Spring 2015

The Chronicle

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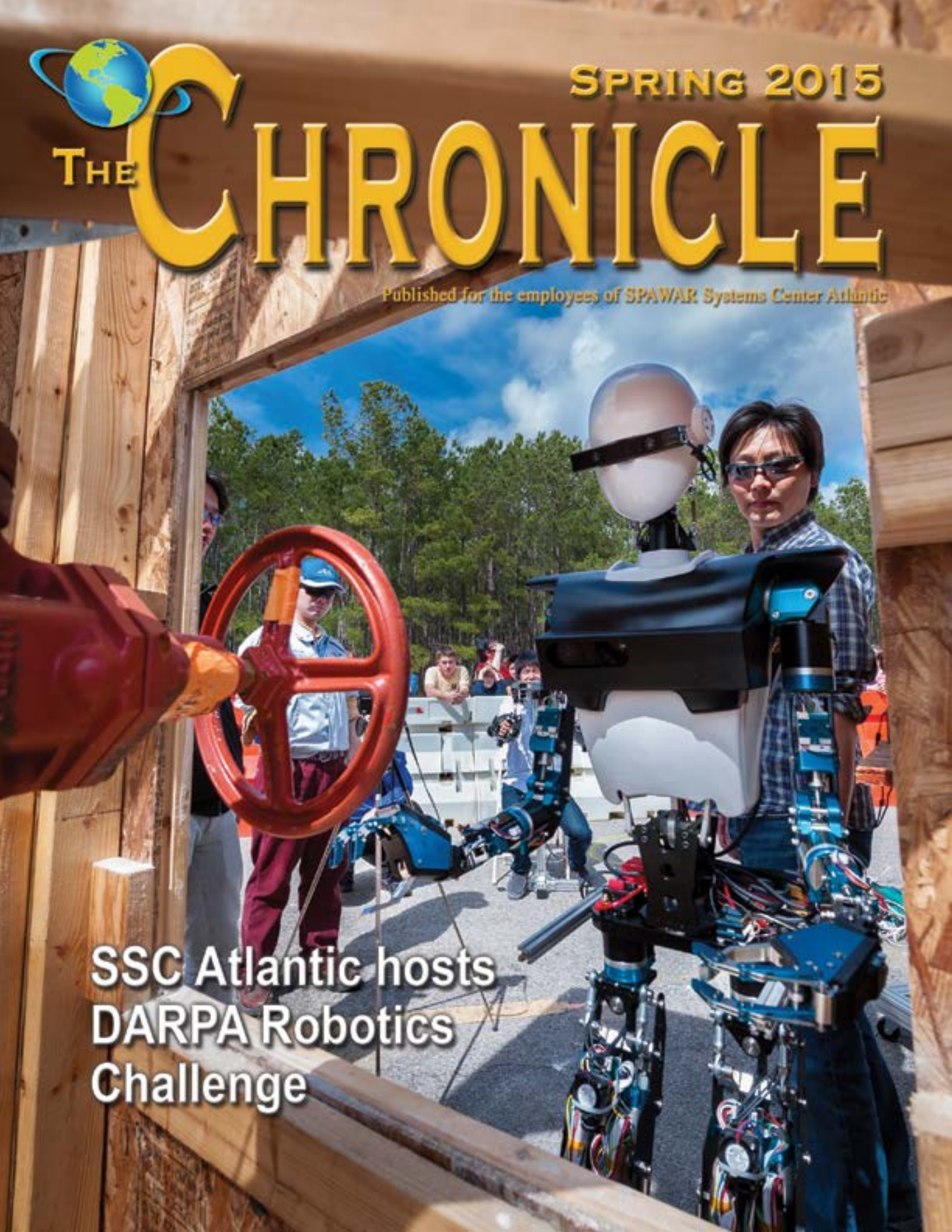

SSC Atlantic hosts DARPA Robotics Challenge

Rear Adm. David Lewis, commander of SPAWARSYSCOM, talks to employees during an all hands meeting at SSC Atlantic April 21.

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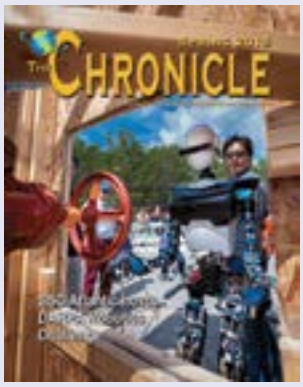

On the cover

A robot from the University of Japan goes through the paces during the Defense Advanced Research Projects Agency (DARPA) Robotics Challenge test event held at SSC Atlantic's Unmanned Systems Research Range. See story on page 20. Photo by Joe Bullinger.

Regina McNeil, one of 12 SSC Atlantic employees recently completing the rigorous Naval Postgraduate School non-resident systems engineering master's degree program, performs case study research. See story on page 12.

SPAWAR Systems Center ATLANTIC

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Commanding Officer..... Capt. Amy D. Burin
Executive Director ..... Steve Dunn

SSC Atlantic
Mission, Vision and Values

Mission: To rapidly deliver and support solutions that enable information dominance for our Naval, Joint, National and Coalition Warfighters.
Vision: Make IT Count for the Warfighter and the Nation.
Values: Service to our country, Excellence and Credibility, Transparency in the way we conduct our business, Responsiveness and Accountability, Diversity and Teaming.

THE CHRONICLE

Editor ..... Susan Piedfort
Command Photographer ..... Joe Bullinger

Goals

Strategic effects that provide innovative solutions for today, tomorrow and beyond.
Operations management that delivers solutions with quality, speed, agility and value.
Organizational development that empowers each individual to make a difference.

The Chronicle is a quarterly publication designed for SSC Atlantic employees. Its purpose is to inform, educate, entertain and generate new ideas.

Heller returns to SSC Atlantic as CO this summer

Capt. Scott D. Heller will return to SSC Atlantic as the next commanding officer, SPAWARSYSCOM Commander Rear Adm. David Lewis announced recently.

Heller currently serves as Program Manager for the Battlespace Awareness and Information Operations Program Office (PMW 120) within the Program Executive Office, Command, Control, Communications, Computers and Intelligence (PEO C4I). An Engineering Duty Officer and member of the Acquisition Corps, Heller returns to Charleston for the third time in his naval career.

A native of New Jersey, Heller received a Bachelor of Arts degree in statistics from the University of Rochester in 1988, earning his commission through the Naval Reserve Officer Training Corps.

Following Surface Warfare Officer School and Officer of the Watch training in Newport, Rhode Island, Heller reported to frigate **USS Pharris** (FF-1094) where he served as Assistant Navigator, Boilers Officer and the Main Propulsion Assistant during exercises in the Baltic, for six months as part of the Standing NATO Force Atlantic (SNFL) and for numerous counter drug operations.

Heller then reported to guided missile cruiser **USS Normandy** (CG-60), homeported in Staten Island, New York, as Anti-Submarine Warfare Officer. During this time **USS Normandy** participated in Operations Deny Flight and Sharp Guard off the coast of Bosnia and earned the "Hook'em Award" in 1993 for the best Anti-Submarine platform in the Mediterranean.

In 1994, AEGIS Combat System Engineering Development Site (CSEDS) in Moorestown, New Jersey welcomed Heller as the Assistant Officer-in-Charge. While serving here he was selected for the Engineering Duty Officer community and the Naval Postgraduate School (NPS). At NPS he earned a Master of Science degree in computer science with a subspecialty in Information Assurance, graduating with the Navy League Award for Highest Academic Achievement.

Capt. Scott D. Heller

Heller's next assignment was at then-SSC Charleston, where he assisted in the fielding and testing of multi-level secure systems, and led a team of engineers in conducting Computer Network Vulnerability Assessments of all ships prior to deployment, greatly improving the information assurance posture of the fleet.

In December 2001, Heller reported to the Engineering Duty Officer School for instructor duty, and then in January 2004, he reported to PEO C4I and Space in San Diego, California. Heller served as the Navy's lead for Cross Domain Solutions; as the Assistant Program Manager for the Automated Digital Network System (ADNS); and finally as the Acting Deputy Program Manager (DPM) for the Deployable Joint Command and Control Program Office in Panama City Beach, Florida.

In October 2007, Heller returned to then-SSC Charleston as Executive Officer and Deputy Chief Engineer before fleeting up as Chief Engineer. He was also selected for promotion to the rank of captain. In October 2009, he reported to Naval Surface Warfare Center, Port Hueneme Detachment as Deputy Commander, Office of Engineering and Technology and Chief Engineer, with responsibility for the technical execution of 1,900 military and civilians performing the test, evaluation and sustainment of Navy surface combat systems.

Rivera-Fisher reports as Command Master Chief

ITCM (IDW/SW/AW) Milly Rivera-Fisher has assumed duties as SSC Atlantic Command Master Chief (CMC). She relieved HTCM(SW) Michael Barfield.

Rivera-Fisher comes to SSC Atlantic after a tour on board **USS Kearsage** (LHD 3) as Automated Data Processing and C4I Leading Chief Petty Officer.

