SYSTEMS ENGINEERING DEPARTMENT
NAVAL POSTGRADUATE SCHOOL

SYSTEMS ENGINEERING NEWSLETTER — April 2022

In This Issue:

Letter from the Chairman

Systems Engineering Chairman
Dr. Oleg Yakimenko

Welcome to the Systems Engineering Newsletter for the winter quarter of the 2022 Academic Year!

With the renovation of Bullard Hall now underway, this winter quarter saw the relocated Systems Engineering faculty and staff scattered all over campus; with eight members in Spanagel Hall, three members in Watkins Hall, five members in Halligan Hall, and six members in Ingersoll Hall. I think faculty, staff, and students handled it pretty well, but I know we all look forward to being back in Bullard Hall, fully renovated, sometime in 2023.

This quarter, the faculty of the Systems Engineering department delivered 38 sections and lead 14 capstone project teams, continued to advise M.S. and Ph.D. thesis students, served on a variety of departmental and schoolwide committees, and worked on multiple reimbursable research projects. Additionally, many SE members were involved in the continuing NPS Transformation Efforts.

In March, the SE Department graduated 25 students: 22 Master of Science in Systems Engineering, and three Master of Science in Systems Engineering Management. Three students graduated with distinction. As usual, one day before graduation, the SE department held the Student Celebration Ceremony for our Distance Learning graduates.

Along with the entire world, NPS is slowly beginning recovery after two years of COVID. Towards the end of the quarter most of the classes were being taught in a regular (including unmasked) format. This gradual return to normalcy is indeed a big relief for our students, staff, and faculty. Hopefully, we will continue teaching in a normal format and have a full-fledged graduation next quarter.

I would like to conclude with congratulating our March graduates and their families and thanking the SE family for the continued great work!

Sincerely,

Dr. Oleg Yakimenko
Systems Engineering Chair and Distinguished Professor

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Systems Engineering Chair Oleg Yakimenko visits San Diego Distance Learning Faculty. From Left: Chair Oleg Yakimenko, Senior Lecturer Mike Green, Professor of Practice Don Muehlbach, and Professor Ray Madachy

SE Spotlight

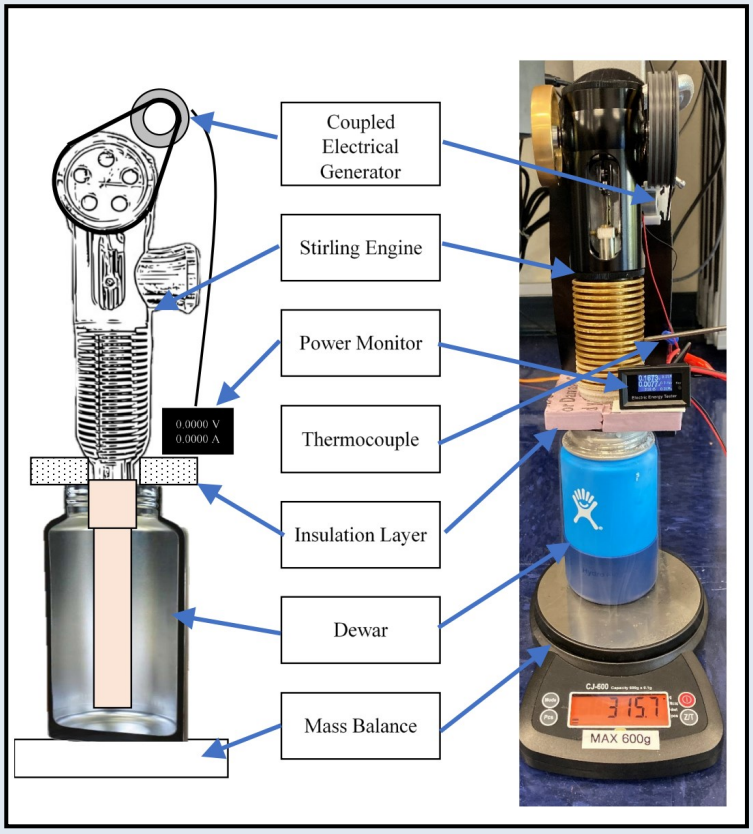
NPS Graduates File "LAES" Patent Application

Two graduates of the Naval Postgraduate School's Systems Engineering Program filed a patent application with the United States Patent Office on February 10, 2022.

