The Program Executive Office for Enterprise Information Systems (PEO EIS) isn’t exactly a household name with the average Navy Sailor, civilian and contractor, but they are all positively impacted by PEO EIS’s work on a daily basis. Without PEO EIS, the Department of the Navy’s (DON) business functions and day-to-day activities would grind to a halt.

For example, most people do not know that PEO EIS:

- Enables Navy users to log onto more than 300,000 Navy Marine Corps Intranet (NMCI) workstations each day to check and send more than 4.5 million emails and transfer more than 20 terabytes of data over the network daily
- Purchases enterprise software licenses, such as productivity suites, at a lower cost to the DON
- Deploys systems — software and hardware — on 150 ships and 75 submarines and in use in eight countries
- Provides the most extensive eLearning system in the Department of Defense with more than 4.5 million courses completed annually
- Operates financial systems that manage more than half of the Navy’s total budget utilizing the Navy Enterprise Resource Planning (ERP) software solution
- Provides pay and personnel support for all active duty and reserve Sailors
- Consolidates Navy’s data centers
- Facilitates the Navy’s push to the commercial cloud

So what is PEO EIS? Established in 2006, PEO EIS is the DON’s enterprise-wide information technology (IT) and business systems acquisition lead. The IT systems enable common business processes and provide standard IT capabilities to Sailors, Marines, civilians and their support systems. PEO EIS acquires and provides life cycle management of more than 40 enterprise systems, software applications and projects that are used by more than 1 million users. PEO EIS provides the DON with capable, secure, and timely IT solutions that maximize value to warfighters by balancing cost with the capability delivered to end users. PEO EIS’ mission is to lead the DON as the premier provider of enterprise IT solutions that enable mission success.

As the DON’s premier IT solutions provider, PEO EIS is one of the DON’s widest-reaching organizations, providing acquisition support to programs that affect every platform and person in both the Navy and the Marine Corps. PEO EIS not only provides warfighters with exceptional services and the ability to successfully execute their responsibilities, but also with the opportunity to manage their careers. PEO EIS delivers commercially-proven and mission-enhancing technology that transforms the DON and unleashes the power of information.

Over the years, PEO EIS’ acquisition portfolio has steadily increased to meet the DON’s growing IT needs in support of mission. Ten years ago, the Navy was not consolidating data centers and mobile applications and the commercial cloud was in its infancy.

Continued on Page 2…
PEO EIS: Unleashing the Power of the Navy’s Enterprise Business Systems (Continued…)

Now, PEO EIS is the Navy’s lead for data center consolidation and cloud migration. Ten years ago, mobile apps weren’t part of the Navy’s IT strategy. Now the Sea Warrior Program (SWP) has created the Navy App Locker and developed 22 mobile applications, providing the DON with mobility, flexibility and agility.

Today, the PEO EIS portfolio includes nine offices responsible for the acquisition of a variety of enterprise systems including defense business systems (logistics, materials, finances and business operational support), hosting solutions (Navy data centers and commercial cloud), network solutions (NMCI and the Outside Continental United States (OCONUS) Navy Enterprise Network (NEN)) and software solutions (including business productivity, public key infrastructure, server and desktop virtualization software). PEO EIS shares administrative responsibility for three of the nine offices with other commands. PEO EIS provides acquisition oversight as the executing agent for Navy Maritime Maintenance Enterprise Solution-Technical Refresh (NMMESTR), a Naval Sea Systems Command (NAVSEA) program, and Global Combat Support System-Marine Corps (GCSS-MC) and DON Enterprise Software Licensing (DON ESL), both of which are Marine Corps programs.

PEO EIS is in the process of establishing two new offices, the Department of the Navy Special Access Programs (SAP) and the Navy Commercial Cloud Service offices.

PEO EIS’s current portfolio of programs consists of:

**Naval Enterprise Networks (NEN), PMW 205:** NEN manages the acquisition of the DON’s shore-based IT networks, delivering enterprise-wide IT services, including end user hardware, business productivity, enterprise transport and cloud services to more than 700,000 users at more than 2,500 sites around the world.

NEN’s portfolio includes:

- NMCI, the DoD and federal government’s largest enterprise network, representing approximately 70 percent of all DON IT operations.
- ONE-Net, the DON’s shore-based network at OCONUS bases and piers, providing secure, seamless and global connectivity for the Navy.
- Pier Connectivity provides network access to Navy ships and submarines while pier side at 26 locations across the globe.

**Navy Enterprise Business Solutions (Navy EBS), PMW 220:** Navy EBS is a portfolio program of IT solutions that provides the DON with business tools and capabilities used to align and manage the Navy’s money, manpower and materials. Navy EBS develops and sustains business IT solutions that enable leadership to effectively obtain, allocate and utilize resources to complete the Navy’s mission. By automating previously manual processes and seamlessly integrating a suite of electronic resource planning, procurement and workforce management business systems, Navy EBS enables the Navy business enterprise to budget, account for and audit its resources so that it can monitor and make decisions to benefit the warfighter and the US taxpayer.

The Navy EBS portfolio includes:

- Navy Electronic Procurement System (ePS), a commercial-off-the-shelf (COTS) based contract writing solution that will provide the DON contract writing management capability and facilitate integration with federally mandated systems. ePS will utilize DoD standards and support auditability.
- Standard Labor Data Collection and Distribution Application (SLDCADA), a time and attendance solution, with more than 100,000 users facilitating more than 7.5 million hours of employment data entry each pay period.
- Navy ERP, a software solution comprised of finance, acquisition, supply, workforce management, and grants management modules that manages nearly 52 percent of the Navy’s Total Obligation Authority. Navy ERP is used by approximately 72,000 users across the six Navy systems commands.

**Global Combat Support System-Marine Corps (GCSS-MC), PMW 230:** GCSS-MC modernizes, integrates and sustains the Marine Corps’ supply and maintenance automated information systems in support of Logistics Chain Management across the Range of Military Operations. GCSS-MC supports the modernization and sustainment of Marine Corps supply and maintenance functions through the development of a web-based common user interface that provides an integrated and distributed logistics capability enabling leaders to effectively plan, manage, execute, and monitor logistics operation from both a garrison and a forward deployed environment.

The GCSS-MC portfolio includes the GCSS-MC Logistics Management Increment 1 and 26 GCSS-MC Logistics Information Systems.

**Sea Warrior Program (SWP), PMW 240:** SWP completed a reorganization in January, divesting parts of its portfolio to a new PEO EIS program office. The change was made so that SWP can focus on its work as the IT acquisition agent for the Office of the Chief of Naval Operations (OPNAV) Manpower, Personnel,
Training and Education (MPTE) (OPNAV N1) business operation providing life full life cycle management to support the Navy’s MPTE initiatives. SWP manages a large portfolio of business applications, systems and initiatives delivering critical capabilities used by active and reserve forces, civilians, retirees and Navy families around the world.

The SWP portfolio includes:

- My Navy Portal (MNP), an easy-to-use site that combines personnel, training and education websites for Sailors into a single self-service portal to manage their careers from the day they join to the day they separate.
- Navy eLearning (NeL), one of the largest distance learning environments in the world, providing on-demand access to web-delivered course offerings available to military and DON civilians.
- Navy Pay and Personnel System (N2P), a web-based, field-entry, electronic pay and personnel support system and analytical repository for all active duty and reserve Sailors.

Enterprise Systems and Services (E2S), PMW 250: Established in January 2018, E2S was created when SWP changed the focus of its portfolio. E2S develops and implements reliable, efficient and secure business IT solutions. E2S supports a wide array of Navy, Marine Corps and other DoD customers.

E2S’s portfolio includes:

- iNavy, a Navy-wide portal solution providing a collaborative framework to enhance business functions.
- Navy 311, a one-stop entry point for Sailor call center support and is an enterprise shared data environment for business intelligence and service request trends analysis.
- Joint Air Logistics Information System (JALIS), DoD’s Air Logistics assets operational scheduling, aircraft management and data analysis system.

DON Enterprise Software Licensing (DON ESL), PMM 172.4: DON ESL leads a joint Navy and Marine Corps strategic sourcing effort to consolidate, centralize and streamline the acquisition and management of enterprise software. DON ESL leverages the combined buying power of the Navy and Marine Corps to improve the DON’s IT and cyberspace investment practices as well as enterprise-level evaluation, funding, management and tracking of current and future requirements for all enterprise-designated software vendors and products. DON ESL’s portfolio includes agreements with eight industry partners.

Navy Maritime Maintenance Enterprise Solution - Technical Refresh (NMMES-TR), PMS 444: NMMES-TR is responsible for the acquisition, program management, and life cycle sustainment of the replacement DON shore maritime maintenance IT solution. NMMES-TR will provide the DON with a modernized IT enterprise solution which will enable the planning, scheduling, execution, monitoring and certifying of depot and intermediate level maintenance and repair of submarines, aircraft carriers and surface ships. NMMES-TR is a blended program office staffed with personnel from both NAVSEA and Space and Warfare Systems Command (SPAWAR).

