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Executive Summary

A renewed focus on innovation is imperative if the Navy is to adapt to a rapidly changing operational environment in an era of declining resources. To leverage the unique contributions of our junior officers and enlisted, Navy Warfare Development Command (NWDC) hosted the Junior Leader Innovation Symposium (JLIS) on Wednesday, June 6th, 2012.

The objectives for JLIS were to:

1. Educate junior leaders on the importance of innovation
2. Deputize junior leaders to contribute new ideas
3. Explore new ways to organize, connect, and proliferate open discussion venues
4. Harvest recommendations on key issues confronting the Navy
5. Employ the creative energy of junior leaders to tackle emerging challenges

The JLIS met all event objectives and exceeded participation expectations. Over 230 junior leaders attended in person, and an additional 218 nodes logged into DCO (some with multiple participants). The event exposed participants to various venues for socializing and developing ideas including NWDC programs, U.S. Naval Institute (USNI) publications and website, the Office of Naval Research (ONR) innovation program, and use of social media including blogs such as Disruptive Thinkers, Sailor Bob, and others.

Three key themes emerged during the symposium:

- Obstacles to Innovation and how to overcome them
- Characteristics of the Millennial Generation with regards to innovation
- Whether Warfighting is Really the Priority

Based on symposium recommendations NWDC will take the following actions:

- Publish and distribute the Innovator’s Guide
- Enhance the unclassified NWDC Center for Innovation portal, and add a classified innovation portal capability
- Expand network of innovators through outreach events to the Fleet.
- Plan follow-on events
- Implement Midshipman internship program at NWDC

Additional recommendations garnered during the symposium, but beyond NWDC’s authority include:

- Energize broad top-down advocacy for innovation
- Leverage private sector technology and processes.
- Expand public communications campaign on innovation processes and outcomes
- Demonstrate Navy-wide resolve to remove obstacles to innovation
Introduction and Background

A renewed focus on innovation is imperative if the Navy is to adapt to a rapidly changing operational environment in an era of declining resources. The CNO's *Sailing Directions* task the Navy to use new technologies and operating concepts to sharpen our warfighting advantage and evolve to remain the preeminent maritime force. In support of this guidance, NWDC's ongoing "Innovation Series 2012" is designed to instill a culture of innovation throughout the Fleet. Junior leaders are integral to this campaign because of their creative energy, and because they represent our long term intellectual investment.

To leverage the unique contributions of our junior officers and enlisted, Navy Warfare Development Command (NWDC) hosted the second major event in the "Innovation Series 2012" campaign – a Junior Leader Innovation Symposium (JLIS) – on Wednesday, June 6th, 2012. The JLIS theme was *Engaging and Empowering our Junior Leaders to Reinvigorate our Culture of Innovation.*

The Innovation Series is designed to help the Fleet regain the innovation advantage and to reawaken our creative DNA. The Junior Leader Innovation Symposium is specifically aimed at leveraging the energy and fresh, unconstrained perspectives of our E5 through O4 personnel.

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An additional objective was to collect feedback on NWDC's draft *Innovator's Guide.*

The JLIS agenda assembled a line-up of speakers from senior and junior Navy leadership and DoD innovation programs to engage and inspire participants. Speakers representing the junior officer, enlisted, naval leadership and academic communities included:

- Commander, Submarine Forces (SUBFOR)
- Innovation Fellow, Office of Naval Research (ONR)
- Distinguished Professor, Naval Post Graduate School (NPS)
- Junior officer authors and bloggers, and
- Two Sailors of the Year

The event included a working panel discussion session to address specific issues facing the Navy.
UNCLASSIFIED

JLIS also broke new ground as the proof of concept for a large scale physical/virtual hybrid event, with real-time interactive discussion. Hampton Roads area participants were invited to attend in person. Junior leaders across the Navy also joined the event virtually through Defense Connect Online (DCO). Video and audio of the proceedings were broadcast over DCO, and one of the speakers delivered his presentation remotely. Questions were taken from both the on-site and DCO participants. A robust discussion was sustained throughout the event on DCO chat. The speakers’ presentations and a copy of the chat comments from DCO are posted on the JLIS event portal at: https://www.nwdc.navy.mil/ncoi/jlis/default.aspx. Names have been removed from the DCO chat in order to protect the anonymity of the individuals providing the comments.

