SYSTEMS ENGINEERING
ESTABLISHED 2002

Accredited
ABET
Engineering
Accreditation
Commission

SE DEPARTMENT NEWSLETTER   **WINTER 2012**

In This Issue . . .

- Fall Graduates & Awards

- New Faculty in the SE Department

- The SCOOP on what's been happening in Systems Engineering

- Faculty & Staff News

Calling All Alumni!

Look for the

Alumni/Employer Survey

coming to your email box in late April. See more detail inside this issue. . .

Fall Graduations and Awards

Curriculum 311 –Systems Engineering (DL)

Cohort 311-102S:		
Richard Campos	Jason Grubbs	Quang Nguyen
John Cunnick	Thomas Laskoski	Michael Roth
Mariavenus David	Raymond Leon	Michael Zalewski
Eugene Farberov	Michael McLachlan	

Cohort 311-102W:		
Phillip Allen	Ray Lai	Debra Reinertson
Alan Deguzman	Bradley May	Michael Roderick
John Ebken	Son Nguyen	Phylecia Ross
David Gravseth	Denis Nunez	Ngo Tran
Nancy Ho	James Pinner	
Michael Huffman	Edgar Pontejos	
Richard Hughes	Michael Raizada	

Cohort 311-103A:		
Gregory Urtz		

Student Recipients for the Wayne E. Meyer Award for Excellence In Systems Engineering for Outstanding Academic Achievement:

- 311-102S: Richard Campos
  Jonathan Trdan-Schmidt
- 311-102W: John Ebken
  Edgar Pontejos

Faculty Recipients for the Wayne E. Meyer Award for Excellence in Systems Engineering for Teaching Excellence:

- 311-102S & 311-102W: Don Muehlbach

Graduation with Distinction:

- 311-102W: Bradley May

CALLING ALL ALUMNI
*To continue receiving the SE Newsletter,
please send your email address to*
SEDepartment@nps.edu

BKCASE™ · STEVENS INSTITUTE of TECHNOLOGY THE INNOVATION UNIVERSITY · NPS NAVAL POSTGRADUATE SCHOOL · Body of Knowledge and Curriculum to Advance Systems Engineering

The Graduate Reference Curriculum in Systems Engineering v0.50 (GRCSE) (http://www.bkcase.org/grcse-05/) was released in December. The latest version of the Systems Engineering Body of Knowledge (SEBoK) (http://www.sebokwiki075.org) was released on March 15th. Both featured major contributions from the NPS Department of Systems Engineering.

GRCSE defines consensus standards for design of graduate curricula in systems engineering, including objectives, outcomes, entrance expectations, content of a common core body of knowledge, and assessment.

The SEBoK contains 130 topics on systems engineering, with comprehensive citations to the literature on systems engineering.

Professor Dave Olwell and Research Associate Steph Enck have been members of the core team responsible for the project. Dave has been the co-editor in chief of both SEBoK and GRCSE and project co-PI (with Art Pyster from Stevens Institute) and the author of several articles in the SEBoK and a chapter in GRCSE. Steph has been a key member of the editorial staff and has provided logistical support over the last two and a half years.

Associate Professor Ray Madachy contributed several articles as one of the 70 authors on the project. The authors came from six continents.

Sponsored by OSD, the project will publish final versions of the SEBoK and GRCSE this fall, and then transition stewardship of the products to INCOSE and IEEE-CS .

Ceremony Welcomes Maritime Research Tools, New Lab to Campus

By Amanda D. Stein

Ensigns Rebecca King, left, and Joseph Beach, right, pour champagne on new unmanned surface vehicles (USVs) presented to NPS by David Jackson, Chief Emerging Technology Officer for the Office of Naval Intelligence (ONI) during a christening ceremony, Jan. 11 on the roof of Spanagel Hall. The USVs, referred to by the Navy as Sensor Hosting Autonomous Remote Crafts (SHARCs), were appropriately named Tiburon and Mako, and christened with a stream of champagne carefully poured on the crafts.

During the ceremony, retired Rear Adm. Jerry Ellis, Director of the Undersea Warfare Research Center, offered confident predictions that the crafts would be invaluable additions to research at NPS. "I christen you Mako and Tiburon, may you always provide good research for the Naval Postgraduate School and may you always return to your home base," he said.

ONI's Jackson attended the ceremony on behalf of the his organization, officially presenting one of the Wave Gliders to the Undersea Warfare Research Center.

"I see this as an opportunity to renew a partnership between ONI and NPS," said Jackson. "We've had partnerships off and on before, but I really see this as an opportunity here to move forward with technologies and not just with wave gliders, but with all different types of technology, from cyber and maritime domain … to ISR and obviously national security. And I think that we will yield great dividends in those areas by working together and pooling our resources – both in knowledge and funding."