Born in Lowell, Massachusetts and raised in Toa Baja, Puerto Rico, she joined the Navy from the Island in October 1994. Her duty stations include Surface Warfare Development Group, Virginia Beach, Virginia; NCTAMS EURCENT, Naples, Italy; and the precommissioning crew of **USS Preble** (DDG 88) home ported in San Diego, California. While serving on board **USS Hopper** (DDG 70) she was advanced to Chief Petty Officer. In 2007 she reported to Navy Marine Corps Intranet in Norfolk, Virginia, where she served as the Network Operating Center and Training Department Leading Chief Petty Officer and was advanced to Senior Chief Petty Officer.

ITCM (IDW/SW/AW) Milly Rivera-Fisher

DeLarge relieves Rafferty as NOLA OIC

Cmdr. Thomas DeLarge relieved Cmdr. Tim Rafferty as officer-in-charge of SSC Atlantic's New Orleans Detachment during an April 29 ceremony.

Rafferty, who has served as officer-in-charge since June 2012, retired from the Navy with more than 23 years of service. He was praised for the detachment's recent successful Fleet Cyber Command Cyber Security Inspection and for establishing positive relationships with regional military and civilian Gulf Coast leaders.

In her remarks, SSC Atlantic Commanding Officer Capt. Amy Burin also praised Rafferty for overseeing a detachment space reduction with no loss or interruption of command operations, saving the command more than $1 million in facility costs and expenses.

Under his leadership the NOLA team also greatly improved mission-critical Navy Manpower and Personnel System capabilities such as career management systems, interactive detailing, mobilization, order writing, leave, pay, separation and retirement services. Rafferty also oversaw operation of a Navy Enterprise Data Center and Customer Support Center fielding more than half a million calls annually.

DeLarge comes to SSC Atlantic following a tour as operations officer for Combined Task Force FIVE ONE in Manama, Bahrain, in support of Operations Enduring Freedom and Inherent Resolve, 2014-2015. The Orangeburg, South Carolina native enlisted in the Navy in 1990 and was commissioned in 1995. His shipboard assignments have been on **USS Saipan** (LHA 2), **USS Whidbey Island** (LSD 41) and **USS Nassau** (LHA 4).

Photo by George Womack

Cmdr. Tim Rafferty and Cmdr. Thomas DeLarge chat after the recent change of charge ceremony in New Orleans.

DeLarge's other duty assignments include Surface Warfare Officer School, Second Battalion Tenth Marines, 2nd Marine Division; Commander Amphibious Group Two; Afloat Training Group Atlantic; Commander Fifth Fleet; as Commander, U.S. Naval Forces Central Command's Pakistan Country Engagement Officer; Maritime Security Squadron Five; and Expeditionary Warfare Training Group Pacific.

SSC Atlantic's CO and ED visited Antarctica, in January and December respectively, to see center teams providing critical command and control services for the stations, aircraft and vessels supporting the U.S. Antarctic Program.

GCSS-MC

SSC Atlantic celebrates milestone

SSC Atlantic's Global Combat Support System – Marine Corps (GCSS-MC) Integrated Product Team (IPT) played a critical role as the United States Marine Corps (USMC) and the Navy's Program Executive Office Enterprise Information Systems (PEO-EIS) recently achieved a major milestone in the 10-year life of the GCSS-MC program.

GCSS-MC is a Major Automated Information System (MAIS) Acquisition Category I (ACAT-I) (IAM) program that utilizes the Oracle commercial off-the-shelf (COTS) E-Business Suite (EBS) and database applications with customized Reports, Interface, Conversion and Enhancement (RICE) objects. Oracle EBS applications are used by industry for business activities ranging from human resources, budget planning and fiscal accounting to supply chain management. The software was tailored to meet unique GCSS-MC needs.

Photo by Sgt. Mark Fayloga

Photo by Joe Bullinger

Members of the GCSS-MC IPT leadership team pose at Bldg. 198. They are, front row, from left, Betty Collins, 58210 (Information Assurance Service Lead), Betty Knott, 58310 (Infrastructure and Upgrades Product Lead), Lauren Templeton, 12230 (Business Operations Service Lead (A)), Bruce Deary, 61500 (Contracts Service Lead); back row, from left, Jeff Hays, 63500 (IPT Lead), Scott Baumann, 59110 (Test Service Lead), Jim Whetzel, 43110 (Logistics Service Lead), Greg Hastings, 54210 (Operations Product Lead), Steve Kanen, 51110 (Configuration Management Service Lead) and Kurt Kraus, 54130 (IPT Technical Lead (A)). Not pictured are Tim Culp, 54210 (Albany LIS Lead), Erika Henderson, 54240 (Systems Engineering Service Lead) and Scott Hoselton, 54110 (IT Systems Product Lead).

In December 2012, the program entered the "critical change" period, an acquisition term used when there is a breach to the expected cost, system performance or schedule baseline for an information technology program. GCSS-MC was unable to deliver a deployed capability that would allow Marines in austere environments without Internet connectivity to use the system, which resulted in a schedule delay. After an extensive nine-month review of the program and a report to Congress, the program got back on track with Increment 1.1.1, which featured three products – Mobile Field Service, Tactical Wide-Area Network and Enterprise Automated Task Organization (EATO) – that provide Marines an interim deployable capability. In support of Increment 1.1.1, SSC Atlantic conducted formal developmental testing (DT) prior to Follow-on Operational Test and Evaluation (FOT&E) of the R1.1.1 software baseline in support of a successful Full Deployment Decision (FDD).

"Mobile Field Service is laptop software that will allow Marines who are not connected to the system to conduct a few different transactions and upload those transactions to the system once the Marine is reconnected," GCSS-MC PM Dave Hansen explained. While they may not be able to place their orders right away, they'll be ready once they have Internet connectivity, and will spend less time in the system.

The Tactical Wide-Area Network, or TWAN, provides a data cache that makes the form-filling process faster over time. "It learns what you're putting into the forms," Hansen said. "And then, over time, TWAN stores that information to help you fill in the forms faster. Overall we see about a 30 percent reduction in transaction time."

The third product, EATO, saves the most time because it allows group transactions in GCSS-MC. This will help limit the number and time for transactions Marines conduct before deployments. "Take the example of establishing a Marine Expeditionary Unit from a Marine Expeditionary Force – you're transferring a lot of gear, and each piece has to be accounted for," Hansen said. "Before we had EATO, we had to do individual transactions numbering around 8,000, which takes about three months. With EATO, you have to fill out a few things beforehand, but what took months now takes a few hours of Marine interaction, and the system does the rest in the background."

Since May 2012 SSC Atlantic has provided systems engineering sustainment and technical support to the GCSS-MC Program Office. This includes modernization engineering, infrastructure, logistics and system baseline configuration management support to the Marine Corps Systems Command (MARCORSYSCOM) program office and Navy PEO-EIS. A multi-increment program of record for Logistics Chain Management via an Enterprise Resource Planning (ERP) system, GCSS-MC is modernizing Logistics Architecture and Management capabilities for the entire Marine Corps. It provides near real-time visibility of retail supply, wholesale supply, equipment maintenance and repair transactions.

SSC Atlantic provides full system operations support and tiered Service Desk support, as well as acting as the in-service technical lead for systems/software engineering and integration. This Service Desk support, provided through the SSC Atlantic New Orleans Enterprise Service Desk (ESD), currently maintains system performance of the production environment with availability greater than 98 percent. SSC Atlantic is sustaining current systems fielded to Marines worldwide, and also leading system upgrade efforts from

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Oracle 11i EBS to Oracle 12.2 EBS by employing an Agile software development methodology.

"GCSS-MC work at SSC Atlantic represents, along with Navy ERP, the success of the command in developing capabilities to support and improve complex, ERP implementations," said Jeff Hays, SSC Atlantic GCSS-MC IPT Lead. "This is a capability that's basically been built from the ground up."

GCSS-MC replaces two legacy supply and maintenance systems that have been used by Marines for more than 40 years: the Supported Activities Supply System and Marine Corps Integrated Maintenance Management System, or SASSY and MIMMS, respectively. Since GCSS-MC combines supply and maintenance functions, Marines can transact on a single system, which allows for improved resource planning and logistics chain management, increased visibility and accountability, and improved operational readiness reporting of Marine Corps assets.

One of the challenges overcome by the GCSS-MC team was the perception that the new system was too complicated, since it combines supply and maintenance functions. Classroom training, detailed training aids and a 24-hour service desk have helped users adapt to better utilize the system, which is now used by nearly 30,000 Marines across the Corps. All told, Marines conduct about 45 million transactions in GCSS-MC every month.

Photo by Sgt. Jennifer Pirante

***Sgt. Christopher Quinlan, supply administration chief with 13th Marine Expeditionary Unit, analyzes task and transaction records kept using the GCSS-MC aboard* USS Boxer.**

"Developing an ERP technical resource for the DoN while reducing the government's reliance upon Oracle personnel has been a total SSC Atlantic team effort regarding not only IPT personnel, but other supporting factions, from Contracts to Human Resources to Facilities and so on," explained Hays, whose IPT includes SSC Atlantic team members in Charleston, New Orleans, Norfolk and the National Capital Region, as well as SSC Pacific.

"Together, we've worked hard to train and acquire a true ERP capability enabling SSC Atlantic to make a difference in our Information Dominance mission," he said.