The patent application is for a Dual Stirling Cycle Liquid Air Battery and lists the inventors as Nicholas A. Bailey, Christopher M.Girouard, and Anthony G. Pollman.

LT Nicholas Bailey

LT Christopher Girouard



Experimental apparatus setup and components

LT Nicholas Bailey graduated from NPS in 2019 with a Master's of Science in Systems Engineering. His master's thesis was titled " Model-Based Simulation, Analysis, and Prototyping for Future Liquid Air Energy Storage Systems."

LT Christopher Girouard also graduated from NPS in 2019 with a Master's of Science in Systems Engineering. His master's thesis was titled "Model-Based and Experimental Analysis for Future Liquid Air Energy Storage Systems."

Assistant Professor Anthony Pollman was thesis advisor to both students.

The Abstract of the patent application follows:

"The invention relates to a liquid air energy storage system. The storage system includes a cryocooler, a dewar, and a Sterling (sic) engine. The cryocooler cools a tip of a cold head to cryogenic temperatures, the cryocooler further includes a heat sink to reject heat from the cryocooler and a cold head that protrudes into a dewar through a cryocooler cavity, the cold head to condense ambient air to create liquified air in the dewar. The dewar holds the liquified air at low temperatures, the dewar having the cryocooler cavity and a Stirling cavity. The Stirling engine drives an electric generator, the Stirling engine further including a cold finger protruding into the dewar through the Stirling cavity, the cold finger to move the liquified air from the dewar to a Stirling heat sink; the Stirling heat sink to expand the liquified air; and the electric generator to generate output electricity."

The patent application caught the attention of Techlink, a company focused on technology transfer partnerships with the Department of Defense and Department of Veteran's Affairs.

Techlink described the prototype as "epic" in an article published on their website. The article can be viewed here.

The NPS website has also published an article, which can be viewed here, about this accomplishment.

Student Stories

Distance Learning Students Receive Meyer Award

The Wayne E. Meyer Award for excellence in systems engineering is presented for superior academic achievement and leadership to an outstanding NPS graduate from the distance learning systems engineering degree program. Recipients are nominated by fellow classmates and the NPS Systems Engineering.

Ms. Kristina Haller and MAJ Michael Monfreda were each selected for the Meyer Award for the 2022 Winter quarter.

Kristina Haller

Kristina Haller completed a Bachelor of Science degree in Mechanical Engineering at the Massachusetts Institute of Technology in 2008 with a thesis focusing on modular robotics. She earned her Master of Science in Mechanical Engineering from the University of Washington with a focus in surgical robotics.

From 2008-2011, she worked at Scientific Applications International Corporation (SAIC) in the rapid prototyping division developing intelligence/surveillance/recon - naissance (ISR) spacecraft. From 2011-2013 she worked at Andrews Space doing mechanical design, analysis, and fabrication of small satellites and launch platforms. In 2013, she moved to the greater Los Angeles area and made a transition from aerospace to the maritime industry working for MAR, Incorporated at Port Hueneme.

In 2016, Kristina relocated back to the Pacific Northwest to work in the Fleet Operations and Program Support Branch (Code 711) of the Signatures Division of NSWC Carderock. She provides engineering and project management support to various Research, Development, Test, and Evaluation projects on the Bangor Waterfront. She began taking classes at the Naval Postgraduate School in 2019 and will complete a Masters in Systems Engineering in 2022.

When asked about her experience at NPS, Kristina said,

"Prior to this program, I did a lot of informal systems engineering in my current position. Through the systems engineering masters program I have been able to bring an increased level of formality and process to my job. With the events during my time at NPS, and the adaptability required during a global pandemic to maintain schedule and cost, this added level of rigor has enabled me to excel."