Data Center and Application Optimization (DCAO): DCAO is the execution agent and technical authority for Navy Data Center Consolidation (DCC), overseeing the consolidation process and sustainment of the transitioned systems. DCAO oversees the transition and sustainment of applications and systems into secure and cost effective hosting environments, including Navy enterprise data centers and commercial cloud environments.
Early during Navy Enterprise Business Solutions (PMW 220) journey toward achieving Federal Information System Controls Audit Manual (FISCAM) compliance, program leadership realized that success depended on effectively implementing the Risk Management Framework (RMF) and Financial Management (FM) Overlay controls, understanding where the system boundaries are and identifying who is actually implementing the controls.

As PMW 220's understanding of FISCAM and RMF matured, the importance of forming partnerships with all stakeholders and business partners within the portfolio’s system boundaries became evident. The Navy ERP system audit and cyber security control boundary extends out and include inherited controls that are important to cybersecurity and are essential for passing an independent financial audit.

To set the stage for success, PMW 220 engaged its business partners comprised of its service providers (Space and Naval Warfare Systems Command (SPAWAR) System Center Atlantic (SSC Atlantic) and Naval Supply Systems Command (NAVSUP) Business Systems Center (BSC)), other interfacing system owners and system user communities represented by the Command Business Offices (CBO).

**Achieving Auditability**

Identifying the system control baselines, understanding the system boundaries and forming partnerships with stakeholders are only the first steps in achieving auditability.

With the assistance of the Navy Comptroller, Office of the Assistant Secretary of the Navy for Financial Management and Comptroller (OASN (FM&C)) Policy and Operations offices, PMW 220 employed industry experts to assess the level of compliance of its systems with RMF and FISCAM established system baselines. The resulting gaps in compliance were noted and plans to close the gaps were developed with priorities based on cyber and financial risk while considering operational mission driven priorities.

The estimated costs to remediate the gaps were included in the Program Objective Memorandum budget process. PMW 220 is moving briskly to address the compliance gaps and has made significant progress in achieving audit readiness. PMW 220 expects that Navy Enterprise Resource Planning (ERP) will achieve RMF compliance, including general audit controls compliance described in the FM Overlay, in fiscal year 2018. In addition to becoming RMF compliant, other financially relevant controls are required to achieve full auditability. PMW 220 is working closely with its service providers and CBO team members to also implement the Business Process Application Controls.

**Sustaining Auditability**

PMW 220 is moving rapidly toward full audit compliance, with the cooperation and support of its systems stakeholders. However once full auditability is achieved, it must be maintained. Continuous monitoring of system security control baselines is step 6 of the RMF process. Furthermore, the RMF process requires testing a third of the control each year and reporting changes to the control baseline for risk evaluation and acceptance.
Through experience, PMW 220 learned that the continuous monitoring process may not be sufficient to maintain auditability because of differences in the audit control baseline and risk appetite of auditability versus cybersecurity. For this reason, PMW 220 developed and is deploying a Manager’s Internal Controls (MIC) program for maintaining system level auditability across the entire audit control baseline of all financial systems within its portfolio.

The figure below depicts the scope of the PMW 220 system level auditability MIC program. It includes all standard MIC program elements, e.g. Internal Control Over Non-Financial Operations (ICONO), Internal Controls Over Financial Reporting (ICOFR) and Internal Controls Over Financial Systems (ICOFS). While the scope of the MIC program is broader than the RMF security control baseline, it leverages the capabilities continuous monitoring tools and techniques to reduce the level of effort and control cost. The cybersecurity continuous monitoring capabilities are augmented by additional test cases derived from audit specific controls outside of the RMF and FM Overlay baselines. This process is an effort to safeguard how system level auditability is maintained, reduces the impact on system operations, reduces the cost of supporting annual audit events and provides leaders and governance bodies with the security and audit-related compliance information to enable prioritizing decisions built on reliable risk metrics.

**PEO SPOTLIGHT**

ICONO’s On-boarding process impacts ICOFS’ Access Controls
Combining acquisition expertise and innovation, the Department of the Navy (DON) Electronic Procurement System (ePS) is primed to centralize and improve contract administration business processes for the Navy enterprise.

The Navy Enterprise Business Solutions (PMW 220) assembled an effective team of DON and Department of Defense functional experts to develop a streamlined acquisition approach. The ePS team collaborated with multiple DON Head Contracting Agency (HCA) representatives, resulting in a Deputy Assistant Secretary of the Navy for Acquisition and Procurement (DASN (AP)) and the Office of the Assistant Secretary of the Navy for Financial Management and Comptroller (OASN (FM&C)) approved Capability Requirements Document (CRD).

The ePS team employed a streamlined organizational change management strategy by engaging stakeholders early to establish a Governance Board chaired by the functional sponsor to address requirements development, program implementation plan approval, and support at key ePS Gate Reviews. Since its establishment, the Governance Board has rendered decisions on more than 10 issues including the deployment sequencing, the selection of the limited deployment sites, the set of interfacing systems, the data migration strategy, and confirmation of the process flows. As a vote of confidence, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) approved a set of tailored milestone requirements, Request for Proposal package release, and Milestone Decision Authority delegation to the Secretary of the Navy for future ePS acquisition decisions.

With roughly 16,400 contracting personnel (including 6,400 critical users) within the Navy’s 10 HCAs and a mandate to implement an auditable contract writing solution, the ePS team’s approach to full deployment of the ePS solution ensures it will not only meet its Congressional and Office of the Secretary of Defense (OSD) mandates, but it will be done using an inventive, proactive, and tailored approach.

Additionally, the ePS team implemented a Product Development & Evaluation (PD&E) cycle into the acquisition, validating the effectiveness and usability of the commercial-off-the-shelf (COTS) contract writing system (CWS) usability prior to ePS contract award. PD&E ensures user community acceptance of a solution due to its “try before you buy” approach. It also fosters early ePS system assessment, contract community user buy-in and reduced organizational change management impacts when implementing the ePS solution. The success of the Governance Board, early collaboration with all stakeholders, and the inclusion of PD&E have produced an exceptional level of communication throughout the ePS program and provide powerful risk mitigation. Once awarded and implemented, Navy ePS will unify and advance contract administration business practices.

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**PROGRAM SPOTLIGHT**

**PEO EIS: Unleashing the Power of the Navy’s Enterprise Business Systems**

by Erin M. Lambert, Assistant Program Manager for ePS, Navy Enterprise Business Solutions
In November 2017, Navy Enterprise Business Solutions (PMW 220) successfully upgraded the Navy Enterprise Resources Planning (Navy ERP) system software, adding new capabilities and improving the system’s cybersecurity posture.

Navy ERP is an extensive multi-functional suite of business software that controls more than 50 percent of the Navy’s financial spending, manages the Navy’s supply operations and provides project and workforce management for more than 65,000 Navy personnel in a secure and auditable manner.

With technical support from the Naval Supply Systems Command (NAVSUP) Business Systems Center (NAVSUP BSC) and Space and Naval Warfare Systems Command (SPAWAR) Systems Center Atlantic (SSC LANT), the final cutover to production was a four-day event during Veterans Day weekend, the culmination of an 18-month project resulting in the installation and deployment of the latest versions of SAP, a commercial off-the-shelf (COTS) software. The upgrade was executed using Program of Record resources while the sustainment team simultaneously delivered five quarterly releases, eight emergency fixes and successfully conducted the annual closure of Navy financial ledgers. The Command Business Offices of the Department of the Navy’s six systems commands were actively engaged and supportive of the upgrade.

PMW 220, SPAWAR Headquarters 5.0 engineering competency, SSC LANT and NAVSUP BSC teams completed the more than 65,000-hour effort, planning, tracking and executing a 12,500 item project plan that included:

- Installing more than 20 new software components, which comprise the Navy ERP system, across six distinct technical environments (development, unit test, system test, production, break fix, and disaster recovery).
- Updating more than 200 functional programs and configuration items to align the new SAP software with processing requirements unique to the Navy and Department of Defense (DoD).
- Validating and updating more than 250 system authorization roles.
- Completing three distinct test passes plus a full regression test, totaling 416 business processes, and executing more than 34,000 manual and 500,000 automated test steps.
- Planning and practicing three cutover dress rehearsals.
- Engaging the active participation, including user definition and testing, of the six systems commands that use Navy ERP.
- Reviewing 178 updated documentation packages.
- Completing Independent Systems Engineering Technical Reviews (SETR), Test Readiness Review, and System Verification Review/Production Readiness Review (SVR/PRR). The SETR reviewed successfully established decision criteria for entry into the test and cutover phases, assessed readiness, identified risks and mitigations, helped develop the production freeze/transition strategy, and provided the program manager with decision criteria to proceed to the next phases of the project, including the cutover go/no-go decision.