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The JLIS met all event objectives and exceeded participation expectations. The junior leaders were excited, energetic, engaged and enjoyed the opportunity. Over 230 junior leaders attended in person, and an additional 218 nodes logged into DCO (some with multiple participants). Over 100 organizations were represented from CONUS, Japan, and Bahrain. The event exposed participants to various venues for socializing and developing ideas including NWDC programs, U.S. Naval Institute (USNI) publications and website, the ONR innovation program, and use of social media including blogs such Disruptive Thinkers, Sailor Bob, and others.
Panel Discussion Working Session

In addition to speaker presentations followed by questions and discussion, JLIS included a working session to fully engage all participants. During the panel session, JLIS participants split into four breakout groups within the NWDC spaces, with the DCO participants forming a fifth working group. Each physical group was led by one of the junior leader panelist. The groups were asked to address the following three questions:

- How can Navy better capture and act on innovative ideas? Consider incentives, education, organizational climate, and culture.
- How should unmanned systems be employed 5 years from now?
- What are the key operational questions Navy needs to answer in the next 5-10 years? What resources does Navy need to answer these questions?

After developing responses to each of the questions, the designated working group lead briefed the participants on their group’s output. Discussion of the working group out briefs was moderated by Naval War College professor Tom Culora. The working group discussions are reflected in the event observations summarized in the following section. Working group out brief slides are posted on the JLIS event portal at:

Observations

NWDC analysts monitored participant discussions throughout the day and reviewed DCO comments (over 2900 were collected) as well as outputs from the panel discussion/working groups. We distilled key themes that emerged during the course of the symposium. Recommendations based on these themes conclude this after action report.

1. Obstacles to Innovation

Junior leaders felt there are significant obstacles to innovation in the Naval services. Obstacles to innovation identified by symposium participants include:

- Unreceptive chain of command (culture not conducive to innovation)
- Means to socialize and develop ideas are not well understood
- Perseverance/grit and working outside the system are required for idea adoption
- Adoption of junior leader ideas requires a senior advocate
- Junior leader lack time to discuss warfighting tactics, improved processes, etc.

Junior leaders are frustrated by their perceived lack of outlets for innovation development, senior advocates for implementation, and time to develop ideas, concepts and tactics to move the Navy forward. Some felt that senior leadership’s desire to not "let go" or lose control stifles innovation, while others felt implementation was the biggest stumbling block. Indeed, one of the JLIS speakers emphasized that it is not enough to simply generate new ideas, but rather that implementation is key; 10 percent is idea generation and 90 percent is moving an idea forward.

One lieutenant said, “The tough thing about innovation is that it is not enough to “talk” about it. A short while ago I worked in the very Strategy and Policy directorate that VADM Richardson used to be in charge of. It was a great, forward leaning organization that had a number of great ideas. The problem was always implementation. I was happy to see the advances recently made in streamlining processes … but I don’t think that goes far enough. We need to codify processes that allow for rapid evaluation and adoption. Perhaps a stronger link between NWDC and NPS/NWC is in order. Together they can explore disruptive technologies and then work to quickly develop the evaluation and adoption strategies for bringing them on board.”

Another symposium participant stated, “Our sailors have amazing ideas, but the lack of easy outlets for those ideas [prevents implementation].” One of the key discoveries for NWDC is that many junior personnel do not know about the significant resources that exist for forwarding ideas, including programs at ONR, NWDC’s Center for Innovation
website and idea harvesting program, the Navy Doctrine Library System (NDLS), and the Navy Lessons Learned Information System (NLLIS).

2. Reaching the Millennial Generation

The Millennial Generation is defined as those Americans born after 1980. Millennials are described as confident, connected and open to change.\(^1\) This generation’s embrace and utilization of technology is one of its distinguishing characteristics. Additionally, Millennials are thought of as team players and being achievement oriented. Many of the Navy’s junior officers and enlisted personnel fall into this generational demographic.

Based on DCO comments, it was evident that junior leaders want to contribute, but they are skeptical that anyone is listening to them.

One lieutenant suggested including “junior sailors … in the feedback loops on new systems and products. One of the most frustrating things [is] to learn a new system that isn’t intuitive or doesn’t fix any of the old operational issues.”

Symposium participants also recommended streamlining the innovation feedback loop between the Fleet and senior decision-makers. Participants suggested more employment of “horizontal” organizational structures, utilizing a junior enlisted board of advisors, crowd sourcing for solutions, and a greater embrace of social media/alternate communication pathways in order to foster innovation.

