Weekly Media Report – Dec 20 - 26, 2022

HALL OF FAME:

Former Pacific Fleet, STRATCOM Commander Haney Honored as 26th Inductee Into NPS Hall of Fame

(Navy.mil 20 Dec 22) … MC2 James Norket

Retired U.S. Navy Adm. Cecil Haney, who commanded the United States Pacific Fleet (PACFLT) and U.S. Strategic Command (STRATCOM), became the 26th inductee of the esteemed Naval Postgraduate School (NPS) Hall of Fame during a ceremony in Herrmann Hall, Dec. 15, recognizing his lifetime of service to the nation and U.S. national security.

EDUCATION:

Naval Postgraduate School and Stanford University Formalize Partnership to Address Global Climate Change, Energy Security and Sustainability

(Sea power 21 Dec 22) … Edward Lundquist

The Naval Postgraduate School (NPS) and Stanford University Doerr School of Sustainability have created a formal partnership to address the challenging issues of global climate change, energy security and sustainability.

TOP 10 MOST AFFORDABLE MBA PROGRAMS

(New Beats 22 Dec 22) … Neha Choudhary

Earning a Master's of Business Administration degree prepares students to build upon their general business undergraduate degrees or business foundation classes and allows them to specialize in high demand business fields. This comprehensive degree prepares graduates to take on leadership roles within their organization or advance to new heights with other opportunities. Individuals who studied another subject in college often choose an MBA to prepare for a new career in management…1. **NAVAL POSTGRADUATE SCHOOL** GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY – MONTEREY, CALIFORNIA

RESEARCH:

The War in Ukraine and its Impact on the Future of Naval Warfare: The USV Dimension

(SLD Info 22 Dec 22)

If one story has dominated the international news for the past ten months, it is Russia's egregious invasion of Ukraine, a war that shows no sign of abating, and which is the largest conflict in Europe in over three-quarters of a century… This is where the Seahawk/Knighthawk comes in and accomplishes the essence of manned-machine teaming envisioned in the Third Offset Strategy. The aircraft could launch, and while staying well-outside enemy anti-air platforms, use a simple tablet to steer one, or ideally more, Devil Ray USVs toward the adversary ship until impact. This "swarm" tactic has been modeled by various organizations such as the **Naval Postgraduate School** and Naval War College and has proven to have deadly effectiveness… Dr. Shannon Houck is an assistant professor in the Defense Analysis Department at the U.S. **Naval Postgraduate School**. She is a social psychologist with

expertise on the science of influence and persuasion, psychological resilience and resistance, and extremism. She can be reached at shannon.houck@nps.edu.

FACULTY:

PSYCHOLOGICAL CAPABILITIES FOR RESILIENCE

(War on the Rocks 27 June 22) … Shannon Houck

When the National Socialists assumed power in Germany in 1933 and ushered in a series of laws that segregated Jews from "Aryan" society, most Jews believed that the Nazi regime would not remain in power for long. It was not until the "Night of Broken Glass" in 1938 — when Nazis coordinated violent, widespread attacks against Jewish synagogues, schools, businesses, hospitals, and homes — that most German Jews realized the gravity of the threat and urgently tried to flee. Resistance movements did not begin in earnest until 1943. Today in 2022, the need for the will and ability to protect civil liberties and defend sovereignty is once again clear, after Russia's unprovoked invasion of Ukraine and China's escalatory threats to use military force to annex Taiwan. In any society, the capacity to defend itself hinges on resilience… Dr. Shannon Houck is an assistant professor in the Defense Analysis Department at the U.S. **Naval Postgraduate School**. She is a social psychologist with expertise on the science of influence and persuasion, psychological resilience and resistance, and extremism. She can be reached at shannon.houck@nps.edu.

ALUMNI:

Capt. Shea S. Thompson Commodore, Surface Development Squadron One (SURFDEVRON 1)

(Sea Power Magazine 20 Dec 22) … Richard R. Burgess

A native of San Marcos, California, Thompson received his commission from the U.S. Naval Academy in 1997. His sea tours included USS George Philip (FFG 12), USS Cape St. George (CG 71), and USS John Paul Jones (DDG 53). He served as executive officer and then commanding officer of USS Chafee (DDG 90). Subsequently he commanded USS Bunker Hill (CG 52).

Thompson's tours ashore include **Naval Postgraduate School** where he earned a Master's Degree in Financial Management; Ballistic Missile Defense Syndicate Lead at Tactical Training Group Pacific; Ballistic Missile Defense Training Officer at U.S. 3rd Fleet; Joint Interface Control Officer at Headquarters U.S. European Command (J3); C4ISR Operations Branch Chief at U.S. Strategic Command, Joint Force Component Command Global Strike (J6); N8/9 Branch Head Headquarters Surface and Mine Warfare Development Center.

Belize Defence Force Congratulates Two Officers for Graduating from the United States Naval Postgraduate School

(Breaking Belize News 21 Dec 22) … Rubén Morales Iglesias

"Congratulations are in order for Major Ivan Locario and Major Lionel Olivera," the BDF said in a statement celebrating the recent graduation of two of its officers from United States **Naval Postgraduate School** in Monterey, California.

UPCOMING NEWS & EVENTS:

Jan 1: New Year's Day (Federal Holiday)
Jan 2: New Year's Day (Observed Holiday)
Jan 23: LCSS: Leadership and Communication Program for Senior Supervisors

HALL OF FAME:

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Retired U.S. Navy Adm. Cecil Haney, who commanded the United States Pacific Fleet (PACFLT) and U.S. Strategic Command (STRATCOM), became the 26th inductee of the esteemed Naval Postgraduate School (NPS) Hall of Fame during a ceremony in Herrmann Hall, Dec. 15, recognizing his lifetime of service to the nation and U.S. national security.

Among the guests honoring Haney's induction were 78th Secretary of the Navy, the Honorable Carlos Del Toro, and retired Vice Adm. Edward Moore Jr., whom Haney helped induct into the NPS Hall of Fame in January 2021.

"As I reflect on these marvelous pictures and names in the NPS Hall of Fame, I think there are two things that really tie them all together," said Del Toro. "The first is a tremendous dedication to not just our Navy, but our department of the Navy and the commitment they've made through their long careers, either as civilians or as military officers in service to our country. And the second thing that comes to mind is how much they all cared about people and really making a difference in people's lives.

"Admiral Haney, I don't think there's anyone more representative of someone who cares about their troops, and about the people that they lead than you," continued Del Toro. "I am deeply honored to be here."

"[Haney] was always the kind of leader that was accessible and led from the front in a quiet way with his demeanor, his confidence, his competence and his intellect," added retired U.S. Navy Vice Adm. Ann E. Rondeau, president of NPS. "He is an exemplar of what we value in the Navy."

Haney, who led the Pacific Fleet from January 2012 to October 2013 and U.S. Strategic Command from November 2013 to November 2016, truly exemplified the definition of a lifelong learner.

After graduating from the U.S. Naval Academy with a Bachelor of Science degree in Ocean Engineering, Haney went on to earn two master's degrees from NPS, in Engineering Acoustics and Systems Technology, followed by an additional master's degree in National Security Strategy from the National Defense University.

"NPS was the foundation of my growth as a naval officer, as a person, and as a lifetime learner," noted Haney. "I'm frankly amazed to be here today receiving this recognition. For me, just getting the rich education here at NPS is more than enough.

