

## Commander, U.S. Pacific Fleet Armed Forces Communications & Electronics Association West 2014

San Diego Convention Center San Diego, California Admiral Harry B. Harris Jr. 11 February 2014 As prepared for delivery

Thank you, Kent, for that introduction...and for your continued leadership as President and Chief Executive Officer of AFCEA...I'd also like to thank Lt. General Wood, AFCEA's Executive Vice President of Defense.

Admiral Pete Daly...Pete, I appreciate all that you and your team have been doing to make this conference happen...as well as your continued leadership of the United States Naval Institute. Thank you for keeping the Navy intellectually curious and for daring to advance the professional, literary, and scientific understanding of sea power. From this life member, I appreciate everything you're doing.

Admiral Keating, Admiral Macke, Admiral Stavridis, General Allen, distinguished guests, ladies and gentlemen, it's great to be here in San Diego, a true Navy town.

It's great to be with you...industry leaders who are helping equip our military forces with the technology that gives us an edge in the battle environment. That's important work and I appreciate all that you do. Since I'm speaking to leaders who know technology, I thought this would be the right place to use this "wearable optical device" as my teleprompter.

This is a pretty cool device. For most of my career, it was only the jet jockeys who got a Heads Up Display...now even an old P-3 guy like me can have one, and I like it -- just don't wear this and drive!

For those who have read my bio, and haven't yet left the room, you know my career has centered around operations. Just a few years ago I was assigned as the deputy CNO for communication networks, "OPNAV N6," which made this analog throwback the Navy's top "computer guy." Talk about a fish out of water. So I had to get smart on all this IT and cyber stuff, and as a hands-on kind of guy, the best way to do that is to put it on and try it.

In my current job as the Commander of the Pacific Fleet, I must focus on fleet operations and fleet networks. So my time as N6... struggle though it was for me...in fact made me a better fleet commander. Certainly it's made Linda Newton's job a little more challenging.

As everyone here knows, in the Navy, we rely on cutting edge technology to get the job done and we're actively seeking it out. And we've got a big shopping list, we need platforms, weapons systems, cyber tools, hand held and...yes, even cool looking devices like this.

If it makes us better warfighters, we're interested...interested but skeptical...because not only do we need technology that allows us to do our jobs better, we need technology that is resilient and

reliable, whether we're ashore or at sea, and it's got to be secure and affordable. Wearable computers like this may only meet one or two of those requirements today. It's got to meet them all.

Today, I'm going to talk a bit about strategy, a bit about technology, and even a bit about what we need in the future from our partners in industry...that's a lot to squeeze into a speech ...but I'll give it a shot.

Our world is interconnected and interdependent in ways unimaginable only a generation ago. Today, not only does 90 percent of the world's commerce travel by sea, but 95 percent of all internet traffic travels under it.

Freedom of the seas is the minimum condition necessary for global trade to flourish. That applies to the United States...a true maritime nation and very much a Pacific nation...and that applies to every other country in the world, some perhaps more obvious than others...but all are affected by the seas.

Of course freedom of the seas requires security and stability in the maritime domain...and working closely with our Allies, partners and friends around the world, the United States Navy plays a significant role in providing that security and stability.

On the Pacific side of the planet, that responsibility falls to your United States Pacific Fleet...where we deploy the most technologically advanced combat-ready naval force in the world. We send it far from our nation's shores where our very presence can influence world events and deter any would-be aggressors...we do this to maintain peace and stability, uphold respect for international law, and ensure unimpeded lawful commerce, freedom of navigation, and overflight.

Today we have the edge on any-and-all would be aggressors out there, but we can't just sit back and rest on our laurels...times are a-changing as Bob Dylan might say...many nations are investing in new high tech platforms, weapons systems and cyber capabilities...and they're aggressively trying to close the gap on us.

Recently my boss, Admiral Sam Locklear, the PACOM commander, spoke to the Surface Navy Association about his concern with the lack of urgency we're seeing in the development of next-generation, surface-launch, over the horizon cruise missiles. He went on to challenge us to think on the offensive, to consider how are you going to show up...how are you going to be dominant...how are you going to be lethal...these are intellectually relevant questions that get at the heart of who we are as the Naval Institute.