- *Susan Piedfort,* Chronicle *Editor*

GCSS-MC

Logistics backbone for the Marine Corps

GCSS-MC is the Marine Corps' web-enabled, deployable logistics information system that provides the backbone for the logistics information exchanges required to effectively request, distribute and maintain critical battlefield equipment and supplies. The system is an Acquisition Category (ACAT-IAM) program, also known as a MAIS.

To achieve this level of designation, a program must exceed $365 million in R&D funding and procurement funding and be designated as "Special Interest" by Congress.

As the primary technology enabler of the Corps' Expeditionary Logistics strategy, the core of GCSS-MC is a modern, COTS enterprise resource planning software package based on Oracle's e-Business Suite. GCSS-MC enables the warfighter to operate both in garrison and while deployed, providing logistics chain "reach-back" from the battlefield.

Operational impact

Marines in combat require a rapid and flexible logistics capability responsive to the 21st century battlefield. GCSS-MC answers this critical operational imperative. It provides a deployable, single point-of-entry for retail logistics transactions, while facilitating modernization of aged logistics processes and procedures. The key to sustaining deployed logistics operations is the enhancement of asset visibility and supply accountability. Critical performance objectives include reduced logistics response, reduced customer wait time, and decreased dependence on forward positioned stocks. Commanders will benefit from GCSS-MC due to increased Logistics Chain intelligence vital to effective C2 functions.

Marines in supply, maintenance and distribution will increase efficiency in planning, accountability and expedited delivery of supplies and equipment to supported units. GCSS-MC increment releases provide basic supply, maintenance, and asset tracking functionalities, and capabilities that enhance system functions in deployed environments. Enterprise Automated Task Organization (EATO) improves the composition and decomposition of the MAGTF by providing batch processing of equipment and personnel between organizations; Mobile Field Service (MFS) supports limited supply and maintenance transactions while disconnected from the enterprise system; and the Tactical Wide-Area Network (TWAN) capability makes form-filling faster over time.

VWIP aims to ease veterans' transitions

By Diane Owens
SSC Atlantic Public Affairs

Fifty-three percent of SSC Atlantic civilian employees around the world are veterans – and many more are spouses of active-duty or former military members.

To empower and serve existing employees in the veterans sector, as well as veterans who are being recruited and hired continuously (42 since October), SSC Atlantic recently initiated a Veterans Workforce Integration Program (VWIP).

The kickoff meeting was held March 4 and broadcast to all sites.

Staci Brown Pelland, VWIP lead, opened the event and thanked Engineering Competency Lead Andrew Mansfield, who had the vision for the program, and Commanding Officer Capt. Amy D. Burin, the program's champion. She also thanked veterans for their commitment and continuing service to the United States.

Photo by Diane Owens

Staci Brown Pelland, Veterans Workforce Initiative Program lead, speaks at the March 4 kickoff meeting.

Pelland, who served 10 years in the Air Force (active and Reserves) as a technical sergeant, is the daughter of a Korean and Vietnam war veteran; she accompanied her father – who was an amputee – to the local veteran's hospital from an early age.

She stated that the center is working to transition post 9/11 veterans into the workforce and improve the quality of life of former military members who are current employed.

The commanding officer spoke, relating that the kickoff date was the anniversary of an aerial attack that ended with Allied air superiority throughout Europe in World War II, leading to the Germans' surrender and Victory in Europe day, about a year later. However, every day on the calendar marks an anniversary of various military or humanitarian missions.

Fewer than 15 percent of Americans can claim the title "military veteran" but the list of accomplishments for those individuals is immense.

SSC Atlantic employs more than 2,000 veterans, and their experiences, insight and knowledge of field technology spanning several generations of wars and conflicts enable the center to deliver high-performance IT solutions to current warfighters.

Three critical components were instilled in veterans during active duty: (1) identity (that they are soldiers, Marines, airmen, Sailors or Coast Guardsmen) (2) purpose (mission) and (3) community (that they work side by side with brothers and sisters at arms for a common purpose).

The center's Veterans Workforce open community and related programs will allow former military members to regain their identity, find their purpose and establish a community of veterans who are helping veterans.

Pelland stated that the definition of a veteran varies greatly, but that veterans at one point wrote a blank check to America for any price – including their lives – and vowed to protect liberty.

The VWIP's three primary initiatives are:

(1) MATES (Mentor, Assist, Train to Excel and Support) – a mentoring program specialized to transition veterans into the workforce

(2) Active Duty Wounded Warrior Military Internship program

(3) Community outreach – establishing a veteran Open Community and developing external strategic partnerships with military and veteran service organizations.

These resources, and others, are available to the 2,076 SSC Atlantic civilians employed as of Jan. 15 who are veterans, as well as to industry partner employees who are also former military members.

MATES will be similar to the New Professionals program – to help new and current veteran employees transition to the workforce through mentoring. It should be especially helpful to individuals who are beginning their first post-military job and will work best if current employees provide feedback on mentoring needs and desires.

SSC Atlantic is also partnering with representatives from several military-related organizations as part of the VWIP initiative. Local reps will provide information and a variety of services onsite in the future.

The center has piloted the Active Duty Wounded Warrior Military internship program and will continue to use it to bring active duty service members who are wounded or ill to

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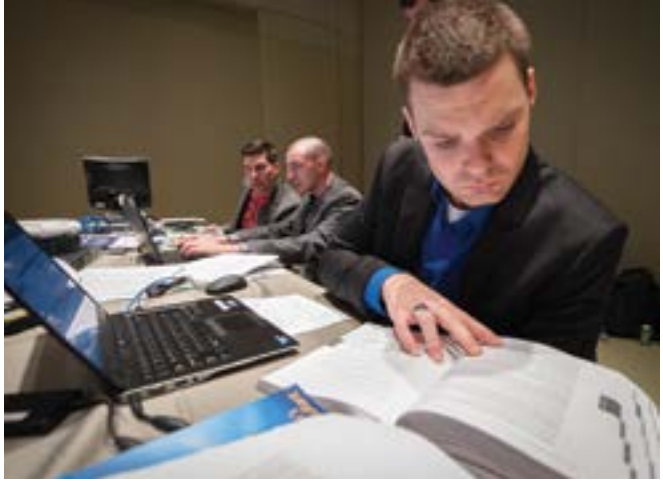


Photos by Joe Bullinger

It's good guys vs. hackers in cyber games

By Michelle Rehr-Matash
SSC Atlantic Public Affairs

SSC Atlantic and the Lowcountry Chapter of the Armed Forces Communications and Electronics Association collaborated to present the third Palmetto Cyber Defense Competition (PCDC) April 11-13 at Trident Technical College in North Charleston.

Eight high school teams who prequalified through Cyber Patriot and eight college teams battled Red Team hackers trying to penetrate their on-line gaming business networks, all the while maintaining network availability, configuring and protecting their network against threats. Winning team members each received a $500 scholarship.

High school students from around South Carolina competed on Saturday, with Palmetto Scholars Academy taking first place. Ashley Ridge earned second; third went to Lowcountry Tech Academy. All eight competing schools received a laptop. Gabriel Voigt of Palmetto Scholars was voted Most Valuable Player, receiving a cash award. Other high schools competing were Florence Career Center, South Aiken, Stratford, Summerville and Wando.

"Real-world security is a lot harder than one thinks," said Mathew Townsend of Florence Career Center. "I really enjoyed it."

University of South Carolina took first place, Charleston Southern University second while College of Charleston placed third on Sunday's collegiate competition. University of South Carolina's Catharine West earned Most Valuable Player receiving a cash award. Clemson, ECPI, South Carolina State, The Citadel, Trident Technical College also competed in the event.

"I felt that I was in an actual professional work environment," Nyteisha Bookert commented. "PCDC pushed me to attend graduate school. It was that much fun. The experience is great for a resume."

A "Pro Day" training challenge for government and industry professionals featured teams from U.S. Cyber Command, 24th Air Force, Navy Cyber Defense Operations Command, and South Carolina National Guard. Industry teams were from Scientific Research & Applications Corporation, Scientific Research Corporation, SCANA Energy and Sentar/SPARC. To maintain the STEM nature of PCDC, two collegiate students were embedded within each Pro team. Amanda Prevatt, a Stall High junior, was invited to join SRA. Pro Day is considered an opportunity for workforce development, training, recruiting and networking.

The goal of the PCDC is to energize South Carolina high school and collegiate students to focus on the development of technical skills in networking and cyber security in preparation for exciting careers.

SSC Atlantic's Jeff Sweeney, Director Palmetto Cyber Defense Competition, said, "Students are our future. PCDC is about getting our youth excited about cyber."

The third annual Palmetto Cyber Defense Competition featured high school, college and professional levels.

SSC Atlantic's Perry meets VPOTUS

SSC Atlantic is fortunate to have a highly qualified and enthusiastic employee like Kaila Perry.

Anyone who has doubts can just ask Vice President Joe Biden.

Because of her success as a national laboratory/federal government intern, Perry was chosen to be a model for a White House-sponsored Cybersecurity Workforce Pipeline Consortium and was selected to meet Biden in January when he announced a $25 million grant to support cybersecurity education at 13 Historically Black Colleges and Universities (HBCUs). Before the announcement, Perry gave Biden, Virginia Gov. Terry McAuliffe and Rep. Bobby Scott a demonstration on steganography.