"I have, and I continue to talk positively about my time here," he continued. "Not just about the quality of the graduate education here, but about the rich experience that I received then, and that continues to be just as outstanding today."

While serving as the commander of U.S. Strategic Command and U.S. Pacific Fleet, Haney said he often turned to his alma mater for research support into some of the complex issues facing the commands.

"We could send our problems to NPS, and they would result in meaningful operations research projects, and provide us with answers to our complications," Haney noted. "I have and continue to benefit from this tremendous university, even though I graduated from here so long ago."

As a submariner, Haney served as a division officer aboard the ballistic missile submarine USS John C. Calhoun (SSBN 630) and the submarine tender USS Frank Cable (AS 40), where he fulfilled his surface warfare qualifications and served as a radiological controls officer. He was an engineer aboard USS Hyman G. Rickover (SSN 709) and Executive Officer aboard USS Asheville (SSN 758) before assuming duties as the assistant squadron deputy at Submarine Squadron (SUBRON) 8. Haney would go on to command the fast-attack submarine USS Honolulu (SSN 718) in 1996, SUBRON 1 from June 2002 to July 2005, and SUBRON 2 from October 2006 to March 2008.

When not at sea, Haney served as the administrative assistant for enlisted affairs at Naval Reactors; congressional appropriations liaison officer for the Office of the Secretary of Defense (Comptroller); deputy chief of staff of Plans, Policies and Requirements, U.S. Pacific Fleet (N58); director, Submarine

Warfare Division (N87); director, Naval Warfare Integration Group (N00X) and deputy commander, U.S. Strategic Command.

The NPS Hall of Fame was established in 2001 to honor NPS' most distinguished alumni and friends who, through the attainment of positions at the highest levels of public service, have made the greatest contributions to society, their nations and to the instiution. Its members include Adm. Mike Mullen, former Chief of Naval Operations and Chairman of the Joint Chiefs of Staff; Adm. Wayne Meyer, the father of the AEGIS combat system; and Vice Adm. Jan Tighe, who served as Commander, U.S. 10th Fleet, making her the first woman to command a numbered fleet.

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EDUCATION:

Naval Postgraduate School and Stanford University Formalize Partnership to Address Global Climate Change, Energy Security and Sustainability

(Sea power 21 Dec 22) … Edward Lundquist

The Naval Postgraduate School (NPS) and Stanford University Doerr School of Sustainability have created a formal partnership to address the challenging issues of global climate change, energy security and sustainability.

The announcement was made on Dec. 15 at the NPS campus in Monterey, California.

The Education Partnership Agreement (EPA) was signed by NPS President Vice Adm. (ret.) Ann E. Rondeau and Dr. Arun Majumdar, dean of the Doerr School of Sustainability, during a ceremony that was presided over by Secretary of the Navy Carlos Del Toro.

“Bold climate action is a mission imperative for the Department of the Navy, and we must harness all of the tools at our disposal in order to make urgently needed change,” said Del Toro. “This collaboration between the Naval Postgraduate School and Stanford University will bring together two globally recognized hubs of research and innovation, focused on realizing solutions that our Navy and our nation can employ now and in the future.”

According to a press release from NPS, the Navy’s climate strategy highlights two major performance goals in its response: building climate resilience and reducing climate threats. But, the release said, it also underlines the importance of leveraging and empowering the education of Sailors and Marines to meet the challenges of climate and energy security and sustainability through knowledge and innovation.

“The combination of expertise, operational experience, education and entrepreneurship in this partnership with Stanford and their Doerr School of Sustainability is truly unique and a powerful contribution to the global climate challenges ahead of us all,” said Rondeau.

The NPS Climate and Security Network (CSN) brings together the school’s collective expertise on climate security and creates opportunities for interdisciplinary collaboration and information sharing. Through the CSN’s efforts, NPS student and faculty have contributed to the development of key climate strategies and plans within the Department of Defense and conduct research to inform future force design, force generation and deployment considerations.

The Doerr School is a new addition to the Stanford campus. Launched in May 2022, the school works with local and global collaborators to understand the challenges of climate change and find solutions that can be executed with impact at scale. The school includes multiple academic departments, including the Woods Institute for the Environment and the Precourt Institute for Energy; a sustainability accelerator to drive policy and technology solutions at scale; and a newly established Oceans Department located at the Hopkins Marine Station in Monterey.

Academic collaboration and research partnerships between NPS and Stanford are not new. Both schools have partnered on research efforts, leveraging each other's strengths as well as their proximity in Northern California — the schools are 90 minutes apart by car.

Under the partnership agreement, NPS and the Doerr School of Sustainability will conduct joint research with the CSN and other NPS departments and groups, including the Energy Academic Group, Center for Infrastructure Defense, Meteorology, Oceanography, National Security Affairs, Defense Management and Engineering to investigate climate security, energy security, sustainability and more.

Naval Postgraduate School and Stanford University Formalize Partnership to Address Global Climate Change, Energy Security and Sustainability - Seapower (seapowermagazine.org)

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TOP 10 MOST AFFORDABLE MBA PROGRAMS

(New Beats 22 Dec 22) … Neha Choudhary

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Universities are continually reviewing and expanding their program offerings and electives to make this degree flexible and accessible, while still integrating core business skills and cutting edge tools that make this degree a staple in business management. When considering an MBA program, students should weigh the cost, program quality, and the specializations available. The programs included on this ranking are all highly accredited and very affordable. Making this list an excellent place to begin the search for the perfect Master's of Business Administration program.

1. **NAVAL POSTGRADUATE SCHOOL** GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY – MONTEREY, CALIFORNIA

The **Naval Postgraduate School's** Graduate School of Business and Public Policy offers an elite Master's of Business Administration with accreditation through the Association to Advance Collegiate Schools of Business. Their unique MBA curriculum is formatted to meet the needs of Department of Defense civilian employees, U.S. Navy officers, and defense contractors. Within the program, students will develop superior analytical skills and expertise in areas of financial management, information management, logistics, and acquisitions. The faculty includes experts from both the military and civilian workforce. The school houses the Center for Defense Management Research where faculty and students explore solutions for defense business management challenges. The MBA requires 18 months to complete and includes concentration options in Acquisition Management, Defense Management, Financial Management, Information Management, and Logistics Management. All students attend full-time as part of their employment or military service with tuition being waived for all active United States Navy and United States Marine Corps members.

The **Naval Postgraduate School** is operated and run by the United States Navy in Monterey, California. They carry regional accreditation with the Western Association of Schools and Colleges, Senior College and University Commission and offer a variety of high-quality degrees; all focused on the increasing combat effectiveness and security in the United States. The Graduate School of Business and Public Policy offers a Master's of Business Administration with several concentration options. To apply, students must review the eligibility requirements for armed forces officers, enlisted armed forces members, and civilians. They will then need to submit an online application complete with GRE scores and one copy of official transcripts from each university attended.

2. UNIVERSITY OF MASSACHUSETTS AMHERST ISENBERG SCHOOL OF MANAGEMENT – AMHERST, MASSACHUSETTS

Students can earn a recognizable Master's of Business Administration degree at the University of Massachusetts Amherst. The Isenberg School of Management's MBA holds accreditation through the Association to Advance Collegiate Schools of Business and is frequently recognized among the best programs in the U.S. by the leading ranking systems. Recognition from these ranking systems assures students that this program is a wise investment that will make an impact on their future career. The UMass Master's of Business Administration program is offered in a fully online, hybrid, or full-time on-campus format. All options are designed to help busy students find success both academically and in reaching their goals. One way that UMass helps students achieve these goals is by offering a fully funded Fellowship program to all full-time MBA students. This Fellowship program provides full tuition support, a stipend, and health care benefits, as well as access to an influential alumni network and many experiential learning opportunities.