Integrating Acquisition Logistics for Naval Combat Systems

Posted by RADM Mark Heinrich in a blog, Wednesday, January 25, 2012

Recently, I was addressing the class at Industrial College of the Armed Forces (ICAF) and the class asked if we were ever going to bring CAPT Keith Sykes (formerly NAVSEA 04L) into NAVSUP...I said "we did!" This question spurred me to write a few notes on what's been done during the transfer of the new NAVSUP Code N00AL, mission and intent, and vision for the future.

For those that don't know, NAVSEA's Logistics, Maintenance, and Industrial Operations Directorate (SEA 04) was responsible for coordinating life-cycle logistics functions for the NAVSEA Headquarters and the Program Executive Offices. In 2010, NAVSEA's Commander approached NAVSUP with the vision of assuming responsibility for NAVSEA headquarters logistics functions. These discussions resulted in a Memorandum of Agreement directing the as-is-where-is alignment of NAVSEA's logistics functions to NAVSUP. On Oct. 1, 2011, CAPT Sykes, his Deputy CDR Zo Williams, and two of his five divisions - Logistics Readiness and Analysis Division (N00AL1) headed by Paul Koester, and Logistics Data Architecture and Human Capital Management (N00AL2) headed by William "Bucky" Buchanan, aligned under NAVSUP, while the other three divisions realigned within NAVSEA 04. This newly aligned organization is collectively designated as NAVSUP Acquisition Logistics (NAVSUP N00AL), with CAPT Sykes being the Assistant Commander for Acquisition Logistics.

"As a previous NAVSEA Deputy Commander for Logistics," said John Goodhart, Vice Commander, Naval Supply Systems Command. "I think the integration efforts will well serve the Fleet and NAVSEA, and provide PEO offices with more comprehensive life cycle logistics support."

The mission of NAVSUP N00AL is to assist with management and implementation of acquisition logistics functions (policies and processes) that support the entire NAVSEA Enterprise (i.e., Headquarters, Program Executive Offices (PEOs), Program Managers and Field Activity Logistics Departments). They budget, manage and execute funds provided to NAVSEA by OPNAV resource sponsors to support implementation of specific logistics programs such as Configuration Data Manager's Database- Open Architecture (CDMD-OA), Diminishing Manufacturing Sources and Material Shortages (DMSMS), and tech pubs, tech data, and drawings. They coordinate with the various acquisition programs to determine NAVSUP Enterprise impacts, and provide input and reach back to the NAVSUP Enterprise to support acquisition logistics requirements. Additionally, they manage more than 140 logistics interns disbursed throughout the PEOs and NAVSEA Warfare Centers. In short, the intent of the new organization is to establish a more direct upstream and downstream link from the Program Offices to the NAVSUP Enterprise.

Providing this link between the requirements generator processes and the provider capabilities at the earliest stages possible is optimal to true end-to-end, life-cycle sustainment support.   As a highlight of this vision, I authorized the establishment of six PEO Liaison positions within NAVSUP N00AL. These Liaisons will embed with respective PEOs in PEO spaces, work PEO issues and tasks, yet will report to NAVSUP 00AL and to strengthen data and process sharing. Going forward, the positions will provide us with greater acuity into Program needs and greater influence in life-cycle logistics decisions.

This effort is one of many intended to bring our capabilities to bear to solve our Navy's logistical challenges, and will only further demonstrate our current and future value stream.

RADM Mark Heinrich

I serve as Commander, Naval Supply Systems Command (NAVSUP) and 46th Chief of Supply Corps. I lead a diverse team of more than 22,500 military and civilian personnel located around the world. NAVSUP's mission is to provide global logistics support to U.S., Joint, and allied forces; and to provide oversight for supply operations, ordnance, contracting, resale, fuel, transportation, security assistance and quality of life programs

Local Engineer Wins Modern Day Technology Leader
David Rhoades graduated from the MSSE DL Program, June 2011

FOR IMMEDIATE RELEASE   February 22, 2012
Release #0712   Point of Contact--David Sanders, 832-3611

David Rhodes, of East Providence, R.I., a software engineer in the Sensors and Sonar Systems Department at the Naval Undersea Warfare Center (NUWC) Division Newport, was recently named a winner of the Modern Day Technology Leader Award. He received his award on February 17, 2012, at the Modern Day Technology Leaders Luncheon during the Black Engineer of the Year Science, Technology, Engineering, and Mathematics (STEM) Global Competitiveness Conference in Philadelphia, Pa.

This award, sponsored by U.S. Black Engineer & Information Technology magazine, pays tribute to men and women who are shaping the future of engineering, science, and technology.

Rhodes has worked at NUWC since 2002 and is recognized as a technical expert in the area of submarine combat systems. He serves as a member of the system integration team for the Acoustic Rapid Commercial-off-the-shelf Insertion (ARCI) Program in support of all submarine platforms. His efforts include identifying and investigating interface problems, developing fixes, performing risk assessments, and verifying and validating fixes.

Rhodes earned his bachelor of science in computer science from North Carolina Agricultural and Technical State University and received his master of science in engineering systems from the Naval Postgraduate School.