Folks, this means our Navy's got to revolutionize our way of thinking, of investing, of acquiring new systems, of leveraging new technologies. We've got to make sure that our Navy has the fleet architecture and force structure that guarantees our ability to defeat all those would be adversaries...not just now, but years into the future. After all, if you want to see the Navy of 2020, just go to the waterfront here in San Diego. We've got to work to maintain the power necessary to sustain combat operations on, over, under and near the seas.

## (ADM. HARRIS STARTS READING FROM A TABLET)

And in our region of the world, where the Pacific Fleet is focused on those areas from Hollywood to Bollywood, from Polar Bears to Penguins, our nation also recognizes the region as having the greatest potential for continued economic growth. The Indo-Asia-Pacific will drive the world economy for the next century.

But there are risks in this region that we must contend with, where conflict or calamity on a regional scale can negatively affect the growth potential for the entire global economy.

Consider the full range of natural disasters that we know too well, earthquakes, tsunamis, volcanoes, typhoons. If Mother Nature can dish it out, it's on the menu here in the Pacific. In November, we responded to the devastation left in the wake of a super-typhoon that hit the Philippines. Friends help friends and we didn't hesitate. We rapidly provided humanitarian relief with a powerful naval force, led by Lt. General John Wissler, including the George Washington Carrier Strike Group, an Amphibious Ready Group, Ospreys, P-3s, specialized medical units, and a shallow water survey ship, just to mention a few of the many assets we sent.

Forward presence matters...it sure did in this case...we were able to help when they needed it most, because we were already there.

In addition to natural disasters, we contend with illegal fishing, piracy, drug and human trafficking and all types of trans-national criminal activity. USS KIDD just completed a long distance patrol through Oceania in conjunction with our Coast Guard. Presence matters.

Then we get into the big stuff, like North Korea trying to develop nuclear weapons, their ongoing efforts to operationalize a long range missile that can deliver them, and their attempts to sell powerful weapons systems and arms to other rogue states.

We see strife between nations over rocks and shoals all through the South China Sea and East China Sea. We've got developing nations vying for regional influence and infringing on the rights of other nations. We see interference with fishing and resource rights in other nation's exclusive economic zones; and maritime sovereignty claims that have no basis in...or relationship to...international law.

Our criticism of China's recent establishment of an Air Defense Identification Zone, or ADIZ, is less about it's right to do so, but rather how they did it in a unilateral attempt to change the status quo. I also have concerns regarding the aggressive growth of the Chinese military, their lack of transparency, and a pattern of increasingly assertive behavior in the East China Sea and South China Sea. This includes incremental efforts to assert control over the area within the so-called "nine dash line." They're doing this despite the objections of their neighbors, and, in my opinion, a lack of any explanation or basis under international law. You'll undoubtedly hear more about this during the upcoming panel discussion with Jim Fanell, provocateur for sure.

Attempts to change the status quo negatively affects regional stability, which leads to nations in the region buying or building the best weapons system they can afford, as a hedge against

potential conflict. There's both growing uncertainty in the region, and increasing tension. And we know this can lead to miscalculation.

For these reasons we stay focused on working with all of our Allies and partners throughout the Pacific, to ensure that we maintain security and stability in a peaceful and prosperous Asia.

This multilateral approach to doing business will be on display this summer, where we host RIMPAC 2014, the world's largest international maritime exercise. RIMPAC expands cooperation, improves safety, builds trust, and increases transparency between participating navies. This year will be the largest in the exercise's 43-year history, with armed forces from 23 nations, including for the first time, Brunei and China.

China's acceptance of our RIMPAC invitation is an important milestone. Despite aforementioned concerns, let me be clear:

We welcome the emergence of a prosperous and successful China as a positive contributor to Asian stability and member of the community of nations.

It is in the best interests of the U.S. and China that we manage friction and prevent misunderstanding at sea through sustained navy-to-navy communication, and practical cooperation on maritime challenges faced by all Pacific nations.