The University of Massachusetts Amherst is a four-year, public school, research university that offers over 100 undergraduate, 75 master's and 45 doctoral programs to over 30,000 students each year. They hold regional accreditation from the New England Commission of Higher Education and are consistently named among the top schools in the nation. UMass Amherst is the flagship campus of the University of Massachusetts system and offers degrees through nine schools and colleges including the Isenberg School of Business. To apply to this elite MBA prospective students must submit a full application, which will include two letters of recommendation, GMAT or GRE scores, current and professional resume, transcripts from all universities attended, and a personal essay.

3. TEXAS A&M INTERNATIONAL UNIVERSITY A.R. SANCHEZ, JR. SCHOOL OF BUSINESS – LAREDO, TEXAS

Students at Texas A&M International University can earn a Master's of Business Administration degree with prestigious accreditation through the AACSB. The MBA offered through the A.R. Sanchez, Jr. School of Business is 30 credits in length and includes a variety of classes such as core courses in Business Research Methods, Strategic Methods, Financial Statement Analysis, and Managerial Economics. Outside of the core courses students are then able to choose three to four classes within their concentration choices of International Business, International Banking, International Trade and Logistics, and Management. Most options are offered both online and on-campus formats with a focus on fine-tuning students' pre-existing skill sets and advancing critical thinking skills. Texas A&M International University's MBA is an excellent investment for those looking for a high-quality program at a very reasonable price point of significantly less than $14,000.

Texas A&M International University is a stand-out member of the Texas A&M University system. The University is regionally accredited by the Southern Association of Colleges and Schools, Commission on Colleges. TAMIU is a four year, public, university that educates just over 7,500 students each year. Their modern campus sits on 300 acres in Laredo, Texas and includes four colleges that offer over 35 undergraduate degrees and 12 graduate level degrees. The A.R. Sanchez, Jr. School of Business provides a well-rounded Master's of Business Administration degree that is held in high regard in the business education community. To apply, applicants must submit GMAT/GRE scores, an online application along with official transcripts from all universities attended, one-page statement of purpose, current and professional resume, and two letters of recommendation.

4. INDIANA STATE UNIVERSITY SCOTT COLLEGE OF BUSINESS – TERRE HAUTE, INDIANA

Indiana State University's Scott College of Business offers a top-notch Master's of Business Administration degree through the Scott College of Business. The program is 33 credit hours in length and carries elite accreditation with the Association to Advance Collegiate Schools of Business. Classes can be taken on a part- or full-time basis and typically meet one night a week on campus. Before starting, students must have completed Statistics. Once admitted, they will work on business-relevant classes such as Management Accounting, Advanced Management Practices, Strategic Financial Decisions, and Managing the Strategic Workforce. Students are encouraged to use their elective courses to participate in a global experience and complete their degree with a unique capstone course focused on analyzing information and problem solving from a variety of angles. ISU's Master's of Business Administration degree is offered at one of the lowest price-points on our list. They can additionally be seen among many

of the leading ranking systems in the nation, assuring prospective students that their affordable tuition rates will not mean a sacrifice in program quality.

Indiana State University is a four-year, public school with regional accreditation through the Higher Learning Commission. The University is located in Terre Haute, Indiana and has an annual student body enrollment of over 13,500 students. ISU houses over 80 undergraduate majors, 75 graduate degree programs, and more than 100 minors, certificate, and licensure programs through seven academic colleges. Graduate students seeking an MBA can earn their degree through the well-respected Scott College of Business. Students interested in this MBA program must submit an online application, copies of official transcripts from all universities previously attended, a statement of purpose, resume or CV, and GMAT/GRE scores.

5. ALBANY STATE UNIVERSITY COLLEGE OF BUSINESS – ALBANY, GEORGIA

Students can earn their MBA degree through the College of Business Albany State University. The program holds esteemed accreditation with the Accreditation Council for Business Schools and Programs and offers tuition rates significantly less than $14,000. Albany State's MBA is 30-33 credits long and provided as a general MBA or with concentrations in Accounting, Healthcare, Supply and Chain Logistics, or Public Administration. While each program offers a unique focus on the Master's of Business Administration all options include relevant courses such as Financial Management, Organizational Behavior and Effectiveness, Marketing Management, and Economics for Managers. The average student to faculty ratio at Albany State University is 19:1 with over half of the class offerings containing less than 20 students. Small class sizes, respected accreditations, and very affordable tuition rates are just a few of the things that make the MBA at Albany State University a great option for anyone looking to earn their graduate degree in business.

Albany State University is a four year, public, historically black university. With over 6,500 students, Albany State is the largest of the three historically black universities within the University of Georgia system. While the main campus is located on 206 acres in Albany, there are two additional campuses in West Albany and Cordele. They carry regional accreditation through the Southern Association of Colleges and Schools, Commission on Colleges and offer a variety of degrees through five academic colleges. The College of Business offers an elite and budget-friendly MBA. Applicants are required to submit a 1,000-word statement of purpose, two letters of recommendation, an online application, and official transcripts from all universities previously attended.

6. SAVANNAH STATE UNIVERSITY COLLEGE OF BUSINESS ADMINISTRATION – SAVANNAH, GEORGIA

Students at Savannah State University can earn a Master's of Business Administration degree with renowned accreditation through the AACSB. The program can be completed in 30 credit-hours on a part-time basis with evening classes on campus. Students will appreciate a well-rounded curriculum with courses such as Managerial Finance, Management Information Systems, Organizational Leadership, and Marketing Management. Savannah State is committed to delivering high-quality programs to a diverse student population. This commitment is shown through their affordable tuition rates of significantly less than $14,000, as well as, mentoring, community involvement projects, applied research, and exceptionally qualified staff.

Savannah State University is a four-year, public, historically black university that was established in 1890. The University carries regional accreditation with the Southern Association of Colleges and Schools, Commission on Colleges and serves a select group of under 5,000 students each year. The campus sits on 210 acres with three colleges making up the University. The College of Business Administration offers a Master's of Business Administration. Students interested in applying this rigorous program must submit an online application complete with one 500-1,000 word essay, transcripts from each university attended, three letters of recommendation, current resume, and official GMAT/GRE scores.

7. ANGELO STATE UNIVERSITY COLLEGE OF BUSINESS – SAN ANGELO, TEXAS

Students can earn an affordable and established Master's of Business Administration degree from the College of Business at Angelo State University. The estimated base tuition cost of the MBA program at Angelo State is one of the lowest of our list, significantly less than $14,000. Even with the low tuition, the

University shows a commitment to excellence. The Master's of Business Administration program is no exception to this standard, offering many opportunities for student success with both online and hybrid options. The program holds prestigious business accreditation with the Accreditation Council for Business Schools and Programs. This accreditation attests to the school's high standards in teaching and business education. Angelo State's MBA is 30 credit-hours in length and is open to all undergraduate backgrounds. The curriculum is interdisciplinary and covers a variety of topics including marketing, management, accounting, finance, the legal and social environment of business, economics, data analytics, and management information systems.

