. Forty-one ships wasn't enough to keep the fleet from continuing to get smaller, and it wasn't enough to keep our shipyards in business.

I've been there in this job now for seven years, over the same time period. In that seven years, we've contracted for 85 ships, more than double. And we haven't done it at the expense of aircraft. We bought 35 percent more aircraft. We've reversed the decline in our ship count. Our fleet will get to 300 ships by 2019 and to our assessed need, 308 ships by 2021. That's giving our Sailors and our Marines the tools they need to do their jobs.

And as we've grown the fleet, we're making sure that these platforms are using energy differently and more efficiently. We've got two big deck amphibs – second-biggest ships in our fleet after carriers – the Makin Island and the America, that are hybrids. They have a normal diesel generator for speeds over 12 knots, and then an electrical drive for speeds under 12 knots. The Makin Island, on its first deployment, brought back almost half its fuel budget, and stayed out 44 days longer than the ship was supposed to.

As this audience knows, all our carriers and all our subs are nuclear. So we got alternative energy right there. The rest of our platforms, we're using advanced biofuels. We only have three requirements for biofuels. One, it's got to be a drop-in fuel. We're not changing anything – and that's important – we're not changing the engines on our ships. Two is, it can't take any land out of food production. And three is, it's got to be cost competitive. So we've certified use of biofuels in our planes and call it the green Hornet now. We did that in 2010. We certified all our ships in 2012.

The Great Green Fleet launched earlier this year. That Great Green Fleet, just staying in RIMPAC right now, steamed on a mixture of marine diesel and biofuels, that cost \$1.99 a gallon. That's how competitive biofuels have become. So at sea, in RIMPAC, we got nine partner nations being refueled with that mixture of biofuels. They're eager to follow our lead. And today, at sea, we're 30 percent of fleet on alternative energy.

Now, back to shore, which is the reason we're here today. In 2009, I said we were to be at half of all our shore energy on alternative fuels by 2020. The President reinforced that, and put it in his State of the Union in 2012. Well, we got there five years early – 1.1 gigawatts. And that's a tribute to the Sailors. That is a tribute to the COs. That's a tribute to our commanders. It's a tribute to the partners that we've worked with. A gigawatt's half of our – we use about 2 gigawatts of fuel. That's a lot of energy. We're at more than 50 percent now. We're at 1.1 gigawatts, and we're still adding to it. And we've saved \$90 million on energy costs.

And these partnerships are what's made it all possible. The state of Virginia, community leaders Dominion Virginia Power. And everyone here said – and I will repeat it – this is a big deal. This is not small potatoes. And when you total these two prices up, 46 megawatts of solar power. And the Navy and Marine Corps aren't the only beneficiaries of this. This creates jobs in Virginia and North Carolina, reduces cost to local energy consumers, and, as I've said over and over again, most importantly, it makes us better war fighters by increasing our flexibility and increasing our vulnerability.

I'll talk about solar panels for a minute. Since 2010, solar power in this country has increased by 60 percent every single year. The cost has come down by 70 percent. And there are a lot of reasons for that. But I think one of them is the United States Navy, the United States Marines Corps, has made it a priority because, as I said in 2009, if the Navy comes, they will build it. The Navy is here, and they have built it.

Now, going back to the very first, why is the Secretary of the Navy, who's not the Secretary of Energy, going through this? This is a part of a long Navy tradition. In the middle of the 19<sup>th</sup> century, we went from sail to coal. In the early 20<sup>th</sup> century, we moved from coal to oil. In the middle of the 20<sup>th</sup> century, we pioneered nuclear as a propulsion method. And every single time – every single time that happened there were people saying: This is nuts. You're crazy to do this.

When we went from sail to coal, it's you're giving away something free for something that costs money. When we went from coal to oil, you're giving up all those coaling stations around the world. How can you do that? And then when we went to nuclear: You can never get

nuclear small enough or safe enough to put it in a submarine. Well, every single time – every single time they were wrong. And I got to tell you, those few folks that are still saying this isn't going to work, they're wrong again this time. And today is part of the proof that they're wrong, so – days like today, the Navy and Marine Corps leads and continue to lead in energy innovation, and by doing so, remains the greatest expeditionary fighting force the world has ever known.

For the Navy, *semper fortis*, always courageous. From the Marines, *semper fidelis*, always faithful. Thank you.