The team overcame many technical challenges, successfully integrating new versions of approximately 100 discrete software components, remediating system and application incompatibilities while concurrently continuing to deliver functional improvements required by the user base and integrating more than 150 team members across numerous technical and user groups in multiple geographically dispersed locations. Failure to overcome those challenges could have resulted in a failed upgrade, resulting in tens of thousands of hours of additional remediation efforts and a negative impact on users across numerous commands and external organizations. Ultimately, a failed upgrade would have negatively impacted thousands of users across the Navy.

The cutover to production was completed ahead of schedule, allowing the system to be brought back online and opened to users 8 hours ahead of schedule. In anticipation of a large number of post upgrade issues, Navy ERP stood up a triage support team to provide five days of post cutover support. However, the post cutover support team noted a very small number of minor post upgrade issues due to the SAP COTS software upgrade.

The successful Navy ERP SAP COTS software upgrade will result in decreased maintenance time and costs, the availability of new out-of-the-box capability and an overall improved cybersecurity posture.
Interview with Mr. Willie Simmons, PMW 220 Employee, and NADP Graduate
by Michelle Ku, PEO EIS Public Affairs

Willie Simmons, an information technology specialist with the Navy Enterprise Business Solutions (Navy EBS) Program Office (PMW 220), graduated from the Naval Acquisition Development Program (NADP) in July 2017.

Simmons, a Navy veteran of six years, was working as a tax fraud investigative analyst dealing with Ponzi schemes, embezzlement cases and tax fraud, when he decided to enter the information technology and information assurance field. He earned a master’s in Information Technology from University of Maryland University College (UMUC) in 2014 and was searching for a position in IT when he learned about NADP. He began the NADP program in 2015.

How did you learn about NADP?
I wasn't familiar with NADP until I stumbled across an announcement online. The announcement emphasized mentorship, leadership development, on-the-job training, classroom instruction and mandatory rotational assignments in different fields of study in the information technology field. NADP seemed like a special program that would be vital for my development in my new career field. I applied for the position and enrolled in the acquisition program.

What made you interested in NADP?
Once I completed my degree and some IT certifications, I was actively looking for an IT position. Everything I had learned up to that point had been strictly from academia. I didn’t have any hands-on IT experience. I was looking for that when I found NADP, which is a graduate level development program. The program is structured to provide a business education as well as practical experience. When you’re looking for employment in IT, they push certifications, but they also want hands-on training which I didn’t have. I was working full-time while attending UMUC so I couldn’t pursue internships at that time. This development program spoke to me, and it was a Navy program so I was already familiar with the culture.

Did you have any acquisition experience prior to NADP?
No, this was my first exposure to acquisition so learning how the Navy does business and how they acquire enterprise information systems was new to me. I learned a lot about what commands need, the transition from legacy systems to the Navy’s current systems, the Navy’s overall mission in the future and the Department of Defense itself.

What did your NADP curriculum include?
NADP is a combination of acquisition education and on-the-job training. I had to complete Defense Acquisition Workforce Improvement Act (DAWIA) IT Level 2 certification upon graduation. I had to complete a leadership course, a professional development course and a senior project which I did on Public Key Infrastructure (PKI) certification. I completed internal rotations within Navy EBS and an external rotation, which was in cybersecurity with OPNAV N2/N6 at the Pentagon.

Also, my NADP career field manager encouraged me to take classes beyond my IT requirements. She recommended I take some project management DAWIA courses to get an understanding of how the project manager looks at things beyond technical functionality.

What did you learn from the program?
I worked with implementation, interface, cybersecurity, all as it relates to the acquisition field. The DAWIA training curriculum focuses on engineering, information technology and the project management process, so you understand functional and technical requirements and how that relates to cost, schedule and performance.

What is your current position with Navy EBS?
I’m an interface analyst. I work with legacy system owners to develop and provide interface requirements and compliance among the systems. I also build and maintain Interface Control Agreements (ICA), which reflects external interface requirements specifications. I provide oversight, coordination and collaboration of service providers to ensure system(s) interfaces accurately reflect the solution.

What did you learn that you’re applying to your job now?
The acquisition process for information systems and how that works in bringing on board a new system and eliminating legacy systems.
Research & Development: The Cybersecurity Challenge In Accessing Sailors’ Records

by Jeff Bradshaw, Sea Warrior Program

When you sign on to your computer using a password, Common Access Card (CAC) or biometrics, you may not be thinking about the latest high-profile cybersecurity breach, but the Navy’s Sea Warrior Program (PMW 240) is not only thinking about breaches on a daily basis, but is also working on ways to provide Sailors, veterans and their dependents easier and secure access to their personnel records and other data when using a computer or an official Navy mobile application.

Cybersecurity has always been a concern. In recent years high-profile breaches have stolen personally identifiable information (PII) of millions of Americans and made the term “cybersecurity” a household word.

In 2017, Yahoo revealed that its 2013 breach didn’t impact 1 billion accounts as first reported, but rather all 3 billion users of the popular webmail provider. The 2017 Equifax data breach affected 145.5 million accounts. More than 21 million government and military employees had their information stolen when Chinese malware (malicious software) hacked into the U.S. Office of Personnel Management in 2015. And hackers aren’t just attempting to retrieve PII.

The CAC is the current method for logging into email accounts for military personnel, government civilians and contractors. While CAC authentication is available on mobile platforms, the implementation for mobility is not optimal. Just as society and the workplace are embracing mobile platforms, the Department of Defense (DoD) Chief Information Officer (CIO) is moving to eliminate CACs and transition to a new means of gaining access. PMW 240 is leading the research and innovation into new methods of access.

One approach is to use a cloud-based software solution to provide strong Identity and Access Management (IdAM) for mobile and web access to personal, protected information. PMW 240 is pilot testing this solution and is scheduled to be completed by spring. The planned cloud-based capabilities will provide Sailors with access to their military records from personal mobile devices without using a CAC. Sailors will be able to view and verify their records, submit leave requests and view Physical Fitness Assessment (PFA) scores all from a mobile device. This capability also creates the ability to give Navy veterans access to their records without a CAC, and without requesting hardcopy records via traditional paper-based mail services. Dependents could also be granted access to specified records and the ability to review and update records when the service member is unavailable.

PMW 240 is pursuing another approach with a proposal for a Small Business Innovative Research (SBIR) Multifactor Authentication (MFA) solution. SBIR enables small businesses to explore and engage in the research and development of technology that may be commercialized for profit. SBIR is a U.S. Federal Government approach to spurring and stimulating high-tech innovation using entrepreneurs in collaboration with government programs.

Sea Warrior’s proposed SBIR MFA effort would assess new advanced cryptographic solutions, such as blockchain, to validate the existence and security posture of Government-purpose mobile apps. The effort is motivated by the DoD’s growing bring-your-own device (BYOD) program, which challenges the Navy to provide an efficient, effective and trusted means to authenticate users while maintaining a user-friendly environment.

While the CAC helped standardize authentication schemes across the DoD, there are implementation challenges in the mobile computing space. As a result of these implementation challenges, blockchain technology may serve as a viable basis for introducing additional factors to the traditional MFA approach. Previously, MFA has been restricted to factors such as Personal Identification Numbers (PIN), passwords, one-time passwords, biometric identifiers and hardware tokens. Blockchain technology provides the knowledge (a unique coin address) and the possession (a private key), two aspects of authentication.

PMW 240’s proposed SBIR MFA solution will bring to bear all of the stated advantages of blockchain technology while leveraging mobile-friendly MFA factors. The overall objective of the SBIR proposal is to design and develop a software-based MFA solution based on blockchain technology and to define a draft set of standards by which MFA solutions will be evaluated and accredited by the Navy approving official. Assuming this proposal is accepted as an SBIR program, PMW 240 will pursue this effort in conjunction with its other user access research.

PMW 240’s research on non-CAC IdAM solutions shows great potential to provide a secure, simple, and low-overhead approach to resolving issues with granting user access to personal Navy information. This work in collaboration with the Navy’s Space and Naval Warfare Command (SPAWAR) and small business is exploring the cutting edge of technologies to solve some of the most vexing cybersecurity issues of our time.
Automated Contract Management System Rolled Out to Warfare Centers

by Naval Undersea Warfare Center (NUWC) Newport Division Public Affairs

All ten NAVSEA Warfare Center Divisions soon will be using the Electronic Cost Reporting and Financial Tracking (eCRAFT) Enterprise (E2) software for post-award contract management, providing Contracting Officer’s Representatives (CORs) with the ability to compare contractor charges against funding plans. E2 achieved a significant milestone in early March when the system was officially granted “final operating capability” by the Defense Information Systems Agency (DISA).