Angelo State University is a public, four-year university, and a member of the well-respected Texas Tech school system. The Angelo State campus is located in San Angelo, Texas, a small town in the heart of the Lone Star State. The University serves close to 10,500 students annually and offers over 100 majors and concentrations at the bachelor's, master's, and doctoral level. The University carries regional accreditation with the prestigious Southern Association of Colleges and Schools, Commission on Colleges and the College of Business at Angelo State offers a distinguished Master's of Business Administration degree. Applicants must have a bachelor's degree from an accredited university with a GPA of 2.5 or better. A GMAT score of 430, or GRE equivalent, is also required.

8. AUGUSTA UNIVERSITY JAMES M. HULL COLLEGE OF BUSINESS – AUGUSTA, GEORGIA

Students at Augusta University can earn their Master's of Business Administration degree through the distinguished Hull College of Business. The program holds accreditation with the Association to Advance Collegiate Schools of Business and is offered at a very affordable price point of less than $14,000. The Hull MBA is 30 credit-hours in length, recently updated, and offered on a flexible timeline between 12-24 months. A few of the courses included within the degree plan include Managerial Finance, Marketing Management, Management of Information Technology, and Business Analytics for Managers. Students can choose to complete their degree either in the evenings with face to face classes, hybrid format, weekend classes, or entirely online. The learning goals for this top-notch program include improving overall business competency, critical thinking skills, and business professional skills. Those looking to advance their career through higher education will appreciate this program's focus on relevant skills, as well as, their convenient scheduling options and competitive price point.

Augusta University is a four year, public, research university located in Augusta, Georgia. Each year the University educates close to 8,500 students through their ten highly respected colleges and schools. Augusta University holds regional accreditation with the Southern Association of Colleges and Schools, Commission on Colleges and the Hull College of Business is well-respected within the business education community. The Hull MBA was recently redesigned in 2016 and offers students the skills needed to compete in today's ever-changing business world. Those interested in applying to the MBA will need to submit an online application which will include official transcripts from all universities attended, three letters of recommendation, GMAT/GRE scores, and curriculum vitae or resume.

9. TEXAS A&M UNIVERSITY-CORPUS CHRISTI COLLEGE OF BUSINESS – CORPUS CHRISTI, TEXAS

The Master's of Business Administration program at Texas A&M University-Corpus Christi is highly accredited by the AACSB. This 30 credit hour program includes relevant course topics such as Operations Management, Accounting Topics, Administrative Strategy and Policy, and Software-Based Business Solutions. Students are not required to choose an area of concentration, but Finance, Healthcare Administration, and International Business are available for those who wish to further specialize their degree. The College of Business at TAMU-CC is recognized for its Coastal Bend Business Innovation Center which allows business students to participate in partnerships with companies such as Citgo and American Bank. Students will appreciate the many opportunities for professional networking and internships, as well as, the program's tuition rates that fall far below $14,000.

Texas A&M University-Corpus Christi is a distinguished member of the Texas A&M University system. The University was established in 1947 and holds regional accreditation with the Southern Association of Colleges and Schools, Commission on Colleges. They provide a wide array of undergraduate and graduate programs to nearly 12,500 students each year. The College of Business offers

a well-recognized Master's of Business Administration program. MBA applicants need to complete the Texas Common Application and submit official transcripts from all universities attended, GMAT/GRE scores, Resume or curriculum vitae, and an essay expressing educational and professional goals.

10. MIDWESTERN STATE UNIVERSITY DILLARD COLLEGE OF BUSINESS ADMINISTRATION – WICHITA FALLS, TEXAS

At Midwestern State University students can earn a Master's of Business Administration degree through the Dillard College of Business Administration. This program is offered at a very affordable tuition rate of less than $14,000 and carries esteemed accreditation through the Association to Advance Collegiate Schools of Business. Students can complete Midwestern State's MBA either on-campus of fully online in 33 to 57 credit hours. The curriculum is, and the core coursework includes classes such as Current Issues in Organizational Behavior, Financial Administration, Advanced Applied Business Statistics and Information Technology Management. Outside of core courses, students may choose a concentration in Energy Management or Accounting. Students who obtained their undergraduate degree in a field outside of business are welcome to apply and will be able to choose between a six-credit-hour MBA foundations course or completing 27 credit-hours of individual courses such as Managerial Accounting, Business Finance, Principles of Marketing, and Macroeconomics Principles.

Midwestern State University is a four year, public, liberal arts university that was established in 1922. The University holds regional accreditation with the Southern Association of Colleges and Schools, Commission on Colleges and serves a close-knit student body of just over 6,000 annually. There are nine graduate programs offered including a Master's of Business Administration through the Dillard College of Business Administration. Students interested in applying to Midwestern State's comprehensive MBA program are encouraged to meet with a graduate coordinator and submit an online application. Within the application students will need to request official transcripts from all universities attended and submit GRE/GMAT scores.

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RESEARCH:

The War in Ukraine and its Impact on the Future of Naval Warfare: The USV Dimension

(SLD Info 22 Dec 22)

If one story has dominated the international news for the past ten months, it is Russia's egregious invasion of Ukraine, a war that shows no sign of abating, and which is the largest conflict in Europe in over three-quarters of a century.

The breathless daily reporting has kept the planet's inhabitants well-informed about the day-to-day details of this conflict, but it will likely take many years to fully understand and unpack the lessons learned regarding what is occurring and Ukraine.

While there are many stories that have been generated regarding this conflict, as well as some nascent lessons learned, one of the most prominent is how Ukraine has been able to use unmanned surface vehicles to attack Russian ships.

The attack on the Russian Navy in the port of Sevastopol in October of this year brought new attention to the capabilities of these unmanned maritime systems, and will likely spur the development of USVs by many nations and navies.

All that said, it is important to realize that this is not a completely new means of warfare, but one that is centuries-old. A bit of perspective is important.

Fire ships were used in ancient China during the battle of Red Cliffs on the Yangtze River, as well as in the Eastern Roman empire in many battles during the time of Byzantine Empire.

Fire ships were also used during the Crusades, and later in the allied victory over the Turks in the battle of Navarino. These fire ships continued to be used during the age of sail through the Napoleonic Wars. Later, they were used during the Greek War for Independence in the 1820s and 1830s.

In the American experience, fire ships were used during the Civil War when the Confederate Navy used them to attack Union ships on the Mississippi River.

As steel hulls replaced wooden ships, and explosive devices became prominent, fire ships were no longer effective weapons. They were replaced by unmanned surface vehicles carrying explosives.

During World War I and World War II, Germany used explosive remote controlled speedboats to protect their coast. One of the most prominent of these was the FL7 electronically controlled motorboat. This unmanned boat carried 300 pounds of explosives, and was designed to be rammed into any British ship that came near the German coast.

Originally they were controlled by a driver who sat atop of 50 foot tower on shore, steering them through a 50 mile long cable that spooled out of the back of the boat. Subsequently, the Germans shifted the operator from a tower onto a seaplane that would fly overhead dragging the wire. Both methods proved unwieldy, but with the invention of wireless radio control, the Germans found that these boats became more effective

What does this have to do with warfare today?

Actually a great deal.

The aforementioned attack on the Russian Navy in Sevastopol ushered in a new era of drone warfare. Unmanned maritime vehicles have been evolving rapidly over the past decade, and now they have gone to war.

In an era where naval vessels are increasingly expensive, attacking these ships with cheap, expendable, explosive-laden USVs is the ultimate form of asymmetric warfare. For example, a U.S. Navy Arleigh Burke destroyer costs over $2 billion, and the U.S. Navy‘s new DDG(X) ship is projected to cost over $3 billion. The efficacy of using unmanned surface vehicles to attack naval vessels is clear.