Winners of the Modern Day Technology Award are selected by a panel of professionals from the Council of Engineering Deans of the Historically Black Colleges and Universities, Lockheed Martin Corporation, and U.S. Black Engineer and Information Technology magazine.

NUWC Division Newport is one of two divisions of the Naval Undersea Warfare Center. NUWC Division Newport's mission is to provide research, development, test and evaluation, engineering and fleet support for submarines, autonomous underwater systems, undersea offensive and defensive weapons systems, and countermeasures. NUWC's other division is located in Keyport, Wash.

Comments from an SEA Alum
LCDR Justin Harts (now in the Pentagon)

I left NPS in 2005 to be OPS on PAUL HAMILTON in Pearl, then went to be N3/OPS at DESRON 15 out in Japan. From there I went to San Diego and was the N1 for the REAGAN Strike Group and now doing time in OLA as the Readiness Portfolio Manager... I screened for O5 command afloat and am waiting for my number to come up.

As far as NPS classmates from the SEA program. I bumped into CDR Chris McCarthy during Operation TOMODACHI. He was the XO of NAS Atsugi and was responsible for the collection, holding and transfer of all the dependents (and pets) being flown from Japan back to CONUS. He said that he designed the bus depot (collection), hanger (holding) and aircraft ramp (transfer) layout from the modeling class we had at NPS based on a "first in, first out" model... He was very proud of the direct correlation that class had on his design and how happy the dependents were (at least with how they were handled). Lt. Col Russ Wiley works here in the Pentagon for the Joint Chiefs. I had lunch with LCDR Brian Connet. He now works cyber defense for NSA.

New Opportunities with the Autonomous Systems Engineering and Integration Laboratory at the SE Department

As well known, from 2002 to 2010, DOD's unmanned aircraft inventory increased more than 40-fold, from 167 to nearly 7,500, with spending increasing from $284 million to $3.3 billion, respectively. Unmanned Aerial System (UAS) inventory reached 70% of that of manned aircraft. These days Navy operates eight different systems spreading across five groups from the 8-inch-long Wasp Micro Air Vehicle with a combat radius of only 5nm all way up to a Global Hawk Broad Area Maritime Surveillance Demonstrator having the size of a corporate jet and combat radius of 5,400nm. According to the recently published report by the Congressional Research Service, this increase in inventory appears largely due to the rising demand to conduct a wider variety of missions as compared to typical intelligence, surveillance and reconnaissance (ISR) missions. Yet, there are several issues seriously limiting the effectiveness of these systems. Among others these issues are: commonality and interoperability, concepts of operations and integration with manned systems, force multiplication and autonomy, airspace integration.

To address these challenges the NPS made a major investment in establishing a new Autonomous Systems Engineering and Integration Laboratory (ASEIL) at the SE Department. The overall goal of this laboratory, led by Professor Yakimenko, is to provide a foundation of the modern unique first-class hands-on education and advanced research in the area of Autonomous Systems, including not only unmanned (autonomous or remotely piloted) platforms themselves, but also payloads, weapons, command and control architectures, computers, communications, missions and concepts.

The educational component of ASEIL is based on a set of experimental setups provided by Quanser. In the recent decade the Canadian-based Quanser became the world leader in the design and manufacture of advanced systems for real-time control design and implementation used in industry, education and research. Specifically, for the education market, Quanser offers a variety of control challenges that are appropriate for all levels of university education and research, including feedback strategies such as PID, LQR, H infinity, fuzzy, neural nets, adaptive and nonlinear controllers. The ASEIL possesses several linear and rotary control experiments allowing students to employ the same power plant to perform experiments of varying complexity. These include the flexible link and joint (to study vibration suppression and weapons aiming) (Fig.1a), gyro-stable platform (Fig.1b) and two-degree-of-freedom ball balancer (Fig.1c) (to learn about gimbaled platforms including those used in Inertial Navigation Systems), solar tracker module (to address missile guidance concepts and alternative to Global Positioning System means for navigation) (Fig.1d), single and double self-erecting inverted pendulum (to study stability and controllability issues) (Fig.2a). By coupling the appropriate module to the plant students achieve configurations ranging from simple position servo control to advanced MIMO systems such as the Seesaw/Pendulum (Fig. 2b).