MAJ Michael Monfreda

Major Michael J. Monfreda is a native of Sterling, MA and was commissioned as a Second Lieutenant in May 2008 through ROTC. He holds a Bachelor of Science degree in Aerospace Engineering from Worcester Polytechnic Institute located in Worcester, MA.

Major Monfreda began his career with an initial assignment to the Basic Officer Leadership Course at Fort Benning, GA in the summer of 2008. Following training, he attended the Aviation Officer Basic Course at Fort Rucker, AL

where he graduated with a qualification in the AH-64D Apache Longbow attack helicopter (2008-2010).

Major Monfreda's first operational assignment was 1-82 Attack Reconnaissance Battalion, 82nd Combat Aviation Brigade at Fort Bragg, NC (2010-2013). Here he held Platoon Leader positions in a maintenance company and a line company before deploying with the unit to Afghanistan in support of Operation Enduring Freedom (2011-2012). Upon his return, he served the unit as an Assistant Operations Officer responsible for duties pertaining to flight operations, current operations, and future operations. He departed Fort Bragg in September 2013 to pursue professional military education at the Aviation Captain's Career Course at Fort Rucker, AL, graduating in February 2014.

Following this school, he completed the AH-64D Maintenance Test Pilot Course before commanding Delta Company, 4-2 Attack Reconnaissance Battalion at Camp Humphreys, Republic of Korea from 2014-2016. Following command, Major Monfreda graduated from the United States Naval Test Pilot School (Class 152) and then served as an experimental test pilot at the Aviation Flight Test Directorate at Redstone Arsenal, AL.

Major Monfreda is currently assigned to the Technology Applications Program office as an Assistant Product Manager at Ft. Eustis, VA.

His aircraft qualifications also include the UH-60A/L Blackhawk, UH-72 Lakota, and C-12 Huron.

Major Monfreda's awards and decorations include the Meritorious Service Medal, Air Medal, Army Commendation Medal, Army Achievement Medal, National Defense Service Medal, Afghanistan Campaign Medal, Global War on Terrorism Service Medal, Army Service Ribbon, Army Overseas Service Ribbon, NATO ISAF Medal, Combat Action Badge, Senior Army Aviator Badge, and Parachutist Badge.

When asked about his experience at NPS, MAJ Monfreda said, "In terms of what I've learned, simply an appreciation for all of the effort that goes into making system engineering work. It truly is a team effort."

Systems Engineering Graduate is Published in Online Magazine

LT Janice Mallery

The online journal *Designs* has published the work of LT Janice Mallery, a graduate of the Naval Postgraduate School's Systems Engineering program. LT Mallery earned her Master's of Science degree in Systems Engineering in December 2021.

Designs is an international, scientific, peer-reviewed open access journal of engineering designs published bimonthly online by MDPI.

LT Mallery's article, entitled "Defense Installation Energy Resilience for Changing Operational Requirements" is based on her master's thesis research with advisors Dr. Van Bossuyt and Dr. Pollman, who also co-authored the work.

Her thesis focused on the impact of different mission scenarios upon energy resilience of military base microgrids.

Abstract of the article follows:

"We propose a methodology to determine the impact of different potential mission scenarios upon energy resilience for mission-critical loads attached to a military base's microgrid infrastructure. The proposed methodology applies to any installation with changing operational states that has energy-resilience requirements. The proposed methodology may be used by energy managers to account for potential mission scenarios that a base may be part of, followed by assessing the microgrid energy resilience to supply the critical loads for said mission scenarios, especially where the external grid power may be unavailable and/or damage to microgrid components may be present. In the event a microgrid design is unable to provide sufficient electrical energy, distributed energy resources and energy storage systems including renewable energy resources may be added to improve energy resilience. A case study is conducted on a fictitious representative military base, microgrid design, and changing mission demands to demonstrate the application of the proposed methodology. This article contributes a methodology for energy managers to evaluate energy resilience using microgrids by accounting for potential mission scenarios, their energy requirements, resulting energy preparedness, and recommendations for improvement, as necessary."