However, what is lost in this aspirational use of unmanned surface vehicles to attack naval vessels is precisely how the USV will actually hit a highly maneuverable naval vessel.

Operating these USVs completely autonomously is likely not a viable tactic, since where a naval vessel is located at one moment will bear little resemblance to where it will be hours or even minutes later.

One tactic that is gaining purchase stems from a concept first articulated in the Department of Defense’s Third Offset Strategy.

The technical aspect of this concept of operations (CONOPS) is centered around a concept called man-machine teaming, and is one that most defense analysts suggest represents the most effective means of prevailing in the future battlespace.

Briefly, here is how this CONOPS would work.

This tactic would combine modern U.S. Navy helicopters, such as the Seahawk and Nighthawk, with small and medium agile unmanned surface vessels such as the MARTAC Devil Ray T24 (24ft) and T38 (38ft) unmanned surface vessels.

While there are many unmanned surface vessels that the U.S. Navy is either considering or developing, what these USVs bring to the table is a high cruise speed, an extremely high burst speed of 60-80 knots, and the ability to operate beyond human capability, making high speed, high-G turns that enable them to outmaneuver, or intercept, even the most modern and agile naval vessels.

This CONOPS leverages the best aspects of what humans and machines can do together. Imagine a U.S. surface combatant that discovers an adversary surface ship in a hot-war situation. Clearly, the goal is to “out stick” the enemy and disable or destroy that ship before the U.S. Navy ship takes a hit. High performance in both speed and maneuverability will be the key component.

This CONOPS builds on what has been the essence of naval warfare for centuries. It means giving one ship the ability stand-off from an adversary vessel and out of range from its weapons, while delivering ordnance that can achieve a mission kill, or even sink the adversary ship. How might the U.S. Navy ship most effectively engage the enemy?

One standoff tactic would be to send a helo armed with hellfire missile to strike the enemy ship. However, with a range of, at best, seven nautical miles for the hellfire missile, that puts a $37M SH-60R/S Seahawk/Knighthawk helicopter and its crew well within the range of adversary anti-air systems. Clearly, this is not a viable tactic.

What if, instead, the U.S. Navy surface combatant carried a number of Devil Ray USVs armed with on-contact explosives and launched them toward to adversary ship. That would be a good start, but if the adversary ship was over the horizon, these USVs would not get to their intended target.

This is where the Seahawk/Knighthawk comes in and accomplishes the essence of manned-machine teaming envisioned in the Third Offset Strategy. The aircraft could launch, and while staying well-outside enemy anti-air platforms, use a simple tablet to steer one, or ideally more, Devil Ray USVs toward the adversary ship until impact. This "swarm" tactic has been modeled by various organizations such as the **Naval Postgraduate School** and Naval War College and has proven to have deadly effectiveness.

This is where many defense experts see manned-machine teaming going in the future.

Now it is time to go beyond modeling and simulation and try out this CONOPS with helicopters and USVs.

The U.S. Navy is planning an ambitious series of exercises, experiments and demonstrations in 2023 and beyond, and this way of tipping the balance in the favor of U.S. Navy forces is one that ought to be explored as a priority.

The War in Ukraine and its Impact on the Future of Naval Warfare: The USV Dimension - Second Line of Defense (sldinfo.com)

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FACULTY:

PSYCHOLOGICAL CAPABILITIES FOR RESILIENCE

(War on the Rocks 27 June 22) … Shannon Houck

When the National Socialists assumed power in Germany in 1933 and ushered in a series of laws that segregated Jews from "Aryan" society, most Jews believed that the Nazi regime would not remain in power for long. It was not until the "Night of Broken Glass" in 1938 — when Nazis coordinated violent, widespread attacks against Jewish synagogues, schools, businesses, hospitals, and homes — that most German Jews realized the gravity of the threat and urgently tried to flee. Resistance movements did not begin in earnest until 1943. Today in 2022, the need for the will and ability to protect civil liberties and defend sovereignty is once again clear, after Russia's unprovoked invasion of Ukraine and China's escalatory threats to use military force to annex Taiwan. In any society, the capacity to defend itself hinges on resilience.

A resilient populace is prepared to resist — to fight to regain power and sovereignty when it is lost. The Resistance Operating Concept describes resilience as a foundation for resistance. The NATO Special Operations Headquarters' Comprehensive Defence Handbook echoes this idea, stating that "[r]esilience is the foundation atop the whole-of-society bedrock." And most recently, the 2022 U.S. National Defense Strategy highlights resilience as a means for deterrence. Each of these foundational documents underscore a critical point: If a nation lacks the will to defend its sovereignty, then its overall resistance capacity is severely impacted.

Despite a renewed focus on resilience and resistance among security planners and practitioners, there is a gap in the current understanding of the psychological capabilities people need to defend and regain sovereignty. Resiliency-building efforts tend to focus almost exclusively on civil preparedness for natural, accidental, or malicious disasters through infrastructure resource management, emergency response protocols, communication networks, and educating the public. This type of preparedness is necessary but insufficient. Preparing individuals and populations for invasion requires cognitive readiness. Determination. Motivation to get in and stay in the fight. Psychologically resilient individuals feel a sense

of connection and belonging to their social circles and community environment. They trust their local forces and civilian services. They are knowledgeable about enemy influence attempts. They believe in their country's narratives and purpose and feel a sense of national identity and pride.

To achieve these outcomes, resilience building must also equip people to deal with the psychological challenges pre-invasion (anticipation and uncertainty), during invasion (coping, acceptance, and unity), and post-invasion (psychological change). Ukraine provides a model example. After what some call a weak and divided defense against Russia's 2014 invasion of Crimea, Ukraine's response to Russia's 2022 assault is nothing short of impressive. They have so far taken back 50 percent of the territory Russia occupied at the start of the war. What accounts for the difference? After 2014, Ukraine adopted a whole-of-society approach to help bolster its government and civic sector capabilities to include psychological resilience. The result is a Ukraine that remains determined, confident in victory, innovative, and united. Other nations should follow step.

Anticipation Pre-Invasion: The Psychology of Uncertainty

Preparing without knowing if, when, where, or how a threat will occur is psychologically challenging. Uncertainty causes angst. It is also linked to decreases in motivation, focus, cooperation, and sense of purpose. For example, runners are most likely to slow their pace and "give in to pain" when faced with uncertain conditions during a race, or that the reality of losing a job has less of a negative impact on one's overall health than experiencing job uncertainty. According to neuroscientists Heidi Grand and Tal Goldhamer, "[t]hreats of uncertainty literally make us less capable, because dealing with them is just not something our brains evolved to do."

Fortunately, people can learn to navigate uncertainty. Indeed, top athletes intentionally train for it. Performance expert Steve Magness writes: "Similar to how we adapt to the stress of a physical workout by increasing the strength of our muscle fibers, building mitochondria, or producing more red blood cells, our brains adapt to the stress of uncertainty, by adjusting our stress response, establishing and reinforcing memory connections, and being better equipped to handle that formerly uncertain situation." With exposure to uncertainty comes more psychological preparedness, not necessarily for specific incidents, but for the discomfort that unanticipated incidents may bring.

