

The Pointy End of the Spear

“We must never forget that the men and women in uniform who we serve are, and will always remain the highest and best technological and transformational marvel any of us can ever envision.”

By Susan Morrissey Livingstone
Former Under Secretary of the Navy

Ms. Livingstone stepped down as Under Secretary Feb. 27, 2003. Excerpts from Ms. Livingstone's address at AFCEA West were taken for this article.

I'd like to share some thoughts on three topics: the first is on the importance of people in this era of transformational change, then a bit on the Naval vision of the future ... and finally, I would like to address Naval space (and by that I do not mean Pentagon office space, but rather the space that occurs “up there”).

First and most appropriately, let's talk about people, our men and women in uniform and their critical importance to transformational change. You have heard so many times that “our people are our most important asset.” But let's put that in further perspective: our Soldiers, Sailors, Marines and Airmen are our **only** asset ... for without them, their training, and their motivation, and (what one Army general called) their “situational curiosity,” even the highest tech platform or capability has no value. It is critically important as we move forward through this new century and this information age ... that we understand and never forget that.

We talk about future capabilities, future platforms, future technologies and what it will take to move “from change to transformation.” But as important as planning is never forget that what we provide ... how and when we provide it ... how we propose to use it, sustain it, and maintain it ... how we envision its place in the theory of war or in operational concepts ... and how we cost it ... are for one and sole purpose — and that is to protect, help, and defend our men and women in uniform ... as they protect, help, and defend us. We must never forget that each of our decisions in each of these areas will significantly impact our men and women in uniform in very personal, fundamental and enduring ways.

We also must never forget that the men and women in uniform who we serve are, and will always remain the highest and

best technological and transformational marvel any of us can ever envision. Our warfighters — our 19 year-olds doing flight ops on carrier decks on the most dangerous territory on earth ... pilots fighting the physical limitations of the human body ... ground troops facing dangers no technology can ever address — are not mere users of systems — they are the system ... indeed they are the mother of all systems. We need to understand and never forget that.

We must also never forget that while new technological capabilities are great, in the endgame, they are just tools and gadgets to those who must employ them, and should never be allowed to assume any more lofty position than just that. Unless our warfighters can use these tools in a user-friendly way and in a way that makes a true difference for them — such tools and gadgets are nothing more than burdens and are meaningless.

Finally, we must never forget that war is nasty, brutish, and remains in many areas of warfare still very basic. As we think of grand new technologies, our Seabees today still work with 1950s equipment ... friendly fire is still an issue for our ground troops ... pilots face the reality of their human brain and their human body confronting the limitless boundary of technology ... logisticians still fight for respect and resources with just-in-time and total asset visibility not yet a reality — and C4ISR (even with the wonders of today's technology) is still limited and undercut by organization, bureaucracy, and computer bleeps and blips — and can suffer from information overload.

Most of us are involved in the business of war rather than the warfighting — the tip of the spear. We know our military services are challenged and stressed as never be-



fore and are called upon to be ready for virtually anything. They can be called upon to fight conflicts ranging from major theater wars to a global war against terrorism—to battling fanatics in caves. They face a spectrum of threats from weapons of mass destruction to the individual shoe bomber. They have volunteered to perform the most dangerous and most difficult missions that have ever been required of mankind ... for the most important values ever envisioned by mankind ... our shared human values of peace and freedom. And they do so with a courage, dedication, and professionalism that is humbling.

Most of us will not serve directly on the battlefield with these incredible young men and women. But each of us whether we work in the defense industry or as military or civilian personnel working on the business end of the pointy spear are all — still in the war fight.

For we serve as the business warriors for our fighting warriors and our job as their business warriors is to ensure that every dollar we spend and everything we do for our warfighters reflects their needs, the realities they face at the lowest tactical levels, and fulfills their expectations. We owe them nothing less ... and they deserve nothing less.

Since the first shot was fired by Naval forces in Operation Enduring Freedom (OEF), we have been justifiably proud of the enormous capabilities demonstrated by our sensors, radars, missiles, command and control, aviation, sea, and ground assets. But it is also useful to pause and put this justifiable pride in perspective in view of some very basic daily realities faced by our young Soldiers, Sailors, Marines, and Air-



Cmdr. Kevin Bedell, SPAWAR OT (right) briefs the Under Secretary of the Navy Susan Morrisey Livingstone at AFCEA West 2003.

men in the fight today. Let me give you just two examples ... because it is realities such as these that we also must address as we pursue technology and transformation.

Example 1. While we in the Pentagon and those in the Defense press tend to focus on the incredible technological successes of Operation Enduring Freedom, and there are successes, particularly in terms of comparison to Desert Storm (12 years ago) ... successes in terms of targeting, reach, precision, persistence, and interoperability, but in the early days of OEF, the Marines faced a very different basic reality.