LT Mallery is from Roseville, CA and a 2015 graduate of University of California, Los Angeles with a Bachelor of Science in Physics.

She began her military career as a qualified Surface Warfare Officer onboard the USS Green Bay (LPD 20) and the USS Little Rock (LCS 9) blue crew. She has laterally transferred to the Engineering Duty Officer (EDO) community and is currently serving at Strategic Weapons Facility, Atlantic (SWFLANT).

ASNE NEJ publishes Former Systems Engineering Student's Thesis Work

By Dr. Joseph Klamo

LT Katherine Irgens

The Naval Engineers Journal (NEJ), a quarterly peer-reviewed technical journal focused on naval engineering which is produced by the American Society of Naval Engineers (ASNE) , recently published the work of Naval Postgraduate School graduate LT. Katherine Irgens.

The article, "Experimental Assessment of Entanglement for a Propeller Driven Unmanned Underwater Vehicle," which was published in the September 2022 issue of NEJ, was written by LT. Katherine Irgens, Dr. Joseph T. Klamo, and Dr. Anthony G. Pollman (NEJ Vol 133(3) pgs. 103-114; available on researchgate.net), and is based on the work LT. Irgens did for her thesis research as part of the Master's of Science in Systems Engineering degree program. Her research was co-advised by Drs. Klamo and Pollman.

LT. Irgens work was part of a larger effort funded through the Naval Research Program (NRP) and sponsored by the U.S. Fleet Forces Command (USFF) Navy Expeditionary Combat Command. The overall goal of the effort, set by USFF, was to investigate any differences in the likelihood of entanglement with marine vegetation between traditional torpedo-shaped propeller driven underwater vehicles and biologically inspired swimming underwater vehicles when operating in the shallow waters of the littoral regions.

LT. Irgens work specifically focused on benchmarking the likelihood of entanglement with marine vegetation for a traditional torpedo-shaped, propeller driven underwater vehicle. She utilized two types of synthetic vegetation; one very flexible and grass-like, and the other, a more rigid giant kelp, to represent the various marine vegetation found in the littoral regions.

In her experiments, she varied vegetation field density and vehicle speed. LT. Irgens showed the dangers of backing up an underwater vehicle in a vegetation field and how transiting forward at a sufficiently high-speed decreases entanglement due to the wake of the vehicle keeping the marine vegetation away from the stern of the vehicle.

As the U.S. Navy continues to increase its reliance on unmanned underwater vehicles to perform missions in the littoral regions, understanding the performance limitations caused by marine vegetation entanglement, is increasingly important.

Prior to coming to NPS she was the Assistant Weapons Officer and Assistant Engineer on the USS Georgia (SSGN-729-G). LT. Irgens is currently an Engineering Duty Officer at Groton, CT .

Capstone Corner

Team HEL-Raisers Win the Systems Engineering Management Army Capstone Competition

By Senior Lecturer Bonnie Johnson

The Capstone Competition is the center-piece of the Systems Engineering Management program. Each project is based on a real-world problem with an actual customer awaiting a solution. Capstone teams are required to apply systems engineering and management techniques and processes. At the end of their graduation quarter, every cohort presents their unique problem, methodology, and solution. A panel of judges assesses each team's competence in applying the skills promoted in the Master's of Science in Systems Engineering management program and the project outcome's value to the customer.

The winners of the 2021 Fall quarter Capstone Competition were MAJ Meg Vermillion, CPT Jonathan Shelton, LTC Mark Scott, MAJ Brian Clayton, and MAJ James Williamson of Team "HEL-raisers."

The team members, who graduated in December 2021 were advised by Dr. Bonnie Johnson (Systems Engineering) and Dr. Joseph Blau (Physics), and sponsored by Mr. Peter Morrison with the Office of Naval Research (ONR). The primary stakeholder was the U.S. Marine Corps (USMC).