Starting from the AY2012 resident SE students take the Introduction to Engineering System Dynamics course which utilizes the aforementioned Quanser Control Lab equipment, unique to NPS. This equipment is used to study basic and advanced concepts in inertial guidance, navigation and control. It is also used to explain the concepts of embedded system, hardware-in-the-loop application, and digital control. Quanser equipment is fully compatible with National Instrument's LabVIEW and the MathWork's Simulink.
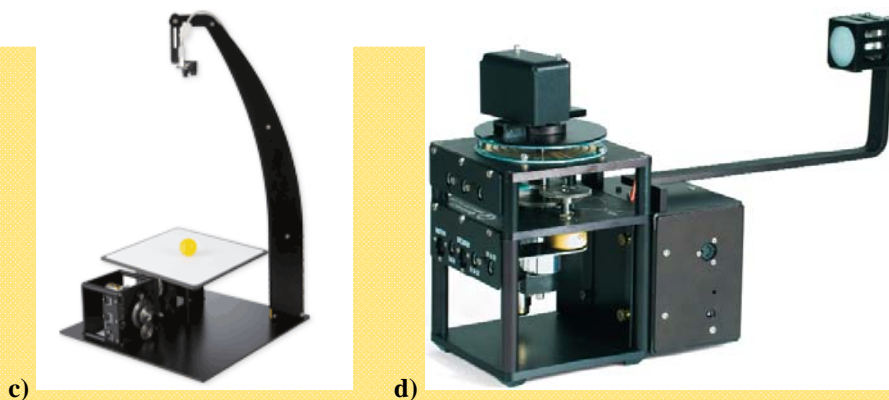

a)   b)

Fig. 1. Quanser's flexible joint (a), gyro/stable platform (b), 2D ball balancer (c), and solar tracker (d).
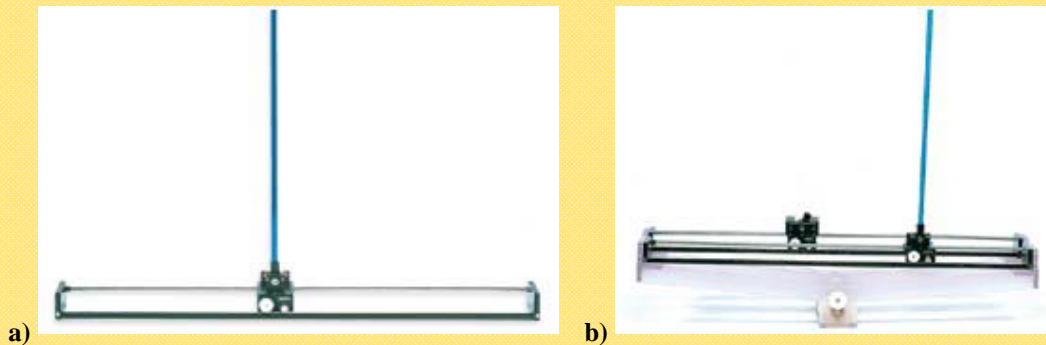

Fig. 2. Quanser's inverted pendulum (a) and seesaw with a pendulum (b).

The research component of ASEIL aims at addressing a wide spectrum of unmanned systems integration issues and is based on a variety of unmanned platforms. Currently, ASEIL's research equipment includes

- Heterogeneous (aerial and ground) indoor platforms to study advanced concepts in guidance, navigation and control; architecture; communication and data relay, hardware and software standardization; improved integration and multi-agent collaboration

- Electro-optical and infrared (EO/IR) sensors and visual data processing equipment, to study and develop novel concepts in visual data processing, reconnaissance and surveillance

Several outdoor platforms, to carry bulky sensors and investigate the issues related to manned-unmanned systems teaming, target identification, communication and networking, acceptance of unmanned systems into the national airspace

ASEIL indoor platforms include Quanser's Qball rotorcraft and Qbot ground vehicles (Fig.3) which are equipped with a variety of sensors and capable of executing collaborative autonomous missions. The entire quadrotor is enclosed within a protective carbon fiber cage which gives the Qball a decisive advantage over other vehicles that would suffer significant damage if contact occurs between the vehicle and an obstacle. Both Qball and Qbot utilize digital-to-analog converters and the embedded Gumstix computer. They employ a high-resolution inertial measurement unit and avionics input/output card designed to accommodate a wide variety of research applications.
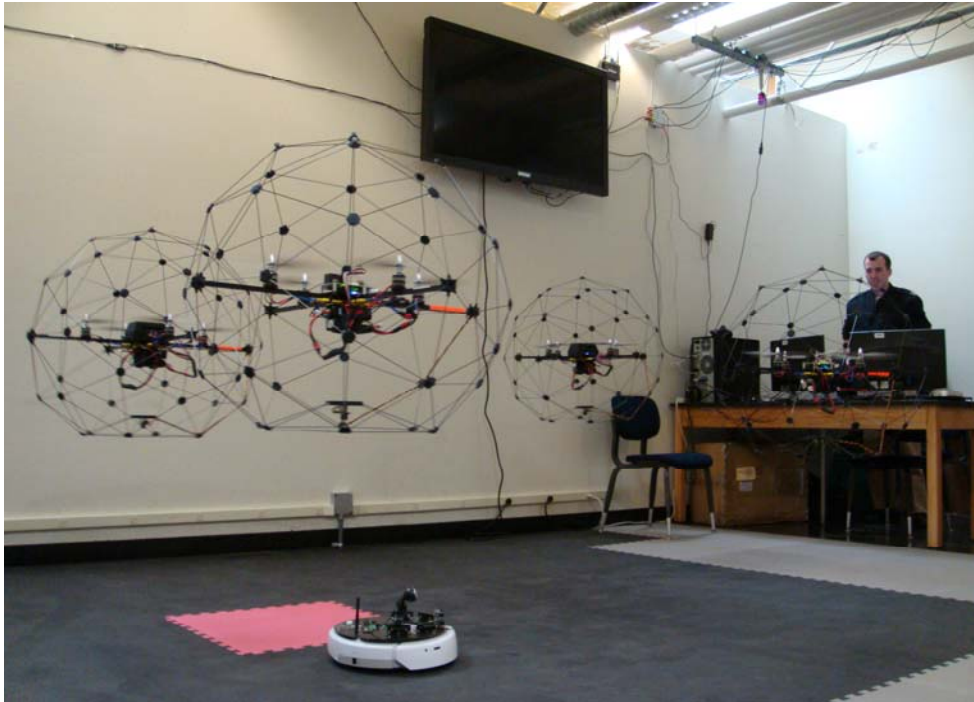
Fig. 3. Four hovering Qballs and Qbot on a joint ISR mission.