Recall Camp Rhino, an expeditionary dirt airstrip where massive dust clouds made every take off and landing a crash waiting to happen. Of course, we had the technology of matting, but we couldn't get the matting to the Marines because of insufficient airlift. A long three weeks later, another potential technology solution in terms of a dust palliative arrived — elegantly called gorilla snot or rhino snot. But rhino snot took water to work and there wasn't enough. So we had to fly in water ... just good old basic water.

High-tech problem? No. Real problem? Yes. Lessons learned: don't forget the basics ... sweat the small stuff as wars may be won or lost on realities such as this ... and people (not technology) made the difference in success.

Example 2. There is a fundamental reality all must face and what those in uniform face every day ... and that is however wondrous and clever we may be in terms of technological innovation, a large number of our men and women in uniform will never experience it.

Take the example of the carrier Constellation now fighting for us in the Persian Gulf. The "Connie" started life in 1961. Perhaps this will be her last fight. As she fights and as we look to the wonders of future platforms, Lt. j.g. Ortega, born decades after the Connie was commissioned, lights her boilers with a \$9 Zippo lighter. Without that Zippo lighter (and it has to be a Zippo or a wick because butane would explode in the hellish heat), the Connie doesn't move, doesn't have water to drink, and doesn't launch aircraft.

Lessons learned: Technology is great ... transformational platforms are great ... but only if you have them. The simple fact is that we will never have all our Soldiers, Sailors, Marines and Airmen in the same technological loop at the same time. In one carrier battle group alone, Sailors and Marines will be working with widely differing capabilities separated by decades of technologies. To add

to this difficulty and complexity, think of the technological and capabilities gaps that exist with our valued allied and coalition partners. This is a very real and human challenge faced by our men and women in uniform every day and by the more than 90 other countries that have joined us in the war against terrorism. The challenge is how can we maximize the sum of the parts when our men and women in uniform will never all fight with even odds and even capabilities.

There are many more such examples, but these two underscore that the hard task of the 21st century will not be to just find wondrous new technologies and capabilities that enhance our ability to fight and win. Perhaps that's the relatively easy part. Rather the real challenge will be to keep those technologies and capabilities in human perspective and people centric — and this is where transformation comes in.

Transformation is far, far more than technology. Transformation is not just gaining new advantages but how we use them, how we link them all together ... and how we sustain them. As Art Cebrowski keeps trying to tell us in the hope that it will eventually take, true transformation entails the co-evolution of technology, organizations and concepts. Occasionally, that co-evolution of technology, organizations and concepts can lead to such a breakthrough as to produce an emerging new theory of war — that is the difference between mere change and transformation.

Change is just a different way ... albeit hopefully a more efficient and effective way ... to do something. Transformation, on the other hand, is taking that change and adding the human factor of concepts to maximize its power, changing human organizations to maximize its use and rising above the "hardening of the categories" of our own brains to think in wholly new ways.

To move from change to transformation and to sustain that transformation requires one critical ingredient ... and that is very, very smart people. To ensure that we have very, very smart people, we need to value and grow courageous, beyond-the-box thinkers and bold and innovative leaders. We need to keep them on their jobs long enough so they learn them and can make a difference.

We need to value and grow people who have the vision to jointly connect technology, organizational change, process change, and changes in training and operational concepts, and have the ability to continually make the numerous, small (but critical) steps that sustain the environment for transformation. (As current examples, think of Task Force Excel, or the standardization and integration of the Fleets, or the current Sea Trial experimentation with crewing or with UUVs for minehunting.)

We also need to value and grow people able to go even further ... people who can explore and expand the boundaries of doctrine, systems and science, and the way we do business to produce those medium steps that are the beginning of something bigger. (The Navy-Marine Corps TACAIR integration is an example of this.)

We also need to grow and value people who are also able to achieve and recognize such major shifts in capabilities, organizations and concepts that when they actually occur, we actually redefine the entire theory of the war fight. (An historical example is the Naval work that led to the Global Positioning System. Future examples are network-centric warfare or perhaps Directed Energy Weapons.)

Finally, we need to value and grow leaders who can see the needs of our warfighters and meet their expectations whether their platforms are the latest and greatest or the oldest of the legacies ... and whether their job is the complexity of countering mobile missiles or suicide swarms ... or simply hauling water to Camp Rhino to meet a critical mission requirement.

That brings me to my second topic: Naval Power 21 ... the people centric vision of the Naval services for the 21st century. I will be brief as you can read all about Sea Power 21 [in the Winter 2003 issue of CHIPS at www.chips.navy.mil/archives/03_Winter/Winter2003WithTags.pdf], if you haven't already done so.

What I want to emphasize about Naval Power 21 is that this vision has as its foundation one of the most important people centric transformations taking place today in the evolution of the most incredible fighting force partnership ever formed ... the partnership of the Navy and Marine Corps.