As such, in the same ways athletes train for uncertainty that they may face during competition, societies must also psychologically train for the unexpected. One way to develop this capability is through interagency training and scenario planning and simulation that intentionally injects elements of uncertainty. This not only helps participants learn procedures and practice their responses, but it also provides a forum for participants to develop important relationships with others involved in planning and preparation processes. As evidenced in Ukraine, a comprehensive defense approach is crucial. Comprehensive defense is defined as "an official Government strategy, which encompasses a whole-of-society approach to protecting the nation against potential threats." This means fostering relationships across government entities (political and military, including conventional and irregular forces) and civilian sectors of society (e.g., community-based organizations, religious leaders, and societal influencers) to serve a critical role in coping if an invasion occurs.

Coping During Invasion: The Psychology of Acceptance and Unity

Resilient people display two essential coping skills during a crisis — the ability to accept what is happening and the ability to adopt a unified front to implement solutions. Psychological acceptance, or "the active embracing of subjective experience, particularly distressing experiences," is cognitively challenging. When facing distressing events, suppression and denial are often more attractive than acceptance because avoidance offers temporary comfort. But acceptance is critical for action.

People must also be prepared to innovate in the face of unanticipated circumstances. Organizational resilience research underscores the importance of bricolage, or the "capability to improvise and to solve problems creatively." Ukrainians, for example, must use everything at their disposal in their current defense against Russian invaders. One Ukrainian woman reportedly threw a jar of pickles from her balcony to crash a drone. Ukrainian farmers have used tractors to tow Russian tanks, and one brewery made Molotov cocktails in their bottles, re-labeling them "Putin is a Dickhead." These examples demonstrate a mastery of bricolage — quickly innovating with whatever available resources one has during a crisis.

Coordinated actions are even more impactful. The most successful groups are those that can unite to achieve a common goal. Sports teams provide a good example. The typical baseball team is made up of very different types of individuals from different regions, backgrounds, ethnicities, beliefs, etc. Oftentimes these various social identities might not easily mix. But the teams that can put aside these individual identities and focus on their team identity tend to win more games.

Similarly, a strong national identity is widely recognized as crucial to successful resilience. However, unity is not automatic. Social psychology research has identified several mechanisms that help bring groups together to collaborate more effectively. Much of this research focuses on the power of contact, which again demonstrates the importance of adopting a whole-of-society approach throughout planning and preparation efforts. Inclusion and consensual (but not co-opted) cohesion generally enhance resilience. But aside from simply getting different entities together, there are four conditions of intergroup contact that can maximize effects: establishing common goals; dedication to cooperation; the development of equality in status; and the presence of institutional support.

These conditions translate into recommended actions to facilitate effective whole-of-society collaborations, the first of which is to focus on common objectives. Bringing different stakeholders together, each of which has their own agendas, requires changing an "us versus them" mindset to a "we" mentality. Individual motivations to collaborate might differ, but emphasizing a clear, overarching mission can assist in bridging differences and facilitating team productivity. The second recommendation is to get genuine buy-in from all participants. This recommendation is obvious on the surface yet is often minimized or ignored entirely. This is not without consequence, as dedicated cooperation rather than passive participation is fundamental to group cohesion and productivity. Genuine buy-in does not come from direct orders that force people to participate. It comes from knowing that one's participation is needed and valued. As such, recommendation three centers around psychological research on status equality. Successful intergroup cooperation involves the recognition of team members strengths, skillsets, and expertise. Leaning on expertise diversity can lead to more successful, unified action.

Adaptation Post-Invasion: The Psychology of Change

After crises comes a period of learning and adaptation. Reflection and learning require cognitive capabilities to evaluate a crisis and enact change based on "lessons learned." In organizational psychology research, this process of learning post-crisis is described as an "ongoing process of reflection and action characterized by asking questions, seeking feedback, experimenting, reflecting on results, and discussing errors or unexpected outcomes of actions." Organizational-level learning also comes from observing others' successes and failures. For example, airline and railroad accidents decline as accidents by other firms in the same industry increase.

However, simply identifying lessons learned does not necessarily mean effective adaptation. Change is a process. People resist change for a variety of reasons, including the increased work that comes with change and the previously discussed psychological challenges associated with uncertainty. We cannot simply ignore resistance to change. To adapt, we must determine the individual and group drivers of resistance to change and address them. Armed with this understanding, leaders can develop more effective strategic communication. This sounds obvious on the surface, and yet research on organizational change finds that while most senior managers understand the reasons behind major decisions, a relative minority of lower-level supervisors and employees think that management adequately explains the reasons behind these decisions. Leaders must communicate clearly, repeatedly, and reinforce the deeply held societal values that further promote national identity.

Many of the psychological capabilities to improve societal resilience can be integrated into three broad focus areas: education, information, and inclusion. Education should not only raise awareness about trends that may affect national safety or potential threats to sovereignty, but it should emphasize a country's unique strengths, national history, culture, and values. Mongolia, a democracy bordered by authoritarian Russia and China, has taken several measures along these lines. For example, this year's Nadaam festival, Mongolia's most important national holiday that celebrates its independence and nomadic culture, coincided with the Gobi Wolf 2022 exercise, "the Pacific Resilience Disaster Response Exercise and Exchange Program, which focuses on interagency coordination and foreign humanitarian assistance." Emphasizing resilience during important cultural events is something other nations can do.

A psychologically resilient population must also be informed about the modern information environment and how it plays a role in shaping thinking and behavior. Disinformation education and media literacy, for example, are critical, as disinformation erodes national cohesion, trust, and inclusion. According to a recent study, Taiwan is one of the most frequent targets of disinformation, which has led civic groups such as Taiwan FactCheck Center, Cofacts, and News Helper to improve public media literacy through educating the Taiwanese people on how to more critically evaluate digital information and distinguish between true and false content. According to Taiwan FactCheck Centre Chairman Hu Yuan-hui: "All stakeholders need to be involved – members of the public, the media, tech companies, fact-checking organisations, academia, the government." This again underscores the importance of a comprehensive, whole-of-society approach.

A whole-of-society and whole-of-government approach is inherently inclusive. Inclusion efforts often focus on bolstering national identity to give people a sense of pride and belongingness, but it can simultaneously train critical skills. For example, in response to Polish citizens' concerns about the war in Ukraine, the Polish Ministry of National Defense recently established a "Train with the Army" project that offers Polish military-led courses to civilians on survival skills, how to properly handle weapons and gas masks, self-defense, and other critical skills. One participant commented that "Even a very strong army can have very big troubles with simple people who can fight in the woods or in the streets, who can resist against regular soldiers … So I think we should all be prepared at least a bit to stay safe, to use arms — even simple ones — and to have some knowledge of survival."

These three broad means to build resilience serve as a general guidepost, but using them to build specific psychological resilience capabilities is, of course, not easy. It takes time and sustained effort. It also requires dedicated leadership that prioritizes long-term resilience. And unfortunately, there is no "one-size-fits all approach" to cultivate psychologically resilient societies given the unique needs, culture, and threats in different regions. But the psychological capabilities discussed in this article provide a goal to work towards and initial recommendations to iterate on. For nations fighting to keep their democratic values in the face of authoritarian pressures — nations like Ukraine, Georgia, Taiwan, Mongolia, Baltic and Balkan states, and many others — the need is urgent.

Dr. Shannon Houck is an assistant professor in the Defense Analysis Department at the U.S. **Naval Postgraduate School**. She is a social psychologist with expertise on the science of influence and persuasion, psychological resilience and resistance, and extremism. She can be reached at shannon.houck@nps.edu.