Despite their embrace of technology, participants were mindful of the potential impacts of greater utilization of technology-based solutions for operational and information security, bandwidth requirements or even as a band-aid for or panacea for more basic institutional challenges. Junior leaders want technology to make their lives easier, but feel that the Navy’s technology is making things harder than they have to be.

Symposium participants wanted technology that was appropriate and intuitive. During the DCO chat many participants expressed frustration with overlapping and redundant systems that were difficult to use.

“Until we find better ways to implement technology/innovation, people will be skeptical because they remember implementation of Defense Readiness Reporting System-Navy (DRRS-N), TORIS/TFOM/online databases, etc.,” said one participant.

Other sailors echoed the need for balancing technology with low-tech practices.

As one Sailor put it, “Just as we shouldn’t adopt new technology just for the sake of adopting it, we shouldn’t automatically resist technology simply because it is different/new.”

\(^1\) The Pew Research Center, *Millenials: A Portrait of Generation Next*, February 2010
“There has to be a balance in our innovative ideas,” another participant posted on DCO. “We want to transit to a more technologically advanced Navy, but we are heading towards a greater risk for predator attacks. We are not allowed to bring a camera device into a security room because it poses a risk, yet we want to transit to iPads, tablets, glass walls, etc. which carry the same technology as the camera/cell phone and pose the same risk.”

3. Is Warfighting Really the Priority?

Junior leaders have a strong perception that there is no time to “talk tactics.” Using innovative technology and processes to reduce administrative “overhead” was a major theme of the DCO chat and the panel/working group discussions. Participants felt that the ability and opportunity to improve warfighting effectiveness and tactics is being smothered by admin requirements.

Sailors felt that tactics development in the Fleet has dropped off in recent years for a number of reasons. As one junior officer put it, “Innovation is stifled by my sailors being occupied by endless hours of tedious tasks (3M, training reports).”

Another symposium participant added, “There is still tactics experimentation going on, just not necessarily in the Fleet. Working outside of (published NATOPs or TTPs) with experimentation can open the command … to trouble. Also, when in my fleet squadron, we didn’t have time to experiment. All of our hours were dedicated to training the new guys for deployment.”

Frustration with overlapping and/or redundant programs, processes and resources lead some participants to suggest a single directory of all Navy websites and portals. There were repeated calls for single point of information dissemination – a meta site to replace too many URLs and different sites that cause information overload and leave no time to process, learn, and understand.

“I … feel that the maze of Navy websites is time consuming and inefficient,” stated one participant.

An enlisted sailor added, “From what I understand, NKO was supposed to be the centralized Navy website that would eliminate having to sign in to all our others (ESAMS, NFAAS, BUPERS, NSIPS, and FLTMPS). If the site was easier to manage and little more organized, people would be able to learn what they need to learn and find what they need to find. The reason people aren’t looking up information isn’t entirely due to laziness, but partially because of a system that’s impossible to teach subordinates how to use.”
One solution to information overload that was repeatedly suggested was a “digital seabag” that could be tailored to sailors’ individual needs and hosted on a smartphone/iPad-like device. One participant recommended that a digital seabag contain: Sacred texts and great literature (via eBooks/audio books/bookmarks/favorites); Professional/rate training sources; Selected family photos and memories; a journal/planner/calendar; Commonly used forms in the course of work; Motivating PT music and videos; Language modules for cultural preparation of current mission, next mission, or for personal development; and a webcam/equipment to video chat with family on port calls. Others recommended more tactical and operational content such as maps, navigation aids and system maintenance information that could be easily updated on regularly scheduled basis.

There was also significant discussion in DCO and in some of the working group briefings of the personnel management system. In particular, there were strong comments that the Enlisted Retention Board (ERB) and Perform to Serve (PTS) programs are not meeting their goal or retaining the best quality sailors while meeting Navy end-strength targets. There was strong distrust of the PTS decision making process, with several participants stating that exemplary sailors have been separated while average or worse performers were retained.

A participant wrote that “PTS is crippling the Seabee workforce - we depend on our experienced folks, and they are the ones getting the axe!” A second sailor replied that the same is true of the air maintenance workforce.

Several participants and one of the panel session breakout groups recommended that unit commanding officers have greater input into retention decisions. One sailor commented that PTS decisions “should be at the command level; or at least give the CO more authorities as pertain to PTS instead of having big Navy (Machine) doing most of the work.” An alternative idea proposed was to give unit CO’s a PTS waiver that could be used to retain an outstanding sailor.