The winning project, "Highway to HEL – USMC Expedition -ary Employment of a High Energy Laser to Counter Drone Threats," assisted the ONR and USMC in solving their need to understand the capabilities and limitations of using high energy

MADIS Joint Light Tactical Vehicle (JLTV) with a

laser (HEL) weapon systems, mounted on joint light tactical vehicles (JLTVs), for counter unmanned aerial system (C-UAS) operations.

The intent is for the HEL to support USMC Marine Air Ground Task Forces and Expeditionary Strike Groups (MAGTF/ESG) in their mission to provide ground-based air defense (GBAD) against emerging low-observable, low radar cross-section, drone threats.

Applying systems analysis, systems engineering concepts, and operational expertise, the team developed a simulation model of HEL engagements against drone swarm threats and used it to experiment with different combinations, formations, numbers, and types of HEL weapons and drone threats operating in different environmental conditions.

The insights from the study will inform the design, organizational structure, and concept of operations for HEL weapons mounted on future USMC tactical vehicles.

Team HEL Raisers (From Left): MAJ Meg Vermillion, CPT Jonathan Shelton, LTC Mark Scott, MAJ Brian Clayton, and MAJ James Williamson

Faculty News

Faculty Members Receive Meyer Award

Professor of Practice Donald Muehlbach and Distinguished Professor Clifford Whitcomb were each chosen to receive the Meyer Award for Teaching Excellence in Systems Engineering (Distance Learning) for the 2022 Spring Quarter. The Meyer Award recognizes faculty members who display technical expertise and leadership and is named for the late Rear Admiral Wayne E. Meyer, one of NPS' greatest Hall of Fame Alumni.

Dr. Donald Muehlbach

Professor of Practice Don Muehlbach, PhD joined the System Engineering department as Distance Learning Faculty (San Diego) in February 2009. This is his 23rd Wayne E. Meyer Award for Excellence in Systems Engineering.

He has also received numerous other NPS and US Navy awards including an NPS Letter of Commendation for Excellence in Teaching in 2021, the Allen Griffin Award for Excellence in Post-Secondary Teaching in 2015, the Rear Admiral John Jay Schieffelin Award for Teaching Excellence in 2013, the GSEAS Faculty Award for Extraordinary Merit in Teaching in 2011, and the Legion of Merit Medal, US Navy in 2011.

Dr. Clifford Whitcomb

Distinguished Professor Clifford Whitcomb joined the Systems Engineering Department in 2005 and is currently the Associate Chair of Academics for the Department. This is his 2nd Wayne E Meyer Award for Excellence in Systems Engineering, the first being received in 2017.

He has also received numerous other awards throughout his career, including the Sustained Performance Award Competency Working Goup, INCOSE in 2020, the Best Paper Award Systems Engineering Division, American Society of Engineering Education (ASEE) in 2020 , and Fellow, Society of Naval Architects and Marine Engineers (SNAME) in 2018.

Associate Professor Kristin Giammarco Participates in Brown Bag Seminar

Systems Engineering Associate Professor Kristin Giammarco was invited by Dr. Andreas Tolk (The MITRE Corporation) to give an overview of the Monterey Phoenix (MP) behavior modeling approach and tool during a September 9, 2021 MITRE Brown Bag Seminar.

Dr. Tolk is responsible for technology integration for the Modeling and Analysis Innovation Center (MAIC), part of the MITRE Labs. As part of his efforts to keep the innovation center on the leading edge of current methods and derived tools, he has been inviting recognized experts to share their knowledge in Brown Bag seminars.

Speaking of the September 9 presentation, Dr. Tolk stated:

"Dr. Giammarco's well done presentation generated a great deal of interest and discussions about this approach. In particular, Dr. Giammarco showed us a novel way to engage "people who do not do systems engineering" (including high-level executives) in important aspects of the systems engineering process, given the simple and intuitive graphs Monterey Phoenix enumerates.

"Many members of our center believe that we can use this approach to help make our sponsors comfortable with model thinking as well as elicit knowledge needed for follow-on engineering recommendations.