In 2014, Donald F. McCormack, Executive Director of the Warfare Centers, saw the value in eCRAFT’s features and directed the system, which had been cited as a best practice by NAVSEA’s Contracts Directorate (SEA 02), to be implemented across all Divisions to enhance and streamline contract surveillance and performance monitoring.

In order to properly roll out the system, the legacy eCRAFT program, in use at NUWC Newport Division for years, needed modernization. Led by computer scientist and project manager William Gross, the Newport team worked with acquisition subject matter experts to compile a list of requirements. Some of the enhancements include a new user interface, obtaining authoritative contract data to significantly reduce data entry, and data filtering to ensure need-to-know access. In June 2016, the team began developing E2. On schedule and under budget, E2 was completed in October 2017 and released in February 2018.

“I see this as a grass-roots effort,” Gross said. “E2 will change the way contract surveillance and performance monitoring is being executed across the NAVSEA Warfare Centers.”

In addition to modernization efforts, E2 is now sharing resources with the Product Data Reporting and Evaluation Program (PDREP) system, hosted within the DISA data center and consolidating an authority to operate. E2’s software features were developed with cybersecurity in mind and in addition to contract surveillance and performance monitoring, include dashboard notification, contract management, contract execution, and executive metrics.

The goals of the system are twofold: help prevent fraud, waste, and abuse; and identify the level of effort for the types of services being provided for each contract.

“We knew how much money is being spent on services, but we didn’t know how it was being spent,” Gross said. “E2 will generate metrics on the kind of services we are buying.”

When submitting invoices into the Wide Area Work Flow (WAWF), vendors also must submit a vendor report to E2, which aligns to WAWF timeframes. The vendor report includes cost details for labor, travel, materials, etc. This report lets the government know how money is being spent and captures cost details and “total workforce,” which is essential to better understanding hiring plans.

A key feature is that 98 percent of the data is either imported from an authoritative data source or provided by the vendor. There is very little “touch time” to make the system work.

“E2 offers unprecedented insights into the Warfare Centers’ contracted work,” Mr. McCormack said. “At a time when the Navy is looking for ways to digitize more of our business
In February of 2018, the DACM office bid a fond farewell to Action Officer, Dennis Heeren. Dennis assisted the DON National Career Field Executive Leads and Defense Acquisition Workforce Improvement Act (DAWIA) management teams within the SYSCOMs since joining the DACM office in December of 2015. He was well regarded for his extensive acquisition and acquisition workforce experience, a thorough understanding of policy requirements, and an intimate knowledge of staffing processes and procedures.

Dennis worked tirelessly to enhance the quality of the acquisition workforce, spearheading numerous initiatives that achieved tangible results. Among his many accomplishments, his support of the Defense Acquisition University (DAU) PMT 401 and PMT 402 classes improved the preparation of future PM/DPMs. His technical expertise and initiative were instrumental in reviving the PMT 401 Navy Service Day, enhancing the course’s usefulness to students and the overall success rate of the course.

Previously, Dennis was the Program Executive Office, Tactical Aircraft (PEO (T)) representative assigned to the Office of Deputy Assistant Secretary of the Navy for Air Programs (DASN (Air)); served as the Communication, Navigation, and Identification (CNI) Co-Integrated Product Team (IPT) Lead for the Navy’s E-2C/D and C-2A aircraft at PMA-231; served as E-2C and C-2A Air Vehicle IPT Lead and E-2C Core Open Architecture (OA) Team Lead; served as an adjunct member of the Carrier On Board (COD) Advanced Development Program Office (ADPO); and was the Deputy Program Manager for Acquisition and Operations for the Navy’s Tomahawk Missile Program (PMA 280). Dennis has previous experience in industry, where he provided program support for the Navy’s F/A-18 AESA Radar program, and supported the NAVAIR Acquisition Reform Office and AIR 1.0.

Heeren is a 20-year Navy veteran, a graduate of Westmar College, LeMars, Iowa, and is married to the former Victoria (Vicki) Mudd. They each have two children from previous marriage; Zachary Mudd, Alexis Mudd, Ashley Heeren, and Kyle Heeren. Dennis and Vicki reside in Leonardtown, MD.
Highlights from the DON Acquisition Workforce Summit

by Brandy Ajose

The DON Acquisition Workforce (AWF) Summit was held on January 24, 2018. The goal of the semi-annual summit is to provide a forum for DON Acquisition Leadership to come together face-to-face to discuss issues impacting the enterprise. The event was attended by Mr. James Geurts, the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RD&A)), Ms. Allison Stiller, Principal Civilian Deputy (PCD), VADM David Johnson, Principal Military Deputy (PMD), and leaders from the System Commands (SYSCOMs), Program Executive Offices (PEOs) and Career Fields (CFs).

The meeting began with opening remarks from Mr. Geurts and Ms. Stiller. Ms. Stiller thanked the attendees for their dedication and flexibility in light of scheduling difficulties caused by weather related and other challenges. Mr. Geurts began on a positive note, saying that he was encouraged by the fact that this meeting was taking place and adding: “People are the most important part of the enterprise. Good people can overcome a bad process, but bad people can make any process fail. We have an opportunity to make strategic changes that will improve the Navy.” He stated that his goal is to embolden the workforce to make important changes and his desire is to position the Navy as the service that is pushing the envelope and doing whatever is needed while focusing on people, culture, and organizational position. “After that,” he concluded, “it is just execution.”

Summit Topics

The following topics were the central focus of the summit:

Training and Development Requirements

Ensure that the members of the workforce receive the right training at the right time in their career based on demand signal. Emphasize the value of on-the-job training and hands-on experience, and build a pipeline of trained candidates. Also, given the push to lower ACAT authority levels, focus on the intended vision for the workforce of the future.

Energizing and Connecting People

Motivate and energize the workforce by offering more hands-on experience with the fleet. Discover what incentivizes employees beyond formal awards. Train/retrain front line supervisors as they have the most direct impact on new hires. Capture successful practices that engage the workforce (e.g. bus visits to a ship, ship trials, etc.), and find a way to formalize them throughout the enterprise.

Workforce Capability, Capacity, and Availability

Become better at predicting future workforce requirements. Develop an enterprise view of what is needed for the future, such as Cyber and Data Scientists, by delving into budding deficiencies before they become current issues. Nurture an understanding of how academia and industry address these issues.

Processes and Tools

Address the issue of long cycle times for hiring and how it impedes the ability to compete with industry for top talent. The hiring process provides an opportunity for some creative pilot programs. There is a need for alignment, transparency and hiring metrics that are meaningful at multiple levels (e.g., RDA, SYSCOM and Career Field). Recognize that multiple pay systems and hiring authorities add significant complexity and confusion. It is also the time to look at the number of hiring officials presently on staff and the training they receive, including diversity.

Summit Participants’ Call to Action

Rather than providing presentations on the status of their respective commands, this year’s format included break out sessions designed to actively engage the leadership in specific calls to action. After lunch, summit attendees joined assigned breakout groups for each of the topics, continued discussions and defined specific actions they could tackle within their areas. NAVSEA Navy Acquisition Development Program (NADP) interns were also invited to participate to provide a breadth of perspectives. Each group generated specific actions needed to improve or generate momentum in each focus area. After the breakout sessions, the entire group reconvened. Each group leader shared a summary of their team’s discourse, detailing actions identified by team members. The action items were captured on a tracker with designated leads to follow up for the next gathering.

Summit Adjournment

Upon adjournment, Ms. Stiller and VADM Johnson thanked participants for their contributions. Ms. Stiller concluded by extending an invitation to the AWF Summit attendees and interns for the next Acquisition Career Council meeting.
The Strength Of The Department Of The Navy

by Victoria L. Bowens, CDP, ASN (M&RA), Director, Diversity and Inclusion Management DON

The strength of the Department of the Navy (DON) rests in our ability to attract, retain, and develop the best diverse talent the Nation has to offer. In 2017, the Partnership for Public Service ranked the DON 10th amongst 18 large government agencies, as one of the “Best Places to Work” and 5th, up 3 percentage points, under the category of “Innovation.”

The demand for Science, Technology, Engineering, and Mathematics (STEM) backgrounds is soaring—we must remain competitive in the global market for talent. To sustain our readiness posture to meet future challenges, leveraging the diverse perspectives and experiences of our existing STEM workforce, and influencing others who may not have an affinity to work for the federal government is essential. By 2050, the African American, American Indians/Alaska Natives, and Latino communities which will account for greater than 40 percent of the overall U.S population. Expanding our engagement with these groups to pursue STEM education and careers will yield more diverse, creative, and innovative ideas.