Photo courtesy NSU/Office of Communications and Marketing

Sera-Brynn Executive Vice President Heather Engel, left, laughs as Vice President Joe Biden points to SSC Atlantic's Kaila Perry, right.

Biden was so impressed that before he announced the grant he stopped, pointed to Perry and said, "Hire her… You better start your bidding!"

"All I could do was laugh and smile," Perry said. "It was probably one of the most memorable moments of my life."

The following day, she and a fellow student, along with the Norfolk State University (NSU) Computer Science Department Head, Provost and President of the university, returned to the White House to share their thoughts and opinions on the grant and how to get students involved in science, technology, engineering, and mathematics (STEM)-related careers.

Perry's own experiences at SSC Atlantic and NSU give her a unique perspective.

She joined SSC Atlantic in June 2013 as a cybersecurity student intern through the Department of Defense Information Assurance Scholarship Program (DoD IASP). That summer she worked at the Washington, D.C., detachment helping to develop a policy server for a multicast group used by unmanned aerial vehicles (UAV).

Graduating in May 2014, she began working at SSC Atlantic's Norfolk, Virginia detachment as a cybersecurity tools implementation specialist, responsible for researching and implementing cybersecurity administrative tools in accordance with information assurance operations.

Perry is currently working part-time while obtaining a master's degree in computer science with emphasis in information assurance.

Besides being active in several cybersecurity and STEM programs at NSU, Perry was also the university's top Information Assurance Scholarship Program (IASP) student with a 4.0 GPA.

As an NSU freshman Perry had no idea what she really wanted to do, so she started with an undeclared major. In her first semester she began work study with Dr. Jonathan Graham in the Information Assurance Center of Excellence. There she was exposed to different projects other students had been working on, and it caught her interest.

"I wanted to see if the forensics projects other students had been working on were like what they did on TV. Of course, they were not, but I enjoyed computer science ... I just loved the problem solving aspect of it, so I changed my major to computer science.

"The course work was really often a challenge," Perry continued, "but it was always achievable. I'm still not sure why specifically I was chosen for the IASP, because the decision was made outside of the university. I can say however that while at NSU I always had multiple professors pushing me to apply for any opportunities such as internships, scholarships, conferences, workshops and cybersecurity competitions," Perry said, "and I would do it. As a result, I had so many opportunities I don't think I would have gotten anywhere else."

Aside from her coursework, she interned at Lawrence Livermore National Laboratory for two summers. Her coursework and experiences have helped form her own strategy for getting youth involved in STEM careers. She believes if students took part in hands-on cybersecurity activities at an early age they would be attracted to those careers.

"Workshops for college-aged students and outreach programs for students K-12 attract more students to the field. I've gone to high schools and helped teach students about cybersecurity tools. After they have performed the tasks most of them seem more enthusiastic about cybersecurity." Perry said.

As for her own future, Perry plans to continue working for SPAWAR when she gets her graduate degree in May 2016. "Long term I'm not sure exactly what I want to do yet, but I've considered going back to school to obtain a PhD and become a professor," she said. "If I do become a professor that will be way down the line; but I really love teaching and tutoring students."

- Adapted from a Q&A with Kaila Perry published in the CHIPS January-March 2015 Issue

Leadership class tailored to SSC Atlantic workforce

Photo by Joe Bullinger

Fuqua leads the class in discussions and exercises that help supervisors understand their personal leadership styles.

At SSC Atlantic, leadership training is considered an essential investment in the workforce that pays dividends in performance, morale and personal growth.

When Total Force Management Competency Lead Rich Hooks wanted to start a new round of leadership classes tailored specifically to SSC Atlantic supervisors, he could have contracted with an outside vendor to deliver the training. But as luck would have it, he found someone right in his own competency with extensive workforce development experience who has completed a master's degree in human resources development and is currently completing her doctorate in leadership organizational management. She is now preparing to defend her doctoral dissertation.

Deborah Fuqua drew on 15 years of work experience in human resources gained from Cuba, Iceland, Japan and SSC Atlantic, to develop and teach the center's Leadership Essentials class. She had already created leadership models that show our processes here at SSC Atlantic.

She has worked extensively at SSC Atlantic in the staffing area as a personnel management advisor, also in the employee relations area, resolving disciplinary actions and managing the Workers' Compensation program. She drew on her real life experiences, the history of the command and her academic study to create a leadership class that specifically addressed concerns voiced in SSC Atlantic's recent Organizational Assessment Survey.

Fuqua spent a year and a half developing the class curriculum for several leadership classes. "It took a while to get approval to start these classes, and I just kept developing the content so I'd be ready to roll it out when the time came," she said. "As soon I got the go-ahead, I was ready!"

Leadership classes for supervisors were held in March and April. They kicked off with self-reflection and a personal leadership statement that prompted supervisors to think about who they are as a leader and how they lead. There were discussions about the different leadership styles – transactional, transformational, autocratic, charismatic and servant – and how supervisors may apply the leadership style approaches to specific situations and people.

"A leader's compass – his or her values, ethics, trust, integrity and financial integrity – is essential to good leadership. We talk about this, and the other fundamentals leaders need – soft skills like communication, trustworthiness, creativity, innovation, motivation, teamwork, delegating and conflict resolution," Fuqua said.

By design each class consisted of new supervisors, mid-career and seasoned supervisors, to allow for a sharing of insights and experiences. Discussions and exercises showed supervisors how important it is to understand their personal leadership styles and the application of them, and that they must lead by example by being an ethical leader. Also, leaders learned the importance of how to apply specific soft skills creating effective leadership, yielding an increase in employee morale.

"It's really eye-opening for them when they role-play in

the situational exercises, seeing things from different perspectives and learning how to lead effectively," Fuqua said. They also discussed things like conflict resolution, diversity, generational differences, communicating effectively in the electronic age, and how people react to change. A supervisor in a recent class told Fuqua it was the most engaging class she had ever taken.

"We had some fun too," Fuqua said. "We had exercises that required teamwork, trust and communication."

"I want them to take what they've learned, retain it and apply it daily," Fuqua said. She's also establishing a blog that will encourage people to ask questions and create a dialog on leadership issues.

Deborah Fuqua

Her ultimate goal is more than just looking at metrics or decreasing the number of grievances, however. "It's really to increase supervisor and employee morale. A lot of it boils down to developing positive workplace relationships by just being nice – treating people with respect. Engaging and empowering employees allows employees to take ownership of their positions, become more committed to their positions and to our mission, increase employee morale, increase productivity, decrease absenteeism, retain exceptional talent, and create the ideal environment where everyone can be creative yielding innovation," she said.

"A leader has the ability to influence others to accomplish tasks and goals that support the mission. I think this class represents a significant command investment in the personal growth of our supervisors and employees," Fuqua added. "It's important that we provide this growth opportunity, because in one way or another, everyone is a leader."

- *Susan Piedfort,* Chronicle *Editor*

Veterans Workforce Integration

Continued from page 7

the center to gain knowledge and abilities through internships. If they're a fit, these people will be hired as civilian employees. Wounded warriors from Camp Lejeune are participating in the program now, as are military personnel from Fort Gordon. This program will stand up at other SSC Atlantic locations in the near future.

Members of the open community are encouraged to use online communication tools on the milsuite website to communicate electronically with each other at *https://www.milsuite.mil/ssc-lant-veteran-workforce*. Those with CAC access, including civilians and industry partners at all locations, are eligible.

Twenty employees have opened milsuite accounts to date, and in the future, subgroups may be formed to target discussion among members of specific groups, such as female veterans and combat vets.

The site will also be used to solicit feedback on a draft charter, gather input about the group's goals and objectives, and get ideas for activities the center can undertake to help veterans. It'll also be a repository for information about local military and veterans' events.

Pelland and others will moderate the site, and ask that contributors be kind, fair, supportive and sensitive of others.

An open discussion followed. Suggestions included:

• Educating the workforce – coworkers and supervisors – about how to tell if a veteran is struggling, and actions to take

• Educating recruiters about questions they can ask veterans, while complying with applicable laws

• Making information about veterans resources available

• Educating veterans about how to be effective in the civilian workforce: how to communicate, how to get things done, how to adapt to the environment

• Educating supervisors about how to encourage veterans who are contractors and would be good candidates to apply for government job openings

• Taking action to help direct active duty military members toward obtaining degrees and gaining experience in science, technology, engineering and math (STEM) fields, where tremendous opportunities are available in the civilian workforce

Debra Baldwin of Code 85 is the Reserves and Guardsmen Liaison for the Southeastern U.S. This position is required by law, and she's here to help and protect civil service employees and contractors in those categories.

Pelland said VWIP meetings will be held quarterly.

Burin emphasized that veterans who have issues in the workplace should not wait to resolve them, but take action now by contacting Staci Brown Pelland *(staci.b.pelland.civ@mail.mil)* for access to resources or by communicating with others via milsuite.

She concluded the meeting by saying, "You can't understand how much we want to help."