And that's what RIMPAC is all about...working with all participating nations in a multilateral way. Great nations understand the importance of working together peacefully to resolve international disputes through multilateral forums like the Association of Southeast Asian Nations (ASEAN).

The United States and our partners remain committed to fostering a rules-based system that respects international laws and adheres to well-established norms. That understanding is part of what makes great powers great.

The United States is, and will remain, a global power and a Pacific power. As America continues our whole of government strategic rebalance to the Pacific, our nation's military forces...all of them...will play an important role.

As the Commander of the Pacific Fleet, I know that our Navy must be in the vanguard of this effort. We're committed to leading America's rebalance to the Pacific...

(ADM. HARRIS GOES TO THE PODIUM AND STARTS READING FROM A PAPER COPY OF REMARKS)

...and so far we're moving out on that effort. By 2020, fully 60 percent of our Navy will be in the Pacific. Just consider what we are doing here right now.

We've just deployed the first P-8 Poseidons to the Pacific. Just a few weeks ago, I flew an eighthour mission on board a P-8 out of Okinawa and the aircrew put that aircraft through its paces. The P-8 is a super aircraft and a huge leap forward in capability. It brings to the table a huge

advantage in ASW, ISR and sensor integration, and in my opinion, the P-8 exceeds its key performance parameters by a wide margin. It's exactly what we need to fight tonight and I want as many as I can get.

It's a similar story for our new Littoral Combat Ships...where LCS-1, the San Diego-based USS FREEDOM, recently concluded a successful maiden deployment to the Western Pacific. In addition to FREEDOM making news by responding to the typhoon disaster in the Philippines, the Navy also publicly documented maintenance challenges she faced during this bold proof-of concept deployment. As with all new platforms, there are lessons to be learned at sea...that's just the nature of the business...and thanks to our great partners in industry, we're able to quickly address any problems... and we usually make huge advancements in improving the technology when we do.

The LCS program is moving forward. Right now, LCS-4 is on her way to San Diego where she'll be commissioned in April as the USS CORONADO...a very fitting name indeed.

And there are more ships coming. Just before arriving here today I visited the newly commissioned USNS JOHN GLENN, a new mobile landing platform that I hope rekindles excitement in Navy-Marine Corps "amphibiosity."

And how about that new the DDG-1000...have you seen a picture of that ship yet? If Batman had a ship, it would look like the ZUMWALT Destroyer. It's at the very cutting edge of technology, including advanced radar, hybrid-drive propulsion system and enormous firepower.

All of these new platforms are going to be game changers in the Pacific thanks in large part to the integrated capabilities they bring to the fight...the technological tools we've been developing, with many of you, our partners in industry...tools that sustain combat operations on, over, under, and near the seas.

Consider CANES, the Consolidated Afloat Network and Enterprise Services. It's the Navy's next-generation tactical afloat network which consolidates legacy networks into a single integrated platform with increased capability for defense and security.

It serves as the single cyber platform for more than 200 applications and connected systems, many of which can now be moved into a virtual environment. CANES will standardize our afloat network configuration, and I believe CANES will deliver improved capabilities and security, drive cost savings and reduce cycle times for maintenance, applications and modernization.

There's the Joint Information Environment, or JIE, that will provide out warfighters and mission partners with a shared IT infrastructure, and a common set of enterprise services, all under a single security architecture. It consists of networked operations centers...core data centers...and a global identity management system with cloud applications and services.

I'm also looking forward to the deployment of the Navy's first NIFC-CA capable Strike Group. That's the Navy Integrated Fire Control-Counter Air System of Systems...how's that for a mouthful? It's delivering requirements for deploying a robust capability to achieve

engagements in a contested environment over the horizon, both over land and water. The THEODORE ROOSEVELT Carrier Strike Group will be the first to deploy with NIFC-CA, and I am excited about TR being stationed here in San Diego next year.

Some of our greatest gains in technology are in our ability to use and exploit the Electromagnetic Spectrum... the term of art is EMMW, Electromagnetic Maneuver Warfare.