"Some of my colleagues are already thinking about how to enhance industry-standard commercial tools with the MP method, as this will help communicate implicit assumptions and allows to better capture trade-offs and – most importantly – provides a first look at the dynamics of the often complex system. The methods contribute significantly to close the gap between conceptual ideas of all stakeholders and the implementation decisions captured by systems engineering experts."

More information about Monterey Phoenix can be found at https://nps.edu/mp

Pictured left to right: Dr. Andreas Tolk and Dr. Kristin Giammarco

Lecturer Corina White is Awarded SEAL Grant

Lecturer Corina White

Systems Engineering lecturer Corina White has been awarded a grant through The Teaching and Learning Commons (TLC) Success Through Effective Assessment of Learning (SEAL) program.

The SEAL education grants for 2022 look for projects that expand assessment practices to measure student learning—specifically the acquisition and application of knowledge skills and attitudes, as well as professional competencies, demonstrated by the achievement of educational outcomes.

Ms. White was awarded the grant based on her project proposal to "Incorporating 'Think Tank' Methods in Systems Engineering DL Courses to Promote Innovation and Assess Comprehension."

Ms. White's proposal follows:

"In order to update our processes and methods to enable the workforce to "do things faster," we must create a bridge between current efforts and how we are currently doing things into how we will do things in the future. We can learn from industry to shift the "academic culture" within engineering to put aside the negative connotation of failure and welcome failure as an opportunity to learn. Creating an environment where students are taught the purpose of foundational methods and tools and how to use them while also being encouraged to think outside of the box and give birth to innovative ideas, methods and tools are used to solve real issues. This project would specifically implement a think tank approach in systems engineering courses to explore innovative assessment strategies, promote case- based learning, active collaborative and inclusive learning practice, and assess the learning process and experience."

Senior Lecturer Bonnie Johnson Receives Hamming Award

Dr. Bonnie Johnson

NPS Systems Engineering Department's Senior Lecturer Dr. Bonnie Johnson has been chosen as a recipient of the 2022 Richard W. Hamming Faculty Award for Interdisciplinary Achievement.

This award, which recognizes innovative accomplishments that support and enhance interdisciplinary activities at NPS, was established in 1999 and first presented in March 2000. The award is presented annually during the March awards ceremony.

Dr. Johnson has received this award for her research in two main areas: (1) automation/artificial intelligence (AI) for defense applications and (2) directed energy (DE) warfare studies. These broad topics involve interdisciplinary research for which she collaborated with various organizations in the Navy, Army, Marine Corps, and Air Force as well as industry partners, as well as multiple departments within NPS.

Although most of her students are in the Systems Engineering program, she has co-advised several students in other departments including Information Sciences and Operations Research.

She is currently on the PhD committee for a student in the Information Sciences Department

The full announcement from Provost and Academic Dean Scott Gartner can be found here.

Grade From a Rubric

Dr. Rama Gehris

Interested in learning how to use spend less time on grading and returning assignments while providing high quality feedback from a rubric?

Join Dr. Rama Gehris' Sakai site "Grade From a Rubric Tools" https://cle.nps.edu/portal/site/8dbcf6fe-f4b4-403a-b792-cd6237b225be/tool/5ec52fac-b726-4b64-90a5-63d663b5a513 to get access to beta version tools, documentation and video tutorials.

The tools leverage functionality on your course Sakai site and customized Excel and Word macros to help you grade more efficiently and consistently with student friendly feedback generation.

Awards and Graduations

Awards

Meyer Award for Outstanding DL Student in Systems

MAJ Michael Monfreda, USA

Ms. Kristina M Haller, Naval Surface Warfare Center, Division Carderock

Meyer Award in Systems Engineering for DL Teaching

Dr. Clifford A. Whitcomb

CAPT Don Muehlbach, PhD

Recommendation for Graduation with Distinction

MAJ Michael Monfreda, USA

MAJ Daniel Pechacek, USA

Mr. John Robert Stebe, Naval Surface Warfare Center, Carderock Division

Theses

LT Margaret A. Dori, USN

Thesis Title: ENGINE MAINTENANCE MANHOURS: AN ANALYSIS OF THE ACCURACY OF CORRECTIVE MAINTENANCE STANDARD RATIOS USED IN DETERMINING MANPOWER REQUIREMENTS
Advisor: William Hatch, **Co-Advisor:** Alejandro Hernandez, and **Reader:** Matthew Boensel