Photos by Joe Bullinger

SSC Atlantic Commanding Officer Capt. Amy Burin and Executive Director Steve Dunn present Certificates of Achievement to SSC Atlantic NPS MSSE graduates at the February 2015 awards ceremony. They are, front row, from left, Brent Misenheimer, Theresa Inman, Laura Rolinger, Jennifer Underwood and Regina McNeil; back row, Dunn, Clive Sugama, Michael Besco, Michael Jourdain, Dean Barsaleau and Burin. Not pictured are Paul Strazdus, Thomas Suggs and Chester Alonzo.

SSC Atlantic employees earn NPS SE Master's degrees

By Dean Barsaleau, 55330

Twelve SSC Atlantic employees from Charleston, New Orleans, and Newtown, Pennsylvania completed a rigorous and demanding systems engineering non-resident master's degree program in December. This two-year program, offered by the Naval Postgraduate School (NPS) in Monterey, California, provided relevant, tailored and unique advanced education and research programs in systems engineering in order to increase the combat effectiveness of U.S. and allied armed forces.

SSC Atlantic students with an undergraduate degree accredited by the Accreditation Board for Engineering and Technology (ABET) earned Master of Science degrees in systems engineering (MSSE), while non-ABET undergrads earned Master of Science degrees in engineering systems (MSES). SSC Atlantic graduates earning Masters of Science in systems engineering were Dean Barsaleau (55330), Michael Besco (56240), Michael Jourdain (521B0), Brent Misenheimer (54530), Laura Rolinger (52510), Paul Strazdus (55200), Clive Sugama (55240), Thomas Suggs (55240) and Jennifer Underwood (52510).

Master of Science degrees in engineering systems were earned by Chester Alonzo (543H0), Theresa Inman (54130) and Regina McNeil (54250).

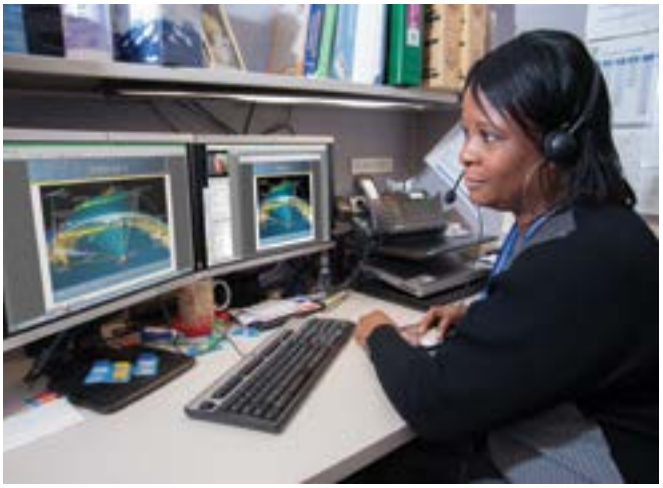
In addition to the SSC Atlantic students, the SPAWAR cohort also included a diverse cross-section of students from SPAWAR headquarters and SSC Pacific in San Diego, and NPS resident students, and incorporated team-based learning to provide realistic collaborative problem solving and enhance student engagement.

The NPS graduate-level education for SSC Atlantic employees was sponsored and funded by Workforce Development (81000) or the Acquisition Workforce Tuition Assistance Program (AWTAP) so the students' only out-of-pocket expenses were for textbooks. The eight-quarter program comprised 54 quarterly graduate credits across 16 courses, including a three-course, block team capstone project.

The program employed a collaborative distance learning environment that included a blended approach with a mix of synchronous and asynchronous web-based tools including voice, video, chat and desktop sharing with periodic on-site visits by the NPS professors and capstone advisors. Students typically took two classes each quarter, delivered in two three-hour sessions from 11 a.m. to 2 p.m. and 2:30 to 5:30 p.m. each Friday.

"This distance learning opportunity allowed me to attain a specialized training skill and certification that further equips me to be competitive and marketable in this ever-changing technological world," McNeil noted. "The NPS SE degree program opened doors of understanding surrounding systems engineering that most only receive on the job. With a well-

Michael Jourdain collaborates on the Systems Engineering Health and Visualization Operational View (OV-1) during a team meeting for the NPS MSSE capstone project.



Regina McNeil reviews the Ballistic Missile Defense OV-1 during case study research for the NPS MSSE System of Systems Engineering course.

structured and extremely challenging curriculum, I was able to gain the advantage of being taught the proper way to use and apply systems engineering processes. I look forward to being more effective and productive along my career path's journey," she added.

"The non-resident nature of the NPS SE cohort allowed me to combine graduate degree studies while still working full time," remarked Strazdus. "This was particularly important for me in my role on the Mobile User Objective System (MUOS) Systems Engineering team. I am frequently travelling between Cape Canaveral, Florida; Point Mugu, California; and contractor facilities in Newtown, Pennsylvania, and I needed a degree program that allowed me to balance my work and travel commitments. This program supported that. Further, if I did miss a lecture because of work or travel, I could easily pick it up because every lecture was recorded," Strazdus added.

Jourdain, who completed the first six quarters while assigned to the SPAWAR office in Stuttgart, Germany, had this to say about the program: "The NPS SE cohort was extremely challenging, particularly considering I was working from the Stuttgart office for the first six quarters, where classes often lasted until 11:30 p.m. Coupled with the high tempo of operations in Europe and the expectation of one to two hours of study for every hour of class time, the program requires commitment while balancing work and family. I did feel the coursework was focused on SPAWAR's needs, and I have been able to immediately apply much of the learned knowledge and skills to my current projects."

Other students identified other benefits of the advanced course work. Inman remarked, "I found the NPS SE curriculum included access to the latest advances in systems engineering and was tailored with a system-of-systems focus to meet SPAWAR enterprise needs. I'm really looking forward to applying the SE concepts and tools to my engineering work here at SSC Atlantic to drive further innovation and better satisfy my internal and external customers through systems-oriented design, management and engineering."

The team learning associated with multiple class assignments and the capstone project also created a realistic project team environment. "I enjoyed working with my colleagues across the SPAWAR enterprise," Alonzo noted. "The diversity of viewpoints, different educational backgrounds and varied work experiences across the cohort provided a great opportunity to expand your horizons and gain exposure to different points of view. I also felt the NPS SE cohort aligned well with the rapidly changing technology and increased complexity inherent in SPAWAR C4I systems and software."

A capstone project is also an integral part of the systems engineering degree program at NPS. The project focuses on building and strengthening students' abilities to conduct high-level systems engineering design, architecture and

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Capt. Amy Burin and Steve Dunn present the Wayne E. Meyer Award for Excellence in Systems Engineering to Laura Rolinger and Clive Sugama for capstone project leadership.

Clockwise from left, Brent Misenheimer, Dean Barsaleau, Regina McNeil and Michael Jourdain collaborate with Chester Alonzo on VTC during a NPS MSSE team meeting.

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analysis. Secondarily, the project contributes to the professional or academic community by providing the resolution of an issue, the solution to a problem, the improvement of a process or an understanding of relationships between phenomena, and an extension in the body of knowledge. Further, the capstone shows the SE students can "do" systems engineering, including:

- Decompose "real world" complex problem with real stakeholders – find the real problem
- Propose rational solutions based on team research
- Analyze and recommend "best" solution and
- Communicate and document results, including recommendations on processes, areas for future work, etc.

The SSC Atlantic graduates formed two separate capstone project teams. The Systems Engineering Health and Visualization (SEHV) team, composed of Chester Alonzo, Michael Besco, Theresa Inman, Michael Jourdain, Regina McNeil, and led by Clive Sugama, focused on developing a capability to effectively capture the relevant source data across all portfolios in near real time in order to develop actionable metrics across the span of organizational projects that support program/project management decisions and implement systems engineering best practices to improve organizational performance. Sugama noted, "We leveraged the SE process including problem definition/needs analysis, requirements analysis, functional analysis, system architectural modeling, and system analysis. Our team identified leading indicators and process compliance trends that can provide invaluable insight into potential future states to allow management to take actions before problems are realized."

The second SSC Atlantic capstone project focused on an analysis of alternatives for USMC ship-shore beyond line of sight communications systems (SSBCS). The team included Dean Barsaleau, Brent Misenheimer, Paul Strazdus, Jennifer Underwood and Thomas Suggs, and was led by Laura Rolinger. "The Navy and Marine Corps would like to reduce its vulnerability to land-based weapons by moving the departure point for USMC landing forces from the current 20-25 nmi from shore to 65-90 nmi from shore," Rolinger said. "Current wideband ship-to-shore communications systems are at their operational limit at around 25 nmi. The USMC needs an Analysis of Alternatives (AoA) of wideband ship-to-shore communication alternatives to allow the Navy amphibious ships to extend their current stand-off distance that is imposed by the range of the current communication systems. Our AoA provided viable alternatives to extend these communication ranges."

The SSC Atlantic NPS SE graduates were recognized in February with Certificates of Achievement for their academic accomplishments. In congratulating this new cadre of credentialed systems engineers, Burin remarked, "Our Navy places a huge premium on effective systems engineering to provide needed capabilities and functionality within a netcentric operations and warfare environment in support of Information Dominance. I congratulate these engineers and look forward to their contributions to the naval acquisition community, particularly Program Executive Offices (PEOs), Systems Engineering Integrated Product Teams (SEIPTs) and Mission Area Systems Engineers, in implementing capability-based acquisition and systems engineering. Well done!"