The ASEIL also possesses several outdoor platforms. For example, two Rotomotion SR20 electric helicopters (Fig.4) feature auto takeoff and landing, full autonomous flight control and guidance system, and 802.11 line-of-sight telemetry. They are capable of executing collaborative missions, carrying a 10lbs payload and performing half-an-hour- to hour-long missions.

Fig. 4. Rotomotion SR20 platform.

For outdoor activities NPS utilizes the nearby restricted (surface to 15,000' mean-sea-level) airspace of the Camp Roberts Army National Guard Training Site with its 3,500'-long 65'-wide runway.

ASEIL is also involved in equipping and testing several different-size rapid prototyping platforms at the U.S Yuma Proving Ground (YPG). These platforms are capable of carrying 6-lbs (Fig.5a), 60-lbs (Fig.5b) and 1,200-lbs (Fig.5c) payload. While the lightest platform, SIG Rascal UAS, is something that NPS has as well, other two are much more sophisticated and capable of. They are equipped with the expensive sensor suites and their development among others includes a design of the recovery system, high-fidelity models, robust controllers. It also includes sensor integration and enhancing autonomy of operations.
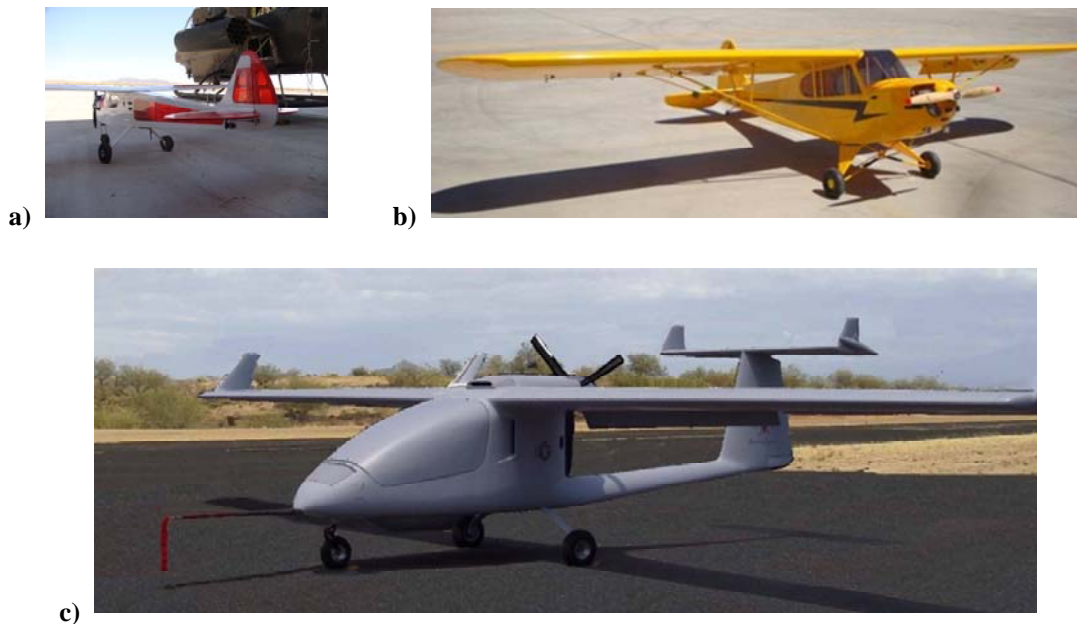
Fig. 5. Aerial platforms at YPG: Rascal (a) Cub 50% (b), and Matrics (c).