The evolution of this powerful partnership has been 227 years in the making. I suggest to you that the partnership of the Naval forces ... in this year and at this time ... is reaching a profound, historic, and absolutely transformational level. What we are seeing today in the integration of the fighting, doctrinal, and organizational capabilities of our Naval forces is — history in the making.

I would be remiss if I did not recognize the terrific leadership of CNO, Adm. Vern Clark and CMC, Gen. Jim Jones [former Commandant of the Marine Corps] ... who never saw a rice bowl that was not worth examining and who had the vision to think new thoughts and the courage to break a few bowls.

Due to their leadership and that of [former] Secretary of the Navy Gordon England, for the first time ever, there is a joint Naval vision (Naval Power 21, which is a marriage of Sea Power 21 and Marine Corps Strategy 21). For the first time ever, there is a joint transformational roadmap ... for the first time ever, there is a joint Naval operational concept in development. Navy and Marine Corps tactical aviation is being integrated ... Amphibious Ready Groups/Marine Expeditionary Units (ARG/MEUs) are being enhanced into new expeditionary strike groups (an enormous cultural change as “amphibious” goes out and “expeditionary” comes in). Also for the first time ever a Marine is a carrier air group commander and a Marine is Commandant of Midshipmen at the Naval Academy. For the first time ever, all of the requirements and combat capabilities that form the transformation roadmap for the Naval forces of the future ... to include ForceNet that underpins the concepts of Sea Basing, Sea Strike, and Sea Shield ... are being developed in total Marine Corps and Navy partnership.

The critical enabler of this Naval vision and partnership is ForceNet, the Navy-Marine Corps term for netted shore, sea, peacetime and joint warfare operations. But just as ForceNet is the critical enabler for Naval Power 21, space is the critical enabler for ForceNet ... and for the Naval Services transformation to the network-centric operations of the future.

And that brings me to the third and final topic — space and the Naval services. As the largest and most dependent of the Services on space, the Naval Services have a long and proud history in space. Historically, from the first Sailor who looked to the stars for navigation, Naval space engineers, acquisition specialists, and

operators have been in the forefront of making space operationally relevant. Since the early 1980s the Naval Postgraduate School has had a record of excellence producing space-smart graduates for all the Services. The Naval Services built and operated the world's first ELINT satellite — the first space-based navigation system, and also developed the technology that underlies today's Global Positioning System.

But for some reason (and that reason is usually resources and the loss of champions), as the Naval Services enter the 21st century, we have lessened our leadership role in space. The recommendation of the Space Commission to make the Air Force Executive Agent for National Security Space further caused some to speculate whether the Naval forces should now just be relegated to “user” or “customer” status, and no longer play a strong leadership and partnership role in space development. In recent Naval POM exercises, space has been treated more like a platform, rather than a critical warfare enabler for the Naval Services, competing unfavorably with new ships, planes, and other science and technology (S&T) and research and development (R&D) priorities.

I commissioned a panel to review the role of Naval space under the chairmanship of retired Adm. Bill Smith. The panel's report came out last year and strongly recommended reinvigorating the Naval Services' leadership role in both designing and delivering space capabilities to the combat force, revitalizing and strengthening development, and articulating Naval space requirements.

Since then we have made some progress. NETWARCOM has been stood up under the leadership of Vice Adm. Dick Mayo, who also leads Naval Network and Space Operations Command. A new Naval space policy, updating the 1993 version, is in the works re-emphasizing that space be integrated into all Naval operations from the strategic to the lowest tactical level. Rear Adm. Tom Zelibor and Marine Maj. Gen. Kevin Kuklock are the centralized leads for Naval space in the Pentagon. The CNO has reinforced that we must sustain a strong cadre of trained Naval space personnel and a strong Naval space acquisition base. We are working to staff positions across the board at the National Security Space Architect organization (NSSA) and at the National Reconnaissance Office (NRO).

But we still have a way to go before the Naval Services fully step up to a full partnership in National Security Space and leverage, resource, and regain the talent, position and expertise which brought the successes of the past. In my mind, we really have no choice. For Naval transformation will not succeed without space and we cannot expect to just throw our requirements over the transom and expect to get the capabilities we need 8 or 10 years later. Space is the penultimate enabler of joint operations, and if we don't play heavily, our joint warfighting contributions and potentials could very well become marginalized.

In closing, I want to thank you for recognizing how key our young Americans in uniform are to the transformation of the future ... for when all is said and done, they are the ones ... as President Bush has said ... who write history with the “bold strokes of their courage.” And thank you for your selfless service and sacrifice, and for your enduring patriotism.

Editor's Note: As we go to press, the Honorable Hansford T. Johnson is Acting Secretary of the Navy and the Office of the Under Secretary of the Navy is vacant. □