Recognizing talent is our greatest strength and we have been extremely successful employing individuals who come from a wide-range of backgrounds. Expanding our outreach to Historically Black Colleges and Minority Serving Institution and universities specializing in STEM; and strengthening relationships with private industry and post-secondary institutions has enabled the Department to remain a major competitor and employer. Our track record to engage with affinity groups like National Society of Black Engineers, Society of Women Engineers, Society of Hispanic Professional Engineers, Society of Mexican American Engineers and Scientists, and American Indian Science and Engineering Society, just to name a few, has increased our exposure to that top talent.

Albert Einstein once said, “To raise new questions, new possibilities, to regard old problems from a new angle, require creative imagination and marks real advance in science.” If we are to appreciate the challenge of solving difficult problems, then the DON workforce of tomorrow must replicate the talents of the future workforce.

ASN (RD&A) Sigma Program

by James Geurts, Assistant Secretary of the Navy for Research, Development and Acquisition

Ladies and Gentlemen, I have recently started a program within ASN (RDA) which will allow mid-level Acquisition Leaders to come work with my team and I for approximately two weeks at the Pentagon.

The foundation of our mission is to provide the warfighter with the resources and equipment necessary to support and protect our great nation. To help support our mission we must continue to place an emphasis on developing a workforce which can continue to compete and win. In support of this intent, I have directed the development of the Sigma Program.

This is a selective program that will focus on our best and brightest young aspiring Acquisition Leaders. The program will provide the opportunity for these future leaders to expand their understanding within and beyond their primary career field. My intent is to immerse the selected members within our day-to-day activities at ASN (RDA), have them participate outside of their comfort zone and contribute to the ASN (RDA) team. My expectation is that they will have a better understanding of our system, share this firsthand experience with those back at their commands, establish new professional relationships, and will support the continued development of a workforce which can compete and win!
From the DACM’s Desk

TEACHING AN OLD DOG, NEW TRICKS

by Mark Deskins, Director, Acquisition Career Management

In last quarter’s newsletter, I introduced the Career Navigator as a tool I use when talking with individuals about their career. I hope you found it useful.

Inherent in career navigation is the idea of continuous learning. That is to say, a constant quest for knowledge and a questioning attitude. No matter if you plan to stay in your current job for the rest of your career or you plan to move often, it is always important to learn something new every day.

I recently read an article (https://business.linkedin.com/talent-solutions/blog/trends-and-research/2018/the-most-in-demand-hard-and-soft-skills-of-2018) that outlined the top hard skills and soft skill that are in demand today. While most of the hard skills were in the IT arena, I was intrigued by the soft skills list that I have copied below.

If you are going to learn something new every day, what are some ways to go about it? For this “old dog”, here are some things I try to do.

Read: If there is a new technology that you are interested in then read about it in professional and scientific magazines and journals.

Attend Conferences and Professional Society Meetings: NDIA, ANSE, INCOSE, SEA-AIR-SPACE are all good places to stretch your thinking.

Rotations: Look at doing a job swap or rotation.

Think Like Industry: Talk with your industry friends and partners and get their perspective. Think about doing a rotation in industry through SECDEF Executive Fellows or if you are in the Cyber/IT arena the Cyber Information Technology Exchange Program (CITEP). You could even sign up to take the popular two week course at UVA Darden Business School, Insights Into Industry Management course.

Travel: Whether you take a personal trip or you are on TDY, meet and talk with people with different backgrounds. It will challenge your thinking and stereotypes. If possible, travel to where the product is being designed/developed, manufactured or in-service. For example, if you work at headquarters, talk to your supervisor about opportunities to visit Warfare Centers, Shipyards and Naval Bases.

Network: Use your network of college friends, work colleagues, industry partners and social media to expand your connections.

Reverse Mentoring: I have to credit Secretary Geurts with this idea. The idea is to have a junior person provide “mentoring” to open up your aperture to see how a younger generation person views your approach and learn from them.

Maybe you received your DAWIA certification years ago and you need to refresh. There are literally hundreds of courses and thousands of hours of continuous learning available through DAU. One place to start is to look at the courses recommended for Core Plus for your career field. Another place to look is to take continuous learning courses in another career field. Harvard Business School courses are also available on the DAU web site.

Some of the in demand soft skills are experienced based (i.e. leadership) while others can be learned through discipline, practice and role-playing. For instance, Toast Masters is one way to get practice in communication. Seek out opportunities to give a brief to your co-workers. Use a “murder board” approach where everyone gives critical constructive feedback.

There are a host of resources available to you as an acquisition professional. Here are a few to consider.

Continuous Learning: DAU courses
Ted Talks www.tedtalks.com
NDIA http://www.ndia.org
INCOSE https://www.incose.org

"Travel is fatal to prejudice, bigotry, and narrow-mindedness, and many of our people need it sorely on these accounts. Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the earth all one’s lifetime." Mark Twain
Insight into Industry Management Course at the Darden School of Business
by Brandy Ajose

Navy Director, Acquisition Career Management (DACM) office hosted its Insight into Industry Management Course (IIMC) held at the Darden School of Business, 18 February – 2 March 2018. The class was attended by over 50 outstanding Navy/Marine Corps Acquisition Work Force students from Strategic Systems Programs, MARCORSYSCOM, NAVAIR, NAVSEA, and SPAWAR.

The intent of the IIMC Course is to deliver a concentrated business curriculum to enhance the student’s awareness of industry vitality (structure and strategy), financial metrics, corporate culture, decision-making drivers and processes, and collaboration and business management techniques to improve their ability to interact with corporations as the students execute their DOD programs.

The IIMC design provided students with education and training in current and cutting-edge business practices sufficient to allow them to recognize business risks and opportunities and to anticipate potential changes in the business world and, ultimately, coordinate and implement anticipatory responses. The curriculum’s 2-week time constraint permitted this program, to be rigorous and provide students a comprehensive education, which captures the core competencies of a full MBA curriculum.

In short, the students upon completion should be equipped to understand the broad assessment, evaluation and decision-making skills required in American business today. This course also maximizes the academic gain. The Navy DACM’s intent is that a dedicated learning environment, one which preempts outside influences and serves to focus the students on learning similar to seminar or Executive MBA programs offered in the commercial sector, be provided.

Participants for this course were AWF O-5/6 officers and GS-13/14/15 (or equivalent) civilians in a Critical Acquisition Position who work in or support a Program Office.

Upon graduation, 80 Continuing Education Credits are earned by each student as well as receiving a custom course certificate and class photo in a portfolio. Students also receive a letter of certification of Certified Educational Units and Certified Professional Education Units (CEUs/CPEs) awarded for attending the course.

The next course offering is scheduled for: 22 July – 03 August 2018

Registration requires the following: 1) First Line supervisor approval, 2) Commitment for the 2 weeks of the class, no leave will be authorized, and 3) Current DAWIA Certification. There will be 52 seats in each offering. Tuition, lodging, and meals are paid for by the Navy DACM Office. Travel is paid for by the student’s command. Defense Acquisition Workforce Development Funds (DAWDF) are authorized to pay for travel.

Insight into Industry Management Course - March 2018 Graduates:

ROW 1: Liz Hendrick, Melanie Colvin, Lisa Haney, Glenda Leon, Stephanie Meixner, Savannah Gill, Janice Tutt, Bob LaPlume, Rasheeda White, Kelly Davis, Robert Smith, Olivia Amaro
ROW 2: Eric Felder, Eddie Kramer, Sly Mata, Patrick Seese, Diane Chiappetta, David Schiff, Kevin Herron, Artie Mueller, Ross Sawtelle, Tony Pignone, Jamie Seiss, Rickie Mellenkamp
ROW 3: Billy Brice, Ryan Crisman, Kitch Kennedy, Bill Ayers, Valerie Goldenberg, Ted Salas, Mike Leese, Erik Barkhimer, Rob Wilson, Ryan Moore, Heather LeRoy, Mike Stanford, Ted Jung
Implementing Accelerated Acquisition Authorities and Reforms within the DON

by Peter Manternach

The Department of the Navy (DON) has had numerous examples of innovating acquisition, within the confines of our Defense Acquisition System, to address the Navy and Marine Corps’ urgent and deliberate needs. Congress and the DON leadership have recognized the need to do more to keep up with demand signal from warfighters and competitor’s increasing threat. As a result, Congress initiated the largest acquisition reform since the 1986 Goldwater Nichols Act. The DON is formalizing these reforms through realignment of accelerated acquisition governance and introduction of alternate acquisition pathways. Although our Defense Acquisition System (as defined in DoDI 5000.02) will continue to be the primary methodology used to acquire systems, there are new authorized alternate paths to accelerate acquisition when the warfighter and the threat demand acceleration.