Speaking of sensors, the ASEIL possesses a TASE200 stabilized Pan-Tilt-Zoom camera gimbal (Fig.6a) which includes Sony FCB-EX980 EO and LWIR FLIR Tau 640 NTSC imagers. This camera gimbal provides image stabilization, scene steering, object tracking, and data overlay on video. This gimbal will be installed on a strut of manned high-wing aircraft available at NPS Navy Flying Club (Fig.6b) using the FAA-approved mount to be able to operate in national airspace. Among others, this platform will be used in the research devoted to the development of crucial "see and avoid" technology to allow UAV to operate autonomously and avoid approaching aircraft.

Fig. 6. TASE200 gimbaled camera.

The newly established ASEIL of the SE department suits well with other NPS facilities. On the research side it organically complements two other NPS centers dealing with unmanned systems. While the first one, the Center for Autonomous Vehicles Research of the Mechanical & Aerospace Engineering (MAE) department, primarily deals with the development of low-level control algorithms for small unmanned aerial and maritime vehicles, the second one, the Center for Interdisciplinary Remotely-Piloted Aircraft Studies, operates manned aircraft equipped with UAS sensors to be able to operate in the controlled airspace. It also provides air vehicle support to the military on training exercises and with tests, evaluations, and operational demonstrations of military technology.

On the educational side ASEIL complements the basic controls lab by the Educational Control Products (ECP) of the Electrical & Computer Engineering (ECE) department. In fact, together with the ECP lab ASEIL supports the same Introduction to Engineering System Dynamics course taught to students of ECE, MAE and SE departments.
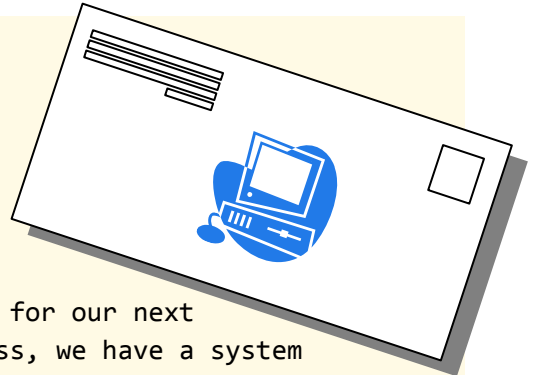
While at the moment only resident students enjoy the educational and research facilities of ASEIL, SE faculty and staff are working on incorporating ASEIL's capabilities into the DL program as well.

CALLING ALL GRADUATES

Alumni/Employer Survey Coming to Your Email Box Soon. . .

The Department of Systems Engineering is preparing for our next program accreditation visit. As part of that process, we have a system to determine how well our graduates are meeting the objectives of our program. This survey is an important part of that process.

We would appreciate you taking a few moments of your time to respond to the questions in the survey. The email you will receive will provide a link to the survey. You do not have to provide personally identifying information. This information will be used for our program improvement, aggregated, and shared only for assessment purposes.

Look for the email titled, "NPS/Department of Systems Engineering Alumni/Employer Survey" coming your way in late April.

Meet the Faculty

Michael A. Day, Research Associate

Michael Day earned his B.S. in Computer Science from the University of Alabama Huntsville in 2003. Before and after graduation he worked as a contractor supporting Army RDECOM at Redstone Arsenal, Alabama. His work included IT support, database administration, software visualization, and lethality simulation for missile systems such as JCM/JAGM and Longbow Hellfire. In 2008 he came to NPS to work as a simulation software engineer supporting the Delta3D Game Engine at the MOVES Institute just one building over in Watkins Hall. His work there included helicopter flight simulation, software support for peripheral vision studies, and serious games development. He feels that his greatest accomplishment at MOVES was assisting with an international student's thesis whose work resulted in a game based maritime navigation trainer that is now in use at the Brazilian Naval Academy.

He has also been attending NPS part time, working to finish an MS in Computer Science, and anticipates graduation in March. One of his thesis co advisors is our very own Tim Chung.

While he comes on with expertise in software engineering and simulation, he is excited about his transition to SE as it gives him a chance to work as a roboticist. He expects to gain skills electrical, mechanical, and systems engineering because of this opportunity.

Michael and his wife Evelyn have two daughters and one son (ages 8, 5, and 3) and live in Marina.

Meet the Faculty

Sim Yong Lee, Research Associate

Sim Yong Lee received his B.S., M.S. and Ph.D. degrees in naval architecture and ocean engineering from Seoul National University in Seoul, Korea in 1993, 1995 and 1999. After finishing his doctoral degree, he has been working as a researcher for ADD (Agency for Defense Development), ROK (Republic of Korea) and supporting the development of naval platforms and underwater systems. In 2006 and 2007, he joined a U.S.- ROK co-development team and worked on the systems engineering and MS&A (modeling, simulation and analysis) for battleship combat system at Lockheed Martin, Moorestown, NJ.

Sim Yong's research is in the areas of MS&A technologies for naval systems engineering including operational performance analysis, system/subsystem performance analysis, software and hardware in the loop simulations and simulation support for training. His current interests are focused on the integrated framework for systems engineering and MS&A.