Photos by Joe Bullinger

SSC Atlantic volunteers monitor the students' progress during the games held at SSC Atlantic's conference center.

DimensionU games begin

Teams from Hanahan and Dubose middle schools dominated at the fourth annual Tricounty DimensionU competition held at SSC Atlantic. Winning teams were given a Golden Tickets to advance to the DoD Math Games virtual tournament, featuring Air Force, Army and Navy affiliated teams.

Hanahan Team C won first Place and participated in the 7th Grade Division of the DoD Math Games. Dubose Team A took second place, and Dubose Team B third place.

DimensionU, funded by the National Defense Education Program (NDEP), is a math gaming tool that enhances students' skills in pre-algebra and algebra. Students engage in a series of first-person action adventure missions with three-dimensional graphics, sounds and animation similar to those in popular video games. They can customize their avatars and can go online to play individually or in teams, with classmates or with other students around the world.

Robot teams compete

SSC Atlantic volunteer effort grows

SSC Atlantic teams were once again part of the action as For Inspiration and Recognition of Science and Technology (FIRST™) Lego League (FLL) competition got underway for the 2014-2015 academic year.

SSC Atlantic sponsors and mentors 46 robotics teams this year in Charleston, Hampton Roads and New Orleans.

SSC Atlantic's Science, Technology, Engineering and Math (STEM) outreach efforts in the Charleston area impacts Charleston, Berkeley, Colleton and Dorchester 2 & 4 county schools, including 30 elementary schools, 28 middle schools, 18 high schools and eight magnet/progressive schools. In the Hampton Roads and New Orleans areas SSC Atlantic's presence is felt in 11 school districts which encompasses four elementary schools, nine middle schools and 19 high schools.

Across SSC Atlantic's three major locations in Charleston, New Orleans and the Hampton Roads area, robotics and STEM outreach programs involve 18,000 children, 1,200 educators and 172 schools.

Throughout the year, SSC Atlantic deploys volunteers from its technical workforce to serve as role models, mentors, content experts, competition judges and other robotics roles that show students the value of a STEM career.

Approximately 400 SSC Atlantic volunteers have expended more than 14,000 volunteer hours in SSC Atlantic's STEM outreach effort.

Other STEM outreach programs include SeaPerch, DimensionU, Palmetto Cyber Defense Competition, cybersecurity Camps, IT Shadow Day and Girls Day Out.

SSC Atlantic's STEM outreach is also helping to generate a broader, more diversified base of future scientists and engineers by working with underserved and underrepresented groups through a variety of volunteers outreach efforts.

For the robotics teams, their hard work culminates in one-day, high-energy, sports-like tournaments. During the tournaments, teams have three rounds on the competition tables to get the best score possible. When not competing with their robots, teams give their research presentations, are interviewed about the technical design of their robots, and how they work together as teams.

Every year, FIRST releases a new challenge based on a real-world scientific topic that engages the teams in hands-on robotics

Photos by Joe Bullinger

Above left and middle, the BurkeBots are evaluated as they give their presentation. At right, ROMbots volunteer mentors show off their robot.

design and scientific research. The theme for the challenge is different each year, allowing teams to learn about a variety of subjects.

This year's challenge is "What is the future of learning?" Teams find the answers, focusing on redesigning how we gather knowledge and skills in the 21st century and teaching adults about the ways that kids need and want to learn.

Each challenge has three parts: the robot game, the project, and FLL core values. Teams of up to 10 children, with at least one adult coach, participate in the challenge by programming an autonomous robot to score points on a themed playing field (robot game) and developing a solu-

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tion to a problem they have identified (project), all guided by the FLL core values.

Past challenges involved nanotechnology, climate, quality of life for the handicapped population and transportation. By designing the challenges around such topics, participants are exposed to potential career paths within a chosen challenge topic, in addition to solidifying the STEM principles that come naturally from participating in the program. Team members also learn valuable life and employment skills which will benefit them no matter which career path they choose.

With names like Brick Masters, Panthers, ROMbots, Beach Bots, B.O.L.T. and STEMbots, this year's team players got in the spirit with costumes, accessories, wigs and even hair color to illustrate their team identity. The competitions featured plenty of excitement for the students, their mentors and their families.

Photos by Joe Bulllinger

Costumes, team spirit, excitement and pandemonium make FRC fun for competing teams.

FRC teams battle it out with robots

For high school teams, FIRST Robotics Challenge (FRC) is the next step up. This unique techno varsity Sport for the Mind™ program is designed to help them learn and discover how interesting and rewarding the lives of engineers and scientists can be.

While the year-round program is about learning, growing, teamwork, real-life challenges and hands-on opportunities, each team's 150-pound, industrial-sized robot is the center of the action, and the camaraderie makes it even more fun.

From a kit of parts with no instructions, the team has six weeks starting in January to build a robot to perform particular tasks on a large playing field against 50 or more teams at competitive tournaments such as the recent one in Myrtle Beach, South Carolina.

In the off-season, students mentor FLL teams, tour local technology companies, listen to guest speakers, and work on teamwork and technical and computer skills

SSC Atlantic sponsors and mentors nine FRC teams across Charleston, Norfolk and New Orleans, and also sponsors cyber clubs at Stall High School and Burke High School in Charleston.

Above, the University of Japan's Aero robot performs one of the manual dexterity challenges. Opposite page; top, students get an up-close look at a robot built by a UCLA/University of Pennsylvania team; middle, students ask questions about the Aero robot; bottom, the robots must navigate over simulated rugged terrain.

DARPA Robotics Challenge

Dextrous robots perform human tasks

High school First Robotics Challenge (FRC) teams and a middle school First Lego League (FLL) team mentored by SSC Atlantic STEM Outreach volunteers got a first-hand look into the future of robotics at the Defense Advanced Research Projects Agency (DARPA) Robotics Challenge (DRC) test event held at SSC Atlantic's Unmanned Systems Research Range (SAUSR) March 2 through 12.

The students watched as top American and international robotics teams worked with robot systems and software to develop robots capable of assisting humans in responding to natural and man-made disasters.

Competitors are from academia and industry from the U.S., Japan, South Korea, China, Hong Kong and the European Union. The teams, representing some of the most advanced robotics research and development organizations in the world, are collaborating and innovating to develop the hardware, software, sensors and human-machine control interfaces to enable their robots to complete a series of challenge tasks selected by DARPA for their relevance to disaster response. Such global participation indicates the high priority many governments are placing on furthering robotic technology.

"As this technology becomes increasingly global, cooperating with the United States in areas where there is mutual concern such as disaster response and homeland security, stands to benefit every country involved," said Gill Pratt, Program Manager of the Defense Sciences Office in the DARPA Robotics Challenge.

To qualify for the DRC finals, teams had to submit videos showing their robots successfully engaging an emergency shut-off switch, getting up from a prone position, traveling 10 meters without falling, passing over a barrier, and rotating a circular valve 360 degrees. Approximately 15 different commercial and custom physical robot forms are competing, but it's each team's unique software, user interface and strategy that will distinguish them and push the technology forward.

For this testing event, the robots were operated wirelessly on a secure wireless network designed, developed and implemented by SSC Atlantic engineers. No power cords, fall arrestors or wired communications tethers were allowed.

For more than 100 Charleston students from Cane Bay,

Photos by Joe Bullinger

West Ashley and Ashley Ridge high schools and Cane Bay Middle School, the event demonstrated the possibilities of taking their FRC and FLL robotics challenges to a whole new level. It also gave them insight into some of the issues they would be working to resolve if they become technologists. They watched as the robots walked over uneven surfaces, opened doors, used drills and drove cars.

"This challenge makes the competitors think about making robots do things that people do, like turning valves, moving debris, things like that," said Pratt, adding, "And it's designed to be difficult." Competitors have to protect their robots against falls, strategically manage battery power, and build enough partial autonomy into the robots to complete the challenge tasks despite deliberately degraded communication links which simulate a disaster zone.

The benefits of sending robots where people can't go are obvious. But since the world was built for humans, challenges involving the dexterity of robot arms and hands, bending of knees and getting oriented to the simulated disaster terrain must be overcome. Previously the teams had worked with wheel and trac-

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S.C. school system honors Johnson as Outstanding Business & Industry Friend

Photo provided

Congratulating Johnson, third from left, are Sherri Yarborough, S.C. CATE Awards chair; Tana Lee, Berkeley County CATE Director; and State Superintendent of Education Molly Spearman.

SSC Atlantic's Science, Technology, Engineering and Math (STEM) Outreach Program Manager Shanda Johnson recently received the Outstanding Business and Industry Friend Award from the Career and Technology Education Administrator's Division of the South Carolina Association of School Administrators.

Johnson was nominated by the Berkeley County School District and learned that she was selected for the award in February. She was presented the award during a March 19 ceremony.

As part of SSC Atlantic's outreach, volunteers have energized students in STEM and cybersecurity areas of study, and made a huge impact by adding a cybersecurity track for the South Carolina Department of Education's Career and Technology Education (CATE) Program. After a successful virtual class pilot at the Lowcountry Technical Academy and Stall High School, virtual classes can now be held with any South Carolina high school. This has greatly increased student interest in cybersecurity and is helping to develop a future cybersecurity workforce in South Carolina.