Change the Rules → Align the Support Structure → Change the Culture

Over the past three years, Congress has recognized the need to reach beyond the traditional acquisition process. Congress has implemented two new accelerated acquisition pathways for the Department of Defense which are outlined in the Fiscal Year (FY) 2016 and 2017 National Defense Authorization Acts (NDAA). These alternative acquisition pathways are intended to increase agility and speed within acquisition community and have been formalized within Title 10 of the U.S. Code (10 U.S.C.). The two new acquisition pathways are:

Middle Tier Acquisition. The FY 2016 NDAA, Section 804 introduced the early provisions of a Middle Tier Acquisition that would release certain DON emergent programs from the confines of the Department of Defense (DoD) Instructions and the Joint Capabilities Integration and Development System (JCIDS) process. It allows for a flexible rapid prototyping fund to accelerated programs within the Planning, Programming, Budgeting, and Execution (PPBE) cycle. The FY 2017 NDAA formalized these provisions in 10 U.S.C. coinciding with the existing Rapid Acquisition Authorities that are currently addressing urgent needs.

Acquisition Agility. The FY2017 NDAA, Section 806 pressed further with acquisition reform through the implementation of what Congress titled Acquisition Agility. Congress introduced authorities to acquire capabilities incrementally through “component acquisition” separately from “platform acquisition” for Major Defense Acquisition Programs (MDAPs). This component acquisition should be “unshackled from the traditional and time-consuming requirements, acquisition, and budget process… and should have a separate, dedicated path for development, including a funding source that is not constrained by large acquisition programs of record.”

This distinction allows components and their underlying technologies to be developed through an agile framework while their associated platform(s) (requiring substantial investment that remains in the inventory for decades) are acquired through the already established deliberate process. These agile tenants are rooted in the Services’ ability to prototype, experiment, and integrate seamlessly into the host platform. These authorities will fundamentally alter how we execute MDAPs and could provide alternative acquisition strategies to ACAT II and smaller programs.

The DON challenge is to implement these pathways to maximize speed and agility, while maintaining transparency, oversight and accountability. The DON’s ability to identify the problem and capability solution, then prototype, experiment, and decide upon an appropriate pathway to field these capabilities, are the foundational principles in executing these acquisition pathways. DASN (RDT&E) has established tools and methodologies of tactics and technology exploration for problem identification that can facilitate innovation of new warfighting concepts and explore cooperative technologies through prototyping. These methods have been successfully synthesized and executed through two initiatives with the Marine Corps Deputy Commandant for Combat Development and Integration (DC, CD&I) and the Naval Research and Development Establishment (NR&DE) within the past year.
These pathways follow a “Lean Start-up” concept that is often utilized in private technology companies to manage start-ups, get products to customers’ faster, and allow feedback to evolve the product before committing large resources for an end-product. This is especially applicable to the way we introduce systems, evolve CONOPS, and adopt commercial technologies. Prototyping to accelerate acquisition will allow maximum flexibility to introduce state-of-the-art technology without over-committing resources on a fully defined program of record. These alternate pathways maximize the flexibility to either cancel the effort early (if not satisfactory) or scale up to a rapid fielding or traditional acquisition program.

In late 2016, the DON published the Secretary of the Navy Instruction (SECNAVINST) 5000.42, Accelerated Acquisition for the Rapid Development, Demonstration and Fielding of Capabilities, to provide a governance structure to initiate projects and align the supporting organizations to accelerate certain capabilities critical to the Navy and Marine Corps success. The SECNAVINST establishes an Accelerated Acquisition Board of Directors (AA BoD) led by the Chief of Naval Operations (CNO), or the Commandant of the Marine Corps (CMC), and the Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN(RDA)). To date, the Navy AA BoD has designated six programs for acceleration acquisition. ASN(RDA) is continuing to work with the CNO and CMC to refine the governance and execution of the AA BoD to facilitate speed in acquisition through alignment of capability requirements, funding constructs, and supporting organizations.

ASN(RDA) will issue guidance to the acquisition community to start to explore and exploit these new authorities. Systems Commands, Program Executive Offices, and Program Managers are encouraged to explore and refine key enablers to support accelerated acquisition which include unique organizational constructs, technical authority processes, contracts and other agreements, flexible funding constructs, and connection of emerging innovation tools. The DON will continue to make full use of authorized flexible funding structures, required cost accounting and financial management regulation changes, and JCIDS and DOT&E coordination.

Acquisition reform is an on-going discovery that can be riddled with “speed bumps” as we undergo a cultural shift in how we do business. As we explore, learn, train and allow program offices to innovate under these constructs, eventually these pathways will become a regular component of our acquisition infrastructure and supported by the enterprise.

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**Alternative Acquisition Pathways and Authorities**

![Diagram of Alternative Acquisition Pathways](attachment:alternative_acquisition_diagram.png)

**Traditional Acquisition (5000.02)**

- Pre-Concept (Inc. IDB)
- Materiel Solution Analysis
- Technology Maturation & Risk Reduction
- Engineering & Manufacturing Development
- Production and Deployment
- Sustainment & Disposal

**Accelerated Acquisition**

- **Problem Identification & Definition**
  - Tactics & Technology Exploration
  - WarGames, Demonstration, ANTX, Prize Challenges, Competitions, etc.

- **Prototype & Experiment**
  - Prototyping, Testing & Evaluation, Refining, Developing CONOPS, etc.

**Decision**

- Scale Up
- Cancel
- Harvest Technology
- Understand Operational Needs
- Continue Limited Production

**Rapid Acquisition Authority (RAA)**

**FY16 NDAA Section 804**

**FY17 NDAA Section 806**

**Organizational Constructs**
- Technical Authority
- Contracts / Agreements
- Financing
- Legal
- Engineering
- Financial Management

**Key Enablers to Accelerate**
- Cost Accounting
- Prototyping Boards
- Fleet Experiments
- Program Security
- Delegations
- Capability Documents
- Workforce Development

**Urgent Needs**

**Middle Tier Acquisitions**

**Acquisition Agility**

**MOSA — Component Prototyping**

**Rapid Prototyping — Rapid Fielding**
In the last DACM Quarterly Newsletter, “wicked” problems were introduced along with strategies to deal with them – recall the Authoritative, Competitive and Collaborative approaches discussed. In this issue, a specific example from NASA is highlighted that parallels many of the Navy’s acquisition hurdles, from the long-term Navy shipbuilding plan to complex enterprise technology programs.

**NASA’s Wicked Challenge**

Technological innovation is crucial for NASA to perform its space exploration missions. Technology development and delivery, though, is only one of many considerations that directly or loosely impact mission performance. Other interconnected considerations include strategy, policy, politics, interactions between stakeholders, resource requirements, federal budgets, and performance goals of space vehicle components and systems to name a few. One could even argue that technology development and maturity is the least impactful of all those considerations! Technology development is necessary but not sufficient for program success.

Using a Wicked Problem model to examine NASA-specific space technology innovation and the innovation barriers in the government environment, researchers proposed how “wicked” models could improve understanding of the key influencing factors. Both the innovation barriers and the influencing factors the NASA researchers found apply to the Navy.

To a large degree, innovation barriers for NASA – and the Navy, too – are driven by the Government budget and the Planning, Programming, Budget and Execution (PPBE) process. As recently demonstrated by repeated Government shutdowns, Continuing Resolutions (CRs) and the Budget Control Act (Sequestration), the lack of a budget has negatively impacted innovation within the Government and industry for the past several years. Even when working smoothly, though, the PPBE process of federal budgeting is optimized for efficient financial management and resource allocation rather than step-function technology innovation.

The key influencing factors stymying technology development and related innovation at NASA are both direct and indirect drivers. For NASA, the organizational structure from the federal government to NASA Headquarters to NASA Centers, and external entities from the National Research Council, to academia, industry and Other Government Agencies (OGAs) influence NASA’s technology development direction and pace. For the Navy, parallels can be drawn from the OPNAV staff to Systems Commands to Warfare Centers, and external partners like DARPA, the Office of Naval Research (ONR), academia, industry, and the industrial base.

These innovation barriers and influencing factors have not stopped NASA from performing its mission or exploring space. Although its science and exploration goals are sometimes overshadowed by national and international prestige, national priorities, election cycles, short term planning, party politics and other drivers, NASA chooses to work on evolvable plans. NASA’s agile plans have common underlying technologies and mission architectures that advance the state-of-the-art and can be ready on short notice as soon as an appropriate level of commitment and long-term funding support is provided by the government. NASA’s planning process includes “wicked” models that provide a systemic view of the many influencing factors and help reduce innovation barriers and stimulate technology innovation.

**What NASA Researchers Found That Can Be Applied to the Navy**

After applying the Wicked Problem model to NASA, the researchers came to several conclusions that are also germane to the Navy:

- Wicked Problems are solved through stakeholders’ deliberation and argumentation. Consequently, technology development is political, above and beyond the scope of cost, schedule and performance drivers, and highly influenced by internal higher-level stakeholders. And, external stakeholders frequently weigh-in, too. Therefore, the Navy would be advantaged to facilitate collaborative approaches to its most “wicked” acquisitions problems and seek out forums for which the various stakeholder communities can come together. Too often, problems are already defined from a specific point-of-view which inherently predisposes the solution. It is important to remember that over-constrained problem definition leads to incremental advances, but not to innovation. The collaborative approach to Wicked Problems involves all stakeholders working together, and converging toward a common best solution, agreed upon by all parties involved. It is a compromise of an optimal solution, not a right or wrong solution.