The personnel system was also extensively discussed on DCO chat. The personnel system was singled out for being difficult, inefficient, and a huge consumer of sailors’ time. In addition, participants felt that current requirements for PRT/PFA/PT do not mesh with the current OPTEMPO/shipboard requirements.
Road Ahead and Recommendations

Based on information garnered during the Junior Leader Innovation Symposium, NWDC was tasked to accomplish the following:

- Deliver an after action report (AAR) to CUSFF/CPF and post on the NWDC website
- Publish and distribute the Innovator’s Guide
- Enhance the NWDC Center for Innovation portal (https://www.nwdc.navy.mil/ncoi/default.aspx) and develop a classified innovation portal
  - Continue harvest of ideas with prompt feedback to submitters
  - Expand awareness and use of innovation tools
  - Develop a classified discussion capability
- Expand network of innovators
- Plan follow-on events
  - Host Pacific Rim Innovation Symposium (early Fall 2012)
  - Senior Leader Innovation Symposium (late Fall 2012)
  - Crowd-sourcing event(s) ICW ONR
  - Continue Innovation Speaker Series
- Implement Midshipman internship program at NWDC

NWDC can support innovation and broker the socialization and development of new ideas. The Center for Innovation website is a primary tool to connect to junior leaders across the Fleet. NWDC has already received several ideas nominated through a link at the Center for Innovation webpage. One suggestion has already been submitted as a potential FY13 Fleet CONOPS (VBSS Team Organization), while another Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) Standardization is being considered for the Navy Concept Generation/Concept Development (CGCD) program. Other ideas continue to be received on a regular basis.

NWDC will expand the functionality and content of the unclassified innovation portal, field a SIPRNET counterpart site, and expand the strategic communications effort to ensure that potential innovators are aware of this and other relevant resources. Participants noted that there are numerous discussion and blog sites available to debate new ideas on the internet, but there is no comparable discussion forum on the SIPRNET.

With regard to future events, junior leaders can add value if involved in the planning process for innovation-related events. We recommend that junior leader speakers from this symposium address the senior leader innovation symposium.

NWDC will endeavor to utilize junior leader recommended techniques such as crowd-sourcing to collect ideas based on the success of ONR, which hosts the Massive
Multiplayer Online Wargame Leveraging the Internet (MMOWGLI) to leverage crowdsourcing. LT Benjamin Kohlmann, founder of the “Disruptive Innovation” blog, introduced the idea of a “hack-a-thon” as a tool for military innovation. In the computer industry, a hack-a-thon is a weekend meeting of programmers from different specialties to focus in developing a software solution to a specific problem. In the military context, a group of junior leaders and subject matter experts can be brought together, virtually or in person for a short/focused working session, to address a given issue, such as the personnel system (a hotly debated topic during the JLIS on both DCO and during the panel discussion). NWDC is pursuing hosting a “hack-a-thon” like event focused on one of the issues identified at the JLIS. Considering that symposium participants were considerably more comfortable with and engaged over DCO than in person, we could hold a “chat-a-thon” virtually in the near term and at low cost. Additionally, several communities expressed their desire to conduct offsite, community-focused innovation events, which NWDC could facilitate.

In addition to the above actions, several recommendations developed during JLIS require a broader, institutional approach. Solutions to these issues exceed NWDC’s scope/authority. Recommendations include:

- Energize broad top-down advocacy for innovation
  - Identify Senior Advocate for Innovation
  - Conduct innovation outreach events directly to the Fleet
  - Engage with education and training commands which are fertile ground to introduce JLs to methods and processes of innovation
- VADM Richardson: private sector is leading the military in innovation; we need to be fast followers
  - Leverage private sector technology and processes
  - Build relationship with industry leaders, invite to next Innovation event
- Expand communications campaign on innovation through publications and blogs
- Demonstrate resolve to remove obstacles
  - Schedule follow on JLIS events
  - Include JLs in planning upcoming events
  - Formalize tracking & feedback process for JL idea submissions

Information specific to JLIS, including videos of the speakers and their presentations, DCO chat comments, and read aheads are posted on the JLIS event portal at: https://www.nwdc.navy.mil/ncoi/jlis/default.aspx. Other innovation information not directly tied the JLIS event is posted on or linked from the main Navy Center for Innovation web portal site (https://www.nwdc.navy.mil/ncoi/default.aspx).