Psychological Capabilities for Resilience - War on the Rocks

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ALUMNI:

Capt. Shea S. Thompson Commodore, Surface Development Squadron One (SURFDEVRON 1)

(Sea Power Magazine 20 Dec 22) … Richard R. Burgess

A native of San Marcos, California, Thompson received his commission from the U.S. Naval Academy in 1997. His sea tours included USS George Philip (FFG 12), USS Cape St. George (CG 71), and USS John Paul Jones (DDG 53). He served as executive officer and then commanding officer of USS Chafee (DDG 90). Subsequently he commanded USS Bunker Hill (CG 52).

Thompson's tours ashore include **Naval Postgraduate School** where he earned a Master's Degree in Financial Management; Ballistic Missile Defense Syndicate Lead at Tactical Training Group Pacific; Ballistic Missile Defense Training Officer at U.S. 3rd Fleet; Joint Interface Control Officer at Headquarters U.S. European Command (J3); C4ISR Operations Branch Chief at U.S. Strategic Command, Joint Force Component Command Global Strike (J6); N8/9 Branch Head Headquarters Surface and Mine Warfare Development Center.

Thompson discussed the roles of Surface Development Squadron One with Senior Editor Richard R. Burgess. Excerpts follow.

How did your background prepare you for your current command?

THOMPSON: Actually, my background prepared me quite well. Following my command tour on USS Chafee, I had the privilege of being assigned to the Surface and Mine Warfighting Development Center [SMWDC] where I served as N8/9 Branch Head for Future Requirements & Resources and Experimentation from 2016 to 2019. During that time, I had significant exposure to the acquisition and budgeting process as well as requirements generation. SMWDC's Warfare Improvement Programs fell under my portfolio for those three years. We produced the surface fleet's Integrated Prioritized Capabilities List for surface warfare Integrated Air and Missile Defense, Surface Warfare, Amphibious Warfare and Mine Warfare. That experience really benefited me as I became intimately familiar with the capability gaps across all those mission areas.

I've worked with a number of stakeholders to include the technical community on how we would get at closing those gaps and back in 2017, we recognized unmanned systems had a role to play in closing a number of gaps across those mission areas. The beauty was, as I also wore the N9 hat, I was able to partner with industry and experiment with new and innovative capabilities that helped close those gaps. For example, I personally worked closely with industry on the first-ever remote operation of Sea Hunter [unmanned surface vessel] from a surface combatant to validate that capability. So, the learning curve of employing and operating unmanned platforms with and from manned surface forces wasn't that steep for me as I came into this job.

In fact, when I took command of SURFDEVRON, I was encouraged by the progress I saw had been made since my time in SMWDC and my time taking command here. We've come a long way since 2017 [with] the current and future capabilities and possibilities that exist with manned and unmanned teaming, how that will enhance the lethality of the surface force going forward.

How many personnel comprise your command?

THOMPSON: On staff here at SURFDEVRON I have 13 Officers, 58 enlisted, and one civilian permanently assigned. USS Michael Monsoor (DDG 1001) and USS Zumwalt (DDG 1000) each muster about 180 personnel. Obviously, I'm eagerly awaiting delivery of USS Lyndon B. Johnson (DDG 1002) when that day comes. USV Division 1 was formally established during the SURFDEVRON 1 change of command ceremony on May 13 and is now commanded by CDR Jerry Daley. That squadron has actually grown to 103 Sailors comprised of 12 officers and 91 enlisted. Those folks are there to provide dedicated support to USV operations.

How has the Chief of Naval Operations' new Navigation Plan influenced the focus of your work?

THOMPSON: The CNO's Navigation Plan is the guiding framework for my efforts for USV experimentation and fleet integration. In there, it talks about [how] unmanned surface platforms will increase the fleet's capacity for distribution and expand our intelligence, surveillance and reconnaissance advantage, add depth to our missile magazines, supplement logistics, and enhance fleet survivability. This transition will gradually rebalance the fleet away from exquisite manpower-intensive platforms for smaller, less expensive yet lethal platforms. The capacity goal, if I remember correctly, is approximately 150 USVs.

That plan also emphasizes the importance of the manned/unmanned teaming in future fleet operations. We're really getting at that. For example, one of the concepts we're working on is further distributing the force through manned and unmanned teaming. Your typical surface action group, or SAG, consists of three destroyers. Right now, we're trying to reimagine that traditional SAG. Instead of three manned DDGs making up that SAG, we're exploring options to have one DDG as the center of a SAG teamed up with a number of unmanned surface vessels that would be one SAG. That also frees up the other two destroyers to create other manned/ unmanned SAGs and further distribute the force and enhance the capability and lethality of those SAGs as well. Honestly, I envision a future where this is the standard SAG construct and my team here is moving out full speed on proving out that concept.

What kind of experiments have you been working on with the Zumwalt-class DDGs?

THOMPSON: I would say that for the class, it's been less about experimentation and more about class capability validation. That's not to say we haven't been leveraging those platforms for experimentation efforts.

I know you're aware that Zumwalt is currently employed in the Indo-Pacific region, and she is working on fleet integration and participation in fleet exercises. We're pushing her forward to learn how the ship can best operate and integrate with other fleet assets and how this integration is done at the tip of the spear. You can only do so much learning pierside. It is important to accelerate her introduction into fleet exercises and this learning is going to inform future employment of the class. Prior to this employment, Zumwalt went through your standard workups for employment, conducting basic training certification events and participating in the Surface Warfare Advanced Tactical Training, otherwise known as SWATT.

Earlier this year, Monsoor participated in an ASW [antisubmarine warfare] exercise known as SCC Mini-wars, and she did that with coalition partners and the USV Sea Hawk in the Hawaiian op area. Monsoor also recently participated in the first RIMPAC exercise for the class where, again, she focused on force integration and continued her work with unmanned vessels in that exercise.

Do you expect the Zumwalt DDGs to return to your squadron after their modification with the Conventional Prompt Strike capability?

THOMPSON: They're going to come back to me following deployment and they're going to be with me for the foreseeable future. The future plans for the class remain in work. We are gathering data right know regarding Zumwalt's current deployment and Michael Monsoor's RIMPAC support. We're going to leverage that data and lessons learned on any future deployments to include how to maintain and sustain the platform in an operational environment when deployed forward. I will say the best way to continue learning and validating the existing capabilities and TTPs [tactics, techniques and procedures] for the class is to keep them underway and employed, whether that's with 3rd Fleet or 7th Fleet.

What kind of things are you doing with the two Overlord USVs and what are you planning in the future once the other two Overlord USV are on strength?

THOMPSON: All four of the USVs that I own right now were involved in RIMPAC: Sea Hunter, Sea Hawk, Nomad and Ranger. Their involvement in RIMPAC really helped determine and define how the capabilities of the unmanned fleet will integrate with our manned ships. RIMPAC was an excellent arena to showcase the USVs' usefulness in electronic warfare, data collection and how warships can leverage USVs in the high-end fight. In every exercise we do from SCC mini wars to SWATT to RIMPAC, the objectives being accomplished form the building blocks of realizing the manned/unmanned concept. A USV tracking a submarine using its ASW payload or providing target-quality tracks to a surface combatant — think EW [electronic warfare] payloads, sensor suite, etc. — we're proving the USV is value added in providing our warships with more flexibility in meeting the mission.

How about your experimentation with Sea Hunter and Sea Hawk USVs?