- Success of programs is often dependent on influencing factors and considerations beyond need, technical feasibility, and fiscal visibility. Project and program managers (PMs) may not have access or visibility to these influencing factors. To increase PM visibility, Navy could expand its Acquisition Workforce (AWF) PM Development Program (PMDP). Along those lines, the
FY2018 National Defense Authorization Act (NDAA) requires the Services to implement such a program with emphasis on identifying the training, experience and expertise to be gained in specific competencies such as industry drivers by completing an Industry Internship within the industrial base, for example.

Project and program hierarchies are typically linear consisting of discreet planning and project management-focused activities whereas Systems Command and Agency hierarchies are more global, requiring a multi-disciplinary skill set involving assessment and analysis of situations, identifying options, then setting policies and combining them with coherent actions. The managerial and leadership skill-sets differ between the two and influence an organization’s mission and program success in different ways. Navy leadership development approaches should evolve to include systems thinking and integrative thinking. As project and program managers are promoted into positions of increased responsibility, training should be required that includes scenario prototyping or case studies that stimulate new ideas and result in an emergence of tacit knowledge that becomes communicable knowledge with new options and strategic advantage.

Further Reading

In Memoriam: Vice Admiral James H. Doyle, Jr
by Brandy Ajose

An inspiring leader in the Surface Navy for decades, Vice Admiral (VADM) James H. Doyle, Jr., USN(Ret) passed away on 28 February 2018 at the age of 93.

VADM Doyle graduated from U.S. Naval Academy in June 1946 with the war-accelerated class of 1947. He commanded the nuclear cruiser USS Bainbridge (CGN-25) for four years, including three deployments during the Vietnam War for which he was decorated.

As a flag officer, he was Chief, International Negotiations Division, Joint Chiefs of Staff, soon after, he was Commander Cruiser-Destroyer Group Twelve and Commander Attack Carrier Strike Group Two aboard the USS Forrestal (CV-59) deployed in the Mediterranean. His last sea assignment was Commander Third Fleet.

Of significance to Naval Acquisition, VADM Doyle will be remembered for his time served as the Deputy Chief of Naval Operations for Surface Warfare (OP-03) from 1975 to 1980, where he played a critical role in promoting the AEGIS Project. It is often said that the transformational success of the AEGIS weapon system and AEGIS ships can be attributed in large part to the personal relationship between the top surface warfare leader on the CNO staff and the top Project Manager in the Naval Sea Systems Command rather than the organizational structure or the wiring diagram that existed at the time in either command. Besides RADM Wayne E. Meyer, VADM Doyle, perhaps more than any other Naval officer, is responsible for the success of AEGIS. The AEGIS Combat Systems Engineering Development Site (CSEDS) was renamed for VADM Doyle in 2008. RADM Meyer remarked during the dedication that if AEGIS is the shield of the fleet, then Jim Doyle is the Shield of AEGIS.

VADM Doyle was awarded the Distinguished Service Medal twice and also held two Legions of Merit and the Bronze Star. In 2010 VADM Doyle was inducted into the Surface Navy Association Hall of Fame. Also, named in his honor and first presented in November of 2017, The Department of Navy Acquisition Vice Admiral James H. Doyle Award is given to an individual who best exemplifies the attributes which were the hallmarks of VADM Doyle’s leadership namely, teamwork, transparency, getting the requirements right, and delivering results. In the spirit of VADM Doyle, the recipient signifies dedication to overcoming numerous challenges to ultimately provide the capability sailors and marines need and deserve.

VADM Doyle’s Obituary: http://navysna.org/final-call.html
Gary Kessler, former Deputy Assistant Secretary of the Navy (Air Programs) (DASN (AIR)) recently retired from the Department of Navy. Mr. Kessler was the principal advisor to the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RD&A)) on matters relating to aircraft (manned and unmanned), air-launched weapons, cruise missiles, airborne sensors and avionics. As DASN(AIR), he monitored and advised ASN (RD&A) on programs managed by the Naval Air Systems Command (NAVAIR) and affiliated Program Executive Offices (PEO). Mr. Kessler’s federal career spanned 35 years with Department of Defense.

Your last day at the DON was a very short time ago, does it feel like “yesterday” and how have you adjusted to retirement? Have you taken up any new hobbies or routines?

My last day in the DON was 31 Jan, but it feels like it was many months ago. I have been very busy since retirement. I started my own small consulting company and had my first consulting contract signed on 1 Feb. I now have seven contracts signed for small, mid-size and large companies, and am in discussions for two additional ones. In addition, I spent 10 days helping my daughter and her husband paint and landscape their house to get on the market. They live in Alabama and have orders to move to DC in May. As you can see, there has not been any time to take up new hobbies or routines. Well, there is one routine that I enjoy not doing any longer, which is to commute 4-5 hours a day to the Pentagon… I love working out of my home.

After 35 years with DON was it hard to say goodbye? Is it goodbye?

It was very hard to say goodbye after working 35 years for the DON, especially to all the great people that I have worked with over the years. As I prepared for my retirement and looked back at all the things that I had done over the years, it definitely felt like a very long and rewarding career. I have been very fortunate to work with some of the best professionals in military, civil service, industry and academia over the years, and I hope to cross paths with many of them in the future as I continue to serve and support the DON in my new role as an Independent Consultant.

What is the greatest lesson you learned working as DASN? What do you consider your greatest contribution?

The thing that I learned the most while working as DASN is how many folks and organizations touch a program and how challenging it can be at times to get alignment and agreement amongst all of these stakeholders to deliver a program to the warfighter. My biggest contribution was to be the loudest voice and advocate for Naval Aviation on the RDA staff to get adequate funding and support for key programs during some very challenging times with current readiness and investing in future capabilities to address the many threats to our Navy.

What advice would you give your successor?

Listen to your staff, they are the pros from Dover. Many have been in the building for years and have supported a number of DASNs, so they understand how the building works and who to work with to accomplish your job. Talk to your PEOs on a frequent basis, if not daily, and stay connected with your counterparts in OPNAV, OSD, FMB, and DCA. Staying connected and aligned is critical in supporting the programs and providing sound advice and counsel to RDA.

What are your thoughts on mentoring? Have you been a mentor?

I am an advocate for mentoring and have been a mentor for years to well over 50 mentees. During my career, I spent a lot of my time and effort mentoring people in the organization because I knew that if I took care of them that they would do exceptional work for our sailors and marines. However, I also did it because I thoroughly enjoyed getting to know so many talented and noble professionals, and I got more out of these relationships than I think that they got from me.

What is your leadership philosophy?

I believe in the leadership philosophy of the three C’s; Competence, Courage and Compassion. Competence is: do you really know your job, or are you striving real hard to learn it? There were definitely many jobs that I took on in my career that I had to strive to learn, but I was always fortunate that I had great people in those organizations that taught me everything that I needed to know.
Courage is— do you make the right decisions for the organization, even if it costs you personally? Leading an organization is not easy, and you quickly learn that you cannot please everyone. I know-- a shocker!! But, I have learned over the years that being open and inclusive and taking the time to gather the facts from a wide and diverse group of folks is key. Two sayings that I always live by are 1) No decision should be made before its' time, and 2) A good decision stands the test of time.

The most important “C” is Compassion. To win the hearts and souls of those that you lead, they have to see and believe that you care as much or more for them, as you do for yourself. If you do, then they will go wherever you want to take them, with their full support and passion. It’s about taking an interest in your people, both professionally and personally; creating a professional, caring and open environment. One where good news and bad news is shared without fear; where honesty, integrity and trust are prevalent, and a lot of times they are the little things that a leader does that makes all the difference.

What is your favorite quote and why?

My favorite quote is the one that I used to wrap up my retirement remarks from the late President Ronald Reagan. I like it because it speaks to service, family and working together.

“America is no stronger than its people—and that means you and me. Well, I believe in you, and I believe that if we work together, then one day we will say, ‘we fought the good fight. We finished the race. We kept the faith.’ And to our children and our children’s children, we can say, ‘we did all that we could be done in the brief time that was given us here on earth.’”

ACQUISITION LEADERSHIP CHANGES

Welcome Aboard!

ACAT I Program Managers
CAPT Vincent Chernesky became the first Program Manager for the Applied Resiliency Program Office (ARPO) in December of 2017.

CAPT Steven Werner relieved Mr. Phillip Anderson, as Deputy Program Manager for the Naval Enterprise Network (PMW-205) in January of 2018.