Today, we are employing new tools, such as the Surface Electronic Warfare Improvement Program (SEWIP) and Ship's Signal Exploitation Equipment (SSEE) to protect, manage, and manipulate the EM spectrum. We're able to adapt to congested and contested EM environments and leverage the full EM spectrum using this cutting edge technology to establish and maintain dominance.

We're also offering a degree in acronyms if you're interested.

We're working closely with our fellow service components to develop and exploit new concepts like Air-Sea Battle. With our military coming out of more than a decade of war, that's a lot of combat experience to leverage...combine that with the innovative technologies you are providing and we're now able to develop entirely new tactics, techniques and procedures that will enable us to fight and win the conflicts of tomorrow.

For the Navy, we are using Air Force tools and assets to deliver long-range targeting data to our front line ships, aircraft and submarines, and it's yielding some very promising results. Our Navy will also be assisting Air Force units to deliver enhanced long-range strike capability.

In the future, our ability to leverage dual-programmed Air Force and Navy technology will be vital...increasing Department of Defense integration beyond anything seen in the past...and doing business in a cost-effective way.

But we're looking to you to help us improve in areas where we're vulnerable. With the proliferation of cyber-capabilities and increased cyber-attacks on our military and business organizations by hacktivists, i-guerrillas, state and non-state sponsored organizations and so on, we recognize the imperative to focus on safeguarding critical information at all times, and that includes our unclassified information...yours too.

We must also focus on maintaining an integrated approach to C2 during conflict. We recognize the importance of assuring our own C2 in a contested environment...it is central to how we control the battle space at the operational level of war.

Arleigh Burke once famously said that the difference between a good commander and an excellent one is 10 seconds. In the 21st Century, the difference between victory and defeat could be determined in nanoseconds.

This requires us to deliver assured decision superiority...that is, fusing knowledge, information, intelligence, data, and orders to the warfighter and back, virtually, instantaneously, and securely, while conducting missions across the spectrum...from humanitarian aid and disaster relief all the

way to the high-end warfight...against all potential enemies. In the future, all that's got to be done in a fiscally-constrained environment.

We simply can't afford to invest in every IT innovation that industry has to offer and I told you some of the basic requirements...they've got to be resilient, reliable, secure and affordable...and this won't change in the near future. We've got to remain ahead of our challengers and be ready to flexibly respond on a cycle "well inside" the POM.

Now I'm sure you all know Moore's law, that computing power doubles nearly every two years...this is different than Harry's Law, where the size of my email queue doubles every day I'm away from work.

It is a cliché to say that continuous change is the fundamental constant in our work. But it's true. In a world governed by Moore's Law, change is a two-edged sword: if we are bold, innovative and creative, we can stay ahead of our rivals. But, if we're timid, if we're stale in our thinking, if we seek evolutionary change instead of revolutionary change, then our adversaries can and will turn Moore's Law to their advantage. Remember, our adversaries are unconstrained by law, regulation or policy.

Speaking of the law, I'm reminded of the story of a man who shot a long-winded speaker. Afterwards, he went to the sheriff's office and confessed. "I just killed a keynote speaker."

The sheriff replied, "Son, you're in the wrong place...you pick up your bounty money at the courthouse."

Now for all of you thinking about collecting that reward money, let me leave you with this thought.

I started this speech with a wearable optical device, then went to a tablet, then a paper copy. What is this all about, really? It's about creativity, redundancy and resilience.

Because all of our systems might fail...and all that stands between our nation and tyranny and oppression is the individual Sailor, Soldier, Airman, Marine and Coastguardsman.

I think it's a fair fight.

No one innovates better, improvises better, than the American Sailor. That's because of the synergy that exists between America's sons and daughters who wear the cloth of the Nation...and the people and industries that give them the best equipment to get the job done...and organizations like AFCEA and the Naval Institute that supports and advocates for us.

I thank you for all you're doing to ensure our military remains ready to fight tonight...and win. May God bless the men and women who serve and may God bless the United States of America.