Sim Yong joined the Systems Engineering Department in December 2011, under the Engineer and Scientist Exchange Program between the U.S. Department of Defense and the ROK Ministry of National Defense. He is trying to contribute to the model based systems engineering research with his experiences on the naval architecture and MS&A supports and find future collaboration opportunities between NPS and ADD. He is enjoying research and life at NPS and Monterey Bay with his wife and two children, and expressing his sincere thanks to Professor Whitcomb and the SE people for the research opportunity and their support.

CDR Joseph Keller, Program Officer, MSSE Resident Program

Commander Keller is a native of California and entered the Navy in 1994 after receiving commissioning from San Diego State University Naval Reserve Officer Training Corps program. Following Naval Nuclear Power School in Orlando, Florida, Prototype training in Balston Spa, New York and Submarine school in Groton, Connecticut he reported to the fast attack submarine USS WILLIAM H. BATES (SSN 680). While on board he qualified as submarine officer as well as serving in various billets including Reactor Controls Assistant, Main Propulsion Assistant and eventually serving as Engineer Officer.

In 1999 Lieutenant Commander Keller was selected for Lateral Transfer to Engineering Duty Officer, and in June 2000 he reported to Naval Postgraduate School in Monterey, CA. Upon Graduation in December 2002 he was awarded a Masters Degree in Mechanical Engineering, an Engineer Degree in Mechanical Engineering, and successfully completed the Total Ships System Engineering (TSSE) program. He was awarded the Highest Academic Achievement award for his class, as well as the Naval Sea Systems Command top academic award in Naval/Mechanical Engineering.

In January 2003, Commander Keller reported to Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY & IMF), where he has served as Alteration Installation Team coordinator on USS Charlotte Selective Restricted Availability (SRA), as well as Key Event Manager, and Deputy Assistant Project Superintendent on the USS Buffalo Engineered Refueling Overhaul (ERO), and finished out the tour as the Project Superintendent for the USS Honolulu FY05 Interim Dry Docking (IDD).

In 2006, Commander Keller reported to Commander Submarine Force Pacific where he served as Typedesk Officer and Budgeting and Scheduling Officer. While there he assisted in transforming the execution process for coordination of pre-availability testing of CNO availabilities, as well and participated in the transformation of the method by which Submarine CNO availabilities budgets and schedules where estimated during the budget and execution cycles.

In 2009 CDR Keller's was assigned to Pearl Harbor Naval Shipyard where he served as the Deputy Project Superintendent on the USS Key West 24 month Engineered Overhaul.

Commander Keller's awards include the Defense Meritorious Service Medal, Navy Commendation Medal (three awards), the Navy Achievement Medal, the Army Achievement Medal, Navy Unit Commendation, and the Naval Expeditionary Medal. While attending Engineering Duty Officer Basic Course he was awarded the ADM Bryan highest academic achievement award.

Commander Keller is married to the former Abigail Richard of Honolulu, Hawaii, and has two daughters, Ashlyn (6), and Chloe (3).

Faculty and Staff News

The department would like to welcome **Michael Day, Research Associate,** to his recent position, where he is excited to have the chance to work as a roboticist. See his introduction in the "Meet the Faculty" section of this newsletter.

We would like to extend our thanks and a fond farewell to **CAPT Brian McGinnis**, the department's former **580, MSSE Resident Program Officer**. At the same time, we would also like to welcome the new **580 Program Officer, CDR Joseph Keller**. You will also find his introduction in the "Meet the Faculty" newsletter section.

Professor Chuck Calvano is the proud grandfather of his first granddaughter (second grandchild). Ayelen Victoria Calvo, 6 lbs., 5 oz., 18 inches, was born on 10 December 2011. You are probably wondering if the last name is a typo, but it is not. Chuck's son-in-law's name differs from his only by the syllable "an". Also, "Ayelen" rhymes with "violin" (without the "V") and is a traditional Peruvian name meaning "joy". Chuck's son-in-law was born in Peru. Congratulations "Papa Chuck"!

Professor Dave Olwell checks in from the University of Hawaii, where he has been spending his ACE Fellowship year. Dave has been learning about the mechanics of major university governance. Topics investigated included managing a board of regents, setting tuition levels, research compliance, research outreach, promotion and tenure policies, relations with the faculty union, relations with the faculty senate, relations with the media, managing an athletic program, fundraising, alumni outreach, hiring, employing a search firm, bonding, articulation agreements, capital facility planning, relations with the legislature, status of research faculty, best practices for Kuali implementation, managing student affairs, IT issues, strategic planning, and last but not least, parking.

Dave has been exploring partnerships with PACOM, UH, and NPS, particularly in the area of biofuels for military use in Hawaii.

Dave has also visited University College London, Imperial College, UH-Hilo, Hawaii CC, CSUMB, MPC, UC Santa Barbara, UC Santa Cruz, Chaminade University, BYU-Hawaii, Ivy Tech, University of Miami, and Stevens Institute. He will visit Hawaii Pacific University, Loyola Marymount, UCLA, USC, Claremont, USNA, USMA, and the Naval War College this spring. His fellowship concludes at the end of this summer.