THOMPSON: They each bring different payloads and capabilities. And so, we're working with those to further validate our concepts. For the broader unmanned campaign plan, Surface Development Squadron One is developing those concepts in the playbooks, in the TTPs and we're doing that with other stakeholders. We're not doing that in a vacuum. I see those concepts and TTPs playing in the potential surface battles of tomorrow. The prototype USVs are being heavily leveraged to validate these concepts and TTPs. When the program of record USV does come online, we can quickly transition it into fleet operations. The goal to me will be for them to be embedded into fleet operations to further distribute the force, provide manned warships with target quality tracks and, also, for adjunct magazines.

One important note I think is worth mentioning is we're focused on autonomous USVs with a man-on-the-loop technology. That means that even though a USV may be in an autonomous mode while

conducting a mission, it is always being monitored — including its health status — and at any time the man-on-the-loop, whether on board a ship or shore, can take direct control as required.

Are there any specific accomplishments you want to mention with regard to the USVs or the Monsoor in RIMPAC?

THOMPSON: Sea Hawk was out during the SCC Mini-Wars and did excellent work. She validated the value of her ASW payload. Not just here at the Echelon 5 level but all the way into the Echelon 2 level. In the near future, we're participating in a fleet exercise that we'll explore how that capability supports our expeditionary capability and the Marine Corps' efforts on that front, too. The big ship-to-shore movement of USVs' C2 [command and control] nodes, officially we're working with PMS-406 to gain unmanned, unescorted, OTH [over the horizon] proof-of-concept testing.

For Monsoor, RIMPAC was really a test of the operational concepts and to gather insights about further employment for the class. She flexed her capabilities across all mission areas to include SUW, ASW, and air defense. She also conducted an experiment that consisted of launched employment and recovery of a UAV to enhance maritime surveillance. All four USVs that participated in RIMPAC demonstrated how they fit into the composite warfare commander concepts either attached to a destroyer or sent out on individual missions. It really helped to determine how the capabilities of the unmanned fleet integrate with our manned ships, with focus on ASW, EW, surface warfare, interoperability and transfer of control of those USVs between manned ships and ashore or vice versa.

With the Navy developing the Next-Generation Destroyer (DDG(X)) and the Large USV, are you actively engaged in providing feedback for development of those vessels?

THOMPSON: Yes. As we worked fleet introduction for DDG 1000 class and the USVs, there are a number of lessons learned that can be applied to both the DDG(X) and LUSV, not just from a capability validation perspective but also from a maintenance and sustainment perspective. And so, those lessons are being shared across the enterprise. The LUSV program is in the prototyping stage while we develop and demonstrate the technology for critical subsystems, through a comprehensive land-based and afloat test program across HM&E [hull, mechanical and engineering], C2, autonomy, perception and integrated combat system aspects prior to moving into serial production. By the end of 2023, we expect to have seven USV prototypes operating under the direction of Surface Development Squadron One and that's in partnership with PMS-406 and the USV Program Office.

USVs are planned to be the high-endurance adjunct [missile] magazine based on commercial designs built around the common missile launcher and combat systems. The initial capability will be to support both surface warfare and strike warfare, but I anticipate that being expanded and air defense as well. The six LUSV studies contracts were awarded in September of this year. Those contracts are going to help refine specifications and requirements to inform future LUSV detail design and construction.

What advances have you seen in unmanned operations technology and sustainment since your squadron was established?

THOMPSON: Since Surface Development Squadron One was established, the advances I am most encouraged by are, we've got much more confidence in safe autonomous operations. We've been out and operating with these platforms for a long period of time. That resiliency really translates to increased on-station time, our abilities to control from ship or shore or, again, transfer control from ship-to-shore and vice versa. The capabilities of the various payloads for USVs provide the operators and leadership the confidence that manned/unmanned teaming does, in fact, enhance the lethality of the surface force.

I really believe it's a game-changing concept, not only for the future force structure but from a tactical, operational and strategic perspective. Those are the big differences I see from back in 2017 when I was just proving out that I can actually operate a USV from a destroyer to where we are today. I'll tell you that with the USV prototypes, we're rapidly expanding their participation in the exercises as well as conducting independent operations such as a recent missile test from an Overlord USV. The maturing fleet experimentation and testing program only serves to increase the fleet's knowledge on USV integration and operational and infrastructure support requirements.

What do you see as the remaining challenges of deploying, operating, and sustaining USVs?

THOMPSON: Well, you know, we're going to continue working to make the USVs more reliable and sustainable through experimentation, lessons learned, testing, evaluation and increased employment. You can't learn when those things are pierside, so we got to keep pushing them out there. Every USV underway hour provides us additional data and learning opportunities that support the maturation of economy and reliability. I said that one of the encouraging things was an increased confidence level and the safe autonomous operations. We still have some work to do in that area. Obviously, COLREGS [International Regulations for Preventing Collisions at Sea 1972] remains a focus area for the program. Today, the autonomy and reliability conduct vessel avoidance for 1v1 [one versus one] COLREGS encounters. However, we're still got some work to do in complying with the full scope of COLREGS. That's the hierarchy of vessels, low visibility compliance, autonomous lights, autonomous sound signals, etc.

Capt. Shea S. Thompson Commodore, Surface Development Squadron One (SURFDEVRON 1) - Seapower (seapowermagazine.org)

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Belize Defence Force Congratulates Two Officers for Graduating from the United States Naval Postgraduate School

(Breaking Belize News 21 Dec 22) … Rubén Morales Iglesias

"Congratulations are in order for Major Ivan Locario and Major Lionel Olivera," the BDF said in a statement celebrating the recent graduation of two of its officers from United States **Naval Postgraduate School** in Monterey, California.

Majors Locario and Olivera graduated with Master's Degrees after studying there since mid-2021.

"Major Locario was conferred a Master's Degree in Science," the BDF said.

"His degree concentrated on Defense Analysis with a focus on Special Operations/Irregular Warfare, graduating with a Grade Point Average of 3.91. The degree program addressed counterinsurgency, terrorism and counterterrorism, unconventional warfare, information operations, and other 'high leverage' operations in U.S. defense and foreign policy."

The BDF said the degree emphasizes critical thinking skills and specialized knowledge.

The BDF said that as part of his degree requirements, Major Locario completed a thesis entitled: 'Should the Government of Belize consider using emerging technology as a better way of managing its border?'

Major Locario also received three additional certificates in Western Hemisphere Regional Studies, Great Power Competition: Current Policy and Strategy, and Military Operational Intelligence.

According to the BDF, Major Olivera graduated with a Master's Degree in Arts.

"His degree concentrated on Security Studies and International Relations with a focus on Policy and Strategy, graduating with a Grade Point Average of 3.80," the BDF said.

The BDF said that under the program Major Olivera studied the nature and dynamics of military organizations and the domestic and international variables involved in formulating policies at the strategic level.

"The program also allows the student to combine a regional focus with comparative courses that discuss terrorist organizations and operations, the financing of terror, legal and policing developments in counter-terrorism, intelligence, and the military role in homeland defense," the BDF said.

Major Olivera's thesis was titled: 'What measures can Belize implement to address the emergence of irregular migrants near its borders?'

Major Olivera also received a certificate in the Great Power Competition: Current Policy and Strategy.

https://www.breakingbelizenews.com/2022/12/21/belize-defence-force-congratulates-two-officers-for-graduating-from-the-united-states-naval-postgraduate-school/

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