CPT Seulbit Lee, Republic of Korean Army

Thesis Title: OPERATIONAL CONCEPT FOR HYDROGEN FUEL-BASED FULLY UNMANNED CARRIER AVIATION
Advisor: Paul Beery, **Co-Advisor:** Anthony Pollman, and **Reader:** Alejandro Hernandez

Capstone Teams

311-203S Team MAUSDT

Capstone Title: CONDITION-BASED UNMANNED UNDERSEA VEHICLE MAINTENANCE MONITORING AND PREDICTION SYSTEM (C-BUMMPS)
Members: Dana Colegrove, Jason Delisser, Corey Johnson, and John Stebe
Advisors: Cliff Whitcomb and Corina White

311-203S Team Thunder Below!

Title: ARCHITECTURE FOR A SUBMARINE DESIGN PROCESS DRIVEN BY WEAPON SYSTEM EFFECTIVENESS AND TOTAL OWNERSHIP COST
Members: Adebo Ifesanya, Jared King, Thomas Stefany, Andrew Weinstein, and Christopher Wemple
Advisors: Mike Green and Ray Madachy

311-203S Team Awesome Force

Title: UNMANNED UNDERWATER VEHICLE MISSION SYSTEMS ENGINEERING PRODUCT REUSE RETURN ON INVESTMENT
Members: Kristina Haller, Danielle Kolber, Theodore Storms, Jesse Weeks, and Wayne Weers
Advisors: Ray Madachy and Mike Green