In case you didn't hear yet, **Kristin Giammarco, Lecturer,** successfully completed her doctoral dissertation defense in outstanding fashion. Her defense was sent out the the SWE PhD students via VTC, and was well attended by faculty and students from across campus in person. The SWE program has said that Kristin is the first woman to complete the program, out of about 25 graduates over the life of the program, as well. Congratulations Kristin!

AWARDS of TENURE

Ronald Giachetti, Professor

This award of tenure is in recognition of his pioneering new textbook, Design of Enterprise Systems: Theory, Architecture, & Methods, and contributions to the field of enterprise systems architecting and design which have brought recognition to himself and to NPS. He has been successful at expanding the scope of resources for research funding based on his successful award of grants from the National Science Foundation and from his deep knowledge of enterprise systems research in support of the Space and Naval Warfare Systems Command Information Dominance systems engineering transformation. His teaching has been outstanding, with several awards for best instructor in systems engineering. His professional service in his role as an Associate Editor for the Journal of Enterprise Transformation and to the Consortium for Systems Engineering Research conference has been exemplary.

Oleg Yakimenko, Professor

This award of tenure is in recognition of his publication record, to include 78 journal papers, 127 conference publications, and numerous books, including Engineering Computations and Modeling in MATLAB/Simulink which have brought recognition to himself and to NPS. His teaching has been outstanding, as evidenced by finishing in the top 5% in the voting for the Schieffelin award in 2011, and achieving SOF scores consistently above the norms for teaching in GSEAS. His international reputation has been recognized through appointments as a Fellow of the Russian Academy of Sciences of Aviation and Aeronautics, an Associate Fellow of the American Institute of Aeronautics and Astronautics (AIAA), and as a Deputy Director of the AIAA Region VI (West) for Education. His service as a member of the Editorial Board of the AIAA Progress in Astronautics and Aeronautics book series has been exemplary.

Notes from the Desk of **Richard Millar, Associate Professor**, On Friday, February 3, members of Cohort 311-101A provided NAWCAD Commander RDML Randolph Mahr and staff members a briefing on their twin Capstone projects: Organic Kill Chain System (Group I) and Pirate Mother Ship Warning and Reporting System (Group II).

The presenters were Jeremy S. Smith and Kent Yen, respectively. Other cohort members located at North Island and Cherry Point participated via teleconference.

The students were supported by several of the sponsoring stakeholders at PEO(U&W), competency leaders, and NPS Systems Engineering faculty members based at NAS Patuxent River: Ron Carlson and the capstone advisors, Dr. Rama Gehris and Dr. Richard C. Millar. The presentations were well received and RDML Mahr closely questioned the students' methods and recommendations, closing with a query on what they had gained from the program and project, and noting that similar briefs on future Capstone projects would be appreciated.

Upcoming Conferences & Call for Papers

April 24-26, 2012	BKCASE Workshop, NPS, SE (Dave Olwell/Stephanie Enck), Monterey, CA
May 14-16, 2012	1st Annual Systems Engineering in Washington, DC (SEDC), Washington, DC
May 16-17, 2012	9th Annual Acquisition Research Symposium, NPS, GSBPP, Seaside, CA
May 21-23, 2012	10th Security Workshop, NPS & TDSI (Tom Huynh), Monterey, CA
June 12-14, 2012	ASNE Mega Rust 2012: Naval Corrosion Conference, San Diego, CA
July 9-12, 2012	22nd Annual INCOSE International Symposium, Roma, Italy
July 16-19, 2012	IEEE SoSE 2012, Genoa, Italy
October 14-17	IEEE International Conference on Systems, Man, and Cybernetics, COEX, Seoul, Korea
October 22–25, 2012	15th Annual Systems Engineering Conference, Sponsored by the National Defense Industrial Association (NDIA), Systems Engineering Division, San Diego, CA
November 14-15, 2012	ASNE Launch & Recovery of Manned & Unmanned Vehicles from Surface Platforms, MITAGS, Linthicum, MD
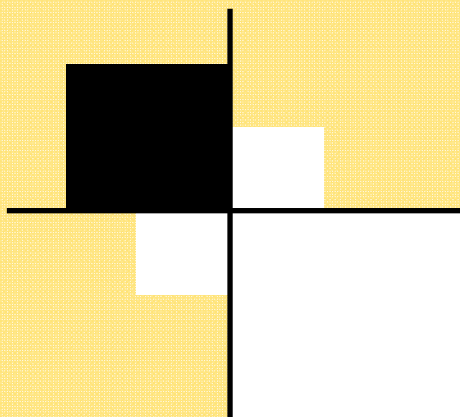
SE Newsletter Editor

Lori A. Wilson

Please direct any comments or questions to lawilson@nps.edu