Col Eric Ropella relieved Col Robert Pridgen as Program Manager for the Executive Transport Helicopter Replacement (PMA-274) in March of 2018.

Ms. Claire Evans relieved Mr. Patrick Fitzgerald as Program Manager for the Sear Warrior (PMW-240) in April of 2018.

ASN(RDA) Staff
CAPT John Lowery relieved CAPT John Lemmon as ASN(RDA) Executive Assistant in February of 2018.
SPAWAR Systems Center (SSC) Atlantic Partners with Industry to Augment In-house Engineering Efforts

by Susan Piedfort, SSC Atlantic Public Affairs

Collaborations

Many of SSC Atlantic’s contractors have worked with the center for years on projects ranging from ForecNet to Information Dominance and now Information Warfare and cybersecurity. One of the more visible examples of SSC Atlantic’s successful teaming with industry was the Mine Resistant, Ambush Protected (MRAP) vehicle integration effort, which began in May of 2007 and ramped up to 50 vehicles being integrated each day by December of 2007. All told, more than 30,000 vehicles, including MRAP-All Terrain Vehicles (M-ATVs), were integrated with lifesaving C4I suites thanks to the government/industry partner effort.

SSC Atlantic’s Internet café project was another successful collaboration resulting in more than 1,000 Internet cafés established for use by warfighters and civilians supporting Operations Iraqi Freedom, New Dawn and Enduring Freedom. The effort began in 2003, and by April of 2011 warfighters had used more than a billion call minutes to call home to loved ones. A more recent SSC Atlantic collaboration with industry partners was availabilities on nuclear aircraft carrier USS Harry S. Truman (CVN 75). Truman received a full upgrade of the Consolidated Afloat Network Enterprise Services (CANES) network to include more than 3,400 Local Area Network drops, impacting more than 2,700 ship spaces.

SSC Atlantic is a pioneer in leveraging commercial cloud services for Navy and federal applications hosting, teaming with various industry integrators and commercial cloud providers with experience in cloud deployment and services. Industry partners also assist in the center’s 24/7 sustainment services, including cloud security services, and in adapting Navy application hosting behaviors and culture to this newer form of hosting services.

Engagement

SSC Atlantic actively engages with industry to improve collaboration and break down barriers to innovation. In Charleston this engagement is facilitated through the Charleston Defense Contractors Association (CDCA). In SSC Atlantic’s detachment in Hampton Roads, Virginia, that connection is enabled through the Tidewater Association of Service Contractors (TASC), and in New Orleans, Louisiana, to members of the former Gulf Coast Government Contractors Association (GCGCA). According to Joshua Hatter, CDCA president, major innovation and convergence is happening between defense and technology organizations, and CDCA plays a crucial role in preserving, sustaining and growing that business. “We want to give our industry partners more venues and opportunities to get their ideas in front of the right people,” said Miller. “Great partnerships are what it takes to do what we do for the Navy and the nation.”
SSC Atlantic has several initiatives centered on improving communication with industry. Steve Harnig, the center’s Chief of the Contracting Office (CCO), leads a concerted effort to increase two-way communication and remove barriers in the government contracting process that can, by nature, be cumbersome. On a quarterly basis, the CCO and his team brief industry at the Small Business and Industry Outreach Initiative (SBIOI). These briefings include information on contracting office performance, contract strategy, forecasting of future orders and contracts, and question and answer sessions. “The intent of these exchanges is to be transparent with industry,” Harnig said, adding that SSC Atlantic views industry as stakeholders in the contracting process since they are impacted by decisions made on individual contract actions and strategies.

To that end, he also chairs a Contracts Industry Council (CIC), made up of different contractors (size, socio-economic status, etc.) The CIC covers “hot topics” that impact the government team or industry. “We intend to keep each of these communication methods going so that we can continue to leverage different perspectives, and explore better ways to deliver timely solutions to the warfighter,” Harnig said.

SSC Atlantic’s recently instituted Technology Exchanges are also fueling collaboration. Several of these quarterly exchanges have already been held and resulted in productive networking and a sharing of ideas. Each exchange focuses on one of SSC Atlantic’s technical growth areas – such as cloud computing, data science analytics, assured communications and cyber warfare – and features relevant industry white papers, panel discussions and break-out sessions.

Industry Days are another way SSC Atlantic communicates with industry partners. SSC Atlantic hosted 23 of them in FY17, and the two-way exchange and feedback at these events has resulted in more efficiency in the contracting process. The SPAWAR Industry Engagement Council (SIEC), a quarterly roundtable discussion at SPAWARSYSCOM headquarters between SPAWAR and PEO leadership and two members from industry groups such as CDCA, the Armed Forces Communications and Electronics Association (AFCEA) and the National Defense Industrial Association (NDIA) enables an understanding of issues, challenges and opportunities that are facing the Navy and industry partners.

An Information Warfare Research Program (IWRP), modeled after the National Shipbuilding Research Program, is now being investigated at SSC Atlantic. IWRP will allow the center to partner with industry in research endeavors that can help respond to emerging requirements in a rapid way and with nontraditional ideas.

Small Business

On the contracting front, SSC Atlantic has a history of effectively working with small businesses and innovative start ups that can offer needed and novel solutions. SSC Atlantic’s partnerships with small businesses have consistently exceeded the DoD statutory targets established by the Small Business Act. SSC Atlantic’s target is 32 percent of total eligible obligated dollars on prime contracts to small business concerns. Out of the $3.25B contracting effort in FY16, 35 percent was obligated to small businesses (468 small business firms). “Our success in consistently exceeding this goal is a result of acquisition planning and meaningful market research to understand small business capability while we minimize the barriers to entry,” Miller said. “We invest greatly in our relationship with small business through focused communication and outreach,” he added.

The quarterly SBIOI provides a venue for government and industry to understand future opportunities and the constraints of both industry and the government. Mutual understanding helps all parties recognize technical requirements, seek opportunities to be innovative and reduce the cost of doing business. More information about SBIOI can be found at http://www.charlestonndca.org/.

According to Robin Rourk, the head of SSC Atlantic’s Office of Small Business Programs, small businesses provide flexibility and innovation to our Information Warfare mission. “Typically, our small business partners have special niche capability and want to make a difference in the day-to-day lives of our warfighters. The sense of pride and ownership of our small businesses make them responsive and committed,” she said.

For industry representatives interested in partnering with SSC Atlantic, a current, detailed contracts listing is posted at http://www.public.navy.mil/spawar/Atlantic/Pages/Home.aspx, and there is also a link to SSC Atlantic’s E-Commerce portal (https://e-commerce.sscno.nmci.navy.mil).

As Heller noted, expectations for SSC Atlantic are great as cyberspace is the fifth Navy warfighting domain, on a par with the physical domains of land, sea, air and space.

“I believe SSC Atlantic is in the right place at the right time to deliver solutions that operationalize cyberspace,” Heller said. “Our industry partners will continue to give us a strategic advantage as we develop and field Information Warfare solutions.”
The Department of the Navy Acquisition Excellence Awards were established by the Secretary of the Navy in 2008 to recognize military and civil service individuals and teams who have made the most outstanding contributions to enhancing competition and innovation.

Calendar & Events

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Acquisition Events & Days of Interest

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<tr>
<th>Date</th>
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<tr>
<td>3 Apr</td>
<td>DAU Acquisition Symposium 2018</td>
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<td>9-11 Apr</td>
<td>SEA AIR SPACE event at Gaylord 9-11 Apr</td>
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<td>9 Apr</td>
<td>Life Cycle Logistics FIPT</td>
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<td>Service Acquisition FIPT</td>
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<td>11 Apr</td>
<td>SASC-Readiness Hearing: Depots, Shipyards, etc.</td>
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<td>12 Apr</td>
<td>HASC-TALF Hearing on DON Aviation Programs</td>
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<td>12 Apr</td>
<td>HASC-Seapower Subcommittee hearing on 355 Ship</td>
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<td>16-20 Apr</td>
<td>PM Workshop</td>
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<td>17 Apr</td>
<td>SASC-Seapower hearing on Navy Shipbuilding</td>
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<td>17 Apr</td>
<td>OSD Small Business FIPT</td>
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<td>23-27 Apr</td>
<td>DoD’s Small Business Training Week (SBTW18)</td>
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<td>5 May</td>
<td>LCS 20 (Cincinnati) Christening, Mobile, AL</td>
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<td>14-18 May</td>
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<td>24 May</td>
<td>AcqDemo Executive Council</td>
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<td>26 May</td>
<td>LCS 14 (Manchester) Commissioning, Portsmouth, NH</td>
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<td>18-20 Jun</td>
<td>ASNE Technology, Systems and Ships</td>
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<td>26 Jun</td>
<td>Defense One Technology Summit</td>
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<td>16-20 Jul</td>
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The deadline for submissions for the JUL 2018 issue of the DACM Corner is 25 May 2018.