DARPA robotics

Continued from previous page

tor robots, but these robots are more humanoid in form.

"This inspires us; we're excited to get to this level," said competitor Paul Oh, PhD, of UNLV. "We have a way to go yet, but we are going to break it open. In another 10 to 20 years, robots will be out there doing this stuff. You guys will make that happen," he told the visiting high and middle school students.

The teams were invited to the event in preparation for the DRC finals, held in June in Pomona, California. Team Kaist of Daejeon, Republic of Korea, and its robot DRC-Hubo won first place.

Technologies resulting from the DRC will transform the field of robotics and catapult forward development of robots featuring task-level autonomy that can operate in the hazardous, degraded conditions common in disaster zones.

- *Susan Piedfort,* Chronicle *Editor*

Chef recognized for support to SSC Atlantic

Photo by Joe Bullinger

From left, SSC Atlantic STEM Outreach Program Manager Shanda Johnson and SSC Atlantic Commanding Officer Capt. Amy D. Burin congratulate Chef Calvert.

SSC Atlantic Commanding Officer Capt. Amy D. Burin and STEM Outreach Program Manager Shanda Johnson recently recognized Stratford High School Culinary Arts Instructor Chef Carl Calvert and his team for their support of SSC Atlantic's STEM outreach efforts.

For the past two years, Carl Calvert and his Stratford High School Culinary Arts team have prepared and served meals and hors d'oeuvres to SSC Atlantic volunteers at STEM appreciation breakfasts and luncheons. Presenting a plaque to Calvert at a Feb. 10 meeting of the Berkeley County School Board, Burin thanked the chef, adding, "This is a phenomenal relationship established between the our groups and demonstrates a true sense of community."

SSC Atlantic featured at STEM festival

Photos by Joe Bullinger

SSC Atlantic was one of more than 50 exhibitors at the Charleston STEM Festival at Brittlebank Park in February. The second annual event was a celebration of science, technology, engineering and math in the Lowcountry. It provided opportunities for engagement and exchange between children, teens, families and local STEM professionals from SSC Atlantic and elsewhere. Hands-on activities (such as holding a Madagascar hissing cockroach, below,) live performances, demonstrations and family-oriented entertainment made the day fun for all.

At the SSC Atlantic booth kids could explore robotics building, control a remote Rover with an iPad, learn about other STEM activities at SSC Atlantic and find out about career opportunities for those who want to make IT count for the warfighter.

Photo by Jerry Sekerak

Students gather at SSC Atlantic for IT Shadow Day

Photos by Joe Bullinger

At top, IT Shadow Day hosts and participants pose in Norfolk. Above, Ray Brown, 52530, tells students about work in the Bldg. 198 Vehicle Integration Bay in Charleston. Below, in the Multidisciplinary Research Center Robert Regal, 71000, briefs on research using brain computer interfaces and electroencephalagraphy (EEG) systems.

High school students in Charleston, Hampton Roads and New Orleans took advantage of SSC Atlantic's fifth annual IT Job Shadow Day and saw first-hand the IT government job opportunities they can pursue after college.

The number of American students pursuing careers in IT, and in STEM areas has steadily declined in recent years. The message to students on IT Job Shadow Day was that if they choose these career fields they will find themselves in high demand from industry, academia and government. Based on the grade point average of college graduates, starting salaries at SPAWAR in STEM career fields are quite appealing and the benefits are great, Capt. Amy D. Burin, SSC Atlantic commanding officer, told the visiting students.

"You are going to see how our IT folks are creating information dominance for America's Navy, protecting our warfighters by giving them all the tools they need in the field of computers, communications, command and control, intelligence, reconnaissance and surveillance. You are going to visit some engineering labs and see IT equipment we have developed that shows the importance of STEM study," Burin told the students. "This program is a win-win – for SSC Atlantic and for you," she added.

Photo by Joe Bullinger

Janice Alster is congratulated by SPAWAR Toastmasters Club President Dave Hillman.

Toastmaster Alster achieves Silver status

Janice Alster, an engineer in SSC Atlantic's Code 54250, was honored Feb. 13 for achieving Toastmasters' Advanced Communicator Silver Award.

Alster has been a member of SPAWAR Toastmasters since 2008. The award recognizes the culmination of her work to complete a series of specific and progressively more complex and difficult communication, facilitation, and public speaking goals and assignments.

"Communication skills aren't optional in the workplace and Toastmasters has helped me develop and improve my communication skills on many levels, not to mention confidence in my communication," said Alster.

"Toastmaster Alster is a seasoned and savvy communicator. Through her experience, she mentors not only other club members, but also other employees in the command by the example she sets in communications excellence," said Dave Hillman, club president for SPAWAR Toastmasters. "Her achievement is an inspiration to everyone and shows that you can set and achieve your personal and professional goals through dedicated and consistent work and improvement," he added.

Toastmasters International is a nonprofit educational organization that teaches communication and leadership skills through a worldwide network of more than 14,650 clubs in 126 countries.

SSC Atlantic Toastmasters meet regularly on the first and third Fridays each month. For more information about the event and club, visit *http://8627.toastmastersclubs.org/.*

Photo by Joe Bullinger

Naval Reserve celebrates 100 year anniversary

A visitor tries his hand maneuvering an autonomous device using a tablet at the SSC Atlantic booth during the Navy Reserve Centennial Celebration March 7 at the Naval Base Memorial at Riverfront Park in North Charleston. The celebration also included guest speakers, military demonstrations on land and water, a Naval Reserve flyover, tours of a Cyclone-class patrol ship, displays, kids activities, music by the U.S. Navy Fleet Forces Band, food and fireworks. The celebration to mark the 100th anniversary of the founding of the Naval Reserve was sponsored by the City of North Charleston, the Navy Operational Support Center Charleston and the Navy League of Charleston.

Hampton Roads SPAWARriors watch the Norfolk Admirals at the Scope Arena.

Photos by Jerry Sekerak

SSC Atlantic hockey nights!

Cheering on Norfolk, Charleston teams

By Jerry Sekerak
SSC Atlantic Public Affairs, Hampton Roads

SSC Atlantic in Charleston and its detachment in Hampton Roads recently hosted command nights out at minor league professional hockey games in their respective areas.

In Hampton Roads, 135 SSC Atlantic employees, families and friends helped cheer their home team to victory Feb. 13.

Cheering from Section 215, the SPAWAR spectators watched the Norfolk Admirals defeat the Syracuse Crunch 2-0 at the Norfolk Scope Arena. Besides the numerous traditional fights between the players on the ice, one of the main highlights of the evening was when SSC Atlantic employee Olli Juntunen (54470) won a 32-inch flat screen TV in a 30-second shootout during the first intermission! Juntunen beat out two other challengers by scoring 18 goals in 30 seconds from center-ice!

Also, before the game, about three dozen SSC Atlantic Hampton Roads Detachment event-goers who purchased special meal tickets enjoyed a pre-game buffet meal in one of the arena's banquet rooms.

During their meal, the group was treated to a friendly interactive visit from the Norfolk team's mascots, "Hat Trick" and "Salty," who helped motivate the group's team spirit for the win.

In Charleston, more than 400 SSC Atlantic employees,

Above, Norfolk Admirals mascot Hat Trick and Salty, at right, mingle with the SSC Atlantic hockey game-goers.

SSC Atlantic employees, families and friends watch the South Carolina Stingrays. Photos by Joe Bullinger

families, and friends watched the South Carolina Stingrays take on the Reading Royals Jan. 24 at the Stingray's home venue of North Charleston Coliseum. Both teams are members of the East Coast Hockey League.

The SPAWAR spectators filled several sections for the teams' "Pack the House" night, and made themselves heard as the command was acknowledged on the jumbotron. Unfortunately, despite the loud cheers and the team earning two power plays in the third period, the Stingrays bowed to the Royals, 2-1.

Photos by Joe Bullinger

Secretary of the Navy Ray Mabus speaks at the ship naming ceremony as Charleston Mayor Joe Riley and Medal of Honor recipient retired Marine Corps Maj. Gen. James E. Livingston listen.

New LCS named USS Charleston

Navy Secretary Ray Mabus greets SSC Atlantic Commanding Officer Capt. Amy D. Burin at the USS Charleston naming ceremony.

Navy Secretary Ray Mabus and Charleston, South Carolina Mayor Joe Riley hosted a ship naming ceremony for the newest USS Charleston warship in January at the Charleston Maritime Center.

The littoral combat ship will be the sixth ship to bear the city's name. The 400-foot long ship is to be built in Mobile, Alabama and will be delivered to the Navy in 2017 at a cost of $440 million.

Littoral ships are designed to operate close to shore. Their duties include mine detection and removal as well as anti-submarine defenses. They are also built to defend against fast-moving, potentially hostile surface ships.

"This naming continues a long tradition of naval ships bearing the city's name and recognizes the strong connection between Charleston and our Sailors and Marines," Mabus said.

"Here in Charleston there is a long history, from the decades of work at the Charleston Naval Shipyard to Charleston Marine Container Inc., building mission modules for the Littoral Combat Ship program today," Mabus continued. "In the coming years, as we build the new USS Charleston, we will continue to grow the size of the fleet."