Graduations

Master of Science in Systems Engineering

CW4 Ryan P Boehringer, USA

MAJ Michael Monfreda, USA

MAJ Daniel Pechacek, USA

Maj Nathaniel L Ross, USMC

Col Richard Michael Rusnok, USMC

LT Margaret A. Dori, USN

LCDR Elliot T Hall, USN

CPT Seulbit Lee, Republic of Korean Army

Mr. Dana Carl Colegrove, Naval Surface Warfare Center, Carderock Division

Mr. Jason M DeLisser, Naval Surface Warfare Center, Carderock Division

Ms. Kristina M Haller, Naval Surface Warfare Center, Division Carderock

Mr. Adebo Habeeb Ifesanya, Naval Surface Warfare Center, Carderock Division

Mr. Corey Doyle Johnson, Naval Surface Warfare Center, Division Carderock

Mr. Jared MacLachlan King, Naval Surface Warfare Center, Carderock Division

Ms. Danielle Sinead Kolber, Naval Surface Warfare Center, Carderock Division

Mr. John Robert Stebe, Naval Surface Warfare Center, Carderock Division

Mr. Thomas J Stefany, Naval Surface Warfare Center, Carderock Division

Mr. Theodore Storms, Naval Surface Warfare Center, Carderock Division

Mr. Jesse B Weeks, Naval Surface Warfare Center, Carderock Division

Mr. Wayne Weers, Naval Surface Warfare Center, Division Carderock

Mr. Andrew Weinstein, Naval Surface Warfare Center, Carderock Division

Mr. Christopher Y Wemple IV, Naval Surface Warfare Center, Division Carderock

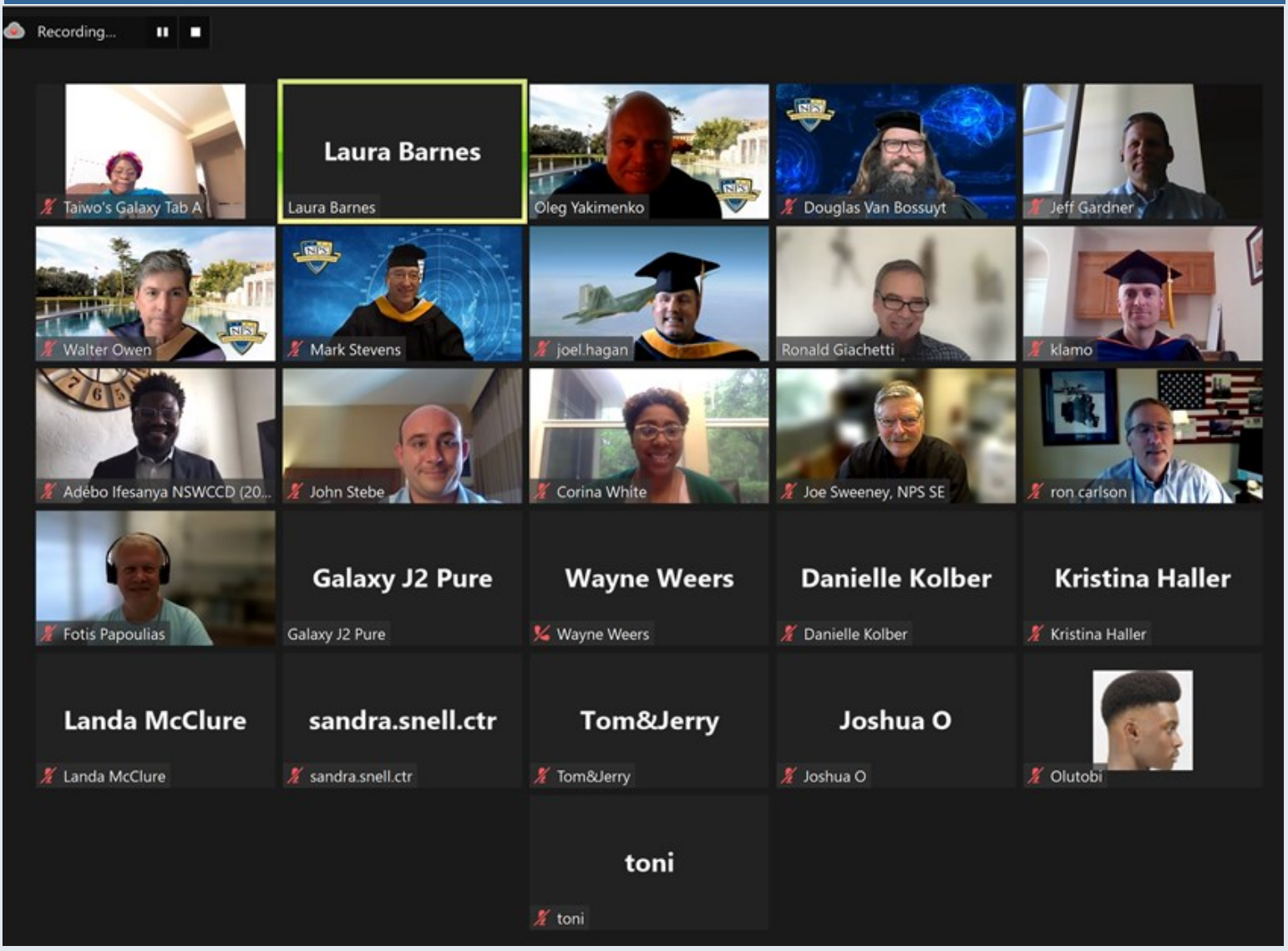
Master of Science in Systems Engineering Management

CDR Jeff A Gardner, USN

Mrs. Landa Rechelle McClure Williams, USAF

Mr. Steve L Oakley, Marine Corps Tactical System Support Activity

Systems Engineering Distance Learning Graduation Photos



NPS Systems Engineering's March 24, 2022 Distance Learning Graduation via Zoom

Please direct questions or comments to the SE Newsletter Editor, Lorene Barnes, at Lorene.Barnes@nps.edu

Request for Alumni News!

The SE Department is interesting in hearing how our alumni are doing.
Please feel free to send the editor news items for inclusion in future newsletters.

If you would like to subscribe to the Systems Engineering Newsletter, please click here.

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Visit Our Systems Engineering Website!