Photos by Joe Bullinger

SPAWARSYSCOM Executive Director Pat Sullivan returns

SPAWAR Systems Command Executive Director Pat Sullivan, above, asks a question in the Executive Conference Room, above, during a recent visit to SSC Atlantic. Sullivan received updates by SSC Atlantic leadership during the visit, and toured several facilities. Above, right, Dave Bednarczyk, left, of 633 explains how SSC Atlantic's Common Submarine Radio Room (CSRR) is scalable to support platform missions, as SSC Atlantic Executive Director Steve Dunn, right, looks on. Below, a CSRR virtual trainer replicates the shipboard environment training room for Sailors.

Photos by Joe Bullinger

2015 Leadership Charleston class visits

Members of the Charleston Metro Chamber of Commerce's Leadership Charleston Class of 2015 learn about electromagnetic interference testing in SSC Atlantic's anechoic chamber. While at the center, they also received a command brief, toured labs and learned about new technologies being developed at SSC Atlantic. Leadership Charleston is a 10-month program that offers an up-close look at issues impacting the Lowcountry. The class features prominent and stimulating speakers and visits to schools, hospitals, the Port of Charleston and the South Carolina Statehouse. Each session examines leadership roles in political, social and economic affairs. Several SSC Atlantic leaders have taken part in the program.

Hughes on board

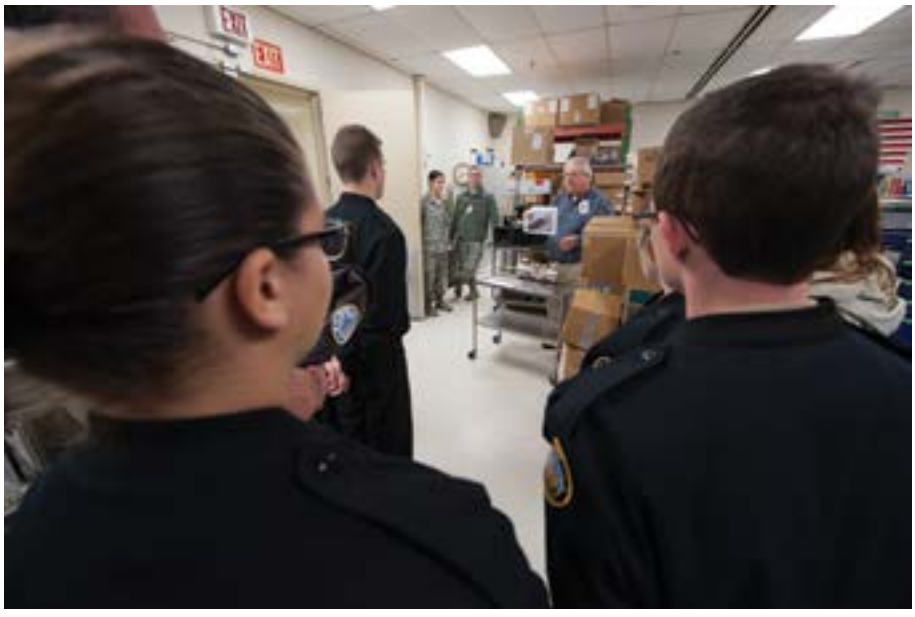
U.S. Army Maj. Gen. Daniel P. Hughes, Program Executive Officer, Command, Control, Communications, Tactical (PEO C3T), center, makes a point during a Jan. 28 SSC Atlantic visit in which he got a closer look at PEO C3T support at the center. Hosted by Charlie Adams, SSC Atlantic Transport and Computing Infrastructure Portfolio Manager, right, Hughes looked at Wideband Networking Warfare Reference Implementation Laboratory testing and software development, a Single Channel Ground and Airborne Radio System (SINCGARS) demo and the MRAP integration facility.

Alston middle schoolers see value of STEM learning

Alston Middle School Tiger Pride was evident when members of the school's robotics team visited SSC Atlantic March 17 to see firsthand the career possibilities using science, technology, engineering and math (STEM) skills. Alston Middle School's robotics team is mentored by Lt. Matthew Horton, 63310. The students pause above before entering the Air Traffic Control (ATC) building to learn about how SSC Atlantic provides a full spectrum of ATC communications, system automation, surveillance, navigation and C2 systems.

York 'Cougar Navy' cadets view SSC Atlantic ops

Greg Card, center, electronics technician in SSC Atlantic's 41150, talks to "Cougar Navy" cadets from the Navy Junior Reserve Officer Training Corps (NJROTC) unit at York Comprehensive High School during a visit in December. The cadets visited several SSC Atlantic labs that showed how IT professionals give the fleet information dominance. Card briefed the cadets on time standard technology, and how advances in solid state and miniaturization have shrunk a Cesium Beam tube physics package from a full-size, rack mounted standard the size of a large thermos down to the size of a pencil eraser.



Render honors appropriately during colors

With dozens of major military installations within the Hampton Roads, Charleston, New Orleans, Tampa and Washington areas, there are few places where morning and evening colors cannot be heard at our SSC Atlantic sites. With just more than half a million active, reserve and retired service members living in the communities surrounding these bases, a soldier, Sailor, Marine or airman can usually be observed proudly rendering honors to the flag of our nation both in the morning and at sunset, regardless of the length of their service.

In honor of those serving today and our veterans of the past, everyone should demonstrate their American pride and show respect to our nation's symbol of strength and unity.

What do you do when colors is being played? Whether in uniform or not, at the first sounds, stop where you are and turn to face the flag. If the flag is not visible, turn in the general direction of the flag or the sound. If in uniform, stand at attention. If not in uniform, protocol still dictates that you stop and face the flag or the music out of respect.

Those in uniform and not in a formation should face the flag (or music) at attention and render a hand salute until the last note is played. Active duty personnel in civilian clothes or veterans may render a salute during the hoisting, lowering or passing of the flag, according to the Defense Authorization Act of 2008. The 2009 Defense Authorization Act allows veterans and service members not in uniform to also salute during the national anthem if they so desire.

Civilians should stand tall facing the flag or music, and place the right hand over the heart. If wearing a hat, remove it with the right hand and hold it at the left shoulder while the right hand is over the heart.

If driving at the time of colors, bring the moving vehicle safely to a complete stop and put the car in park. Protocol dictates turning off any music playing in the vehicle, and all vehicle occupants should remain seated at attention until after the last note of the music has played.

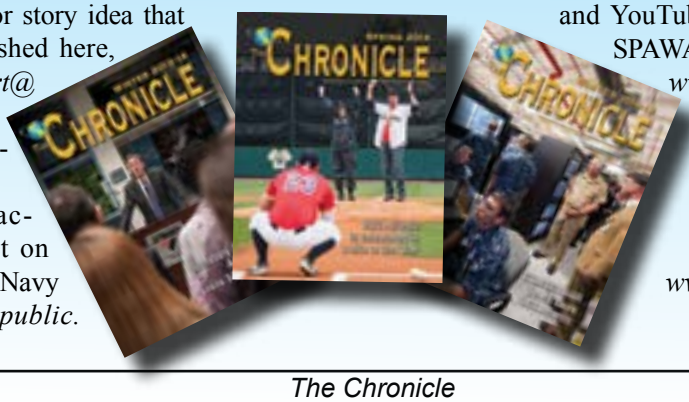
All Americans should appreciate the tradition of colors and the freedom we enjoy in our country. Observing colors is a tradition involving respect to our country, wherever we are.

Check out *The Chronicle* online; send in your story

What's happening in your world that you'd like to see in *The Chronicle*? The power of your experiences is even greater when you take the time to share them! We look forward to reading about the great work you are doing as part of the SSC Atlantic team.

If you have a story or story idea that you'd like to see published here, send it to *susan.piedfort@navy.mil* or call the editor anytime at (843) 218-4973, DSN 588-4973.

The Chronicle is accessible on the Internet on SPAWAR's official U.S. Navy website at *http://www.public.navy.mil/spawar/Atlantic/Press/Pages/default.aspx*. Check out *The Chronicle* on the Intranet at *https://blog.spawar.navy.mil/chronicle/*.



Check out SSC Atlantic, SSC Pacific and SPAWAR headquarters news on Facebook, Twitter, Flickr and YouTube. If you wish to become a SPAWAR Facebook fan, visit *http://www.facebook.com/spaceandnavalwarfaresystemscommand*. See us on Twitter *http://twitter.com/SPAWARHQ*, You Tube *www.youtube.com/teamspawar* and. Flickr *www. flickr.com/teamspawar.*

The Chronicle Photo Contest

Thank you to all who submitted!

And the winner(s) are...

Rocky Mountain National Park
August 2014

Michael & Thomas Kozma
Codes 58830 & 52520

Hit us with *your* best shot

We are now soliciting submissions from SSC Atlantic employees for next issue's contest.

Send your best shot to *susan.piedfort@navy.mil* or *joseph.bullinger@navy.mil.*

Ready, aim ...

Andrew Thigpen of 11410 takes his best shot during an April 22 dodgeball competition aimed at raising awareness of and encourage discussion about the procedures to report sexual assaults. Photo by Joe Bullinger